

183 FERC ¶ 61,205  
DEPARTMENT OF ENERGY  
FEDERAL ENERGY REGULATORY COMMISSION

18 CFR Part 101

[Docket No. RM21-11-000; Order No. 898]

Accounting and Reporting Treatment of Certain Renewable Energy Assets

(Issued June 29, 2023)

**AGENCY:** Federal Energy Regulatory Commission.

**ACTION:** Final rule.

**SUMMARY:** In this final rule, the Federal Energy Regulatory Commission (Commission or FERC) is amending the Uniform System of Accounts (USofA) for public utilities and licensees to: create new accounts for wind, solar, and other renewable generating assets; create a new functional class for energy storage accounts; codify the accounting treatment of environmental credits; and create new accounts within existing functions for computer hardware, software, and communication equipment. We also amend the relevant FERC forms to accommodate these changes.

**DATES:** Effective date: This rule is effective **January 1, 2025**.

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**SUPPLEMENTARY INFORMATION:**

183 FERC ¶ 61,205  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Willie L. Phillips, Acting Chairman;  
James P. Danly, Allison Clements,  
and Mark C. Christie.

Accounting and Reporting Treatment of Certain  
Renewable Energy Assets

Docket No. RM21-11-000

ORDER NO. 898

FINAL RULE

(Issued June 29, 2023)

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**I. Introduction**

1. In this final rule, the Commission is revising the Uniform System of Accounts (USofA)<sup>1</sup> to account for rapid changes in technology and resource mix in the U.S. energy industry over recent decades. The reforms adopted in this final rule will add functional

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<sup>1</sup> *Unif. Sys. of Accounts Prescribed for Pub. Utils. & Licensees Subject to the Provisions of the Fed. Power Act*, 18 CFR pt. 101. Unless otherwise indicated, references to the USofA in this final rule refer to the USofA for public utilities and licensees.

detail to the USofA in order to provide uniformity, consistency, and transparency in accounting and reporting for investments in these technologies, and to assist the Commission in fulfilling its responsibilities under the Federal Power Act (FPA) to ensure that rates remain just and reasonable. Therefore, pursuant to the Commission's authority to prescribe accounting and financial reporting requirements for jurisdictional companies under section 301 of the FPA,<sup>2</sup> we modify part 101<sup>3</sup> of the Commission's regulations to: (1) create new subfunctions and accounts for wind, solar, and other renewable generating assets; (2) establish a new functional class and accounts for energy storage assets; (3) create new accounts and codify accounting treatment for environmental credits; and (4) create new accounts for computer hardware, software, and communication equipment within existing functions that do not already include them. The final rule also makes corresponding changes to the following FERC Forms to implement the USofA changes: FERC Form Nos. 1, 1-F, 3-Q (electric), and 60.<sup>4</sup>

2. Generally, we are adopting the specific reforms proposed in the Notice of Proposed Rulemaking (NOPR), but with certain revisions based on the record in this proceeding. In particular, certain proposals in the NOPR have been altered in this final

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<sup>2</sup> 16 U.S.C. 825.

<sup>3</sup> 18 CFR pt. 101.

<sup>4</sup> Edits to the FERC Form No. 60 Annual Report of Centralized Service Companies, governed under the Public Utility Holding Company Act, are the result of changes to the FERC forms for public utilities and licensees from which FERC Form No. 60 summarily references accounts.

rule to effectuate the Commission's intent, better address the needs of different stakeholders, and facilitate solutions to potential technical challenges.

3. As discussed further below in section IV.G (Proposed Compliance Procedures), each utility must implement the requirements of this final rule by January 1, 2025.

## **II. Background**

### **A. Previous Changes to the USofA**

4. The USofA was created by the Federal Power Commission to facilitate the Commission's ratemaking responsibilities and uniformly capture financial and operational information for, first, traditional public utilities, and then natural gas pipelines.<sup>5</sup> The USofA has been modified over time to account for changing technological, legal, and market conditions.

5. For example, in Order No. 552, the Commission revised the USofA to account for sulfur dioxide emissions allowances under the 1990 Clean Air Act Amendments.<sup>6</sup> In that order, the Commission created new inventory Accounts 158.1 (Allowance Inventory) and 158.2 (Allowances Withheld) and new expense Account 509 (Allowances) to accommodate the new sulfur dioxide emissions allowances. The Commission noted that some commenters sought to classify allowances in existing accounts to facilitate a desired ratemaking result; however, the Commission found these comments unpersuasive

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<sup>5</sup> 18 CFR pt. 101.

<sup>6</sup> *Revisions to Unif. Sys. of Accts. to Acct. for Allowances under the Clean Air Act Amends. of 1990 & Regulatory-Created Assets & Liabilities & to Form Nos. 1, 1-F, 2 & 2-A*, Order No. 552, 62 FR 61299 (Nov. 17, 1997), FERC Stats. & Regs. ¶ 30,967 (1993) (cross-referenced at 62 FERC ¶ 61,299).

because accounting rules provide sound and uniform accounting rather than dictating particular ratemaking results.<sup>7</sup>

6. In 2013, the Commission issued Order No. 784, which revised the USofA and related forms to codify accounting treatment for energy storage.<sup>8</sup> The Commission created: (1) new electric plant and associated operating and maintenance expense accounts (O&M accounts) to record investments in, and operations and maintenance costs associated with, energy storage assets; (2) a new purchased power account to record the cost of power purchased for use in storage operations; and (3) new FERC Form Nos. 1 and 1-F schedules.<sup>9</sup> Order No. 784 also amended existing schedules in FERC Form Nos. 1, 1-F, and 3-Q (electric) to report operational and statistical data on storage assets.

7. Specifically, the Commission created electric plant accounts for energy storage assets within the existing USofA functions: Account 348 (Energy Storage Equipment – Production), Account 351 (Energy Storage Equipment – Transmission), and Account 363 (Energy Storage Equipment – Distribution).<sup>10</sup> The Commission created corresponding new O&M accounts: Account 548.1 (Operation of Energy Storage Equipment) and Account 553.1 (Maintenance of Energy Storage Equipment) for energy storage plant classified as production; Account 562.1 (Operation of Energy Storage Equipment) and

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<sup>7</sup> *Id.* at 30,799.

<sup>8</sup> *Third-Party Provision of Ancillary Servs.; Acct. & Fin. Reporting for New Elec. Storage Tech.*, Order No. 784, 78 FR 46178 (July 30, 2013), 144 FERC ¶ 61,056 (2013), *order on clarification*, Order No. 784-A, 146 FERC ¶ 61,114 (2014).

<sup>9</sup> *Id.* P 123.

<sup>10</sup> *Id.* P 141.

Account 570.1 (Maintenance of Energy Storage Equipment) for energy storage plant classified as transmission; and Account 582.1 (Operation of Energy Storage Equipment) and Account 592.2 (Maintenance of Energy Storage Equipment) for energy storage plant classified as distribution.<sup>11</sup>

8. In these energy storage accounts, the installed cost of energy storage assets is recorded based on the function or purpose the assets serve. Where an energy storage asset performs more than one purpose or function, Order No. 784 requires the cost of the asset to be allocated among the accounts based on the functions performed and approved rate recovery.<sup>12</sup> While some commenters argued that the requirement to allocate energy storage assets that perform multiple functions across the relevant accounts places an undue administrative burden on utilities, the Commission nevertheless provided for functional recording because utilities that recover the costs of storage operations on a cost of service basis must already maintain cost allocation information on the assets.<sup>13</sup> Furthermore, the Commission in Order No. 784 found that the alternative of recording all costs of energy storage assets in a single plant account would result in less transparent reporting.<sup>14</sup>

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<sup>11</sup> *Id.* P 147.

<sup>12</sup> *Id.* P 126.

<sup>13</sup> *Id.* P 133.

<sup>14</sup> *Id.* P 135.



**B. Locke Lord Petition**

9. In Docket No. AC20-103, Locke Lord submitted a petition to the Chief Accountant requesting confirmation that the costs of certain wind and solar generating assets should be booked to Other Production Accounts 343 (Prime Movers), 344 (Generators), and 345 (Accessory Electric Equipment).<sup>15</sup> Specifically, Locke Lord proposed to record: (1) wind turbines, solar modules, combiner circuits, and inverters to Account 343 (Prime Movers); (2) wind turbine generators to Account 344 (Generators); and (3) DC conductors, individual low-voltage step-up transformers, AC conductors (34.5 kV) associated with collector systems, power cables, conduit and underground duct banks, circuit breakers, disconnect switches and accessories, grounding conductors and grounding transformers, collector system buses, main and/or auxiliary transfer buses, collector system control systems, Supervisory Control and Data Acquisition (SCADA) systems, static capacitors and reactors, and collector system substations to Account 345 (Accessory Electric Equipment).

10. Some commenters in that proceeding argued that the petition proposed recording inappropriate costs, including costs related to the collector system and SCADA,<sup>16</sup> into Account 345 (Accessory Electric Equipment), which would implicate broader issues of compensation for reactive power.<sup>17</sup> Some commenters, including Edison Electric

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<sup>15</sup> *Locke Lord LLP*, 174 FERC ¶ 61,033, at P 1 (2021).

<sup>16</sup> *Id.* P 6.

<sup>17</sup> *Id.* PP 10, 13. Specifically, the *AEP* Methodology identifies costs associated with four groups of plant investment: (1) the generators/exciters; (2) generator step-up transformers; (3) accessory electric equipment; and (4) the remaining production plant

Institute (EEI), suggested that the Commission consider creating new accounts for wind, solar, and other non-hydro renewables to resolve this dispute.<sup>18</sup>

11. The Commission denied the petition, noting that the record reflected substantial disagreement about equipment functions and categorizations.<sup>19</sup> In so doing, the Commission also noted that it would concurrently issue a Notice of Inquiry (NOI) to consider creating separate categories of accounts in the USofA for wind and solar generating assets.<sup>20</sup> The Commission has since opened a separate proceeding under Docket No. RM22-2-000 to gather comments and information about potential alternative reactive power compensation.

### C. Notice of Inquiry

12. On January 19, 2021, the Commission issued an NOI in the instant docket seeking comment on the appropriate accounting treatment for certain renewable generating assets.<sup>21</sup> Specifically, the Commission sought comment on: (1) whether to create new accounts within the USofA for non-hydro renewable energy generating assets;<sup>22</sup> (2) what investment. These costs are then allocated between real and reactive power using an allocation factor. *Id.* P 10 n.12.

<sup>18</sup> *Id.* PP 8, 13, 16.

<sup>19</sup> *Id.* P 19.

<sup>20</sup> *Id.* P 20.

<sup>21</sup> *Acct. & Rep. Treatment of Certain Renewable Energy Assets*, Notice of Inquiry, 86 FR 7086, 174 FERC ¶ 61,032 (2021) (NOI).

<sup>22</sup> The NOI defined non-hydro renewable generating assets as production assets other than hydroelectric generators (such as solar, wind energy, geothermal, biomass, etc.) that rely on the heat or motion of the earth or the sun's radiation to produce energy. These assets are denoted as renewable because the power production is based on a fuel

modifications to FERC Form No. 1 are needed to reflect these changes; (3) whether to codify the proper accounting treatment of the purchase, generation, and use of renewable energy credits (REC); and (4) whether there are rate-setting implications for these accounting and reporting changes.

13. The Commission explained that the USofA contains discrete production accounts for Steam, Nuclear, Hydraulic, and Other Production, but does not contain accounts specifically designated for solar, wind, or other non-hydro renewable generating assets.<sup>23</sup> The Commission noted that companies record non-hydro renewable generating assets in the USofA's Other Production accounts, but that parties have disagreed which Other Production accounts are appropriate for these assets.<sup>24</sup> For example, the Commission noted that no plant account definition clearly describes solar panels, PV inverters, wind generation towers, or the computer hardware and software required to operate wind and solar generators.<sup>25</sup> Similarly, the Commission explained that the related O&M accounts do not uniquely accommodate costs to maintain wind and solar facilities.<sup>26</sup>

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source that is not consumed or destroyed by the generation process, such as buried hydrocarbons (coal, oil, natural gas) or the decay of rare irradiated heavy metals (nuclear). Biomass (trees, nut shells, grain husks and stalks, etc.) is considered renewable, despite consumption of its hydrocarbon source, because the carbon it releases is offset by regrowth of carbon capturing equivalent biomass. *Id.* P 1.

<sup>23</sup> *Id.* P 2.

<sup>24</sup> *Id.* PP 2-3.

<sup>25</sup> *Id.* PP 6-9.

<sup>26</sup> *Id.* P 9.

14. The Commission also explained that USofA accounts do not explicitly address the purchase, generation, or use of RECs.<sup>27</sup> The Commission found in *Ameren Illinois Co.* that RECs are analogous to sulfur dioxide emission allowances, accounting treatment for which was codified in Order No. 552.<sup>28</sup> The Commission noted that Order No. 552 classified emission allowances as inventory and established new inventory and expense accounts to record the allowances and associated activities.<sup>29</sup> In keeping with Order No. 552, the Commission has found that RECs that are purchased or generated should be recorded in Account 158.1 (Allowance Inventory) and expensed to Account 509 (Allowances) as they are utilized.<sup>30</sup>

15. The Commission also noted that any proposed additions and modifications to its USofA would require corresponding changes to FERC Form No. 1, and could have a significant and measurable impact on rates.<sup>31</sup>

#### **D. Notice of Proposed Rulemaking**

16. On July 28, 2022, the Commission issued a NOPR in the same proceeding.<sup>32</sup> In the NOPR, the Commission proposed, as discussed in greater detail below, to: (1) create

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<sup>27</sup> *Id.* PP 4, 13.

<sup>28</sup> *Ameren Ill. Co.*, 170 FERC ¶ 61,267, at P 52 (2020).

<sup>29</sup> NOI, 174 FERC ¶ 61,032 at P 13 (citing Order No. 552, FERC Stats. & Regs. ¶ 30,967).

<sup>30</sup> *Id.* PP 4, 13-14 (citing *Ameren Ill. Co.*, 170 FERC ¶ 61,267 at P 52).

<sup>31</sup> *Id.* PP 12, 16.

<sup>32</sup> See *Acct. & Reporting Treatment of Certain Renewable Energy Assets*, Notice of Proposed Rulemaking, 87 FR 59870 (Oct. 3, 2022), 180 FERC ¶ 61,050, at P 28 (2022) (NOPR).

new subfunctions and accounts for wind, solar, and other non-hydro renewable generating assets; (2) establish a new functional class and accounts for energy storage accounts; (3) create new accounts and codify the accounting treatment of RECs; and (4) create new accounts for computer hardware, software, and communication equipment within existing functions that do not already include them. The Commission received seven comments from a diverse set of stakeholders.<sup>33</sup>

### **III. Need for Reform**

17. In the NOPR, the Commission noted that the USofA has not been significantly modified since the Commission issued Order No. 784 in 2013 and does not provide clear accounting treatment for activities related to many technological and economic developments in the U.S. energy industry of recent decades, like the growth of investments into renewable generating facilities, battery storage, and RECs, among others.<sup>34</sup> By adding functional detail to the USofA, these reforms will provide uniformity, consistency, and transparency in accounting and reporting for investments into these assets, and assist the Commission in fulfilling its responsibilities under the FPA to ensure that rates remain just and reasonable.

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<sup>33</sup> See American Clean Power Association (ACP) and Solar Energy Industries Association (SEIA) (collectively Clean Energy Associations) NOPR Comments; Carl Pechman NOPR Comments; Dominion Energy, Inc. (Dominion) NOPR Comments; EEI and American Gas Association (AGA) (collectively Utility Associations) NOPR Comments; Liquid Energy Pipeline Association (LEPA) NOPR Comments; Pacific Gas and Electric (PG&E) and San Diego Gas and Electric (SDG&E) NOPR Comments; Retail Energy Supply Association (RESA) NOPR Comments.

<sup>34</sup> NOPR, 180 FERC ¶ 61,050 at P 27.

18. As discussed in the NOPR and NOI, the USofA contains discrete production accounts for Steam, Nuclear, Hydraulic, and a catch-all category for Other Production.<sup>35</sup> However, the USofA does not have production accounts designated specifically for solar, wind, or other renewable generating assets; public utilities instead record non-hydro renewable generating assets in the Other Production accounts. Given the rapid expansion and development of wind, solar, and other renewable generation technologies, and the record in Docket No. AC20-103 and the instant rulemaking proceeding, we conclude that the USofA must be modified to clarify how public utilities should account for non-hydro renewable generating assets, to avoid inconsistencies in accounting and reporting, and to facilitate the ratemaking process. NOI and NOPR commenters also generally agreed that these accounts are needed given non-hydro renewables' varied and distinct characteristics from existing electric production subfunctions within the USofA.<sup>36</sup>

19. Our reporting requirements for energy storage also need revision. In Order No. 784, the Commission created accounts for energy storage assets and related operations and maintenance expenses within different functions, but underestimated the additional burden that functional reporting, along with frequent reclassification of plant assets and associated accumulated depreciation, imposes on utilities.<sup>37</sup> Since the issuance of Order

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<sup>35</sup> 18 CFR pt. 101.

<sup>36</sup> See ACP NOI Comments at 16; Alliant Energy NOI Comments at 3; Dominion NOPR Comments at 3; EEI NOI Comments at 4; Utility Associations NOPR Comments at 7. *But see* Clean Energy Associations NOPR Comments at 6 (contending that confusion and inconsistency in recording renewable energy assets can be resolved at lesser cost by clarifying that specific existing USofA accounts should be used).

<sup>37</sup> See Order No. 784, 144 FERC ¶ 61,056 at P 133.

No. 784, and based on experience and industry input since the issuance of Order No. 748, the Commission now recognizes the need for revisions to its USofA for energy storage accounting. Today, it is clear that frequently changing functionalization imposes significant recordkeeping and reporting burden on utilities, which increases internal control risks for reporting errors in our forms.<sup>38</sup> Consequently, NOI commenters requested the Commission to create, and NOPR commenters supported the proposed creation of, a new energy storage function in this proceeding.<sup>39</sup> We are now persuaded that this new function is needed to simplify and improve recording and reporting of energy storage assets and related expenses.

20. Similarly, the Commission has concluded that USofA revision is needed to formalize accounting treatment for the purchase, generation, and use of environmental credits. While the Commission explained in 2020 that RECs should be treated analogously to the accounting treatment for sulfur dioxide emission allowances addressed in Order No. 552,<sup>40</sup> not all utilities follow this approach.<sup>41</sup> In addition, utilities are increasingly using a variety of environmental crediting items.<sup>42</sup> As such, codifying

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<sup>38</sup> EEI NOI Comments at 6-9.

<sup>39</sup> Clean Energy Associations NOPR Comments at 5; EEI NOI Comments at 6-9; Energy Storage Association (ESA) NOI Comments at 1-2; Utility Associations NOPR Comments at 11.

<sup>40</sup> *Ameren Ill. Co.*, 170 FERC ¶ 61,267 at P 52.

<sup>41</sup> EEI NOI Comments at 10.

<sup>42</sup> See Carl Pechman NOPR Comments at 4; Utility Associations NOPR Comments at 19.

environmental credit treatment will promote consistent treatment of these items in Commission accounting and reporting.

21. Lastly, designated computer hardware, software, and communication equipment accounts for all functions and plant subfunctions are needed to eliminate ambiguity and improve consistency in accounting and reporting. Currently, the USofA includes designated computer hardware, software, and computer equipment accounts in some functions and subfunctions but not others. Specifically, the Regional Transmission and Market Operation Plant function includes plant accounts for computer hardware, software, and communication equipment, and the Transmission and Regional Market functions contain maintenance accounts for these assets, but no other plant or maintenance function includes such specificity.<sup>43</sup> USofA revisions are therefore needed to provide for consistent treatment of these assets and costs.

#### **IV. Proposed Reforms**

##### **A. Creation of New Subfunctions and Accounts for Non-Hydro Renewables**

###### **1. NOPR**

22. The Commission proposed three new subfunctions within the Production Plant function of the USofA: D. Solar Production, E. Wind Production, and F. Other Non-Hydro Renewable Production.<sup>44</sup> Consistent with all other production subfunctions (e.g., Steam Production, Nuclear Production, and Hydraulic Production), the Commission proposed the following five accounts within each of these three new subfunctions: (1)

<sup>43</sup> See 18 CFR pt. 101.

<sup>44</sup> NOPR, 180 FERC ¶ 61,050 at P 33.



Accounts 338.1, 338.20, and 339.1 (Land and Land Rights); (2) Accounts 338.2, 338.21, and 339.2 (Structures and Improvements); (3) Accounts 338.8, 338.29, and 339.8 (Other Accessory Electrical Equipment); (4) Accounts 338.12, 338.33, and 339.12 (Miscellaneous Power Plant Equipment); and (5) Accounts 338.13, 338.34, and 339.13 (Asset Retirement Costs).<sup>45</sup> These accounts are similar in description and instruction to the existing accounts of the same title in each of the other production subfunctions.

23. The Commission also proposed to create three additional accounts for the new Solar Production and Wind Production subfunctions: (1) Accounts 338.5 and 338.26 (Collector System); (2) Accounts 338.6 and 338.27 (Generation Step-up Transformers (GSU)); and (3) Accounts 338.7 and 338.28 (Inverters).<sup>46</sup> Similar to distribution system accounts, the Collector System accounts list many of the same items included in the accounts for Poles, Towers and Fixtures (Account 364) and Overhead Conductors and Devices (Account 365).<sup>47</sup> The GSU accounts are intended to record transformers that are directly connected to generator terminal tips and supporting equipment. The inverter accounts are intended to record equipment that converts power from direct current to alternating current.

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<sup>45</sup> *Id.* P 35. The three accounts under each number represent the three new subfunctions: Solar, Wind, and Non-Hydro Renewable Production, respectively.

<sup>46</sup> *Id.* P 36.

<sup>47</sup> For example, Account 364 listed, among others, poles, towers, anchors, and extension arms. Account 365 listed, among others, circuit breakers, conductors, and lightning arrestors.

24. Additionally, the Commission proposed unique generating accounts for all three subfunctions: (1) Account 338.4 (Solar Panels) for Solar Production; (2) Account 338.23 (Wind Turbines) and Account 338.24 (Wind Towers and Fixtures) for Wind Production; and (3) Account 339.3 (Fuel Holders), Account 339.4 (Boilers), and Account 339.6 (Generators) for Other Non-Hydro Renewable Production.<sup>48</sup> The solar panels account is designated to record panels and support equipment that change solar energy into electricity and related supporting structures such as racks and gears. The wind turbines account includes components that are located from the top of the tower to the end of the turbine blades. The wind towers and fixtures account includes the tower and the components contained within the tower that are located from the top of the foundation to the base of the nacelle. The three accounts to record fuel holders, boilers, and generators that are included in Other Non-Hydro Renewable Production capture renewable generation assets that use any fuel source or method (e.g., steam or direct burning). These accounts allow for recording biofuels, hydrogen, geothermal, and other types of generation in this subfunction. Many of the items listed in these account descriptions are the same as those accounts listed in the Steam and Other Production subfunctions.<sup>49</sup>

25. Similar to the new plant accounts for non-hydro renewables, the Commission proposed new O&M accounts for these subfunctions, titled F. Solar Generation, G. Wind

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<sup>48</sup> NOPR, 180 FERC ¶ 61,050 at P 37.

<sup>49</sup> See, e.g., Account 342 (Fuel Holders, Producers, and Accessories); Account 312 (Boiler Plant Equipment); Account 344 (Generators).

Generation, and H. Other Non-Hydro Renewable Generation.<sup>50</sup> All three subfunctions include the following seven accounts consistent with the other subfunctions (e.g., Steam, Nuclear, and Hydraulic): (1) Accounts 558.1, 558.20, and 559.1 (Operation Supervision and Engineering); (2) Accounts 558.4, 558.23, and 559.4 (Rents); (3) Accounts 558.5, 558.24, and 559.5 (Operation Supplies and Expenses (Nonmajor only)); (4) Accounts 558.6, 558.25, and 559.6 (Maintenance Supervision and Engineering (Major only)); (5) Accounts 558.7, 558.26, and 559.7 (Maintenance of Structures (Major only)); (6) Accounts 558.16, 558.36, and 559.15 (Maintenance of Miscellaneous (Solar, Wind, or Other Non-Hydro Renewable) Generation Plant (Major only)); and (7) Accounts 558.17, 558.37, and 559.16 (Maintenance of (Solar, Wind, or Other Non-Hydro Renewable) Generation Plant (Nonmajor only)).<sup>51</sup> These accounts have similar descriptions, items, and instructions to existing accounts.

26. The Commission also proposed four additional maintenance accounts for Solar and Wind Generation subfunctions, but not for the Other Non-Hydro Renewable Production subfunction:<sup>52</sup> (1) Accounts 558.9 and 558.29 (Maintenance of Collector

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<sup>50</sup> NOPR, 180 FERC ¶ 61,050 at P 38.

<sup>51</sup> Item 7 includes three accounts that are designated as nonmajor only. Nonmajor entities would therefore record all maintenance activities in these accounts without the added granularity required for major entities (Items 1-6).

<sup>52</sup> While wind and solar are distributive in design (i.e., with a collector system spread across a comparatively wide area), other renewables are, as currently conceived, unlikely to be distributive in design. These non-distributive renewable plants, similar to existing coal, oil, nuclear, and gas plants, do not have collector systems. In addition, their generator step-up transformers and inverters are comparatively minor integrated parts.

Systems (Major only)); (2) Accounts 558.10 and 558.30 (Maintenance of Generator Step-up Transformers (Major only)); (3) Accounts 558.11 and 558.31 (Maintenance of Inverter Expenses (Major only)); and (4) Accounts 558.12 and 558.32 (Maintenance of Other Accessory Electrical Equipment (Major only)).<sup>53</sup> These accounts allow for recording maintenance expenses for the associated plant accounts for Solar and Wind Production. The proposed list of items for Accounts 558.9 and 558.29 (Maintenance of Collector Systems (Major only)) are similar to the list of items for Account 593 (Maintenance of Overhead Lines (Major only)) in the Distribution Expenses function.

27. The Commission also proposed new operating expense accounts for the main operating costs of the new production subfunctions: for Solar Generation, Account 558.2 (Solar Panel Generation and Other Plant Operating Expenses (Major only)); for Wind Generation, Account 558.21 (Wind Turbine Generation and Other Plant Operating Expenses (Major only)); and for Other Non-Hydro Renewable Generation, Account 559.2 (Other Miscellaneous Generation and Other Plant Operating Expenses (Major only)), and Account 559.3 (Fuel).<sup>54</sup>

28. In addition, the Commission proposed new maintenance accounts for specific generation assets: for Solar Generation, Account 558.8 (Maintenance of Solar Panels (Major only)); for Wind Generation, Account 558.27 (Maintenance of Wind Turbines, Towers and Fixtures (Major only)); and for Other Non-Hydro Renewable Generation, Account 559.9 (Maintenance of Boilers (Major only)), and Account 559.10 (Maintenance

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<sup>53</sup> NOPR, 180 FERC ¶ 61,050 at P 39.

<sup>54</sup> *Id.* P 40.

of Generating and Electric Equipment (Major only)).<sup>55</sup> These new accounts have similar descriptions and instructions to maintenance accounts for generation equipment in the other subfunctions. The Commission proposed to designate an account for maintenance of electrical equipment separate from the maintenance of generation equipment for the new Solar and Wind Generation subfunctions.

29. Further, the Commission proposed new accounts for the Maintenance of Computer Hardware (Major only), the Maintenance of Computer Software (Major only), and Maintenance of Communication Equipment (Major only) for the three new plant subfunctions (Solar, Wind, and Other Non-Hydro Renewable Generation) corresponding to the plant accounts, as discussed further below.<sup>56</sup>

30. Lastly, the Commission sought comment on several topics.<sup>57</sup> First, to avoid confusion with the existing “Other Production” generation subfunction, the Commission sought comment on whether to retitle that subfunction to “Prime Mover Production” because the current instructions to the “Other Production” subfunction only describe prime mover-type generation assets.<sup>58</sup> Second, noting that the USofA does not currently address kinetic energy from the ocean to generate electricity,<sup>59</sup> the Commission sought comment on whether to include both tidal and wave energy as part of the existing

<sup>55</sup> *Id.* P 41.

<sup>56</sup> *Id.* P 42.

<sup>57</sup> *Id.* PP 34, 43, 68.

<sup>58</sup> A prime mover electric generator is one where the fuel source directly moves the electric turbine rather than using a boiler or other secondary energy transfer.

<sup>59</sup> *See* EEI NOI Comments at 4-5.

Hydraulic Production function, rather than in the newly proposed other non-hydro renewable asset accounts. Third, the Commission sought comment on whether the Commission's Chief Accountant should issue accounting guidance for hydrogen, and whether it would be helpful to propose revisions to the USofA for natural gas pipelines to account for hydrogen activities.

## 2. Comments

31. Dominion and Utility Associations support the addition of new accounts for non-hydro renewable generating assets.<sup>60</sup> Clean Energy Associations contend that confusion and inconsistency in recording renewable energy assets could be resolved at lesser cost by clarifying that specific existing USofA accounts should be used, but support the Commission's proposed accounts for wind turbines (Account 338.23); solar panels and related racking and trackers (Account 338.4); inverters and converters (Account 338.28); individual, low-voltage step-up transformers (Accounts 338.6 and 338.26); AC collector systems (Accounts 338.5 and 338.26); and Static capacitors (Account 338.5).<sup>61</sup>

32. Commenters also suggest specific revisions to the NOPR proposal. First, Clean Energy Associations raise concerns that the NOPR proposed separate accounts for some equipment that is infrequently itemized by manufacturers and typically retired together.<sup>62</sup> For wind facilities, Clean Energy Associations accordingly recommend that the Commission consolidate proposed Account 338.23 (Wind Turbines) and Account 338.24

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<sup>60</sup> Dominion NOPR Comments at 3; Utility Associations NOPR Comments at 7.

<sup>61</sup> Clean Energy Associations NOPR Comments at 6.

<sup>62</sup> *Id.* at 13-14, 19.

(Wind Towers and Fixtures) into a single account for the wind turbine generator, tower, pad-mounted or nacelle-mounted transformer, and foundation. Further, they argue that reporting wind towers and turbines together would be consistent with Electric Plant Instruction No. 3, Item 8, Part B, which states “[t]he cost of specially provided foundations not intended to outlast the machinery or apparatus for which provided, and the cost of angle irons, castings, etc., installed at the base of an item of equipment, shall be charged to the same account as the cost of the machinery, apparatus, or equipment.”<sup>63</sup> For solar facilities, Clean Energy Associations suggest that the Commission consolidate solar inverter and power station transformer costs into the same account.<sup>64</sup> In the alternative, Clean Energy Associations request that the Commission specify how costs should be recorded when manufacturers or contractors do not itemize them separately.

33. Next, Clean Energy Associations make several comments related to recording collector system costs.<sup>65</sup> First, Clean Energy Associations note inconsistencies in the collector system definitions for Solar Production and Wind Production subfunction accounts, Account 338.5 and Account 338.26, respectively—both between the two and compared with conventional generation accounts. Between the two new Collector System account definitions, Clean Energy Associations suggest revising the definition of the collector system for wind generation in Account 338.26 to mirror the proposed

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<sup>63</sup> 18 CFR pt. 101, Electric Plant Instruction No. 3, Item 8, Part B.

<sup>64</sup> Clean Energy Associations NOPR Comments at 13-14.

<sup>65</sup> *Id.* at 11-12.

definition for solar generation, which reads: “This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as static capacitors) that are used to transport and consolidate the power fed from individual wind turbine generators, once it has been stepped-up, to the substation prior to interconnection to the grid.”

34. Further, Clean Energy Associations request that the Commission identify an account for collector system substation costs.<sup>66</sup> Clean Energy Associations recommend that the Commission adopt a separate Production Plant account for the substation similar to the collector system or clarify the definition of the collector system to include the specific items that are part of the collector system substation.

35. Clean Energy Associations also suggest that the Commission consolidate treatment of static capacitors and reactors in the same account.<sup>67</sup> While the NOPR proposed requiring solar system capacitor reporting in Account 338.5 (Collector System) and reactor reporting in Account 338.8 (Other Accessory Electrical Equipment), Clean Energy Associations suggest that no distinction between the two technologies is needed. Specifically, Clean Energy Associations suggest that if the Commission intends to include all of the plant from the high side of the individual, low-voltage step-up transformers located at the inverter power stations and/or the wind turbines to the low side of the Main Power Transformer (MPT) at the substation (for a transmission interconnection) or interconnection with the grid (for a distribution interconnection), it

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<sup>66</sup> *Id.* at 7-8.

<sup>67</sup> *Id.* at 6-7.



should include both capacitors and reactors connected to the collector system in the definition for the Collector System account. Further, Clean Energy Associations note the need for the Commission to make the same determination for wind generation, which also may use static capacitors and reactors, but is not included in the proposed amendment to the USofA.

36. Clean Energy Associations next suggest that the Commission clarify the end-point of the collector system and adopt definitions that run from inverters or wind turbines up to but not including the MPT, consistent with comparable equipment for conventional generation.<sup>68</sup> According to Clean Energy Associations, the NOPR's solar and wind collector system definitions appear to go beyond the MPT, while conventional generation connects generators to the MPT via connection facilities that end at the low side of the MPT.

37. In addition, Clean Energy Associations request that the Commission establish a separate Production Plant account to house the installed cost of the DC collector system, or clarify that the cost should be reported to Other Accessory Electric Equipment in proposed Account 338.8.<sup>69</sup> According to Clean Energy Associations, the DC collector system does not fit within the NOPR's definitions for proposed Account 338.4 (Solar Panels) nor Account 338.5 (Collector System), which they understand to be limited to the AC collector system connected to the high side of the inverter power station transformer.

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<sup>68</sup> *Id.* at 12.

<sup>69</sup> *Id.* at 8-9.

38. Clean Energy Associations further request that the Commission clarify the exact equipment that should be included in the Other Accessory Equipment accounts for both solar and wind, especially given overlap with the proposed Collector System accounts.<sup>70</sup>

39. The Commission also received comments on the NOPR's proposed accounts for GSU. Utility Associations note a potential inconsistency between the NOPR's proposed GSU definition and *Kentucky Utilities Company's* instruction that "GSU transformers are not used in the generation of power and thus should not be booked to production plant accounts" (although their costs may be assigned to production through the ratemaking process).<sup>71</sup> The Commission proposed to include GSU transformers on the low side of the collector system in new Solar Production and Wind Production subfunction accounts.<sup>72</sup> Utility Associations ask the Commission to reconcile this proposal with *Kentucky Utilities Company's* instruction.

40. Clean Energy Associations, for their part, suggest that the Commission revise the proposed GSU account definitions to include all transformer devices up to and including the MPT housed in the substation—that is, GSUs on the *high* side of the of the collector system in addition to those on the low side.<sup>73</sup> Clean Energy Associations also cite to

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<sup>70</sup> *Id.* at 17-18.

<sup>71</sup> Utility Associations NOPR Comments at 7-8 (citing *Ky. Utils. Co.*, 85 FERC ¶ 61,274, at 62,112 n.37 (1998) (Opinion No. 432)).

<sup>72</sup> NOPR, 180 FERC ¶ 61,050 at P 36; *see also id.*, proposed Accounts 338.6 and 338.27.

<sup>73</sup> Clean Energy Associations NOPR Comments at 9-10.

*Kentucky Utilities Company*,<sup>74</sup> the Commission's characterization of *Kentucky Utilities Company* in *Pacific Gas & Electric Co.*,<sup>75</sup> and Order No. 827,<sup>76</sup> to argue that the Commission should expand its GSU accounts to include the substation MPT and equipment located beyond the high side of the substation MPT.

41. Clean Energy Associations also request clarification about where and how the substation MPT and equipment located beyond the high side of the substation MPT should be recorded.<sup>77</sup> Clean Energy Associations suggest that the proposed collector system definitions in Accounts 338.5, 338.26, and 387.5 overlap with the description for Station Equipment in existing Account 353.

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<sup>74</sup> *Id.* at 9 (citing Opinion No. 432, 85 FERC at 62,112 n.36 (“[T]he GSU serves no purpose without the generator, and the generator cannot transform power to the transmission-level voltage without the GSU.”)).

<sup>75</sup> *Id.* at 10 (citing *Pac. Gas & Elec. Co.*, 106 FERC ¶ 61,144, at P 19 (2004) (“GSU transformers . . . are located at generation stations and [are] used solely to increase the voltage of electric energy produced by generators to the higher voltages necessary for bulk power transmission to load centers.”)).

<sup>76</sup> *Id.* (citing *Reactive Power Requirements for Non-Synchronous Generation*, Order No. 827, 81 FR 40793 (June 23, 2016), 155 FERC ¶ 61,277, at P 13 n.31 (2016) (“[T]he generator substation would be the substation for a wind [or solar] generator that separates the low-voltage collector system from the higher voltage elements of the Interconnection Customer Interconnection Facilities that bring the generator's energy to the Point of Interconnection.”)).

<sup>77</sup> *Id.* at 10-11 (citing NOPR proposed Accounts 338.5, 338.26, and 387.5 (“This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities that are installed beyond the high side of the GSU transformer and the transmission or distribution point of interconnection.”) and 18 CFR pt. 101, Account 353 (“This account shall include the cost installed of transforming, conversion, and switching equipment used for the purpose of changing the characteristics of electricity in connection with its transmission or for controlling transmission circuits.”)).

42. Clean Energy Associations further request clarification related to reporting different types of land and construction costs for non-hydro renewable generation projects.<sup>78</sup> Clean Energy Associations suggest that the Commission define or affirm that it is appropriate to allocate the clearing and grading, permitting, and site civil costs across all direct costs (including both structures and equipment accounts). Specifically, Clean Energy Associations suggest clarifying that it is appropriate to report: (1) improvement and equipment costs comparably to USofA Electric Plant Instruction Nos. 8(A) and 9(A) across all direct costs; (2) permits and privileges in accordance with the booking of the associated plant for which the permit is sought; and (3) land option payments that permit site access, investigation, and permit applications and/or land lease payments during the construction period as privileges and permits under Electric Plant Instruction No. 3, Components of Construction Cost, Item 9, or expenses during construction under Electric Plant Instruction No. 3.

43. In addition, several commenters comment on the NOPR's proposed O&M accounts. Utility Associations suggest that wind and solar plants are simpler to operate than other types of generating plant, with less distinguishable labor, and therefore require fewer O&M accounts to support them than traditional generation assets.<sup>79</sup> They therefore argue that the Commission should limit the creation of new O&M accounts for non-hydro renewables to those listed in Appendix A to their comments. Dominion argues that the Commission should create a robust list of maintenance accounts sufficient to

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<sup>78</sup> *Id.* at 15-17.

<sup>79</sup> Utility Associations NOPR Comments at 7, app. A.

meaningfully segregate costs.<sup>80</sup> Relatedly, Dominion opposes elimination of the miscellaneous expense account for each type of renewable energy in order to preserve a place for expenses that do not clearly fall within other specified accounts. Clean Energy Associations, for their part, agree with the NOPR's proposed O&M accounts, but urge the Commission to clarify that the operations and maintenance costs are related to Plant booked to Production Accounts.<sup>81</sup> Clean Energy Associations raise the need for this clarification because, while the NOPR suggests that its four proposed maintenance accounts "would allow for the recording of maintenance expense for the associated plant accounts for Solar and Wind Production," it also suggests that maintenance of the collector system "would be similar to the list of items for Account 593 (Maintenance of Overhead Lines) (Major Only) in the Distribution Expense function" and describes wind and solar collector systems as "distributive in design. . . ."<sup>82</sup>

44. Commenters also responded to the NOPR's request for comment on renaming the Other Production account, how to account for tidal and wave technologies, and hydrogen accounting guidance. Utility Associations oppose the NOPR's proposal to retitle "Other Production" to "Prime Mover Production."<sup>83</sup> Utility Associations suggest that retaining the "Other Production" account will preserve existing flexibility for recording assets in

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<sup>80</sup> Dominion NOPR Comments at 3.

<sup>81</sup> Clean Energy Associations NOPR Comments at 19-20.

<sup>82</sup> *Id.* (citing NOPR, 180 FERC ¶ 61,050 at P 39 n.78).

<sup>83</sup> Utility Associations NOPR Comments at 7.

the face of technological change to record future production assets that do not meet the definition of either prime movers or renewable generating assets.

45. Regarding the NOPR's request for comment on hydrogen technologies, Utility Associations and Carl Pechman both request guidance on accounting for hydrogen facilities.<sup>84</sup> Utility Associations suggest that hydrogen equipment costs should be recorded to Account 339.12 (Miscellaneous Power Plant Equipment) while hydrogen fuel costs should be recorded to Account 547 instead of Account 559.3.<sup>85</sup> And, while Utility Associations believe that it is currently premature to propose new public utility accounts specifically for hydrogen use in the electricity industry, they suggest that new natural gas pipeline accounts are needed to record the investments and operating expenses incurred for hydrogen. They therefore recommend that the Commission update the USofA for natural gas pipelines to include a list of proposed accounts in Appendix B to their comments.<sup>86</sup>

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<sup>84</sup> Carl Pechman NOPR Comments at 3-4; Utility Associations NOPR Comments at 9-11.

<sup>85</sup> Utility Associations NOPR Comments at 9-11.

<sup>86</sup> Those accounts include: (1) Gas Plant Accounts as Section D - Hydrogen and Other Renewables under Natural Gas Storage and Processing Plant: (a) Land and land rights, (b) Structures and improvements, (c) Hydrogen generation and conversion equipment, (d) Hydrogen storage equipment, (e) Biogas cleaning and conditioning equipment, (f) Other renewable equipment, (g) Compression and power equipment, (h) Measuring and regulating equipment Pipelines, (i) Other equipment Gas Expense; (2) Accounts as Section D – Hydrogen and Other Renewables under Natural Gas Storage Terminaling and Processing Expense: (a) Operation: (i) Operation supervision and engineering, (ii) Hydrogen equipment and storage expense, (iii) Biogas Equipment expense, (iv) Other renewable equipment expense, (v) Compression and power equipment expense, (vi) Measuring and regulating equipment expense, (vii) Pipelines expense, (viii) Other hydrogen and renewables operating expense, and (b) Maintenance:

46. Last, regarding the NOPR's request for comment on tidal and wave technologies, Carl Pechman advocates for the Commission to adopt a forward-looking policy of developing accounting provisions for new resources that treats tidal and wave energy activities as a type of other renewable production rather than including it within existing Hydraulic Production accounts.<sup>87</sup>

### 3. Commission Determination

47. We adopt the NOPR's proposals to create new Production Plant subfunctions and associated accounts, with minor revisions, as discussed below. We disagree with Clean Energy Associations that accounting treatment clarity and transparency can be adequately provided at lesser administrative burden through issuance of accounting guidance instead of creating new renewable subfunctions.<sup>88</sup> The existing Other Production subfunction no longer fully accommodates the specificities of modern renewable generation systems. For instance, no existing Other Production account describes the function that collector systems provide to wind and solar farms—consolidating power from individual turbines or panels before interconnection to the grid. The Commission typically uses accounting guidance to clarify how best to account for an item among several available accounts.

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(i) Maintenance supervision and engineering, (ii) Maintenance of structures and improvements, (iii) Maintenance of hydrogen equipment and storage, (iv) Maintenance of biogas and other renewable equipment, (v) Maintenance of compression and power equipment, (vi) Maintenance of measuring and regulating equipment, and (vii) Maintenance of pipelines Maintenance of other equipment. *Id.*, at app. B.

<sup>87</sup> Carl Pechman NOPR Comments at 4.

<sup>88</sup> See Clean Energy Associations NOPR Comments at 6.

subfunctions is therefore necessary to provide uniformity, consistency, and transparency to reduce risk of errors in accounting and reporting.

48. First, we adopt the NOPR's proposals to separate reporting of wind towers, turbines, foundations, and transformers. Wind towers, turbines, foundations, and transformers are different items with separate purposes and potentially distinct service lives, and should therefore be tracked in separate accounts. While Clean Energy Associations note that these assets are often retired together,<sup>89</sup> we have assessed that these assets may feature distinct depreciation lives supporting separate accounts. We also note that, while vendor invoices are used for recording costs in construction work in progress that becomes plant in service, these invoices do not determine the unitization of plant in service by account under the USofA instructions.<sup>90</sup>

49. We also adopt the NOPR's proposal to create separate GSU and inverter accounts within the Solar Production subfunction. Like the wind turbine, tower, foundation, and transformer accounts, establishing separate accounts is warranted because solar inverters are both separate equipment from, and do not serve the same function as, power station transformers. We note that we do not control how vendors describe the work performed during construction on invoices, and the company unitizes the costs (into retirement units) after the project is closed and records the costs to the appropriate plant accounts.

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<sup>89</sup> *Id.* at 13, 19.

<sup>90</sup> Costs included in capitalization are explained in 18 CFR pt. 101, Electric Plant Instruction Nos. 1. Classification of electric plant at effective date of system of accounts (Major utilities), 2. Electric Plant to Be Recorded at Cost, 3. Components of construction cost, and 4. Overhead Construction Costs.



Again, we reiterate that vendor invoices may inform about certain activities performed during construction, but asset unitization is performed when the project is complete and available to be placed in service.

50. In addition, we adopt the NOPR's proposal to create Collector System accounts within the new Solar Production and Wind Production subfunctions. However, we also agree with Clean Energy Associations that the definitions of the proposed collector systems in Account 338.5 and Account 338.26 require certain revisions for consistency.<sup>91</sup> We have revised the Wind Production subfunction Account 338.26 definition (and the Energy Storage function Account 387.5 definition) to mirror the Solar Production collector system definition in Account 338.5.

51. We decline to grant Clean Energy Associations' request that we adopt a separate Production Plant account for the substation.<sup>92</sup> This equipment should be recorded either to Account 353 (Station Equipment) for transmission, or Account 362 (Station Equipment) for distribution. We note that transmission-level substations have historically been, and will remain, considered transmission plant for accounting purposes. While we recognize that this classification may be inconvenient for utilities that otherwise own only Generation or General Plant function assets, the true function of the substation—providing transmission-level voltage to a wire system—governs its classification.

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<sup>91</sup> See Clean Energy Associations NOPR Comments at 11-12.

<sup>92</sup> See *id.* at 7-8.

52. However, we grant several of Clean Energy Associations' requests for clarification,<sup>93</sup> and so clarify account text as described herein. First, we have revised the Collector System account definitions to include static capacitors and reactors in the same account because they serve similar functions within collector systems. We note, however, that reactors can serve multiple purposes and are therefore listed in multiple accounts, and should be recorded to the appropriate account based on their operational purpose. Second, we have revised the new Collector System account definitions (Accounts 338.5 and 338.26, as well as Account 387.5 in the new energy storage function) to indicate that: (1) the collector system end-point extends up to, but does not include, the substation prior to interconnection to the grid; and (2) to exclude the cost of transformers and other equipment used to interconnect to transmission or distribution lines. We agree with Clean Energy Associations that this revision is needed to harmonize the solar and wind collector system definitions with our existing accounts for conventional generation. Third, we clarify that DC collector systems should be recorded in the Collector System accounts and revise the Account 338.5 and 338.26 definitions to remove "once it has been stepped up." This revision resolves confusion and furthers the NOPR's intent to include DC collector systems within the Collector System account definitions.

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<sup>93</sup> See *id.* at 7 (suggesting inclusion of static capacitors and reactors in the same account), 12 (requesting clarification on the collector system end point), 8-9 (requesting clarification on DC collector system recording).

53. Next, we decline to provide an exhaustive list of the equipment that should be recorded in the Other Accessory Electrical Equipment accounts.<sup>94</sup> We reiterate that operational purpose of equipment, rather than equipment name, determines appropriate account classification, and that account equipment lists are meant to be illustrative, not prescriptive. Attempting to provide an exhaustive list of equipment to be recorded to the Other Accessory Electrical Equipment account risks over- and under-inclusion of equipment that should be booked to that account based on functional purpose. To further clarify the purposes of each account, we have revised their definitions and instructions to emphasize that Collector System accounts are for equipment used to transport and consolidate the power fed from individual generation units (solar panels, wind turbines), while the equipment recorded in the Other Accessory Electrical Equipment account supports the generator in the action of generating power.

54. We also adopt the NOPR's proposal to create GSU accounts within the new Wind Production and Solar Production subfunctions. We note that, despite commenters' suggestion to the contrary,<sup>95</sup> this decision is consistent with Commission precedent in *Kentucky Utilities Company*.<sup>96</sup> There, the Commission considered whether the costs of GSU transformers that step up voltage to the transmission system<sup>97</sup> should be included in

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<sup>94</sup> See *id.* at 17-18 (requesting specification of all equipment that should be recorded in Other Accessory Equipment accounts).

<sup>95</sup> See Clean Energy Associations NOPR Comments at 9-10; Utility Associations NOPR Comments at 7-8.

<sup>96</sup> See Opinion No. 432, 85 FERC ¶ 61,274.

<sup>97</sup> *Id.* at 62,109 n.33 ("A GSU transformer is an electrical device that transforms

transmission rates. It determined that, while the costs of such GSU transformers should be assigned to generators for rate purposes,<sup>98</sup> for accounting purposes “GSU transformers are not used in the generation of power, and thus should not be booked to production accounts.”<sup>99</sup>

55. Utility Associations misread *Kentucky Utilities Company* in arguing that it conflicts with the NOPR’s proposed GSU account definitions.<sup>100</sup> They question how the proposed Production Plant GSU accounts are consistent with the Commission’s statement in *Kentucky Utilities Company* that “GSU transformers are not used in the generation of power, and thus should not be booked to production accounts.”<sup>101</sup> This confusion appears to derive from the fact that, unlike traditional generation sources that have a single GSU that steps-up the generator voltage to transmission or distribution levels, renewable plants have two step-up transformers: one GSU located on the low voltage side of the collector system, and another step-up transformer at the substation, that, as in conventional power plants, steps up voltage to connect to the transmission or distribution system. While these assets are both step-up transformers, they serve different functional purposes—and therefore should be reported to different accounts. The GSU transformers at issue in

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power from a lower voltage to a higher voltage. The GSU transformers in question in this proceeding are those which step-up voltages at the generation level to higher voltages at the [transmission level].”)

<sup>98</sup> *Id.* at 62,112.

<sup>99</sup> *Id.* at 62,112 n.37.

<sup>100</sup> Utility Associations NOPR Comments at 7-8.

<sup>101</sup> Opinion No. 432, 85 FERC at 62,112 n.37.

*Kentucky Utilities Company* stepped up voltage to the transmission system.<sup>102</sup> The GSU accounts that we create here for the new Solar Production and Wind Production subfunctions instead are designated for transformers that step up voltage to support the collector systems. These GSUs do not directly interconnect with transmission and distribution power grids. Therefore, *Kentucky Utilities Company* is inapposite. To further clarify the GSU assets that belong in the new Production subfunction accounts, however, we revise Accounts 338.6 and 338.27 (and Energy Storage function Account 387.6) to expressly exclude transformers and other equipment that step up voltage or frequency for the purposes of transmission or distribution. Those assets are more appropriately included in transmission or distribution Account 353 (Station Equipment) or Account 362 (Station Equipment), respectively.

56. Clean Energy Associations also misread *Kentucky Utilities Company*.<sup>103</sup> They argue that *Kentucky Utilities Company* requires the Commission to include the substation MPT and equipment located *beyond* the high side of the substation MPT within the GSU accounts. In doing so, Clean Energy Associations mistake *Kentucky Utilities Company*'s holding on rate treatment for one applying to accounting treatment. To the contrary, *Kentucky Utilities Company* expressly forbade recording the cost of GSU equipment beyond the high side of the substation MPT to production plant accounts, even while

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<sup>102</sup> *Id.* at 62,109 n.33 (specifying that “[t]he GSU transformers in question in this proceeding are those which step-up voltages at the generation level to higher voltages at the [transmission level].”).

<sup>103</sup> Clean Energy Associations NOPR Comments at 9-10.

noting that the GSUs serve generators for rate allocation purposes.<sup>104</sup> Clean Energy Associations' references to *Pacific Gas & Electric Co.* and Order No. 827 are even less relevant.<sup>105</sup> In *Pacific Gas & Electric Co.*, the Commission distinguished that rate case from *Kentucky Utilities Company* in finding that the facilities in the two cases were different and held that bulk transmission lines configured as loop facilities should be allocated to transmission rates. The Commission's order in *Pacific Gas & Electric Co.* said nothing about the accounting treatment for the substation MPT and equipment located beyond the high side of the substation MPT.<sup>106</sup> The Commission's illustrative footnote in Order No. 827, which required non-synchronous generators to provide dynamic reactive power at the high-side of the generator substation,<sup>107</sup> similarly did not disturb our precedent that transformers used to step up voltage for the purpose of transmission or distribution should not be recorded to Production Plant accounts.<sup>108</sup>

<sup>104</sup> Compare Opinion No. 432, 85 FERC at 62,112 n.37 ("GSU transformers are not used in the generation of power and thus should not be booked to production plant accounts.") with *id.* at 62,112 ("[I]t has become increasingly important to recognize the role that GSUs perform in support of generation as it pertains to the allocation of costs.").

<sup>105</sup> See Clean Energy Associations NOPR Comments at 9-10 (citing *Pac. Gas & Elec. Co.*, 106 FERC ¶ 61,144 at P 19 ("GSU transformers . . . are located at generation stations and [are] used solely to increase the voltage of electric energy produced by generators to the higher voltages necessary for bulk power transmission to load centers."); Order No. 827, 155 FERC ¶ 61,277 at P 13 n.31 ("[T]he generator substation would be the substation for a wind [or solar] generator that separates the low-voltage collector system from the higher voltage elements of the Interconnection Customer Interconnection Facilities that bring the generator's energy to the Point of Interconnection.")).

<sup>106</sup> *Pac. Gas & Elec. Co.*, 106 FERC ¶ 61,144 at PP 19-20.

<sup>107</sup> Order No. 827, 155 FERC ¶ 61,277 at P 13.

<sup>108</sup> See Opinion No. 432, 85 FERC at 62,112 n.37 ("GSU transformers are not used

Therefore, our decision to limit the equipment that is recorded in the new GSU accounts to equipment that steps up voltage on the low side of the MPT is consistent with Commission precedent.

57. In response to Clean Energy Associations' concerns about where to record the substation MPT given alleged conflict between proposed collector system definitions in Accounts 338.5, 338.26, and 387.5 and the Station Equipment in existing Account 353,<sup>109</sup> we note first that Clean Energy Associations misstate the NOPR's proposed collector system definition in Account 338.5.<sup>110</sup> The NOPR's Account 338.5 definition does not overlap with the definition of Account 353. As explained above, we have revised the definitions in Accounts 338.26 and 387.5 to align with the definition in Account 338.5 at Clean Energy Associations' request.<sup>111</sup> This change resolves the overlap with Account 353 that concerned Clean Energy Associations. Equipment at and beyond the substation

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in the generation of power and thus should not be booked to production plant accounts.”).

<sup>109</sup> Clean Energy Associations NOPR Comments at 10-11 (citing NOPR proposed Accounts 338.5, 338.26, and 387.5; 18 CFR pt. 101, Account 353).

<sup>110</sup> *Compare* NOPR, proposed Account 338.5 (“This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as static capacitors) that are used to transport and consolidate the power fed from individual solar panels, once it has been stepped-up, to the substation prior to interconnection to the grid.”) *with* Clean Energy Associations NOPR Comments at 10-11 (quoting NOPR proposed Accounts 338.5, 338.26, and 387.5 text as: “This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities that are installed beyond the high side of the GSU transformer and the transmission or distribution point of interconnection.”).

<sup>111</sup> *See supra* P 50; *see also* Clean Energy Associations NOPR Comments at 11-12.

serve transmission and distribution interconnection functions and should accordingly be recorded in the transmission and distribution accounts.

58. Regarding Clean Energy Associations' request for clarification on allocation of clearing and grading, permitting, and site civil costs,<sup>112</sup> we note that Electric Plant Instruction Nos. 3, 8(A), and 9(A) apply to all plant in service and have for several decades. We do not intend to change application of these instructions in this docket. We find the text of these instructions to be sufficient and do not require modification.

59. We also adopt the NOPR's proposal to create O&M accounts to support the new production subfunctions, but we consolidate the specific accounts proposed in response to comments. We are persuaded by Utility Associations' argument that the new generation subfunctions are simpler, and less labor intensive to operate and maintain than steam and nuclear generation, and that therefore the limited rate-setting benefits of separating some of these costs are likely outweighed by the additional burden they create.<sup>113</sup> We believe that the accounts that Utility Associations propose appropriately streamline the O&M accounts while still providing for sufficient detail to meaningfully segregate costs, as requested by Dominion.<sup>114</sup> However, we are also persuaded by Dominion's request to retain the miscellaneous maintenance expense accounts to house expenses that do not clearly fall within other specified accounts, and so create a miscellaneous expense account alongside the others proposed by Utility Associations.

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<sup>112</sup> See Clean Energy Associations NOPR Comments at 15-17.

<sup>113</sup> See Utility Associations NOPR Comments at 7, app. A.

<sup>114</sup> Dominion NOPR Comments at 3.



60. As such, we create only those maintenance accounts recommended by the Utility Associations,<sup>115</sup> plus miscellaneous maintenance expense accounts. We therefore also renumber the maintenance accounts. For solar, these accounts will now be numbered as follows: Account 558.7 (Maintenance of Solar Panels, Structures, and Equipment (Major only)), Account 558.8 (Maintenance of Computer Hardware (Major only)), Account 558.9 (Maintenance of Computer Software (Major only)), Account 558.10 (Maintenance of Communication Equipment (Major only)), Account 558.11 (Maintenance of Miscellaneous Solar Generation Plant (Major only)), and Account 558.12 (Maintenance of Solar Generation Plant (Nonmajor only)). For wind, these accounts will now be numbered as follows: Account 558.13 (Operation Supervision and Engineering), Account 558.14 (Wind Turbine Generation and Other Plant Operating Expenses (Major only)), Account 558.15 (Reserved), Account 558.16 (Rents), Account 558.17 (Operation Supplies and Expenses (Nonmajor only)), Account 558.18 (Maintenance Supervision and Engineering (Major only)), Account 558.19 (Maintenance of Wind Turbines, Structures, and Equipment (Major only)), Account 558.20 (Maintenance of Computer Hardware (Major only)), Account 558.21 (Maintenance of Computer Software (Major only)), Account 558.22 (Maintenance of Communication Equipment (Major only)), Account 558.23 (Maintenance of Miscellaneous Wind Generation Plant (Major only)), and Account 558.24 (Maintenance of Wind Generation Plant (Nonmajor only)).

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<sup>115</sup> We correct the naming convention for the accounts for maintenance of communication equipment to refer to “communication equipment” rather than “communications equipment,” as proposed by Utility Associations, consistent with references to communication equipment accounts throughout this rule and the USofA.

61. In addition, in response to Clean Energy Associations' comment regarding the appropriate function for the new O&M accounts,<sup>116</sup> we clarify that operations and maintenance costs are related to Plant recorded to Production Accounts. Our note that collector systems are distributive in design was intended to be illustrative of how these systems operate and not to indicate that collector systems are part of the Distribution Plant function.

62. Next, we address the subjects on which the NOPR requested comment. We are persuaded by Utility Associations' comment that retaining the "Other Production" account will preserve existing flexibility for recording assets in the face of technological change.<sup>117</sup> We therefore retain the "Other Production" title for this generation subfunction.

63. In response to comments regarding accounting treatment for tidal and wave resources,<sup>118</sup> we have determined that, because these resources do not fit well within the existing Hydraulic Production subfunction, they should be placed within the new Other Renewable subfunction. Accordingly, in this final rule we create an Other Renewable Production subfunction instead of the NOPR's proposed Other Non-Hydro Renewable Production subfunction.

64. Lastly, as for hydrogen, we agree with Utility Associations that existing and proposed public utility accounts are sufficient for current and anticipated uses of

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<sup>116</sup> See Clean Energy Associations NOPR Comments at 19.

<sup>117</sup> See Utility Associations NOPR Comments at 7.

<sup>118</sup> Carl Pechman NOPR Comments at 3-4.

hydrogen as an electric fuel or energy storage medium and that no new public utility accounts are therefore needed.<sup>119</sup> We reiterate that, for either electric generation or energy storage, the recording and reporting of hydrogen specific fuel, equipment, and operations and maintenance expenses should follow the most appropriate account instructions for the function it is used to fulfill.

65. Finally, we will not at this time propose additional guidance for electric utility hydrogen reporting or new natural gas pipeline hydrogen accounts. We will consider the need for such additional guidance and natural gas pipeline USofA revisions in separate proceedings, as necessary.

**B. Creation of Energy Storage Function and Accounts**

**1. NOPR**

66. The Commission proposed a new USofA function for energy storage in order to reduce recordkeeping, depreciation, and retirement burden and opportunity for error deriving from energy storage reporting across generation, transmission, and distribution functions.<sup>120</sup> The Commission proposed to structure the new Energy Storage Plant function similar to those for other USofA functions, including the new wind, solar, and other renewable subfunctions, as follows: (1) Account 387.1 (Land and Land Rights); (2) Account 387.2 (Structures and Improvements); (3) Account 387.11 (Miscellaneous Energy Storage Equipment); (4) Account 387.12 (Asset Retirement Costs for Energy Storage); (5) Account 387.5 (Collector System); (6) Account 387.6 (Generator Step-up

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<sup>119</sup> Utility Associations Comments at 9.

<sup>120</sup> NOPR, 180 FERC ¶ 61,050 at PP 44, 48-49.

Transformers (GSU)); and (7) Account 387.7 (Inverters). The Commission also proposed to add a new Account 387.3 (Energy Storage Equipment), which would include the primary energy storage equipment in this function as described in the proposed instructions. In addition, the Commission proposed to create Energy Storage function plant accounts for computer hardware, software, and communication equipment, as described below.

67. The Commission further proposed to create an Energy Storage Expense function within the Operation and Maintenance Expense Chart of Accounts, including: (1) Account 577.1 (Operation Supervision and Engineering); (2) Account 577.4 (Rents); (3) Account 577.5 (Operation Supplies and Expenses (Nonmajor only)); (4) Account 578.1 (Maintenance Supervision and Engineering (Major only)); (5) Account 578.2 (Maintenance of Structures (Major only)); (6) Account 578.4 (Maintenance of Collector Systems (Major only)); (7) Account 578.5 (Maintenance of Generator Step-up Transformers (Major only)); (8) Account 578.6 (Maintenance of Inverter Expenses (Major only)); (9) Account 578.10 (Maintenance of Miscellaneous Other Energy Storage Plant (Major only)); (10) Account 578.11 (Maintenance of Other Energy Storage Plant (Nonmajor only)); (11) Account 577.2 (Operation of Energy Storage Equipment (Major only)); (12) Account 577.3 (Storage Fuel); and (13) Account 578.3 (Maintenance of Energy Storage Equipment (Major only)) (as well as the computer hardware, software, and communication equipment accounts described below).<sup>121</sup> Lastly, the Commission

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<sup>121</sup> *Id.* PP 50-51.

proposed reclassifying pumped storage to be recorded within the Energy Storage function of the USofA rather than the Hydraulic Production subfunction.

## 2. Comments

68. Utility Associations and Clean Energy Associations support the NOPR's proposal to establish a separate function for Energy Storage.<sup>122</sup> Utility Associations, however, propose three revisions regarding Energy Storage related to functional reporting, O&M accounts, and pumped storage.

69. First, Utility Associations request removal of subpart c from Account 387.3, which would require accounting records to show monthly functional activity of storage assets, as well as the NOPR's proposed functional MWh reporting on pages 414-16 of Form No. 1.<sup>123</sup> Utility Associations argue that these requirements conflict with the goal that motivated moving energy storage to a separate function—removing burdensome requirements to track and frequently reclassify storage assets based on changes in function.<sup>124</sup> Rather, Utility Associations recommend following Order No. 784's approach of allowing the accounting for energy storage assets that serve more than one function to follow the allocation decisions made in the relevant rate proceedings.

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<sup>122</sup> Clean Energy Associations NOPR Comments at 5; Utility Associations NOPR Comments at 11.

<sup>123</sup> Utility Associations NOPR Comments at 11-12.

<sup>124</sup> *Id.* at 11 (citing NOPR, 180 FERC ¶ 61,050 at P 45 (explaining that “[b]y creating one new dedicated storage function, utilities would no longer be required to track and frequently reclassify storage assets based on changes in function, and thus, after the initial burden to implement the changes proposed to be adopted here, the continuing compliance burden would be significantly reduced.”)).

70. Further, as for the renewables O&M accounts, Utility Associations suggest that, given the relative simplicity of energy storage operations and maintenance, the Commission should limit the energy storage O&M accounts to those listed in Appendix A to their comments.<sup>125</sup>

71. Lastly, Utility Associations recommend against reclassifying pumped storage assets to the new Energy Storage function.<sup>126</sup> Utility Associations explain that pumped storage is not a new technology and fits more naturally within existing hydroelectric generation accounts given similarities in the lives of the facilities, permitting processes, engineering, operation, and staffing.

### 3. Commission Determination

72. We adopt the NOPR's proposal to establish a separate function for Energy Storage, with a few revisions, discussed below.

73. We agree with Utility Associations that the proposed instructions to subpart c of Account 387.3 and the associated reporting on pages 414-16 of the FERC Form No. 1 are needlessly burdensome and contrary to the purpose of this final rule, and thus remove them.<sup>127</sup>

74. We are also again persuaded by Utility Associations to consolidate the list of O&M accounts that we create for energy storage given the comparative operational

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<sup>125</sup> *Id.* at 13, app. A.

<sup>126</sup> *Id.* at 13.

<sup>127</sup> *See id.* at 11-12.

simplicity of storage systems,<sup>128</sup> similar to our consolidation of the renewable production O&M accounts.<sup>129</sup> However, we add a miscellaneous maintenance account to the list proposed by Utility Associations. The new accounts will now be as follows: Account 578.2 (Maintenance of Energy Storage Equipment and Structures (Major only)), Account 578.3 (Maintenance of Computer Hardware (Major only)), Account 578.4 (Maintenance of Computer Software (Major only)), Account 578.5 (Maintenance of Communication Equipment (Major only)), Account 578.6 (Maintenance of Miscellaneous Other Energy Storage Plant (Major only)), and Account 578.7 (Maintenance of Other Energy Storage Plant (Nonmajor only)).

75. Last, we are persuaded by Utility Associations' request not to reclassify pumped storage assets to the new Energy Storage function.<sup>130</sup> We agree with Utility Associations that pumped storage assets better fit within existing hydroelectric production accounts given the nature of these assets. This decision is particularly reasonable given our prior decision to streamline the Energy Storage function O&M accounts that we otherwise create in this final rule—the hydroelectric O&M accounts are better tailored to the relative complexity of operating and maintaining pumped storage assets.

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<sup>128</sup> Again we correct the naming convention for the account for maintenance of communication equipment to refer to “communication equipment” rather than “communications equipment,” as proposed by Utility Associations, consistent with references to communication equipment accounts throughout this rule and the USofA.

<sup>129</sup> See Utility Associations NOPR Comments at 13.

<sup>130</sup> See *id.*

### C. Accounting Treatment for Renewable Energy Credits

#### 1. NOPR

76. The Commission proposed a number of USofA revisions to codify treatment of RECs.<sup>131</sup> The Commission proposed to retitle General Instruction No. 21 (Allowances) to Allowances and Renewable Energy Credits (RECs), and to update the instruction to include REC reporting and correct typos. These proposed revisions include: (1) proposing to remove the reference to the Clean Air Act in Part A to make the instruction less restrictive and adding reference to the proposed new accounts described below; (2) moving the last sentence of Part A to the beginning of Part B; (3) amending Parts A and C to refer to historical cost to make the instruction consistent with other existing regulatory text in the USofA;<sup>132</sup> (4) correcting Part D to remove an erroneous repeated reference to “from inventory”; (5) updating the text in Part E to include references to RECs in addition to allowances and in Part F to clarify the inventory accounting for RECs; (6) replacing the language included in existing Part G with language that would instead provide guidance for cases in which allowances and RECs may be considered as prepayments; (7) moving the existing language in Part G addressing penalties to Part H, and removing the reference to the EPA to make the instruction applicable to similar items created by other regulatory bodies; (8) moving and updating the existing language in Part H to a newly proposed Part I that would address gains and losses on dispositions of

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<sup>131</sup> NOPR, 180 FERC ¶ 61,050 at P 52.

<sup>132</sup> 18 CFR pt. 101, General Instruction No. 21 (Allowances).



allowances and RECs; and (9) adding a new Part J that would address the revenues for RECs associated with the sale of energy.

77. Similarly, the Commission proposed to revise the text to Accounts 158.1 (Allowance Inventory) and 158.2 (Allowances Withheld) to remove references to the Environmental Protection Agency, to reference historical cost, and to include a new note to address prepayments in accordance with the proposed text in General Instruction No. 21.<sup>133</sup> The Commission also proposed to renumber Account 509 (Allowances) to Account 509.1, delete the reference to sulfur dioxide in that account, and create for RECs two new inventory accounts and, under the Steam Power Generation subfunction, two new expense accounts: Account 158.3 (Bundled Renewable Energy Credits Inventory), Account 158.4 (Unbundled Renewable Energy Credits Inventory), Account 509.2 (Bundled Renewable Energy Credits), and Account 509.3 (Unbundled Renewable Energy Credits).<sup>134</sup> And, consistent with the newly proposed instructions in Part I of General Instruction No. 21, the Commission proposed to add Account 411.11 (Gains from the Disposition of RECs) and Account 411.12 (Losses from the Disposition of RECs). Last, the Commission clarified that the Commission considered RECs to be inventory, and noted that Commission accounting and reporting regulations trump conflicting regulations by other accounting authorities.

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<sup>133</sup> NOPR, 180 FERC ¶ 61,050 at PP 53-57.

<sup>134</sup> We use the term “bundled” to convey that the RECs are sold with their associated energy, and the term “unbundled” to convey that the RECs are sold separately from the energy.

## 2. Comments

78. Five parties commented on the NOPR's proposal to codify accounting treatment for RECs. These comments address: (1) the need for revisions or additional accounts to capture information on a broader range of credit mechanisms; (2) placement of REC expense accounts within the USofA; (3) interaction with REC treatment by other governing bodies; and (4) timing questions related to implementation, recovery, and REC expiration. RESA notes the similarities between the NOPR's REC proposals and those recommended by RESA in emphasizing its support for the NOPR overall.<sup>135</sup> PG&E and SDG&E, Utility Associations, and Dominion, however, suggest that the Commission host a technical conference on REC accounting treatment to ensure workability in light of the diversity of REC instruments.<sup>136</sup>

79. Utility Associations and Carl Pechman request revisions to the NOPR's proposals to capture data on utilities' investments in a broader range of environmental credit mechanisms. Utility Associations argue that the proposed retitling of General Instruction No. 21 to Allowances and Renewable Energy Credits and corresponding changes to the text of the instruction and related accounts do not fully reflect the scope of developments in the industry.<sup>137</sup> Rather, Utility Associations recommend that the Commission extend the provisions of the USofA to consider a broader variety of environmental credits that

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<sup>135</sup> RESA NOPR Comments at 5.

<sup>136</sup> Dominion NOPR Comments at 4-5; PG&E and SDG&E NOPR Comments at 1, 2, 5; Utility Associations NOPR Comments at 18.

<sup>137</sup> Utility Associations NOPR Comments at 19-20.

are either used to: (1) avoid or reduce greenhouse gas emissions to the atmosphere; or (2) convey environmental attributes of renewable electricity generation. Utility Associations also suggest that the Commission could use a proposed technical conference to further identify underlying characteristics of these types of instruments that, if met, would qualify for accounting in the same manner as allowances and RECs. Carl Pechman echoes this request, suggesting broadening new account definitions to incorporate Zero Emissions Credits (ZEC) and carbon offsets.<sup>138</sup>

80. Carl Pechman further questions the NOPR's proposal to create a single category for "allowances" without more detail.<sup>139</sup> Carl Pechman suggests accounting for such allowances together without distinction misses an opportunity to make valuable data about utility investments in diverse environmental credits available to Public Utility Commissions and other interested stakeholders.

81. Utility Associations also question the placement of the new Allowance expense accounts within the USofA.<sup>140</sup> They recommend that the Commission place the new Allowances account within the Other Power Supply expense subfunction rather than within the Steam Power Generation subfunction. Utility Associations explain that, because RECs, unlike sulfur dioxide allowances, typically do not derive from steam power generation, the Steam Power Generation subfunction is not an appropriate place for those costs to be reported.

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<sup>138</sup> Carl Pechman NOPR Comments at 1, 4.

<sup>139</sup> *Id.* at 6-9.

<sup>140</sup> Utility Associations NOPR Comments at 20-21.

82. In addition, some commenters voice concerns about alignment between the NOPR's REC accounting treatment and that of other regulatory bodies. First, several commenters urge the Commission to consider the Financial Accounting Standards Board's ongoing work to address the underlying economic and accounting issues associated with RECs (and other similar instruments) before issuing any final rule or guidance.<sup>141</sup> Utility Associations further advocate for the Commission to strive to align the final rule's requirements and Generally Accepted Accounting Principles (GAAP), to the extent possible, to avoid costs of dual recordkeeping.<sup>142</sup>

83. These commenters also made several suggestions with respect to state ratemaking processes. First, PG&E and SDG&E request that the Commission's general instructions concerning REC reporting under the USofA explicitly clarify that RECs recorded to any FERC account are not intended to impact the retail rates of public utilities.<sup>143</sup> In addition, PG&E and SDG&E request the Commission to explicitly consider instances where regulatory recovery occurs at the time of renewable electric energy production, and reconsider its decision in Order No. 552 precluding the use of inventory methods in Commission filings that reflect the effects of the ratemaking treatment granted by state commissions.<sup>144</sup> PG&E and SDG&E and Utility Associations argue that, where the cost

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<sup>141</sup> Carl Pechman NOPR Comments at 9; PG&E and SDG&E NOPR Comments at 1; Utility Associations NOPR Comments at 18-19.

<sup>142</sup> Utility Associations NOPR Comments at 19.

<sup>143</sup> PG&E and SDG&E NOPR Comments at 2-5.

<sup>144</sup> *Id.* at 5.

of the REC is bundled with electric energy and recovery from retail customers at the time of renewable electricity energy generation, the Commission should allow the entity to charge the full cost of the bundled product to Account 555 (Purchased Power) at the time of energy usage.<sup>145</sup> Commenters argue that doing so is necessary to ensure that accounting reflects the economic effects of the state ratemaking treatment and that the revenue and expense associated with the RECs match.

84. Further, Utility Associations and Dominion comment on the treatment of expired RECs. Utility Associations request specific guidance on how to report expired RECs that are no longer eligible to be used to comply with the applicable renewable energy standard for which they were initially created.<sup>146</sup> They recommend that expired RECs be recorded in Account 411.12, Losses from Disposition of RECs. Dominion emphasizes that RECs may be created or purchased for reasons unrelated to compliance with a specific renewable energy standard, and therefore requests that the Commission adopt an expired RECs definition flexible enough to account for potential REC benefits aside from renewable energy standard application.<sup>147</sup>

85. Utility Associations are also concerned about the flexibility of the NOPR's proposed REC accounting treatment as applied to REC valuation methodologies. Utility Associations worry that the NOPR's proposal to account for RECs as inventory and the issuance of RECs from inventory on a vintage basis using a monthly weighted average of

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<sup>145</sup> *Id.*; Utility Associations NOPR Comments at 22-23.

<sup>146</sup> Utility Associations NOPR Comments at 21-22.

<sup>147</sup> Dominion NOPR Comments at 4.

historical cost determination risks mismatch with the variety of REC markets and treatment.<sup>148</sup> Therefore, Utility Associations advocate for the Commission to allow for more flexibility in valuation method to align the Commission's accounting requirements with compliance requirements, business practices, and retail ratemaking treatments.

86. Lastly, noting the diversity in current accounting practices and ratemaking treatment for RECs and other similar instruments across the utility industry, Utility Associations recommend prospective adoption of any final rule or accounting guidance related to RECs in order to allow for an adequate transition period for utilities.<sup>149</sup> Such prospective adoption would, according to Utility Associations, ensure utilities' existing accounting and reporting treatment continues to align with their current ratemaking treatment, while also providing utilities time to transition operational and accounting practices for future impacts on ratemaking and avoiding unnecessary additional cost and complexity.

### 3. Commission Determination

87. We adopt the NOPR's proposal to codify accounting and reporting treatment for RECs, with a few revisions, discussed below.

88. Despite several commenters' requests,<sup>150</sup> we decline to host a technical conference on REC treatment implementation. We note that the majority of REC comments received

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<sup>148</sup> Utility Associations NOPR Comments at 21.

<sup>149</sup> *Id.* at 20.

<sup>150</sup> See Dominion NOPR Comments at 4-5; PG&E and SDG&E NOPR Comments at 1, 2, 5; Utility Associations NOPR Comments at 18.

on the NOPR do not conflict with the NOPR's proposed REC accounting treatment but rather relate to practicalities of rule implementation and matters outside the area of accounting and reporting. This rule addresses those comments that require deviation from the NOPR's proposals, specifically by broadening relevant instructions in the USofA and creating accounts to accommodate all types of environmental credits. Any accounting and reporting questions that public utilities may have after the issuance of this final rule can be directed to the Commission's Chief Accountant seeking informal or formal accounting guidance in a separate docket.

89. As noted above, we make a few amendments to the NOPR's proposed accounting treatment for RECs. First, in response to Utility Associations' and Carl Pechman's concerns about inclusion of other non-REC environmental items,<sup>151</sup> we have decided to update the name of the proposed Renewable Energy Credit accounts to "Environmental Credits." This retitling will clarify that these accounts are for all types of environmental credits, including ZECs and other allowances, and not just those classified as RECs. These accounts will provide for the recording of any type of environmental credit and allow companies to maintain granularity as needed (e.g., by designating subaccounts or other codes for different types of environmental credits unique to their operations).

90. However, we decline to make additional granular accounting mandatory, as Carl Pechman requests.<sup>152</sup> Such additional granularity is not necessary. The USofA is a

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<sup>151</sup> Carl Pechman NOPR Comments at 1, 4; Utility Associations NOPR Comments at 19-20.

<sup>152</sup> Carl Pechman NOPR Comments at 6-9.

standard framework on which a utility's accounting system is to be based in order to support the Commission's statutory responsibilities. However, utilities are not precluded from tailoring their accounting systems to their own needs, which is a standard practice, by using subaccounts or other codes to track more granular detail for managerial or additional regulatory purposes. Therefore, we adopt the NOPR's proposed changes to General Instruction No. 21.

91. Next, we are persuaded by Utility Associations' request to place the expense accounts for Environmental Credits in the Other Power Supply expenses sub-function rather than the Steam Generation subfunction.<sup>153</sup> We agree that, because environmental credits are not generally the product of steam generation, their expenses do not belong in the Steam Generation subfunction. We have accordingly renamed and renumbered these accounts to Account 555.2 (Bundled Environmental Credits) and Account 555.3 (Unbundled Environmental Credits).

92. The other concerns raised by commenters relate to implementation practicalities rather than the NOPR's proposed accounting treatment itself. We believe that this final rule provides sufficient clarification to address these concerns. However, if any concerns remain, they can be addressed through subsequent informal or formal accounting guidance issued by the Commission's Chief Accountant.

93. The first set of these implementation concerns relates to the potential for inconsistency between Commission accounting treatment and that employed by other

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<sup>153</sup> See Utility Associations NOPR Comments at 20-21.



regulatory bodies.<sup>154</sup> These concerns seem to derive primarily from the NOPR's proposal to treat RECs as inventory.

94. Our decision to treat environmental credits as inventory is consistent with the Commission's long-standing policy, first stated in Order No. 552, of treating emission allowances as inventory, which the Commission has since extended to other environmental credits. Moreover, the primary purpose of our accounting rules is to facilitate ratemaking processes, not necessarily to align with other regulators' accounting practices, which may be designed to serve different objectives. Environmental credits, like allowances, are government-created tradeable property rights designed to promote environmental objectives that store value and are often utilized in a period other than that in which they are acquired. In this sense, environmental credits operate for utilities as an inventoriable asset similar to the value of assets recorded in Account 151 (Fuel Stock (Major Only)), or Account 154 (Plant Materials and Operating Supplies). Generally, if another accounting authority's treatment conflicts with the accounting and financial reporting needed by the Commission to fulfill its statutory responsibilities, then the Commission's accounting and reporting regulations prevail.<sup>155</sup> Finally, while this rule directs utilities to treat environmental credits as inventory, we recognize that there may

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<sup>154</sup> See *id.* at 18-19; Carl Pechman NOPR Comments at 9; PG&E and SDG&E NOPR Comments at 1.

<sup>155</sup> See Order No. 552, FERC Stats. & Regs. ¶ 30,967 at 30,801 (“If GAAP conflicts with the accounting and financial reporting needed by the Commission to fulfill its statutory responsibilities, then GAAP must yield. GAAP cannot control when it would prevent the Commission from carrying out its duty to provide jurisdictional companies with the opportunity to earn a fair return on their investment and to protect ratepayers from excessive charges and discriminatory treatment.”).

be situations in which utilities have different accounting or rate treatment as required by their state or other regulatory bodies. Utilities can record regulatory assets or liabilities to record any differences between accounting and ratemaking treatment, or maintain separate records to accommodate the accounting treatment required by the different regulatory bodies (though, as for any tariff-driven deviation from standard accounting and FERC Form instructions, utilities must disclose such alternative accounting in their FERC Form reports). We also clarify, in response to PG&E and SDG&E's request,<sup>156</sup> the accounting in this rulemaking is not intended to impact retail rates, as indicated above.

95. Next, we turn to commenters' various timing concerns. We are unpersuaded by Utility Associations' and PG&E and SDG&E's concerns about how to report bundled REC costs that are recovered from retail customers at the time of renewable electricity energy generation.<sup>157</sup> Existing regulatory accounts are readily available when costs incurred in one ratemaking period need to be recovered or expensed in another.<sup>158</sup> Changes to the NOPR's accounting proposal are therefore not needed to address these concerns.

96. As for Utility Associations' concerns about where to record expired RECs,<sup>159</sup> we agree that expired RECs should be recorded in new Account 411.12 (Losses from

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<sup>156</sup> PG&E and SDG&E NOPR Comments at 2-5.

<sup>157</sup> *Id.* at 5; Utility Associations NOPR Comments at 22-23.

<sup>158</sup> *See, e.g.*, Account 182.3 (Other Regulatory Assets) and Account 254 (Other Regulatory Liabilities). These regulatory accounts are designated for amounts that are probable to be included in a different period for purposes of developing the rates.

<sup>159</sup> *See* Utility Associations NOPR Comments at 21-22.

Disposition of Environmental Credits). This treatment is consistent with the new General Instruction No. 21 Allowances and Environmental Credits, Part I. Similarly, in response to Dominion's concerns about the non-statutory use of expired RECs,<sup>160</sup> we note that General Instruction No. 21, Part I, indicates that losses on speculative trading should be recorded in Account 426.5 (Other Deductions). As such, no further revision to the accounting treatment for environmental credits is warranted to address recording of expired RECs.

97. Regarding Utility Associations' inventory valuation concerns,<sup>161</sup> we note that our preference for weighted average cost has been in place for Allowances since Order No. 552, which the Commission has consistently applied to environmental credits in the decades since. However, we emphasize again that if specific state law or tariff provisions require utilities to use a different inventory method, the economic reality of the transaction governs, with divergence from standard practice noted and explained in the FERC Form Nos. 1 and 3-Q disclosures.

98. Lastly, we clarify for Utility Associations that, as for all final rules, this final rule will apply only prospectively and will allow utilities an adequate transition period, as discussed further below.<sup>162</sup>

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<sup>160</sup> Dominion NOPR Comments at 4

<sup>161</sup> Utility Associations NOPR Comments at 21.

<sup>162</sup> *See id.* at 20.

**D. Creation of Computer Hardware, Software, and Communication Equipment Accounts**

**1. NOPR**

99. The Commission proposed new accounts in each function and subfunction for computer hardware, software, and communication equipment.<sup>163</sup> The USofA was updated in 2005 to include accounts for recording computer hardware, software, and communication equipment owned by regional transmission organizations (RTO), but did not create comparable accounts for non-RTO public utilities and licensees to report these types of assets.<sup>164</sup> Consequently, non-RTO public utilities do not record computer hardware, software, and communication equipment uniformly, with many utilities recording these assets in general accounts (e.g., Account 303 (Miscellaneous Intangible Plant) and Account 391 (Office Furniture and Equipment)). To eliminate ambiguity and ensure greater consistency and transparency in accounting and reporting, the Commission proposed including computer hardware, software, and communication equipment accounts in each different functional area, including the general function.

100. The Commission proposed to add three plant accounts and three maintenance accounts to all functions and subfunctions that currently lack them, including the new Renewable Generation subfunctions and the new Energy Storage function.<sup>165</sup> These

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<sup>163</sup> NOPR, 180 FERC ¶ 61,050 at P 58.

<sup>164</sup> *Acct. & Fin. Reporting for Pub. Utils. Including RTOs*, Order No. 668, 70 FR 77627 (Dec. 30, 2005), FERC Stats. & Regs. ¶ 31,199 (2005) (cross-referenced at 113 FERC ¶ 61,276), *reh'g denied*, Order No. 668-A, 71 FR 28513 (May 16, 2006), 115 FERC ¶ 61,080 (2006).

<sup>165</sup> NOPR, 180 FERC ¶ 61,050 at P 59.

accounts are: Accounts 315.1, 324.1, 334.1, 338.9, 338.30, 339.9, 345.1, 351.1, 363.1, 387.8, and 397.1 (Computer Hardware); Accounts 315.2, 324.2, 334.2, 338.10, 338.31, 339.10, 345.2, 351.2, 363.2, 387.9, and 397.2 (Computer Software); Accounts 315.3, 324.3, 334.3, 338.11, 338.32, 339.11, 345.3, 351.3, 363.3, 387.10, and 397.3 (Communication Equipment); Accounts 513.1, 531.1, 544.1, 553.1, 558.13, 558.33, 559.12, 578.7, 592.2, and 935.1 (Maintenance of Computer Hardware (Major only)); Accounts 513.2, 531.2, 544.2, 553.2, 558.14, 558.34, 559.13, 578.8, 592.3, 935.2 (Maintenance of Computer Software (Major only)); and Accounts 513.3, 531.3, 544.3, 553.3, 558.15, 558.35, 559.14, 578.9, 592.4, 935.3 (Maintenance of Communication Equipment (Major only)). The Commission added (Major only) to the account names for existing Transmission Expenses Maintenance Accounts 569.1, 569.2, 569.3, consistent with the proposed accounts. Because the RTO function only exists for RTOs and independent system operators, the Commission did not propose this designation on its accounts (i.e., Accounts 576.2, 576.3, and 576.4). These accounts have the same descriptions, instructions, and items as the existing RTO and Transmission function accounts of the same title.

101. The Commission also proposed adding a new Electric Plant Instruction No. 17, Integrated computer hardware, software, and communication equipment.<sup>166</sup> The instruction explained that where computer hardware, software, and communication equipment is integrated as part of a larger retirement unit, it shall be recorded in the property account of the retirement unit purchased. It further clarified that, if this

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<sup>166</sup> *Id.* P 60.

computer hardware, software, or communication equipment is not integrated, Plant Instruction No. 10 should be followed.

102. Lastly, the Commission sought comment on whether the Commission should also create computer hardware, software, and communication accounts for natural gas pipelines, oil pipelines, and centralized service companies.<sup>167</sup>

## 2. Comments

103. Dominion, Clean Energy Associations, and Utility Associations commented on the NOPR's proposal to create new accounts within existing functions for computer hardware, software, and communication equipment. Dominion and Utility Associations appear to conditionally support the NOPR's proposals, with some requested revisions, while Clean Energy Associations oppose them.<sup>168</sup>

104. Clean Energy Associations question whether the proposed accounts are warranted, alleging that they will add administrative burden with few expected benefits.<sup>169</sup> Clean Energy Associations suggest that these costs could better be recorded to Other Accessory Electric Equipment. In the alternative, Clean Energy Associations suggest that the Commission should confirm through accounting guidance that the scheduled retirements approach that most utilities use for non-structures and improvements related to General

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<sup>167</sup> *Id.* P 61.

<sup>168</sup> See Clean Energy Associations NOPR Comments at 14-15; Dominion NOPR Comments at 3; Utility Associations NOPR Comments at 14.

<sup>169</sup> Clean Energy Associations NOPR Comments at 14-15.

Plant may be used for computer hardware, software, and communication equipment  
Production accounts.

105. Dominion, in contrast, supports the proposed changes regarding computer hardware and communication equipment, but raises three concerns regarding software accounting treatment.<sup>170</sup> First, Dominion believes that software should remain in Account 303 despite the potential for some inconsistency in accounting and reporting of computer software between functions. Second, because software is an intangible asset and does not have a depreciable service life similar to production plant, Dominion argues that it is more appropriate to recognize the amortization of software in Account 404 (Limited Term Plant Amortization) than Account 403 (Depreciation Expense). Third, Dominion asserts that the NOPR's proposed accounting guidance conflicts with recent guidance issued by the Commission's Chief Accountant regarding cloud computing, and Dominion states that it agrees with the guidance in that order.<sup>171</sup> Last, Dominion argues that one function having different instructions on how to handle software does not warrant a change to all other functions and subfunctions.<sup>172</sup> If software is to be recorded to different functions, Dominion believes that the Commission should issue guidance on how to account for software that supports more than one function—specifically, whether to use the General function or whether allocations to the functions are required.

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<sup>170</sup> Dominion NOPR Comments at 3-4.

<sup>171</sup> *Id.* at 4 (citing *Guidance on Acct. for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Serv. Contract*, Docket No. AI20-1-000 (Dec. 20, 2019)).

<sup>172</sup> Dominion NOPR Comments at 4.

106. Utility Associations also support creation of these new plant accounts, and recommend that balance amounts for computer hardware, software, and communication equipment that can be readily identified as dedicated to a particular function be transferred to the new accounts.<sup>173</sup> However, Utility Associations note that these assets may by nature share functionality, and even if not, it may be difficult to determine that equipment supports a sole functional area. Where computer hardware, software, or communication equipment is not clearly dedicated to a sole function, Utility Associations suggest that it should be recorded in General Plant.

107. In addition, Utility Associations make a number of comments on specific proposed accounts. First, they suggest that the Commission remove item 1 “Personal Computers” entirely or rename it “Computers and Similar Items” to avoid implying that all personal computers must be tracked functionally.<sup>174</sup> Utility Associations explain that personal computers are generally not tracked functionally due to their short lives, low cost, and frequent transfer among personnel supporting different functional operations.

Eliminating or broadening the item would mitigate the large, disproportionate burden that functional tracking of personal computers would require. Next, Utility Associations recommend allowing utilities to use Accounts 356, 358, 365, and 367 to record fiber optic cable used for transmission and distribution purposes. Utility Associations explain that fiber optic cable provides protective capabilities (shield and grounding, vibration and cable failure detection) and, when used for transmission and distribution, has a longer life

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<sup>173</sup> Utility Associations NOPR Comments at 14.

<sup>174</sup> *Id.* at 14-17.



than other communication devices more consistent with traditional overhead and underground conductors and devices. Therefore, Utility Associations argue that retaining the ability to continue to record fiber optic cable to plant Accounts 356, 358, 365 and 367 better aligns depreciation to its appropriate life span. Last, Utility Associations recommend that the Commission's Chief Accountant amend Accounting Release No. 15, Vintage Year Accounting for General Plant Accounts (AR-15), to allow public utilities currently applying the principles of AR-15 to vintaged General Plant accounts for computer hardware and communication equipment to continue that practice for assets that will now be accounted for in the new functional accounts. Utility Associations explain that this amendment will allow utilities to continue to record "auto-retirements" of assets that are fully amortized and eliminate the need to track small individual items of property.

108. Utility Associations and Dominion also responded to the NOPR's request for comment on the need to create computer hardware, software, and communication equipment accounts in the USofA for centralized service companies. Utility Associations recommend adding computer hardware, software, and communication accounts to the USofA and FERC Form No. 60 for centralized service companies to better align their reporting with associated operating companies.<sup>175</sup> Dominion also requests that if software is to be recorded to the different functions, the Commission should issue guidance on how centralized service companies should account for software that supports more than

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<sup>175</sup> *Id.* at 18.

one function—that is, whether the use of the General function would be appropriate or whether allocations to the functions are required.<sup>176</sup>

109. LEPA responded to the NOPR’s request for comment on the need to create computer hardware, software, and communication equipment accounts in the USofA for oil pipelines. LEPA opposes creation of such new accounts for oil pipelines, arguing that doing so would create needless burdens for oil pipelines that would far outweigh any perceived benefit.<sup>177</sup>

### 3. Commission Determination

110. We adopt the NOPR’s proposal to create new accounts for computer hardware, software, and communication equipment within existing functions that do not already include them.

111. Several commenters questioned whether it is necessary or warranted to create these new accounts, in all or in part.<sup>178</sup> First, we disagree with Clean Energy Associations and Dominion that these new accounts are not warranted.<sup>179</sup> We recognize that creating these new accounts may create initial implementation burden for utilities, but we find that separate functional classification of such costs is necessary to improve uniformity, consistency, and transparency in accounting and reporting of such assets and related

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<sup>176</sup> Dominion NOPR Comments at 4.

<sup>177</sup> LEPA NOPR Comments at 2-4.

<sup>178</sup> See Clean Energy Associations NOPR Comments at 14-15; Dominion NOPR Comments at 3-4; Utility Associations NOPR Comments at 14-17.

<sup>179</sup> See Clean Energy Associations NOPR Comments at 14-15; Dominion NOPR Comments at 4 (arguing that one function having different instructions on how to handle software does not warrant a change to all other functions and subfunctions).

activities, and to better inform the ratemaking process. Additionally, to address the Utility Associations' comment regarding transfer of existing balance amounts for computer hardware, software, and communication equipment,<sup>180</sup> we clarify that if utilities cannot readily identify functional level of detailed balances of plant with associated accumulated depreciation, such balances may reside in the accounts initially used by the utilities.

112. We also disagree with Dominion's suggestion that software should remain in Account 303 as provided in the prior guidance on cloud computing issued by the Commission's Chief Accountant in Docket No. AI20-1-000.<sup>181</sup> This guidance was consistent with then-available accounts within the USofA. In this prior accounting guidance, the Commission's Chief Accountant specifically stated that utilities should record implementation costs for cloud computing in Account 303 "*provided such costs are not specifically provided for in other utility plant accounts.*"<sup>182</sup> In the instant rulemaking, the Commission now provides functional plant accounts specifically designated for software, therefore superseding the prior accounting guidance in Docket No. AI20-1-000. As such, we also reject Dominion's request to provide for amortization of software in Account 404,<sup>183</sup> and instead direct utilities to record associated depreciation

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<sup>180</sup> See Utility Associations NOPR Comments at 14.

<sup>181</sup> See Dominion NOPR Comments at 3-4.

<sup>182</sup> *Guidance on Acct. for Implementation Costs Incurred in a Cloud Computing Arrangement that is a Serv. Contract*, Docket No. AI20-1-000, at 3 (Dec. 20, 2019) (emphasis added).

<sup>183</sup> See Dominion NOPR Comments at 3-4.

expense to Account 403, which includes depreciation for all classes of depreciable electric plant. We also clarify that where software supports more than one function, it can be recorded to Account 397.2 (General Plant Software).

113. To address Utility Associations' comments about computer hardware, software, and communication equipment that serves multiple functions,<sup>184</sup> we clarify that utilities may record such assets based on the assets' predominant use or function, or, alternatively, in the new General Plant accounts. Concerning Utility Associations' comment related to personal computers,<sup>185</sup> we clarify that account lists are illustrative and not prescriptive; personal computers should therefore only be recorded in the functional computer accounts if the specific computer's retirement unit serves that predominant function, such as one issued to a transmission or distribution line worker. In the case of personal computers that are mostly used by employees for general purposes, such computers can be recorded in the new General Plant account.

114. To address Utility Associations' comment about fiber optic cables,<sup>186</sup> we note that the recording of fiber optic cables should follow the same classification criteria as discussed above, and be recorded based on their purpose and function. For example, fiber optic cables used as communication equipment should be recorded in the new functional accounts for communication equipment.

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<sup>184</sup> See Utility Associations NOPR Comments at 14-17.

<sup>185</sup> See *id.*

<sup>186</sup> See *id.* at 15-17.

115. To address Utility Associations'<sup>187</sup> and Clean Energy Associations'<sup>188</sup> comments related to the application of vintage accounting as discussed in AR-15, we note that vintage accounting is the same as scheduled retirements approach. The appropriateness of vintage depreciation is considered on a case-by-case basis within depreciation rate case proceedings.

116. Finally, we note Utility Associations and Dominion's comments requesting new accounts or guidance for centralized service companies<sup>189</sup> and LEPA's comments opposing creation of such accounts for oil pipelines.<sup>190</sup> We will consider whether future guidance or amendments to the USofAs for centralized service companies and natural gas companies are warranted.

**E. Reporting**

**1. NOPR**

117. To accommodate the proposed changes to the USofA explained above, the Commission proposed to amend FERC Form Nos. 1, 1-F, and 3-Q (electric) to include the new subfunctions for Wind, Solar, and Other Non-Hydro Renewable as well as a new Energy Storage function within the plant and operations and maintenance expense sections of the forms, including the schedules for depreciation.<sup>191</sup> Each subfunction and

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<sup>187</sup> *Id.*

<sup>188</sup> Clean Energy Associations NOPR Comments at 15.

<sup>189</sup> See Dominion NOPR Comments at 3; Utility Associations NOPR Comments at 18.

<sup>190</sup> LEPA NOPR Comments at 2-4.

<sup>191</sup> NOPR, 180 FERC ¶ 61,050 at P 62; App. B: FERC Form Nos. 1/1-F at 204-

function would include the accounts as described above. The currently existing functional accounts for energy storage would be removed (Accounts 348, 351, 363, 548.1, 562.1, 570.1, and 584.1) or replaced (Accounts 553.1 and 592.2).

118. The proposed reporting changes to FERC Form Nos. 1, 1-F, and 3-Q (electric) would result in changes to centralized service company reporting in FERC Form No. 60, Schedule XVI—Analysis of Charges for Service—Associate and Non-Associate Companies, because the FERC Form No. 60 summarizes the functional and sub-functional O&M accounts detailed in FERC Form Nos. 1, 1-F, and 3-Q (electric).<sup>192</sup> As such, these proposed changes to FERC Form No. 60 consist of new rows for the summarized totals of the proposed new Energy Storage function and Generation sub-functions O&M accounts.

119. The Commission also proposed to amend FERC Form Nos. 1, 1-F, and 3-Q (electric) to include RECs as part of the instructions and titles wherever allowances are discussed.<sup>193</sup> Further, it proposed to consolidate inputs for both sulfur dioxide and nitrogen oxides (NO<sub>x</sub>) in the existing Allowances schedule,<sup>194</sup> to include inputs for both bundled and unbundled RECs, and to amend the related title for Account 509 to read as

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207, 219, 321-322; FERC Form No. 1 at 227, 336, 352, 354, 401a; FERC Form No. 1-F at 21, 24; FERC Form No. 3-Q (electric) at 208, 324a, 324b.

<sup>192</sup> NOPR, 180 FERC ¶ 61,050 at P 63; App. B: FERC Form No. 60 at 304-305a.

<sup>193</sup> NOPR, 180 FERC ¶ 61,050 at P 64; App. B: FERC Form Nos. 1/1-F at 320; FERC Form No. 1 at 2, 110-111, 120-121, 228a, 229a; Form No. 1-F at 4, 10-11, 15-16.

<sup>194</sup> App. B: FERC Form No. 1 at 228a-229a amended, pages 228b-229b deleted.

Account 509.1.<sup>195</sup> The Commission proposed to add separate gain and loss accounts to the statement of income for RECs.<sup>196</sup>

120. The Commission further proposed to amend FERC Form Nos. 1, 1-F, and 3-Q (electric) to include new plant and maintenance expense accounts for computer hardware, software, and communication equipment within all functions and subfunctions (including the general function).<sup>197</sup> In the Depreciation and Amortization of Electric Plant schedule section B (Basis for Amortization Charges), the Commission proposed to eliminate the first two sentences and the word software from the third sentence as these clauses would no longer be applicable to software.<sup>198</sup>

121. Finally, the Commission proposed to consolidate the several statistical pages for different classes of large production generators into one statistical page to also include hydro and non-hydro renewables.<sup>199</sup> The Commission also proposed to amend the energy storage statistical pages to remove references in the instructions and columns related to cost functionalization.<sup>200</sup>

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<sup>195</sup> App. B: FERC Form Nos. 1/1-F at 320; FERC Form No. 1-F at 15.

<sup>196</sup> App. B: FERC Form Nos. 1/3-Q (electric) at 114; FERC Form No. 1-F at 6.

<sup>197</sup> NOPR, 180 FERC ¶ 61,050 at P 65; App. B: FERC Form Nos. 1/1-F at 204-207, 320-323; FERC Form No. 3-Q (electric) at 325.

<sup>198</sup> App. B: FERC Form No. 1 at 336.

<sup>199</sup> NOPR, 180 FERC ¶ 61,050 at P 62; App. B: FERC Form No. 1 at 402-03 amended; pages 406-07 deleted.

<sup>200</sup> App. B: FERC Form No. 1 at 414-20.

## 2. Comments

122. Clean Energy Associations suggest that the NOPR's proposed changes to the USofA and FERC Form No. 1 have the potential to increase the burden on public utilities that are subject to the USofA requirements, but clarify that if public utilities that are subject to the USofA are supportive of the NOPR's proposed reporting changes, it does not object to the additional requirements.<sup>201</sup>

123. Utility Associations note that the NOPR proposed to combine all large generating assets for FERC Form No. 1 reporting purposes into one statistical page.<sup>202</sup> Utility Associations recommend that the Commission keep existing statistical plant pages 402-03 and 406-07 unchanged and instead add new pages for reporting large solar, wind, and other non-hydro renewables larger than 10 MW. Utility Associations argue that, because the vast majority of the reporting requirements on the existing pages are not applicable to solar, wind, and other non-hydro renewable generating assets, consolidating the information for generating plant statistics on one page adds undue complexity that will complicate preparation and review. In addition, echoing their comments on the NOPR's energy storage provisions (that the functional MWh reporting on pages 414-16 of FERC Form No. 1 contradict the NOPR's goal in establishing a new storage function), Utility Associations recommend that the Commission modify FERC Form No. 1 pages 414-16 to eliminate columns d, e, and f, which show functional MWhs delivered.

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<sup>201</sup> Clean Energy Associations NOPR Comments at 3.

<sup>202</sup> Utility Associations NOPR Comments at 23-24.



124. Utility Associations also note a number of ministerial errors in the NOPR related to reporting.<sup>203</sup> Those errors include: (1) proposed line 35.46 on the FERC Form No. 1 and 1-F page should identify 339.13 instead of 338.13; (2) proposed line 10.5 on the FERC Form No. 3-Q page 324a should be re-labeled to remove the word “Renewables” from “Wind Renewables Generation – Maintenance (558.25-558.35)” to ensure consistent naming convention with proposed lines 10.1, 10.2 and 10.4; (3) the summation referenced in proposed line 21.4 on FERC Form No. 3-Q page 325 should be changed from “Enter Total of lines 21 thru 21.4” to “Enter Total of lines 21 thru 21.3”; and (4) on pages 320-23 of FERC Form No. 1 and 1-F: (a) proposed line 79.15 should be modified to “Maintenance of Other Accessory Electrical Equipment” instead of “Other Accessory Electrical Equipment”; (b) proposed line 79.37 should list Account 558.33 instead of Account 558.31; (c) proposed line 79.38 should list Account 558.34 instead of Account 558.32; (d) proposed line 79.39 should list Account 558.35 instead of Account 558.33; and (e) proposed line 79.40 should list Account 558.36 instead of Account 558.34.

### 3. **Commission Determination**

125. We adopt the NOPR’s proposed changes to the FERC forms, with minor revisions, discussed below. First, in keeping with other revisions made in this final rule, we update references in FERC Form Nos. 1, 1-F, and 3-Q (electric) to the proposed Other Non-Hydro Renewable subfunction to refer instead to the Other Renewable subfunction. We also update references to RECs in FERC Form Nos. 1, 1-F, and 3-Q (electric) to instead reference environmental credits, as appropriate.

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<sup>203</sup> *Id.*, at app. C.

126. In response to Clean Energy Associations' concerns about potential increased burden resulting from the NOPR's proposed reporting requirements,<sup>204</sup> while sensitive to the administrative burdens our rules create, we find that the clarity, transparency, consistency, and uniformity benefits of this final rule, including its reporting requirements, outweigh the potential burdens of reporting.

127. We agree with Utility Associations' request to maintain statistical plant pages 402-03 and 406-07 and instead add new pages for reporting renewable generating assets larger than 10 MW.<sup>205</sup> Accordingly, we add a new renewable generating plant statistical page 404 to FERC Form No. 1. The NOPR's proposal to consolidate these forms was intended to simplify the reporting burden associated with this final rule. After considering Utility Associations' comment, we find that refraining from consolidation better reduces administrative burdens.

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<sup>204</sup> We note that Clean Energy Associations qualified their objection to the NOPR's proposed reporting requirements. See Clean Energy Associations NOPR Comments at 3 ("The Clean Energy Associations also note that the extensive changes to the USofA and FERC Form No. 1 proposed in the USofA NOPR actually have the potential to *increase* the burden on public utilities that are subject to the USofA requirements; if public utilities that are subject to the USofA are supportive of the significant reporting changes proposed in the USofA NOPR that they would have to bear, Clean Energy Associations do not object to these additional requirements."). We also note that Utility Associations, whose members are subject to the USofA, appear to support the reporting proposals. See Utility Associations NOPR Comments at 1, 24 (explaining that Utility Associations support the NOPR's provisions "except as noted in [their] specific comments[,] and not otherwise objecting to the NOPR's reporting proposals).

<sup>205</sup> Utility Associations NOPR Comments at 23-24.

128. Lastly, we accept all of Utility Associations' proposed ministerial revisions<sup>206</sup> in order to correctly reflect the Commission's intent in proposing the NOPR and effectuate the purpose of this final rule.

**F. Other Issues**

**1. Account Numbering**

**a. Comments**

129. Utility Associations and Dominion take issue with the number of digits that the NOPR proposed to include for new accounts. Specifically, both commenters recommend using four-digit accounts rather than the five-digit accounts (for example, using 338.1 rather than 338.10) proposed in the NOPR to avoid the cost and time that modifying accounting software to allow for five-digit accounts will require.<sup>207</sup>

**b. Commission Determination**

130. While we recognize Utility Associations' and Dominion's concerns that the proposed five-digit numbering increases implementation burdens to update accounting software,<sup>208</sup> we nevertheless find five-digit numbering to be the least burdensome way to implement needed changes because creating these new accounts without using five-digit numbering would require complete overhaul of the USofA's numbering system. In addition, we find that the need for and benefit from these new accounts, as discussed above, justifies the burden caused by the proposed numbering.

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<sup>206</sup> *Id.*, at app. C.

<sup>207</sup> Dominion NOPR Comments at 2; Utility Associations NOPR Comments at 6.

<sup>208</sup> See Dominion NOPR Comments at 2; Utility Associations NOPR Comments at 6.

## 2. Issues Beyond the Scope of this Rulemaking

### a. Comments

131. Some commenters raise issues that were not addressed in the NOPR. Clean Energy Associations urge the Commission to convene a technical conference, issue guidance, or act on the NOI in Docket No. RM22-2-000 on reactive power compensation issues, and otherwise to confirm that the cost of equipment that supports the production and provision of reactive power service should be used to support reactive power compensation that is based on the current *American Electric Power* methodology.<sup>209</sup> RESA requests that the Commission make additional modifications to the USofA in this or a subsequent rulemaking to include accounts associated with competitive market function activities (i.e., the provision of default supply service).<sup>210</sup> Carl Pechman suggests that the Commission adopt an on-going process to evaluate accounting needs required to support decarbonization of the electric system.<sup>211</sup> In addition, Carl Pechman suggests evaluating whether existing accounting protocols for generation assets provide sufficient fidelity to provide adequate information on capital cost of pollution control and decarbonization investments (such as carbon capture and storage).

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<sup>209</sup> Clean Energy Associations NOPR Comments at 5.

<sup>210</sup> RESA NOPR Comments at 5-11.

<sup>211</sup> Carl Pechman NOPR Comments at 2.

**b. Commission Determination**

132. The NOPR did not propose reforms related to these issues raised by commenters. Therefore, these issues are outside the scope of this proceeding and will not be addressed here.

**G. Proposed Compliance Procedures**

**1. Comments**

133. Several commenters request that the rule's accounting and reporting requirements apply prospectively to avoid the need to restate or refile financial statements from prior years.<sup>212</sup> Specifically, Dominion suggests a two-year implementation window between rulemaking issuance and implementation date given the significant time and expense that implementing the rulemaking's changes will require.<sup>213</sup> Utility Associations also request guidance on how utilities should transfer historical balances to the new accounts when implementing the Commission's order, and propose providing for the transfer of the historical balances to the new accounts in the current year without restating balances for prior years and for disclosure in footnotes in reports filed with the Commission, including FERC Form No. 1, describing the amounts transferred.<sup>214</sup>

134. Several commenters also request that the Commission allow utilities to continue to apply the previously approved depreciation rates applicable to the prior accounts in the

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<sup>212</sup> *Id.* at 6; Dominion NOPR Comments at 2-3; PG&E and SDG&E NOPR Comments at 1, 5.

<sup>213</sup> Dominion NOPR Comments at 5.

<sup>214</sup> Utility Associations NOPR Comments at 6 (stating that its proposed treatments would be consistent with the treatment that the Commission previously approved in Order No. 784).

new accounts until depreciation rates are approved for the new accounts.<sup>215</sup> Utility Associations explain that this would enable the continued depreciation of assets using approved depreciation rates until a utility can propose new rates for review and approval.

135. Last, Utility Associations suggest that the Commission should allow jurisdictional utilities with formula rates to update their formula rates to comply with the Commission's order updating the USofA through a single-issue filing either under FPA section 205 or a compliance filing.<sup>216</sup> Utility Associations note that permitting single-issue filings would allow affected utilities to update their formula rates solely for the purpose of complying with this final rule, thereby providing the necessary clarity that the remainder of the filed rate would not be subject to litigation.

## 2. **Commission Determination**

136. We require regulated entities to implement the requirements of this final rule by January 1, 2025. These changes are therefore prospective, as requested.<sup>217</sup> We will not require retroactive reporting in the FERC Form Nos. 1 and 3-Q of these accounting changes, nor restatement of prior years in the initial Forms under implementation of the new accounts. Therefore, public utilities must use the accounting treatment codified in this rule in all applicable filings starting in the first quarter of 2025. We have chosen the January 1, 2025, implementation date despite Dominion's request for two years to

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<sup>215</sup> Dominion NOPR Comments at 2-3; Utility Associations NOPR Comments at 7.

<sup>216</sup> Utility Associations NOPR Comments at 4-5, 24.

<sup>217</sup> *Id.* at 6; Dominion NOPR Comments at 2-3; PG&E and SDG&E NOPR Comments at 1, 5.

implement the changes<sup>218</sup> in order to timely respond to the need for this final rule's changes while providing a reasonable implementation period that coincides with a new accounting and reporting cycle. This extended implementation schedule will also ensure that smaller entities subject to our accounting and reporting requirements have sufficient time to update their accounting and reporting software. In response to Utility Associations' request for guidance on how utilities should transfer historical balances to the new accounts,<sup>219</sup> we agree that the historical balances should be transferred to the new accounts in the current year without restating balances for prior years, and that the amounts transferred should be disclosed in the utilities' FERC Forms filed with the Commission.

137. We agree with commenters that existing depreciation rates should apply to the newly classified plant going forward, to be revisited in a timely manner in the utility's next relevant depreciation rate case.<sup>220</sup> This includes, as noted above, vintage depreciation rates being applied to non-General Plant, and current amortization rates being treated as vintage depreciation with identical rates. We will consider on a case-by-case basis the appropriateness of this depreciation method going forward as with any depreciation rate case, and take into account all of the appropriate information relevant to

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<sup>218</sup> Dominion NOPR Comments at 5.

<sup>219</sup> Utility Associations NOPR Comments at 6 (stating that its proposed treatments would be consistent with the treatment that the Commission previously approved in Order No. 784).

<sup>220</sup> See Dominion NOPR Comments at 2-3; Utility Associations NOPR Comments at 7.

retirement units in the account, including the accuracy of historic accounting and supplementary property records in contested depreciation rate cases.

138. We also agree with Utility Associations<sup>221</sup> that utilities affected by this final rule may seek to update their rates on a single-issue basis given the limited scope of the requirements in this final rule.<sup>222</sup> We therefore will allow jurisdictional utilities with formula rates to seek to update their formula rates to comply with this rule through either a single-issue filing under FPA section 205 or as part of a utility's section 205 filing to update formula rates involving other matters. We note, however, that, as we do not issue this rule under FPA section 206, FPA section 206 compliance filings are neither a required nor appropriate response to this final rule; compliance rather requires appropriate accounting for items subject to the accounting treatment in rate filings. We also emphasize that, as for other accounting rulemakings, nothing in this rule should be construed as pre-granting authority for rate recovery in a rate proceeding.<sup>223</sup>

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<sup>221</sup> See Utility Associations NOPR Comments at 4-5, 24 (citing *Promoting Transmission Inv. through Pricing Reform*, Order No. 679, 71 FR 43294 July 31, (2006), 116 FERC ¶ 61,057, at PP 191-193, *order on reh'g*, Order No. 679-A, 72 FR 1152 (Jan. 10, 2007), 117 FERC ¶ 61,345 (2006), *order on reh'g*, 119 FERC ¶ 61,062 (2007)).

<sup>222</sup> See *Indicated RTO Transmission Owners*, 161 FERC ¶ 61,018, at PP 13-14 (2017); see also *See Pub. Util. Transmission Rate Changes to Address Accumulated Deferred Income Taxes*, Order No. 864, 84 FR 65281 (Nov. 7, 2019), 169 FERC ¶ 61,139, at PP 2, 18 (2019), *order on reh'g*, Order No. 864-A, 85 FR 27681 (May 11, 2020), 171 FERC ¶ 61,033 (2020).

<sup>223</sup> See *Acct., Fin. Reporting, & Rate Filing Requirements for Asset Ret. Obligations*, Order No. 631, 68 FR 19610 (Apr. 21, 2003), 103 FERC ¶ 61,021, at P 64 (2003).



**V. Information Collection Statement**

139. The information collection requirements contained in this final rule are subject to review by the Office of Management and Budget (OMB) under section 3507(d) of the Paperwork Reduction Act of 1995.<sup>224</sup> OMB's regulations require approval of certain information collection requirements imposed by agency rules.<sup>225</sup> Upon approval of a collection of information, OMB will assign an OMB control number and expiration date. Respondents subject to the filing requirements of this rule will not be penalized for failing to respond to these collections of information unless the collections of information display a valid OMB control number.

140. This final rule requires jurisdictional entities as detailed in 18 CFR part 101 (Uniform System of Accounts Prescribed for Public Utilities and Licensees Subject to the Provision of the Federal Power Act, General Instructions) to update, modify, and add accounts. The updates within the USofA are also required in the respective forms (FERC Form Nos. 1, 1-F, 3-Q (electric), and 60) that are filed with the Commission.

141. Interested persons may obtain information on the reporting requirements by contacting Ellen Brown, Office of the Executive Director, Federal Energy Regulatory Commission, 888 First Street, NE, Washington, DC 20426 via email ([DataClearance@ferc.gov](mailto:DataClearance@ferc.gov)) or telephone ((202) 502-8663).

142. Title: Annual Report of Major Electric Utilities, Licensees, and Others (FERC Form No. 1), Annual Report for Nonmajor Public Utilities and Licensees (FERC Form

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<sup>224</sup> 44 U.S.C. 3507(d).

<sup>225</sup> 5 CFR 1320.11.

No. 1-F), Quarterly Financial Report of Electric Utilities, Licensees (FERC Form No. 3-Q (electric)), Annual Reports of Centralized Service Companies (FERC Form No. 60)

Action: Revision of collections of information in accordance with Docket No. RM21-11-000.

OMB Control Nos.: 1902-0021 (FERC Form No. 1) and 1902-0029 (FERC Form No. 1-F), 1902-0205 (FERC Form No. 3-Q (electric)), and 1902-0215 (FERC Form No. 60)

Respondents: Public utilities and licensees and centralized service companies who are not exempt or waived from filing per 18 CFR parts 141 and 369.

Frequency of Information Collection: Annually (FERC Form Nos. 1, 1-F, and 60); quarterly (FERC Form No. 3-Q).

Necessity of Information: The reforms in this final rule adjust the USofA to account for changes in the industry, particularly around renewable generation.

Internal Review: The Commission has reviewed the changes and has determined that such changes are necessary. These requirements conform to the Commission's need for efficient information collection, communication, and management within the energy industry. The Commission has specific, objective support for the burden estimates associated with the information collection requirements.

143. The Commission estimates a one-time burden due to the revisions in FERC Form Nos. 1, 1-F, 3-Q (electric), and 60 reflected in the final rule in Docket No. RM21-11-000, but estimates that the ongoing burden following the implementation will be consistent with the current collection estimates. The burden estimates below are included in two

tables, the first table showing the one-time implementation burden required to update, add, and modify accounts related to the final rule and the second table showing the ongoing annual burden to record and report on each account in the FERC Form Nos. 1, 1-F, 3-Q (electric), and 60.

144. The one-time implementation burden includes updating, adding, and modifying accounts to be compliant with the final rule in Docket No. RM21-11-000. This includes updates to FERC Form Nos. 1, 1-F, 3-Q (electric), and 60 for the creation of new accounts and production subfunctions for wind, solar, and other renewable generating assets; establishment of a new functional class for energy storage accounts; codification of the accounting treatment of environmental credits; and creation of new accounts within existing functions for computer hardware, software, and communication equipment. The Reporting section IV.E of this document indicates which forms and pages will be affected by the categorized proposed changes.

145. The estimates below were calculated using previous final rules combined with the Commission's best estimate of the required effort to update, modify, or add accounts within the USofA. We estimate that, on average, it will take 20 minutes to create or transition an account to comply with the requirements listed in this final rule. FERC Form No. 1 requires 132 account changes, FERC Form No. 1-F requires 132 account changes, and FERC Form No. 60 requires 11 account changes. The changes to FERC Form No. 3-Q (electric) are reflected in the calculations for FERC Form No. 1 and 1-F because the quarterly reports are generally a subset of the annual filings required by

FERC Form No. 1 and 1-F. The changes above are reflected in the one-time implementation burden estimate listed in Table 1 below.<sup>226</sup>

<b>Table 1: RM21-11-000 Final Rule One-Time Implementation Burden, in Year 1</b>						
<b>Requirement</b>	<b>Number of Respondents (1)</b>	<b>Annual Number of Responses per Respondent (2)</b>	<b>Total Number of Responses (1)*(2)=(3)</b>	<b>Average Burden &amp; Cost Per Response<sup>227</sup> (4)</b>	<b>Total Annual Burden Hours &amp; Cost (3)*(4)=(5)</b>	<b>Annual Cost per Respondent (\$) (5)÷(1)</b>
Form No. 1	217	1	217	44 hrs.; \$4,004	9,548 hrs.; \$868,868	\$4,004
Form No.1-F	2	1	2	44 hrs.; \$4,004	88 hrs.; \$8,008	\$4,004
Form No. 3-Q electric <sup>228</sup>	221	3	663	0 hrs. \$0	0 hrs. \$0	\$0
Form No. 60	42	1	42	3.7 hrs.; \$336.70	155.4 hrs.; \$14,141.40	\$336.70
<b>Total for Implementation Burden</b>			924		9,791.4 hrs.; \$891,017.40	

146. The Commission estimates that the ongoing burden in years 2 and beyond will be consistent with the current burden estimates related to FERC Form Nos. 1, 1-F, 3-Q (electric), and 60 because, although the accounts are changing, the data historically has been recorded and documented under different account names: therefore, after the initial

<sup>226</sup> The burden numbers in the table are rounded to 1 decimal place, and the costs are rounded to the nearest dollar.

<sup>227</sup> The average burden and cost per response is calculated using the hourly wage figures for FERC staff. The Commission estimates that the costs for the Commission are comparable to those in industry. Commission staff average salary plus benefits totals \$188,922 or \$91 per hour.

<sup>228</sup> The Commission assumes that the one-time burden for the FERC Form No. 3-Q is incorporated into the calculation of FERC Form No. 1 because quarterly filings are typically a subset of the annual filings.

implementation of the changes, respondents will likely revert to the current burden estimates. The estimated ongoing burden is shown in Table 2 below.

<b>Table 2: RM21-11-000 Final Rule Annual Ongoing Burden (current), Starting in Year 2</b>						
<b>Requirement</b>	<b>Number of Respondents (1)</b>	<b>Annual Number of Responses per Respondent (2)</b>	<b>Total Number of Responses (1)*(2)=(3)</b>	<b>Average Burden &amp; Cost Per Response<sup>229</sup> (4)</b>	<b>Total Annual Burden &amp; Cost (3)*(4)=(5)</b>	<b>Annual Cost per Respondent (\$) (5)÷(1)</b>
Form No. 1	217	1	217	1,182 hrs.; \$107,562	256,494 hrs.; \$23,340,954	\$107,562
Form No.1-F	2	1	2	136 hrs.; \$12,376	272 hrs.; \$24,752	\$12,376
Form No. 3-Q electric	221	3	663	168 hrs. \$15,288	111,384 hrs.; \$10,135,944	\$45,864
Form No. 60	42	1	42	78 hrs.; \$7,098	3,276 hrs.; \$298,116	\$7,098
<b>Total Ongoing Burden (current)</b>			924		371,426 hrs.; \$33,799,766	

147. In this final rule, besides the noted revisions, the Commission used the numbers provided in the NOPR.

## **VI. Environmental Analysis**

148. The Commission is required to prepare an Environmental Assessment or an Environmental Impact Statement for any action that may have a significant adverse effect

<sup>229</sup> The average burden and cost per response is calculated using the hourly wage figures for FERC staff. The Commission estimates that the costs for the Commission are comparable to those in industry. Commission staff average salary plus benefits totals \$188,992 or \$91 per hour.

on the human environment.<sup>230</sup> No environmental consideration is necessary for the promulgation of a rule that addresses information gathering, analysis, and dissemination,<sup>231</sup> or that addresses accounting.<sup>232</sup> This final rule addresses accounting. In addition, this final rule involves information gathering, analysis, and dissemination. Therefore, this final rule falls within categorical exemptions provided in the Commission's regulations. Consequently, neither an environmental impact statement nor an environmental assessment is required.

## **VII. Regulatory Flexibility Act**

149. The Regulatory Flexibility Act of 1980 (RFA)<sup>233</sup> generally requires a description and analysis of final rules that will have significant economic impact on a substantial number of small entities. The RFA mandates consideration of regulatory alternatives that accomplish the stated objectives of a proposed rule and minimize any significant economic impact on a substantial number of small entities.<sup>234</sup> The Small Business Administration (SBA) sets the threshold for what constitutes a small business. Under SBA's size standards,<sup>235</sup> electric generators definitions of "small" range from 250–1,150

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<sup>230</sup> *Reguls. Implementing the Nat'l Evt'l Pol'y Act*, Order No. 486, 52 FR 47897 (Dec. 17, 1987), FERC Stats. & Regs. Preambles 1986-1990 ¶ 30,783 (1987) (cross-referenced at 41 FERC ¶ 61,284).

<sup>231</sup> See 18 CFR 380.4(a)(5).

<sup>232</sup> See *id.* 380.4(a)(16).

<sup>233</sup> 5 U.S.C. 601-612.

<sup>234</sup> *Id.* 603(c).

<sup>235</sup> 13 CFR 121.201.

employees based on the type of generation. For the purpose of our analysis, we use the 1150 employee threshold NAICS Code: 221115 Wind Electric Power Generation (this will cover all categories of electric generators) that is used for solar, wind, geothermal, biomass, and “other” generators because the proposed rules accounting changes are particularly relevant for these types of generation.

150. In our analysis, we utilized previous submissions of the FERC Form Nos. 1,<sup>236</sup> 1-F,<sup>237</sup> 3-Q (electric),<sup>238</sup> and 60<sup>239</sup> filers to create populations of companies to determine the number of small entities. The Commission found that, of this population, approximately 88% percent of companies filing FERC Form No. 1, 50% of companies filing FERC Form No. 1-F, and approximately 69% of companies filing FERC Form No. 60, qualify as “small” using the definition provided by SBA. The Commission believes that this rule will not have a significant economic impact on a substantial number of small entities, and therefore no regulatory flexibility analysis is required.

151. According to SBA guidance, the determination of significance of impact “should be seen as relative to the size of the business, the size of the competitor’s business, and

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<sup>236</sup> The total population of 2020 FERC Form No. 1 filers totaled 221. We used a statistical sample size of 67 companies that produces a 95% confidence level.

<sup>237</sup> The total population of 2020 FERC Form No. 1-F filers totaled 2.

<sup>238</sup> The FERC Form No. 3-Q are quarterly filings, which are typically a subset of the annual filings. The Commission assumes that the 3-Q filers are generally consistent with FERC Form No. 1 filers.

<sup>239</sup> The total population of 2020 FERC Form No. 60 filers totaled 42. We used a statistical sample size of 29 companies that produces a 95% confidence level.

the impact the regulation has on larger competitors.”<sup>240</sup> We do not consider the estimated cost to be a significant economic impact. As a result, we certify that this final rule will not have a significant economic impact on a substantial number of small entities.

### **VIII. Document Availability**

152. In addition to publishing the full text of this document in the Federal Register, the Commission provides all interested persons an opportunity to view and/or print the contents of this document via the Internet through the Commission’s Home Page (<http://www.ferc.gov>).

153. From the Commission’s Home Page on the Internet, this information is available on eLibrary. The full text of this document is available on eLibrary in PDF and Microsoft Word format for viewing, printing, and/or downloading. To access this document in eLibrary, type the docket number excluding the last three digits of this document in the docket number field.

154. User assistance is available for eLibrary and the Commission’s website during normal business hours from FERC Online Support at (202) 502-6652 (toll free at 1-866-208-3676) or email at [ferconlinesupport@ferc.gov](mailto:ferconlinesupport@ferc.gov), or the Public Reference Room at (202) 502-8371, TTY (202) 502-8659. E-mail the Public Reference Room at [public.referenceroom@ferc.gov](mailto:public.referenceroom@ferc.gov).

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<sup>240</sup> U.S. Small Business Administration, *A Guide for Gov’t Agencies How to Comply with the Regul. Flexibility Act*, at 18 (May 2012), [https://www.sba.gov/sites/default/files/advocacy/rfaguide\\_0512\\_0.pdf](https://www.sba.gov/sites/default/files/advocacy/rfaguide_0512_0.pdf).



**IX. Effective Date and Congressional Notification**

155. These regulations are effective January 1, 2025. The Commission has determined, with the concurrence of the Administrator of the Office of Information and Regulatory Affairs of OMB, that this rule is not a “major rule” as defined in section 351 of the Small Business Regulatory Enforcement Fairness Act of 1996.

List of subjects in 18 CFR Part 101

Electric power

Electric utilities

Reporting and recordkeeping requirements

Uniform System of Accounts

By the Commission.

( S E A L )

Kimberly D. Bose,  
Secretary.

In consideration of the foregoing, the Commission amends Part 101, Chapter I, Title 18, Code of Federal Regulations, as follows:

**PART 101 - UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED FOR PUBLIC UTILITIES AND LICENSEES SUBJECT TO THE PROVISIONS OF THE FEDERAL POWER ACT**

1. The authority citation for part 101 continues to read as follows:

**Authority:** 16 U.S.C. 791a-825r, 2601-2645; 31 U.S.C. 9701; 42 U.S.C. 7101-7352, 7651-7651o.

2. In part 101:

- a. Under General Instructions, Instruction 21 is revised;

- b. Under Electric Plant Instructions, Instruction 17 is added;

- c. Under Balance Sheet Chart of Accounts, Accounts 158.3 and 158.4 are added to the list;

- d. Under Balance Sheet Accounts:

- i. Accounts 108, 111, 158.1, and 158.2 are revised; and

- ii. Accounts 158.3 and 158.4 are added;

- e. Under Electric Plant Chart of Accounts:

- i. Accounts 315.1, 315.2, 315.3, 324.1, 324.2, 324.3, 334.1, 334.2, and 334.3 are added to the list;

- ii. Section 2.d. of the list is revised;
  - iii. Accounts 338.1 through 338.13 are added to the list;
  - iv. Sections 2.e., 2.f., and 2.g. and Accounts 338.20 through 338.34, 339.1 through 339.13, and 351.1, 351.2, and 351.3 are added to the list;
  - v. Account 363 is removed from the list and reserved;
  - vi. Accounts 363.1, 363.2, and 363.3 are added to the list;
  - vii. Account 387 is removed from the list;
  - viii. Section 6 is redesignated as section 7 of the list;
  - ix. A new section 6 and Accounts 387.1 through 387.12 are added to the list;
  - x. Account 397 is removed from the list and reserved; and
  - xi. Accounts 397.1, 397.2, and 397.3 are added to the list;
- f. Under Electric Plant Accounts:
- i. Accounts 315.1, 315.2, 315.3, 324.1, 324.2, 324.3, 334.1, 334.2, 334.3, 338.1 through 338.13, 338.20 through 338.34, 339.1 through 339.13, and 345.1 through 345.3 are added;
  - ii. Accounts 348 and 351 are removed and reserved;
  - iii. Accounts 351.1, 351.2, and 351.3 are added;
  - iv. Account 363 is removed and reserved;

v. Accounts 363.1, 363.2, 363.3, 387, and 387.1 through 387.12 are added;

vi. Account 397 is removed and reserved; and

vii. Accounts 397.1, 397.2, and 397.3 are added;

g. Under Income Chart of Accounts, Accounts 411.11 and 411.12 are added to the list;

h. Under Income Accounts, Accounts 411.11 and 411.12 are added;

i. Under Operation and Maintenance Expense Chart of Accounts:

i. Accounts 513.1, 513.2, 513.3, 531.1, 531.2, 531.3, 544.1, 544.2, and 544.3 are added to the list;

ii. Account 548.1 is removed from the list and reserved;

iii. Account 553.1 of the list is revised;

iv. Accounts 553.2, 553.3, 555.2, 555.3, 558.1 through 558.24, and 559.1 through 559.16 and sections 1.f., 1.g, and 1.h. are added to the list;

v. Account 562.1 is removed from the list and reserved;

vi. Accounts 569.1, 569.2, and 569.3 of the list are revised;

vii. Accounts 577.1 through 577.5 and 578.1 through 578.7 are added to the list;

- viii. Account 570.1 is removed from the list and reserved;
- viii. Sections 4 through 8 are redesignated as sections 5 through 9 of the list;
- ix. A new section 4 is added to the list;
- x. Account 584.1 is removed from the list and reserved;
- xi. Account 592.2 of the list is revised; and
- xii. Accounts 592.3, 592.4, 935.1, 935.2, and 935.3 are added to the list; and
- j. Under Operation and Maintenance Expense Accounts:
  - i. Account 509 is revised;
  - ii. Accounts 509.2, 509.3, 513.1, 513.2, 513.3, 531.1, 531.2, 531.3, 544.1, 544.2, and 544.3 are added;
  - iii. Account 548.1 is removed and reserved;
  - iv. Account 553.1 is revised;
  - v. Accounts 553.2, 553.3, 558.1 through 558.24, and 559.1 through 559.16 are added;
  - vi. Account 562.1 is removed and reserved;
  - vii. Accounts 569.1, 569.2, and 569.3 are revised;
  - viii. Account 570.1 is removed and reserved;

- ix. Accounts 577.1, 577.2 through 577.5, 578.1 through 578.7 are added;
- x. Account 584.1 is removed and reserved; and
- xi. Account 592.2, 592.3, 592.4, 935.1, 935.2, and 935.3 are added.

The revisions and additions read as follows:

**PART 101 - UNIFORM SYSTEM OF ACCOUNTS PRESCRIBED FOR PUBLIC UTILITIES AND LICENSEES SUBJECT TO THE PROVISIONS OF THE FEDERAL POWER ACT**

\* \* \* \* \*

**General Instructions**

\* \* \* \* \*

*21. Allowances and environmental credits.*

A. Public utilities owning allowances and environmental credits for operational purposes, shall account for such allowances and environmental credits at historical cost in account 158.1, Allowance Inventory, account 158.2, Allowances Withheld, account 158.3, Bundled Environmental Credits Inventory, or account 158.4, Unbundled Environmental Credits Inventory, as appropriate.

B. Allowances and environmental credits acquired for speculative purposes shall be accounted for in account 124, Other Investments. When purchased allowances and environmental credits acquired for speculative purposes become eligible for use in different years, and the allocation of the purchase cost cannot be determined by fair

value, the purchase cost allocated to allowances and environmental credits of each vintage shall be determined through use of a present-value based measurement. The interest rate used in the present-value measurement shall be the utility's incremental borrowing rate, in the month in which the allowances and environmental credits are acquired, for a loan with a term similar to the period that it will hold the allowances and environmental credits and in an amount equal to the purchase price.

C. The underlying records supporting operational allowances and environmental credits recorded in account 158.1, account 158.2, account 158.3, and account 158.4 shall be maintained in sufficient detail at historical costs and provide the number of allowances and environmental credits and the related cost by vintage year, including allowances and environmental credits acquired at zero cost.

D. Issuances from inventory included in account 158.1, account 158.2, account 158.3, and account 158.4 shall be accounted for on a vintage basis using a monthly weighted-average method of historical cost determination. The cost of eligible allowances and environmental credits not used in the current year, shall be transferred to the vintage for the immediately following year.

E. Account 158.1 shall be credited and account 509, Allowances, debited concurrent with the monthly remittance of the allowances to be charged to expense based on each month's emissions. Account 158.3 and 158.4 shall be credited and account 555.2, Bundled Environmental Credits, and account 555.3, Unbundled Environmental Credits, debited, respectively, so that the cost of the environmental credits to be remitted



for the year is charged to expense based on each month's usage. This may, in certain circumstances, require allocation of the cost between months on a fractional basis.

F. In any period in which actual emissions exceed the amount allowable based on eligible allowances owned, the utility shall estimate the cost to acquire the additional allowances needed and charge account 158.1 with the estimated cost and credit the proper liability account. In any period in which a utility records its estimated amount of required environmental credits, the utility shall debit account 158.3 or account 158.4 with the estimated cost and credit the proper liability account. When differences between the estimated and actual costs become known, the adjustments should be made through account 158.1, account 158.3, and 158.4, as well as account 509, account 555.2, and account 555.3 within a single month, as appropriate.

G. When a prepayment is made for allowances or environmental credits, the payment is debited to account 165, Prepayments. This accounting is not intended to influence the outcome of any rate treatment.

H. Penalties assessed by any authoritative agencies shall be charged to account 426.3, Penalties.

I. Gains on dispositions of allowances and environmental credits, other than those held for speculative purposes, shall be accounted for as follows. First, if there is uncertainty as to the regulatory treatment, the gain shall be deferred in account 254, Other Regulatory Liabilities, pending resolution of the uncertainty. Second, if there is certainty as to the existence of a regulatory liability, the gain will be credited to account 254, with

subsequent recognition in income when reductions in charges to customers occur or the liability is otherwise satisfied. Third, all other gains will be credited to account 411.8, Gains from Disposition of Allowances, or account 411.11, Gain from Disposition of Environmental Credits. Losses on disposition of allowances and environmental credits, other than those held for speculative purposes, shall be accounted for as follows. Losses that qualify as regulatory assets shall be charged directly to account 182.3, Other Regulatory Assets. All other losses shall be charged to account 411.9, Losses from Disposition of Allowances, or account 411.12, Losses from Disposition of Environmental Credits. (See Definition No. 31.) Gains or losses on disposition of allowances and environmental credits held for speculative purposes shall be recognized in account 421, Miscellaneous Nonoperating Income, or account 426.5, Other Deductions, as appropriate.

J. Revenues for environmental credits associated with the sale of energy shall be recorded in the appropriate operating revenue account.

\* \* \* \* \*

**Electric Plant Instructions**

\* \* \* \* \*

*17. Integrated computer hardware, software, and communication equipment.*

Where computer hardware, software, and communication equipment is integrated as part of a larger retirement unit, it shall be recorded in the property account of the retirement unit purchased. This shall be done consistently with electric plant instruction 10.

\* \* \* \* \*

**Balance Sheet Chart of Accounts**

\* \* \* \* \*

3. Current and Accrued Assets

\* \* \* \* \*

158.3 Bundled environmental credits inventory.

158.4 Unbundled environmental credits inventory.

\* \* \* \* \*

**Balance Sheet Accounts**

\* \* \* \* \*

**108 Accumulated provision for depreciation of electric utility plant (Major only).**

A. This account shall be credited with the following:

(1) Amounts charged to account 403, Depreciation Expense, or to clearing accounts for current depreciation expense for electric plant in service.

(2) Amounts charged to account 403.1, Depreciation expense for asset retirement costs, for current depreciation expense related to asset retirement costs in electric plant in service in a separate subaccount.

(3) Amounts charged to account 421, Miscellaneous Nonoperating Income, for depreciation expense on property included in account 105, Electric Plant Held for Future Use. Include, also, the balance of accumulated provision for depreciation on property when transferred to account 105, Electric Plant Held for Future Use, from other property

accounts. Normally account 108 will not be used for current depreciation provisions because, as provided herein, the service life during which depreciation is computed commences with the date property is includible in electric plant in service; however, if special circumstances indicate the propriety of current accruals for depreciation, such charges shall be made to account 421, Miscellaneous Nonoperating Income.

(4) Amounts charged to account 413, Expenses of Electric Plant Leased to Others, for electric plant included in account 104, Electric Plant Leased to Others.

(5) Amounts charged to account 416, Costs and Expenses of Merchandising, Jobbing, and Contract Work, or to clearing accounts for current depreciation expense.

(6) Amounts of depreciation applicable to electric properties acquired as operating units or systems. (See electric plant instruction 5.)

(7) Amounts charged to account 182, Extraordinary Property Losses, when authorized by the Commission.

(8) Amounts of depreciation applicable to electric plant donated to the utility.

(The utility shall maintain separate subaccounts for depreciation applicable to electric plant in service, electric plant leased to others and electric plant held for future use.)

B. At the time of retirement of depreciable electric utility plant, this account shall be charged with the book cost of the property retired and the cost of removal and shall be credited with the salvage value and any other amounts recovered, such as insurance.

When retirement, costs of removal and salvage are entered originally in retirement work

orders, the net total of such work orders may be included in a separate subaccount hereunder. Upon completion of the work order, the proper distribution to subdivisions of this account shall be made as provided in the following paragraph.

C. For general ledger and balance sheet purposes, this account shall be regarded and treated as a single composite provision for depreciation. For purposes of analysis, however, each utility shall maintain subsidiary records in which this account is segregated according to the following functional classification for electric plant:

- (1) Steam production,
- (2) Nuclear production,
- (3) Hydraulic production,
- (4) Solar production,
- (5) Wind production,
- (6) Other renewable production,
- (7) Other production,
- (8) Transmission,
- (9) Distribution,
- (10) Regional Transmission and Market Operation,
- (11) Energy Storage Plant, and
- (12) General.

These subsidiary records shall reflect the current credits and debits to this account in sufficient detail to show separately for each such functional classification:

- (a) The amount of accrual for depreciation,
- (b) The book cost of property retired,
- (c) Cost of removal,
- (d) Salvage, and
- (e) Other items, including recoveries from insurance.

Separate subsidiary records shall be maintained for the amount of accrued cost of removal other than legal obligations for the retirement of plant recorded in account 108, Accumulated Provision for Depreciation of Electric Utility Plant (Major only).

D. When transfers of plant are made from one electric plant account to another, or from or to another utility department, or from or to nonutility property accounts, the accounting for the related accumulated provision for depreciation shall be as provided in electric plant instruction 12.

E. The utility is restricted in its use of the accumulated provision for depreciation to the purposes set forth above. It shall not transfer any portion of this account to retained earnings or make any other use thereof without authorization by the Commission.

\* \* \* \* \*

**111 Accumulated provision for amortization of electric utility plant (Major only).**

- A. This account shall be credited with the following:
  - (1) Amounts charged to account 404, Amortization of Limited-Term Electric

Plant, for the current amortization of limited-term electric plant investments.

(2) Amounts charged to account 421, Miscellaneous Nonoperating Income, for amortization expense on property included in account 105, Electric Plant Held for Future Use. Include also the balance of accumulated provision for amortization on property when transferred to account 105, Electric Plant Held for Future Use, from other property accounts. See also paragraph A(2), account 108, Accumulated Provision for Depreciation of Electric Utility Plant.

(3) Amounts charged to account 405, Amortization of Other Electric Plant.

(4) Amounts charged to account 413, Expenses of Electric Plant Leased to Others, for the current amortization of limited-term or other investments subject to amortization included in account 104, Electric Plant Leased to Others.

(5) Amounts charged to account 425, Miscellaneous Amortization, for the amortization of intangible or other electric plant which does not have a definite or terminable life and is not subject to charges for depreciation expense, with Commission approval.

(The utility shall maintain subaccounts of this account for the amortization applicable to electric plant in service, electric plant leased to others and electric plant held for future use.)

B. When any property to which this account applies is sold, relinquished, or otherwise retired from service, this account shall be charged with the amount previously credited in respect to such property. The book cost of the property so retired less the

amount chargeable to this account and less the net proceeds realized at retirement shall be included in account 421.1, Gain on Disposition of Property, or account 421.2, Loss on Disposition of Property, as appropriate.

C. For general ledger and balance sheet purposes, this account shall be regarded and treated as a single composite provision for amortization. For purposes of analysis, however, each utility shall maintain subsidiary records in which this account is segregated according to the following functional classification for electric plant: (1) Steam production; (2) nuclear production; (3) hydraulic production; (4) solar production; (5) wind production; (6) other renewable production; (7) other production; (8) transmission; (9) distribution; (10) regional transmission and market operation; (11) energy storage plant; and (12) general. These subsidiary records shall reflect the current credits and debits to this account in sufficient detail to show separately for each such functional classification (a) the amount of accrual for amortization, (b) the book cost of property retired, (c) cost of removal, (d) salvage, and (e) other items, including recoveries from insurance.

D. The utility is restricted in its use of the accumulated provision for amortization to the purposes set forth above. It shall not transfer any portion of this account to retained earnings or make any other use thereof without authorization by the Commission.

\* \* \* \* \*



**158.1 Allowance inventory.**

A. This account shall include the cost of allowances owned by the utility and not withheld by any authoritative agency. *See* General Instruction No. 21 and account 158.2, Allowances Withheld.

B. This account shall be credited and account 509, Allowances, shall be debited concurrent with the monthly emissions.

C. Separate subdivisions of this account shall be maintained so as to separately account for those allowances usable in the current year and in each subsequent year. The underlying records of these subdivisions shall be maintained in sufficient detail so as to identify each allowance included; the origin of each allowance; and the historical cost.

(Note: For prepayments of allowances, see General Instruction No. 21.)

**158.2 Allowances withheld.**

A. This account shall include the cost of allowances owned by the utility but withheld by any authoritative agency. (*See* General Instruction No. 21.)

B. The inventory cost of the allowances released by any authoritative agency for use by the utility shall be transferred to account 158.1, Allowance Inventory.

C. The underlying records of this account shall be maintained in sufficient detail so as to identify each allowance included; the origin of each allowance; and the historical cost.

**158.3 Bundled environmental credits inventory.**

A. This account shall include the cost of environmental credits owned by the utility, bundled with energy, and not withheld by any authoritative agency. See General Instruction No. 21 and account 158.2, Allowances and Environmental Credits Withheld.

B. This account shall be credited and account 509.2, Bundled Environmental Credits, shall be debited concurrent with the monthly use of environmental credits.

C. Separate subdivisions of this account shall be maintained so as to separately account for those environmental credits usable in the current year and in each subsequent year. The underlying records of these subdivisions shall be maintained in sufficient detail so as to identify each environmental credit included; the origin of each environmental credit; and the historical cost.

(Note: For prepayments of environmental credits, see General Instruction No. 21.)

**158.4 Unbundled environmental credits inventory.**

A. This account shall include the cost of environmental credits owned by the utility, not considered bundled with energy, and not withheld by any authoritative agency. See General Instruction No. 21 and account 158.2, Allowances and Environmental Credits Withheld.

B. This account shall be credited and account 509.3, Unbundled Environmental Credits, shall be debited concurrent with the monthly use of environmental credits.

C. Separate subdivisions of this account shall be maintained so as to separately account for those environmental credits usable in the current year and in each subsequent

year. The underlying records of these subdivisions shall be maintained in sufficient detail so as to identify each environmental credit included; the origin of each environmental credit; and the historical cost.

(Note: For prepayments of environmental credits, see General Instruction No. 21.)

\* \* \* \* \*

**Electric Plant Chart of Accounts**

\* \* \* \* \*

2. Production Plant

a. steam production

\* \* \* \* \*

315.1 Computer hardware.

315.2 Computer software.

315.3 Communication equipment.

\* \* \* \* \*

b. nuclear production

\* \* \* \* \*

324.1 Computer hardware.

324.2 Computer software.

324.3 Communication equipment.

\* \* \* \* \*

c. hydraulic production

\* \* \* \* \*

334.1 Computer hardware.

334.2 Computer software.

334.3 Communication equipment.

\* \* \* \* \*

d. solar production

338.1 Land and land rights.

338.2 Structures and improvements.

338.3 [Reserved]

338.4 Solar panels.

338.5 Collector system.

338.6 Generator step-up transformers (GSU).

338.7 Inverters.

338.8 Other accessory electrical equipment.

338.9 Computer hardware.

338.10 Computer software.

338.11 Communication equipment.

338.12 Miscellaneous power plant equipment.

338.13 Asset retirement costs for solar production.

e. wind production

338.20 Land and land rights.

338.21 Structures and improvements.

338.22 [Reserved]

338.23 Wind turbines.

338.24 Wind towers and fixtures.

338.25 [Reserved]

338.26 Collector system.

338.27 Generator step-up transformers (GSU).

338.28 Inverters.

338.29 Other accessory electrical equipment.

338.30 Computer hardware.

338.31 Computer software.

338.32 Communication equipment.

338.33 Miscellaneous power plant equipment.

338.34 Asset retirement costs for wind production.

f. other renewable production

339.1 Land and land rights.

339.2 Structures and improvements.

339.3 Fuel holders.

339.4 Boilers.

339.5 [Reserved]

339.6 Generators.

339.7 [Reserved]

339.8 Other accessory electrical equipment.

339.9 Computer hardware.

339.10 Computer software.

339.11 Communication equipment.

339.12 Miscellaneous power plant equipment.

339.13 Asset retirement costs for other renewable production.

g. other production

340 Land and land rights.

341 Structures and improvements.

342 Fuel holders, producers, and accessories.

343 Prime movers.

344 Generators.

345 Accessory electric equipment.

345.1 Computer hardware.

345.2 Computer software.

345.3 Communication equipment.

346 Miscellaneous power plant equipment.

347 Asset retirement costs for other production plant.

348 [Reserved]

3. Transmission Plant

\* \* \* \* \*

351.1 Computer hardware.

351.2 Computer software.

351.3 Communication equipment.

\* \* \* \* \*

#### 4. Distribution Plant

\* \* \* \* \*

363 [Reserved]

363.1 Computer hardware.

363.2 Computer software.

363.3 Communication equipment.

\* \* \* \* \*

#### 6. Energy Storage Plant

387 [Reserved]

387.1 Land and land rights.

387.2 Structures and improvements.

387.3 Energy storage equipment.

387.4 [Reserved]

387.5 Collector system.

387.6 Generator step-up transformers (GSU).

387.7 Inverters.

387.8 Computer hardware.

387.9 Computer software.

387.10 Communication equipment.

387.11 Miscellaneous energy storage equipment.

387.12 Asset retirement costs for energy storage.

7. General Plant

\* \* \* \* \*

397 [Reserved]

397.1 Computer hardware.

397.2 Computer software.

397.3 Communication equipment.

\* \* \* \* \*

**Electric Plant Accounts**

\* \* \* \* \*

**315.1 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

Items

1. Personal computers.
2. Servers.
3. Workstations.



4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

### **315.2 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

#### Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

### **315.3 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

\* \* \* \* \*

**324.1 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

Items

1. Personal computers.
2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.

7. Networking components.

### **324.2 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

#### Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

### **324.3 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

\* \* \* \* \*

**334.1 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

Items

1. Personal computers.
2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

**334.2 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

#### Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

#### **334.3 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

#### Items

1. Fiber optic cable.
2. Remote terminal units.

3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

\* \* \* \* \*

### **338.1 Land and land rights.**

This account shall include the cost of land and land rights used in connection with solar power generation. (See electric plant instruction 7.)

### **338.2 Structures and improvements.**

This account shall include the cost in place of structures and improvements used in connection with solar power generation. (See electric plant instruction 8.)

### **338.3 [Reserved]**

### **338.4 Solar panels.**

This account shall include the installed cost of the racks, solar panels, solar tracking system, and other equipment to be used primarily for generating Direct Current (DC) electricity.

### **338.5 Collector system.**

This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as capacitors and reactors) that are used to transport and consolidate the power fed from individual solar panels up to, but not including, the

substation prior to interconnection to the grid. This account shall exclude the cost of transformers and other equipment used for the express purpose of interconnecting to transmission or distribution lines.

#### Items

1. Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.
2. Armored conductors, buried, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc.
3. Brackets.
4. Circuit breakers.
5. Conductors, including insulated and bare wires and cables.
6. Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct, and standpipe on pole or tower.
7. Crossarms and braces.
8. Excavation and backfill, including shoring, bracing, bridging, and disposal of excess excavated material.
9. Extension arms.
10. Fireproofing, in connection with any items listed herein.
11. Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed.
12. Ground wires, clamps, etc.

13. Guards.
14. Hollow-core oil-filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc.
15. Insulators, including pin, suspension, and other types, and tie wire or clamps.
16. Lightning arresters.
17. Paving, Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.
18. Permits for construction.
19. Pole steps and ladders.
20. Poles, wood, steel, concrete, or other material.
21. Racks complete with insulators.
22. Railings.
23. Railroad and highway crossing guards.
24. Reinforcing and stubbing.
25. Removal and relocation of subsurface obstructions.
26. Settings.
27. Sewer connections, including drains, traps, tide valves, check valves, etc.
28. Shaving, painting, gaining, roofing, stenciling, and tagging.
29. Splices.
30. Sumps, including pumps.
31. Switches.



32. Towers.

33. Tree trimming, initial cost including the cost of permits therefor.

34. Ventilating equipment.

35. Other line devices.

**338.6 Generator step-up transformers (GSU).**

This account shall include only the cost of the GSU transformers directly connected to the generator terminal tips and other equipment used for conveying the power to the GSU for the purpose of initially changing the voltage or frequency of electric energy for the purpose of moving the power. It shall exclude the cost of additional transformers and other equipment once the power has been initially stepped up from a generator voltage to a higher voltage.

Note: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purposes of transmission or distribution.

**338.7 Inverters.**

This account shall include the installed cost of inverters for the purpose of converting electricity from direct current (DC) to alternating current (AC).

**338.8 Other accessory electrical equipment.**

This account shall include the installed cost of other conversion or auxiliary generating apparatus and equipment used primarily in connection with the control and switching of electric energy produced by solar panels, including weather monitoring equipment, and protection of electric circuits and equipment, as used to support the

generator in the action of generating power (excluding SCADA systems) not specifically chargeable to any other account.. This account shall exclude Collector System costs, account 338.5, Collector System; GSU costs, account 338.6, Generator Step-up Transformers (GSU); and Inverter costs, account 338.7, Inverters.

#### Items

1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.
2. Rheostats, storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, special housings, etc.
3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, special housing, etc.
4. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, trunktype boards complete, cubicles, generator signal stands, temperature-recording devices, atmospheric reading devices, frequency control equipment, master clocks, watt-hour meter, station totalizing wattmeter, storage batteries, panels and charging sets, instrument

transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, batteries, special housing for batteries, etc.

5. Station buses, including main, auxiliary transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, current transformers, potential transformers, protective relays, storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station ground system, special fire-extinguishing system, and test equipment.

Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.

Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.

### **338.9 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

#### Items

1. Personal computers.

2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

### **338.10 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

#### Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.

11. Market application software.

**338.11 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

**338.12 Miscellaneous power plant equipment.**

This account shall include the installed cost of miscellaneous equipment in and about the solar plant devoted to general station use, and which is not properly includible in any of the foregoing solar power production accounts.

Items

1. Compressed air and vacuum cleaning systems, including tanks, compressors, exhausters, air filters, piping, etc.

2. Cranes and hoisting equipment, including cranes, cars, crane rails, monorails, hoists, etc., with electric and mechanical connections.
3. Fire-extinguishing equipment for general station use.
4. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
5. Miscellaneous equipment, including atmospheric and weather indicating devices, intrasite communication equipment, laboratory equipment, signal systems, callophones, emergency whistles and sirens, fire alarms, and other similar equipment.
6. Miscellaneous belts, pulleys, countershafts, etc.
7. Refrigerating system including compressors, pumps, cooling coils, etc.
8. Station maintenance equipment, including lathes, shapers, planers, drill presses, hydraulic presses, grinders, etc., with motors, shafting, hangers, pulleys, etc.
9. Ventilating equipment, including items wholly identified with apparatus listed herein.

Note: When any item of equipment, listed herein is used wholly in connection with equipment included in another account, its cost shall be included in such other account.

**338.13 Asset retirement costs for solar production.**

This account shall include asset retirement costs on plant included in solar production function.

**338.20 Land and land rights.**

This account shall include the cost of land and land rights used in connection with wind power generation. (See electric plant instruction 7.)

**338.21 Structures and improvements.**

This account shall include the cost in place of structures and improvements used in connection with wind power generation. (See electric plant instruction 8.)

**338.22 [Reserved]****338.23 Wind turbines.**

This account shall include the cost installed of the mechanical turbine parts and generator equipment, including nacelle, gearbox, etc., to be used primarily for generating electricity.

**338.24 Wind towers and fixtures.**

This account shall include the cost installed of towers and appurtenant fixtures used for supporting wind power production. Foundations shall be included in account 338.21 Structures and Improvements.

**338.25 [Reserved]****338.26 Collector system.**

This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as capacitors and reactors) that are used to transport and consolidate the power fed from individual wind turbines up to, but not including, the substation prior to interconnection to the grid. This account shall exclude the cost of

transformers and other equipment used for the express purpose of interconnecting to transmission or distribution lines.

#### Items

1. Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.
2. Armored conductors, buried, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc.
3. Brackets.
4. Circuit breakers.
5. Conductors, including insulated and bare wires and cables.
6. Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct, and standpipe on pole or tower.
7. Crossarms and braces.
8. Excavation and backfill, including shoring, bracing, bridging, and disposal of excess excavated material.
9. Extension arms.
10. Fireproofing, in connection with any items listed herein.
11. Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed.
12. Ground wires, clamps, etc.
13. Guards.



14. Hollow-core oil-filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc.
15. Insulators, including pin, suspension, and other types, and tie wire or clamps.
16. Lightning arresters.
17. Paving, Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.
18. Permits for construction.
19. Pole steps and ladders.
20. Poles, wood, steel, concrete, or other material.
21. Racks complete with insulators.
22. Railings.
23. Railroad and highway crossing guards.
24. Reinforcing and stubbing.
25. Removal and relocation of subsurface obstructions.
26. Settings.
27. Sewer connections, including drains, traps, tide valves, check valves, etc.
28. Shaving, painting, gaining, roofing, stenciling, and tagging.
29. Splices.
30. Sumps, including pumps.
31. Switches.
32. Towers.

33. Tree trimming, initial cost including the cost of permits therefor.

34. Ventilating equipment.

35. Other line devices.

**338.27 Generator step-up transformers (GSU).**

This account shall include only the cost of the GSU transformers and other equipment used for conveying the power to the pad-mount GSU for the purpose of initially changing the voltage or frequency of electric energy for the purpose of moving the power. It shall exclude the cost of additional transformers and other equipment once the power has been initially stepped up from a generator voltage to a higher voltage.

Note: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purposes of transmission or distribution.

**338.28 Inverters.**

This account shall include the installed cost of inverters for the purpose of converting electricity from direct current (DC) to alternating current (AC).

**338.29 Other accessory electrical equipment.**

This account shall include the installed cost of other conversion or auxiliary generating apparatus and equipment used primarily in connection with the control and switching of electric energy produced by wind turbines, including weather monitoring equipment, and protection of electric circuits and equipment, as used to support the generator in the action of generating power (excluding SCADA systems) not specifically chargeable to any other account. This account shall exclude Collector System costs,

account 338.26, Collector System; GSU costs, account 338.27, Generator Step-up Transformers (GSU); and Inverter costs, account 338.28, Inverters.

#### Items

1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.
2. Rheostats, storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, special housings, etc.
3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, special housing, etc.
4. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, trunktype boards complete, cubicles, generator signal stands, temperature-recording devices, atmospheric reading devices, frequency control equipment, master clocks, watt-hour meter, station totalizing wattmeter, storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, batteries, special housing for batteries, etc.

5. Station buses, including main, auxiliary transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, current transformers, potential transformers, protective relays, storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station ground system, special fire-extinguishing system, and test equipment.

Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.

Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.

### **338.30 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

#### Items

1. Personal computers.
2. Servers.
3. Workstations.

4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

### **338.31 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

#### Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

### **338.32 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

#### Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

#### **338.33 Miscellaneous power plant equipment.**

This account shall include the installed cost of miscellaneous equipment in and about the wind plant devoted to general station use, and which is not properly includible in any of the foregoing wind power production accounts.

#### **338.34 Asset retirement costs for wind production.**

This account shall include asset retirement costs on plant included in wind production function.

#### **339.1 Land and land rights.**

This account shall include the cost of land and land rights used in connection with other renewable power generation. (See electric plant instruction 7.)

#### **339.2 Structures and improvements.**

This account shall include the cost in place of structures and improvements used in connection with other renewable power generation. (See electric plant instruction 8.)

Note: this includes mirrors for solar boiler systems.

### **339.3 Fuel holders.**

This account shall include the cost installed of renewable fuel handling and storage equipment used between the point of fuel delivery to the station and the intake through which fuel is either directly drawn to the engine, or into a boiler system, inclusive.

#### Items

1. Blower and fans.
2. Boilers and pumps.
3. Economizers.
4. Exhauster outfits.
5. Flues and piping.
6. Pipe system.
7. Producers.
8. Regenerators.
9. Scrubbers.
10. Steam injectors.
11. Tanks for storage of electrolytes, hydrogen, renewable natural gas, algae, etc.

## 12. Vaporizers.

### **339.4 Boilers.**

This account shall include the cost installed of furnaces, boilers, steam and feed water piping, boiler apparatus and accessories used in the production of steam or other vapor, to be used primarily for generating electricity. This account includes solar boiler systems

1. Boiler feed system, including feed water heaters, evaporator condensers, heater drain pumps, heater drainers, deaerators, and vent condensers, boiler feed pumps, surge tanks, feed water regulators, feed water measuring equipment, and all associated drives.
2. Boiler plant cranes and hoists and associated drives.
3. Boilers and equipment, including boilers and baffles, economizers, superheaters, foundations and settings, water walls, arches, grates, insulation, blow-down system, drying out of new boilers, also associated motors or other power equipment.
4. Draft equipment, including air preheaters and accessories, induced and forced draft fans, air ducts, combustion control mechanisms, and associated motors or other power equipment.
5. Gas-burning equipment, including holders, burner equipment and piping, control equipment, etc.
6. Instruments and devices, including all measuring, indicating, and recording



equipment for boiler plant service together with mountings and supports.

7. Lighting systems.

8. Stacks, including foundations and supports, stack steel and ladders, stack concrete, stack lining, stack painting (first), when set on separate foundations, independent of substructure or superstructure of building.

9. Station piping, including pipe, valves, fittings, separators, traps, desuperheaters, hangers, excavation, covering, etc., for station piping system, including all steam, condensate, boiler feed and water supply piping, etc.,

10. Ventilating equipment.

11. Water purification equipment, including softeners and accessories, evaporators and accessories, heat exchangers, filters, tanks for filtered or softened water, pumps, motors, etc.

12. Water-supply systems, including pumps, motors, strainers, raw-water storage tanks, boiler wash pumps, intake and discharge pipes and tunnels not a part of a building.

### **339.5 [Reserved]**

### **339.6 Generators.**

This account shall include the cost installed of other renewable generators of all types apart from wind and solar.

#### Items

1. Cranes, hoists, etc., including items wholly identified with such apparatus.

2. Fire-extinguishing equipment.
3. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.
4. Generator cooling system, including air cooling and washing apparatus, air fans and accessories, air ducts, etc.
5. Generators—main, a.c. or d.c., including field rheostats and connections for self-excited units and excitation system when identified with the generating unit.
6. Lighting systems.
7. Lubricating system, including tanks, filters, strainers, pumps, piping, coolers, etc.
8. Mechanical meters, and recording instruments.
9. Platforms, railings, steps, gratings, etc., appurtenant to apparatus listed herein.
10. Cooling system, including towers, pumps, tank, and piping.
11. Piping - main exhaust, including connections between generator and condenser and between condenser and hotwell.
12. Piping - main steam, including connections from main throttle valve to turbine inlet.
13. Circulating pumps, including connections between condensers and intake and discharge tunnels.
14. Tunnels, intake and discharge, for condenser system, when not a part of structure, water screens, etc.

15. Water screens, motors, etc.
16. Moisture separator for turbine steam.
17. Turbine lubricating oil (initial charge).

### **339.7 [Reserved]**

### **339.8 Other accessory electrical equipment.**

This account shall include the installed cost of other conversion or auxiliary generating apparatus and equipment used primarily in connection with the control and switching of electric energy produced by other renewable, including weather monitoring equipment, and the protection of electric circuits and equipment as used to support the generator in the action of generating power (excluding SCADA systems) not specifically chargeable to any other account.

#### Items

1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.
2. Rheostats, backup storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, special housings, etc.
3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and

equipment, conductors and conduit, special supports for generator main leads, grounding switch, special housing, etc.

4. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, trunktype boards complete, cubicles, generator signal stands, temperature-recording devices, atmospheric reading devices, frequency control equipment, master clocks, watt-hour meter, station totalizing wattmeter, backup storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, emergency backup batteries, special housing for batteries, etc.

5. Station buses, including main, auxiliary transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, current transformers, potential transformers, protective relays, backup storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station ground system, special fire-extinguishing system, and test equipment.

Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.

Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.

### **339.9 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

#### Items

1. Personal computers.
2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

### **339.10 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

## Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

**339.11 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

## Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.

6. Workstations.

7. Telephones.

**339.12 Miscellaneous power plant equipment.**

This account shall include the installed cost of miscellaneous equipment in and about the other renewable plant devoted to general station use, and which is not properly includible in any of the foregoing other renewable power production accounts.

**339.13 Asset retirement costs for other renewable production.**

This account shall include asset retirement costs on plant included in other renewable production function.

\* \* \* \* \*

**345.1 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

Items

1. Personal computers.

2. Servers.

3. Workstations.

4. Energy Management System (EMS) hardware.

5. Supervisory Control and Data Acquisition (SCADA) system hardware.

6. Peripheral equipment.

7. Networking components.

**345.2 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

## Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

**345.3 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.



Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

\* \* \* \* \*

**348 [Reserved]**

\* \* \* \* \*

**351 [Reserved]**

**351.1 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

Items

1. Personal computers.
2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.

6. Peripheral equipment.
7. Networking components.

### **351.2 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

#### Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

### **351.3 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

## Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

\* \* \* \* \*

**363 [Reserved]****363.1 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

## Items

1. Personal computers.
2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

**363.2 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

## Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

**363.3 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

\* \* \* \* \*

**387 [Reserved]**

**387.1 Land and land rights.**

This account shall include the cost of land and land rights used in connection with energy storage plant. (See electric plant instruction 7.)

**387.2 Structures and improvements.**

This account shall include the cost in place of structures and improvements used in connection with energy storage plant. (See electric plant instruction 8.)

**387.3 Energy storage equipment.**

A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes.

B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage

equipment shall not be charged to this account but to operations and maintenance expense accounts for energy storage expenses, as appropriate.

C. The records supporting this account shall show, by months, the function(s) each energy storage asset supports or performs.

#### Items

1. Batteries/Chemical.
2. Compressed Air.
3. Flywheels.
4. Superconducting Magnetic Storage.
5. Thermal.

Note: The cost of pumped storage hydroelectric plant shall be charged to hydraulic production plant. These are examples of items includible in this account. This list is not exhaustive.

#### **387.4 [Reserved]**

#### **387.5 Collector system.**

This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as capacitors and reactors) that are used to transport and consolidate the power fed from individual storage facilities up to, but not including, the substation prior to interconnection to the grid. This account shall exclude the cost of transformers and other equipment used for the express purpose of interconnecting to transmission or distribution lines.

## Items

1. Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.
2. Armored conductors, buried, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc.
3. Brackets.
4. Circuit breakers.
5. Conductors, including insulated and bare wires and cables.
6. Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct, and standpipe on pole or tower.
7. Crossarms and braces.
8. Excavation and backfill, including shoring, bracing, bridging, and disposal of excess excavated material.
9. Extension arms.
10. Fireproofing, in connection with any items listed herein.
11. Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed.
12. Ground wires, clamps, etc.
13. Guards.
14. Hollow-core oil-filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc.

15. Insulators, including pin, suspension, and other types, and tie wire or clamps.
16. Lightning arresters.
17. Paving, Pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.
18. Permits for construction.
19. Pole steps and ladders.
20. Poles, wood, steel, concrete, or other material.
21. Racks complete with insulators.
22. Railings.
23. Railroad and highway crossing guards.
24. Reinforcing and stubbing.
25. Removal and relocation of subsurface obstructions.
26. Settings.
27. Sewer connections, including drains, traps, tide valves, check valves, etc.
28. Shaving, painting, gaining, roofing, stenciling, and tagging.
29. Splices.
30. Sumps, including pumps.
31. Switches.
32. Towers.
33. Tree trimming, initial cost including the cost of permits therefor.
34. Ventilating equipment.



35. Other line devices.

**387.6 Generator step-up transformers (GSU).**

This account shall include only the cost of the GSU transformers and other equipment used for conveying the power to the pad-mount GSU for the purpose of initially changing the voltage or frequency of electric energy for the purpose of moving the power. It shall exclude the cost of additional transformers and other equipment once the power has been initially stepped up from a generator voltage to a higher voltage.

Note: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purposes of transmission or distribution.

**387.7 Inverters.**

This account shall include the installed cost of inverters for the purpose of converting electricity from direct current (DC) to alternating current (AC).

**387.8 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

Items

1. Personal computers.
2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.

5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

### **387.9 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

#### Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.
6. Energy Management System (EMS) software.
7. Supervisory Control and Data Acquisition (SCADA) system software.
8. Evaluation and assessment system software.
9. Operating, planning and transaction scheduling software.
10. Reliability applications.
11. Market application software.

**387.10 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

## Items

1. Fiber optic cable.
2. Remote terminal units.
3. Microwave towers.
4. Global Positioning System (GPS) equipment.
5. Servers.
6. Workstations.
7. Telephones.

**387.11 Miscellaneous energy storage equipment.**

This account shall include the installed cost of miscellaneous equipment in and about the energy storage equipment devoted to general station use, and which is not properly includible in any of the foregoing energy storage plant accounts.

**387.12 Asset retirement costs for energy storage plant.**

This account shall include asset retirement costs on plant included in the energy storage plant function.

\* \* \* \* \*

**397 [Reserved]**

**397.1 Computer hardware.**

This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.

## Items

1. Personal computers.
2. Servers.
3. Workstations.
4. Energy Management System (EMS) hardware.
5. Supervisory Control and Data Acquisition (SCADA) system hardware.
6. Peripheral equipment.
7. Networking components.

**397.2 Computer software.**

This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.

## Items

1. Software licenses.
2. User interface software.
3. Modeling software.
4. Database software.
5. Tracking and monitoring software.

- 6. Energy Management System (EMS) software.
- 7. Supervisory Control and Data Acquisition (SCADA) system software.
- 8. Evaluation and assessment system software.
- 9. Operating, planning and transaction scheduling software.
- 10. Reliability applications.
- 11. Market application software.

**397.3 Communication equipment.**

This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.

Items

- 1. Fiber optic cable.
- 2. Remote terminal units.
- 3. Microwave towers.
- 4. Global Positioning System (GPS) equipment.
- 5. Servers.
- 6. Workstations.
- 7. Telephones.

\* \* \* \* \*

**Income Chart of Accounts**

- 1. Utility Operating Income

\* \* \* \* \*

411.11 Gains from disposition of environmental credits.

411.12 Losses from disposition of environmental credits.

\* \* \* \* \*

**Income Accounts**

\* \* \* \* \*

**411.11 Gains from disposition of environmental credits.**

This account shall be credited with the gain on the sale, exchange, or other disposition of environmental credits in accordance with paragraph (H) of General Instruction No. 21. Income taxes relating to gains recorded in this account shall be recorded in account 409.1, Income Taxes, Utility Operating Income.

Note: Revenues for environmental credits associated with the sale of energy shall be recorded in the appropriate operating revenue account consistent with General Instruction No. 21 (J).

**411.12 Losses from disposition of environmental credits.**

This account shall be debited with the loss on the sale, exchange, or other disposition of environmental credits in accordance with paragraph (H) of General Instruction No. 21. Income taxes relating to losses recorded in this account shall be recorded in account 409.1, Income Taxes, Utility Operating Income.

\* \* \* \* \*

**Operation and Maintenance Expense Chart of Accounts**

1. Power Production Expenses

a. steam power generation

Operation

\* \* \* \* \*

509 Allowances.

\* \* \* \* \*

Maintenance

\* \* \* \* \*

513.1 Maintenance of computer hardware (Major only).

513.2 Maintenance of computer software (Major only).

513.3 Maintenance of communication equipment (Major only).

\* \* \* \* \*

b. nuclear power generation

\* \* \* \* \*

Maintenance

\* \* \* \* \*

531.1 Maintenance of computer hardware (Major only).

531.2 Maintenance of computer software (Major only).

531.3 Maintenance of communication equipment (Major only).

\* \* \* \* \*

c. hydraulic power generation

\* \* \* \* \*

Maintenance

\* \* \* \* \*

544.1 Maintenance of computer hardware (Major only).

544.2 Maintenance of computer software (Major only).

544.3 Maintenance of communication equipment (Major only).

\* \* \* \* \*

d. other power generation

\* \* \* \* \*

Operation

\* \* \* \* \*

548.1 [Reserved]

\* \* \* \* \*

Maintenance

\* \* \* \* \*

553.1 Maintenance of computer hardware (Major only).

553.2 Maintenance of computer software (Major only).

553.3 Maintenance of communication equipment (Major only).

\* \* \* \* \*

e. other power generation

555.2 Bundled environmental credits.

555.3 Unbundled environmental credits.



\* \* \* \* \*

f. solar generation

Operation

558.1 Operation supervision and engineering.

558.2 Solar panel generation and other plant operating expenses

(Major only).

558.3 [Reserved]

558.4 Rents.

558.5 Operation supplies and expenses (Nonmajor only).

Maintenance

558.6 Maintenance supervision and engineering (Major only).

558.7 Maintenance of solar panels, structures, and equipment (Major only).

558.8 Maintenance of computer hardware (Major only).

558.9 Maintenance of computer software (Major only).

558.10 Maintenance of communication equipment (Major only).

558.11 Maintenance of miscellaneous solar generation plant (Major only).

558.12 Maintenance of solar generation plant (Nonmajor only).

g. wind generation

Operation

558.13 Operation supervision and engineering.

558.14 Wind turbine generation and other plant operating expenses  
(Major only).

558.15 [Reserved]

558.16 Rents.

558.17 Operation supplies and expenses (Nonmajor only).

Maintenance

558.18 Maintenance supervision and engineering (Major only).

558.19 Maintenance of wind turbines, structures, and equipment  
(Major only).

558.20 Maintenance of computer hardware (Major only).

558.21 Maintenance of computer software (Major only).

558.22 Maintenance of communication equipment (Major only).

558.23 Maintenance of miscellaneous wind generation plant (Major  
only).

558.24 Maintenance of wind generation plant (Nonmajor only).

h. other renewable generation

Operation

559.1 Operation supervision and engineering.

559.2 Other miscellaneous generation and other plant operating expenses (Major only).

559.3 Fuel.

559.4 Rents.

559.5 Operation supplies and expenses (Nonmajor only).

Maintenance

559.6 Maintenance supervision and engineering (Major only).

559.7 Maintenance of structures (Major only).

559.8 [Reserved]

559.9 Maintenance of boilers (Major only).

559.10 Maintenance of generating and electric equipment (Major only).

559.11 [Reserved]

559.12 Maintenance of computer hardware (Major only).

559.13 Maintenance of computer software (Major only).

559.14 Maintenance of communication equipment (Major only).

559.15 Maintenance of miscellaneous other renewable generation plant (Major only).

559.16 Maintenance of other renewable generation plant (Nonmajor only).

2. Transmission Expenses

Operation

\* \* \* \* \*

562.1 [Reserved]

\* \* \* \* \*

Maintenance

\* \* \* \* \*

569.1 Maintenance of computer hardware (Major only).

569.2 Maintenance of computer software (Major only).

569.3 Maintenance of communication equipment (Major only).

\* \* \* \* \*

570.1 [Reserved]

\* \* \* \* \*

4. Energy Storage Expenses

Operation

577.1 Operation supervision and engineering.

577.2 Operation of energy storage equipment (Major only).

577.3 Storage fuel.

577.4 Rents.

577.5 Operation supplies and expenses (Nonmajor only).

Maintenance

578.1 Maintenance supervision and engineering (Major only).

578.2 Maintenance of energy storage equipment and structures  
(Major only).

578.3 Maintenance of computer hardware (Major only).

578.4 Maintenance of computer software (Major only).

578.5 Maintenance of communication equipment (Major only).

578.6 Maintenance of miscellaneous other energy storage plant  
(Major only).

578.7 Maintenance of other energy storage plant (Nonmajor only).

5. Distribution Expenses

Operation

\* \* \* \* \*

584.1 [Reserved]

\* \* \* \* \*

Maintenance

\* \* \* \* \*

592.2 Maintenance of computer hardware (Major only).

592.3 Maintenance of computer software (Major only).

592.4 Maintenance of communication equipment (Major only).

\* \* \* \* \*

9. Administrative and General Expenses

\* \* \* \* \*

Maintenance

\* \* \* \* \*

935.1 Maintenance of computer hardware (Major only).

935.2 Maintenance of computer software (Major only).

935.3 Maintenance of communication equipment (Major only).

\* \* \* \* \*

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

**509 Allowances.**

This account shall include the cost of allowances expensed concurrent with the monthly emissions. (See General Instruction No. 21.)

**513.1 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the steam power generation subfunction. (See operating expense instruction 2.)

**513.2 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the steam power generation subfunction. (See operating expense instruction 2.)

**513.3 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the steam power generation subfunction. (See operating expense instruction 2.)

\* \* \* \* \*

**531.1 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the nuclear power generation subfunction. (See operating expense instruction 2.)

**531.2 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the nuclear power generation subfunction. (See operating expense instruction 2.)

**531.3 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the nuclear power generation subfunction. (See operating expense instruction 2.)

\* \* \* \* \*

**544.1 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the hydraulic power generation subfunction. (See operating expense instruction 2.)

**544.2 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the hydraulic power generation subfunction. (See operating expense instruction 2.)

**544.3 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the hydraulic power generation subfunction. (See operating expense instruction 2.)

\* \* \* \* \*

**548.1 [Reserved]**

\* \* \* \* \*

**553.1 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the other power generation subfunction. (See operating expense instruction 2.)



**553.2 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the other power generation subfunction. (See operating expense instruction 2.)

**553.3 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the other power generation subfunction. (See operating expense instruction 2.)

\* \* \* \* \*

**555.2 Bundled environmental credits.**

For environmental credits that were bundled with energy, this account shall include the cost of environmental credits expensed concurrent with the monthly usage. (See General Instruction No. 21.)

**555.3 Unbundled environmental credits.**

For environmental credits that were unbundled from energy, this account shall include the cost of environmental credits expensed concurrent with the monthly usage. (See General Instruction No. 21.)

\* \* \* \* \*

**558.1 Operation supervision and engineering.**

A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of solar power generating stations. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)

B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of solar power generating stations.

**Labor:**

1. Supervising solar production.
2. Operating solar panels, auxiliary apparatus and switching and other electric equipment.
3. Operating switchboards, switch gear and electric control and protective equipment.
4. Keeping electric plant log and records and preparing reports on electric plant operations.
5. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
6. Cleaning electric plant equipment when not incidental to maintenance work.

**558.2 Solar panel generation and other plant operating expenses (Major only).**

This account shall include the cost of labor, materials used and expenses incurred

in operating solar generation and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other solar generation operation expense accounts.

Labor:

1. Operating switchboards, switch gear and electric control and protective equipment.
2. Operating solar generators and auxiliary apparatus and switching and other electric equipment.
3. Keeping electric plant log and records and preparing reports on electric plant operations.
4. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
5. Cleaning electric plant equipment when not incidental to maintenance work.
6. General clerical work.
7. Guarding and patrolling plant and yard.
8. Building service.
9. Care of grounds including snow removal, cutting grass, etc.
10. Miscellaneous labor.

Materials and Expenses:

11. Lubricants and control system oils.

12. General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.
13. First-aid supplies and safety equipment.
14. Employees' service facilities expenses.
15. Building service supplies.
16. Communication service.
17. Miscellaneous office supplies and expenses, printing and stationery.
18. Transportation expenses.
19. Meals, traveling and incidental expenses.
20. Water for fire protection or general use.
21. Research, development, and demonstration expenses.

**558.3 [Reserved]**

**558.4 Rents.**

This account shall include all rents of property of others used, occupied or operated in connection with solar power generation. (See operating expense instruction 3.)

**558.5 Operation supplies and expenses (Nonmajor only).**

This account shall include the cost of materials used and expenses incurred in the operation of solar power generating stations.

Items:

1. Lubricants and control system oils.

2. General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.
3. First-aid supplies and safety equipment.
4. Employees' service facilities expenses.
5. Building service supplies.
6. Communication service.
7. Miscellaneous office supplies and expenses, printing and stationery.
8. Transportation expenses.
9. Meals, traveling and incidental expenses.
10. Water for fire protection or general use.

**558.6 Maintenance supervision and engineering (Major only).**

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of solar generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

**558.7 Maintenance of solar panels, structures, and equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of solar structures, solar panels, and other solar plant equipment, the book cost of which is includible in account 338.2, Structures and Improvements, account 338.4, Solar Panels, account 338.5, Collector Systems, account 338.6, Generator Step-up

Transformers, account 338.7, Inverters, and account 338.8, Other Accessory Electrical Equipment. (See operating expense instruction 2.)

**558.8 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the solar generation subfunction. (See operating expense instruction 2.)

**558.9 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the solar generation subfunction. (See operating expense instruction 2.)

**558.10 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the solar generation subfunction. (See operating expense instruction 2.)

**558.11 Maintenance of miscellaneous solar generation plant (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous solar generation plant, the book cost of which is includible in account 338.12, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)

**558.12 Maintenance of solar generation plant (Nonmajor only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of solar generation plant the book cost of which is includible in plant accounts 338.1 to 338.12, inclusive. (See operating expense instruction 2.)

**558.13 Operation supervision and engineering.**

A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of wind power generating stations. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)

B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of wind power generating stations.

**Labor:**

1. Supervising wind production.
2. Operating wind turbines, generators and auxiliary apparatus and switching and other electric equipment.
3. Operating switchboards, switch gear and electric control and protective equipment.
4. Keeping electric plant log and records and preparing reports on electric plant operations.
5. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.

6. Cleaning electric plant equipment when not incidental to maintenance work.

**558.14 Wind turbine generation and other plant operating expenses (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in operating wind generation and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other wind generation operation expense accounts.

Labor:

1. Operating switchboards, switch gear and electric control and protective equipment.
2. Operating wind turbines, generators and auxiliary apparatus and switching and other electric equipment.
3. Keeping electric plant log and records and preparing reports on electric plant operations.
4. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
5. Cleaning electric plant equipment when not incidental to maintenance work.
6. General clerical work.
7. Guarding and patrolling plant and site.
8. Building service.



9. Care of grounds including snow removal, cutting grass, etc.

10. Miscellaneous labor.

Materials and Expenses:

11. Lubricants and control system oils.

12. General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.

13. First-aid supplies and safety equipment.

14. Employees' service facilities expenses.

15. Building service supplies.

16. Communication service.

17. Miscellaneous office supplies and expenses, printing and stationery.

18. Transportation expenses.

19. Meals, traveling and incidental expenses.

20. Water for fire protection or general use.

21. Research, development, and demonstration expenses.

**558.15 [Reserved]**

**558.16 Rents.**

This account shall include all rents of property of others used, occupied or operated in connection with wind power generation. (See operating expense instruction 3.)

**558.17 Operation supplies and expenses (Nonmajor only).**

This account shall include the cost of materials used and expenses incurred in the operation of wind power generating stations.

## Items:

1. Lubricants and control system oils.
2. General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.
3. First-aid supplies and safety equipment.
4. Employees' service facilities expenses.
5. Building service supplies.
6. Communication service.
7. Miscellaneous office supplies and expenses, printing and stationery.
8. Transportation expenses.
9. Meals, traveling and incidental expenses.
10. Water for fire protection or general use.

**558.18 Maintenance supervision and engineering (Major only).**

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of wind generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account.

(See operating expense instruction 1.)

**558.19 Maintenance of wind turbines, structures, and equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of wind structures, the book cost of which is includible in account 338.21, Structures and Improvements, account 338.23, Wind Turbines, account 338.24, Wind Towers and Fixtures, account 338.26, Collector Systems, account 338.27, Generator Step-up Transformers, account 338.28, Inverters, and account 338.29, Other Accessory Electrical Equipment. (See operating expense instruction 2.)

**558.20 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the wind generation subfunction. (See operating expense instruction 2.)

**558.21 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the wind generation subfunction. (See operating expense instruction 2.)

**558.22 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the wind generation subfunction. (See operating expense instruction 2.)

**558.23 Maintenance of miscellaneous wind generation (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous wind generation plant, the book cost of which is includible in account 338.33, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)

**558.24 Maintenance of wind generation (Nonmajor only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of wind generation plant the book cost of which is includible in plant accounts 338.20 to 338.33, inclusive. (See operating expense instruction 2.)

**559.1 Operation supervision and engineering.**

A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of other renewable power generating stations. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)

B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of other renewable power generating stations.

**Labor:**

1. Supervising other renewable production.
2. Operating other renewable prime movers, generators and auxiliary apparatus and switching and other electric equipment.

3. Operating switchboards, switch gear and electric control and protective equipment.
4. Keeping electric plant log and records and preparing reports on electric plant operations.
5. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
6. Cleaning electric plant equipment when not incidental to maintenance work.

#### **559.2 Other miscellaneous generation and other plant operating expenses**

##### **(Major only).**

This account shall include the cost of labor, materials used and expenses incurred in operating other renewable generation and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other renewable generation operation expense accounts.

##### Labor:

1. Operating switchboards, switch gear and electric control and protective equipment.
2. Operating other renewable prime movers, generators and auxiliary apparatus and switching and other electric equipment.
3. Keeping electric plant log and records and preparing reports on electric plant operations.

4. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
5. Cleaning electric plant equipment when not incidental to maintenance work.
6. General clerical work.
7. Guarding and patrolling plant and yard.
8. Building service.
9. Care of grounds including snow removal, cutting grass, etc.
10. Miscellaneous labor.

Materials and Expenses:

11. Lubricants and control system oils.
12. General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.
13. First-aid supplies and safety equipment.
14. Employees' service facilities expenses.
15. Building service supplies.
16. Communication service.
17. Miscellaneous office supplies and expenses, printing and stationery.
18. Transportation expenses.
19. Meals, traveling and incidental expenses.
20. Water for fire protection or general use.
21. Research, development, and demonstration expenses.

**559.3 Fuel.**

This account shall include the cost delivered at the station (see account 151, Fuel Stock, for Major utilities, and account 154, Plant Materials and Operating Supplies, for Nonmajor utilities) of all fuel, such as electrolytes, hydrogen, renewable natural gas, algae, etc., used in other power generation.

**559.4 Rents.**

This account shall include all rents of property of others used, occupied or operated in connection with other renewable power generation. (See operating expense instruction 3.)

**559.5 Operation supplies and expenses (Nonmajor only).**

This account shall include the cost of materials used and expenses incurred in the operation of other renewable power generating stations.

**Items:**

1. Lubricants and control system oils.
2. General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.
3. First-aid supplies and safety equipment.
4. Employees' service facilities expenses.
5. Building service supplies.
6. Communication service.
7. Miscellaneous office supplies and expenses, printing and stationery.

8. Transportation expenses.
9. Meals, traveling and incidental expenses.
10. Water for fire protection or general use.

**559.6 Maintenance supervision and engineering (Major only).**

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of other renewable power generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)

**559.7 Maintenance of structures (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of other renewable structures, the book cost of which is includible in account 339.2, Structures and Improvements, and account 339.3 Fuel Holders. (See operating expense instruction 2.)

**559.8 [Reserved]**

**559.9 Maintenance of boilers (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of steam plant, the book cost of which is includible in account 339.4, Boiler Plant Equipment. (See operating expense instruction 2.)

**559.10 Maintenance of generating and electric equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant, the book cost of which is includible in account 339.6.



Generators, and account 339.8, Other Accessory Electric Equipment. (See operating expense instruction 2.)

**559.11 [Reserved]**

**559.12 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the other renewable generation subfunction. (See operating expense instruction 2.)

**559.13 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the other renewable generation subfunction. (See operating expense instruction 2.)

**559.14 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the other renewable generation subfunction. (See operating expense instruction 2.)

**559.15 Maintenance of miscellaneous other renewable generation plant (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous other renewable generation plant, the book cost of

which is includible in account 339.12, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)

**559.16 Maintenance of other renewable generation plant (Nonmajor only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of other renewable generation plant the book cost of which is includible in plant accounts 339.1 to 339.12, inclusive. (See operating expense instruction 2.)

\* \* \* \* \*

**562.1 [Reserved]**

\* \* \* \* \*

**569.1 Maintenance of computer hardware (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the transmission function. (See operating expense instruction 2.)

**569.2 Maintenance of computer software. (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the transmission function. (See operating expense instruction 2.)

Items

1. Telephone support.

- 2. Onsite support.
- 3. Software updates and minor revisions.

**569.3 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the transmission function. (See operating expense instruction 2.)

\* \* \* \* \*

**570.1 [Reserved]**

\* \* \* \* \*

**577.1 Operation supervision and engineering.**

A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of energy storage plant. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)

B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of energy storage equipment.

Labor:

- 1. Supervising energy storage equipment operation.
- 2. Operating energy storage equipment and auxiliary apparatus and switching and other electric equipment.

3. Operating switchboards, switch gear and electric control and protective equipment.
4. Keeping electric plant log and records and preparing reports on electric plant operations.
5. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
6. Cleaning electric plant equipment when not incidental to maintenance work.

**577.2 Operation of energy storage equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in operating energy storage plant and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other energy storage operation expense accounts.

Labor:

1. Operating switchboards, switch gear and electric control and protective equipment.
2. Operating energy storage and auxiliary apparatus and switching and other electric equipment.
3. Keeping electric plant log and records and preparing reports on electric plant operations.

4. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.
5. Cleaning electric plant equipment when not incidental to maintenance work.
6. General clerical work.
7. Guarding and patrolling plant and yard.
8. Building service.
9. Care of grounds including snow removal, cutting grass, etc.
10. Miscellaneous labor.

Materials and Expenses:

11. Lubricants and control system oils.
12. General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.
13. First-aid supplies and safety equipment.
14. Employees' service facilities expenses.
15. Building service supplies.
16. Communication service.
17. Miscellaneous office supplies and expenses, printing and stationery.
18. Transportation expenses.
19. Meals, traveling and incidental expenses.
20. Water for fire protection or general use.
21. Research, development, and demonstration expenses.

**577.3 Storage fuel.**

This account shall include the cost delivered at the station (see account 151, Fuel Stock, for Major utilities, and account 154, Plant Materials and Operating Supplies, for Nonmajor utilities) of all fuel, such as electrolytes, hydrogen, renewable natural gas, algae, etc., used in energy storage.

**577.4 Rents.**

This account shall include all rents of property of others used, occupied or operated in connection with energy storage. (See operating expense instruction 3.)

**577.5 Operation supplies and expenses (Nonmajor only).**

This account shall include the cost of materials used and expenses incurred in the operation of energy storage equipment.

## Items:

1. Lubricants and control system oils.
2. General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.
3. First-aid supplies and safety equipment.
4. Employees' service facilities expenses.
5. Building service supplies.
6. Communication service.
7. Miscellaneous office supplies and expenses, printing and stationery.
8. Transportation expenses.

9. Meals, traveling and incidental expenses.

10. Water for fire protection or general use.

**578.1 Maintenance supervision and engineering (Major only).**

This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of energy storage facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account.

(See operating expense instruction 1.)

**578.2 Maintenance of energy storage equipment and structures (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage structures, energy storage equipment, and other energy storage plant the book cost of which is includible in account 387.2, Structures and Improvements, account 387.3, Energy Storage Equipment, account 387.5, Collector Systems, account 387.6, Generator Step-up Transformers, and account 387.7, Inverters.

(See operating expense instruction 2.)

**578.3 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the energy storage function. (See operating expense instruction 2.)

**578.4 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the

cost of ongoing support for software products serving the energy storage function. (See operating expense instruction 2.)

**578.5 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the energy storage function.

(See operating expense instruction 2.)

**578.6 Maintenance of miscellaneous other energy storage plant (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous energy storage plant, the book cost of which is includible in account 387.11, Miscellaneous Energy Storage Equipment. (See operating expense instruction 2.)

**578.7 Maintenance of other energy storage plant (Nonmajor only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage plant the book cost of which is includible in plant accounts 387.1 to 387.11, inclusive. (See operating expense instruction 2.)

**584.1 [Reserved]**

\* \* \* \* \*

**592.2 Maintenance of computer hardware (Major only).**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the distribution function.



**592.3 Maintenance of computer software (Major only).**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the distribution function. (See operating expense instruction 2.)

**592.4 Maintenance of communication equipment (Major only).**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the distribution function. (See operating expense instruction 2.)

\* \* \* \* \*

**935.1 Maintenance of computer hardware.**

The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware used for administrative and general purposes. (See operating expense instruction 2.)

**935.2 Maintenance of computer software.**

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products used for administrative and general purposes. (See operating expense instruction 2.)

**935.3 Maintenance of communication equipment.**

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment used for administrative and general purposes. (See operating expense instruction 2.)

Note: The following appendix will not be published in the Federal Register nor appear in the Code of Federal Regulations.

**X. Appendix A: Changes to the USofA**

Note: Appendix A is a copy of the changes to the regulatory text with deletions and additions marked as a courtesy to industry to make it easier to see the changes. Deletions are in marked brackets and additions are in italics.

1. In Part 101, General Instructions, Instruction 21, the instruction is amended to read as follows:

**General Instructions**

\* \* \* \* \*

21. Allowances *and environmental credits*.

A. [Title IV of the Clean Air Act Amendments of 1990, Public Law No. 101-549, 104 Stat. 2399, 2584, provides for the issuance of allowances as a means to limit the emissions of certain airborne pollutants by various entities, including public utilities.] Public utilities owning allowances *and environmental credits*[, other than those acquired] for *operational* [speculative ]purposes, shall account for such allowances *and environmental credits* at *historical* cost in account 158.1, Allowance Inventory, [or ]account 158.2, Allowances Withheld, *account 158.3, Bundled Environmental Credits Inventory, or account 158.4, Unbundled Environmental Credits Inventory*, as appropriate.

B. Allowances *and environmental credits* acquired for speculative purposes [and identified as such in contemporaneous records at the time of purchase ] shall be accounted for in account 124, Other Investments.[B. ] When purchased allowances *and*

*environmental credits acquired for speculative purposes* become eligible for use in different years, and the allocation of the purchase cost cannot be determined by fair value, the purchase cost allocated to allowances *and environmental credits* of each vintage shall be determined through use of a present-value based measurement. The interest rate used in the present-value measurement shall be the utility's incremental borrowing rate, in the month in which the allowances *and environmental credits* are acquired, for a loan with a term similar to the period that it will hold the allowances *and environmental credits* and in an amount equal to the purchase price.

C. The underlying records supporting *operational allowances and environmental credits recorded in account 158.1, [and ]account 158.2, account 158.3, and account 158.4* shall be maintained in sufficient detail *at historical costs and [so as to ]provide the number of allowances and environmental credits and the related cost by vintage year[.], including allowances and environmental credits acquired at zero cost.*

D. Issuances from inventory [from inventory ]included in account 158.1, [and ]account 158.2, *account 158.3, and account 158.4* shall be accounted for on a vintage basis using a monthly weighted-average method of *historical* cost determination. The cost of eligible allowances *and environmental credits* not used in the current year, shall be transferred to the vintage for the immediately following year.

E. Account 158.1 shall be credited and account 509.1, Allowances, debited *concurrent with the monthly remittance of the allowances to be charged to expense [monthly ]based on each month's emissions. Account 158.3 and 158.4 shall be credited*

*and account 555.2, Bundled Environmental Credits, and account 555.3, Unbundled Environmental Credits, debited, respectively, so that the cost of the environmental credits to be remitted for the year is charged to expense based on each month's usage. This may, in certain circumstances, require allocation of the cost [of an allowance] between months on a fractional basis.*

F. In any period in which actual emissions exceed the amount allowable based on eligible allowances owned, the utility shall estimate the cost to acquire the additional allowances needed and charge account 158.1 with the estimated cost *and credit the proper liability account. In any period in which a utility records its estimated amount of required environmental credits, the utility shall debit account 158.3 or account 158.4 with the estimated cost and credit the proper liability account.* [This estimated cost of future allowance acquisitions shall be credited to account 158.1 and account 158.3 and charged to account 509.1 and 509.2, as appropriate, in the same accounting period as the related charge to account 158.1.] *When differences between the estimated and actual costs become known, the adjustments should be made through account 158.1, account 158.3, and account 158.4, as well as account 509, account 555.2, and account 555.3 within a single month, as appropriate.* [Should the actual cost of these allowances differ from the estimated cost, the differences shall be recognized in the then-current period's inventory issuance cost.]

*G. When a prepayment is made for allowances or environmental credits, the payment is debited to account 165, Prepayments. This accounting is not intended to influence the outcome of any rate treatment.*

[G.]H. [Any p]Penalties assessed by any[the ]authoritative agencies [Environmental Protection Agency for the emission of excess pollutants ]shall be charged to account 426.3, Penalties.

[H.]I. Gains on dispositions of allowances *and environmental credits*, other than[allowances] *those* held for speculative purposes, shall be accounted for as follows. First, if there is uncertainty as to the regulatory treatment, the gain shall be deferred in account 254, Other Regulatory Liabilities, pending resolution of the uncertainty. Second, if there is certainty as to the existence of a regulatory liability, the gain will be credited to account 254, with subsequent recognition in income when reductions in charges to customers occur or the liability is otherwise satisfied. Third, all other gains will be credited to account 411.8, Gains from Disposition of Allowances, *or account 411.11, Gain from Disposition of environmental credits*. Losses on disposition of allowances *and environmental credits*, other than *those* [allowances ]held for speculative purposes, shall be accounted for as follows. Losses that qualify as regulatory assets shall be charged directly to account 182.3, Other Regulatory Assets. All other losses shall be charged to account 411.9, Losses from Disposition of Allowances, *or account 411.12, Losses from Disposition of environmental credits*. (See Definition No. 3[0]1.) Gains or losses on disposition of allowances *and environmental credits* held for speculative

purposes shall be recognized in account 421, Miscellaneous Nonoperating Income, or account 426.5, Other Deductions, as appropriate.

*J. Revenues for environmental credits associated with the sale of energy shall be recorded in the appropriate operating revenue account.*

\* \* \* \* \*

2. In Part 101, Electric Plant Instructions, Instruction 17, the instruction is added to read as follows:

**Electric Plant Instructions**

\* \* \* \* \*

*17. Integrated computer hardware, software, and communication equipment.*

*Where computer hardware, software, and communication equipment is integrated as part of a larger retirement unit, it shall be recorded in the property account of the retirement unit purchased. This shall be done consistently with electric plant instruction 10.*

\* \* \* \* \*

3. In Part 101, Balance Sheet Chart of Accounts, Accounts 158.3 and 158.4 are added to the list:

**Balance Sheet Chart of Accounts**

\* \* \* \* \*

1. Current and Accrued Assets

\* \* \* \* \*

*158.3 Bundled renewable energy credits inventory.*

*158.4 Unbundled renewable energy credits inventory.*

\* \* \* \* \*

- 4. In Part 101, Electric Plant Chart of Accounts, Accounts 315.1, 315.2, and 315.3 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

1. Production Plant

\* \* \* \* \*

a. steam production

\* \* \* \* \*

*315.1 Computer hardware.*

*315.2 Computer software.*

*315.3 Communication equipment.*

\* \* \* \* \*

- 5. In Part 101, Electric Plant Chart of Accounts, Accounts 324.1, 324.2, and 324.3 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

1. Production Plant

\* \* \* \* \*



b. nuclear production

\* \* \* \* \*

324.1 Computer hardware.

324.2 Computer software.

324.3 Communication equipment.

\* \* \* \* \*

6. In Part 101, Electric Plant Chart of Accounts, Accounts 334.1, 334.2, and 334.3 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

1. Production Plant

\* \* \* \* \*

c. hydraulic production

\* \* \* \* \*

334.1 Computer hardware.

334.2 Computer software.

334.3 Communication equipment.

\* \* \* \* \*

7. In Part 101, Electric Plant Chart of Accounts, Solar Production subfunction and Accounts 338.1, 338.2, 338.3, 338.4, 338.5, 338.6, 338.7, 338.8, 338.9, 338.10, 338.11, 338.12, and 338.13 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

1. Production Plant

\* \* \* \* \*

d. *solar production*

\* \* \* \* \*

338.1 *Land and land rights.*

338.2 *Structures and improvements.*

338.3 *Reserved.*

338.4 *Solar panels.*

338.5 *Collector system.*

338.6 *Generator step-up transformers (GSU).*

338.7 *Inverters.*

338.8 *Other accessory electrical equipment.*

338.9 *Computer hardware.*

338.10 *Computer software.*

338.11 *Communication equipment.*

338.12 *Miscellaneous power plant equipment.*

338.13 *Asset retirement costs for solar production.*

\* \* \* \* \*

8. In Part 101, Electric Plant Chart of Accounts, Wind Production subfunction and Accounts 338.20, 338.21, 338.22, 338.23, 338.24, 338.25, 338.26, 338.27, 338.28, 338.29, 338.30, 338.31, 338.32, 338.33, and 338.34 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

1. Production Plant

\* \* \* \* \*

e. *wind production*

\* \* \* \* \*

338.20 *Land and land rights.*

338.21 *Structures and improvements.*

338.22 *Reserved.*

338.23 *Wind turbines.*

338.24 *Wind towers and fixtures.*

338.25 *Reserved.*

338.26 *Collector system.*

338.27 *Generator step-up transformers (GSU).*

338.28 *Inverters.*

338.29 *Other accessory electrical equipment.*

338.30 *Computer hardware.*

338.31 *Computer software.*

338.32 *Communication equipment.*

338.33 *Miscellaneous power plant equipment.*

338.34 *Asset retirement costs for wind production.*

\* \* \* \* \*

9. In Part 101, Electric Plant Chart of Accounts, Other Renewable Production subfunction and Accounts 339.1, 339.2, 339.3, 339.4, 339.5, 339.6, 339.7, 339.8, 339.9, 339.10, 339.11, 339.12, and 339.13 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

1. Production Plant

\* \* \* \* \*

f. *other renewable production*

\* \* \* \* \*

339.1 *Land and land rights.*

339.2 *Structures and improvements.*

339.3 *Fuel holders.*

339.4 *Boilers.*

339.5 *Reserved.*

339.6 *Generators.*

339.7 *Reserved.*

*339.8 Other accessory electrical equipment.*

*339.9 Computer hardware.*

*339.10 Computer software.*

*339.11 Communication equipment.*

*339.12 Miscellaneous power plant equipment.*

*339.13 Asset retirement costs for other renewable production.*

\* \* \* \* \*

10. In Part 101, Electric Plant Chart of Accounts, Other Production subsection letter is amended, Account 348 is amended, and Accounts 345.1, 345.2, and 345.3 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

1. Production Plant

\* \* \* \* \*

g. [d]other production

\* \* \* \* \*

*345.1 Computer hardware.*

*345.2 Computer software.*

*345.3 Communication equipment.*

\* \* \* \* \*

*348 Reserved. [Energy Storage Equipment – Production]*

\* \* \* \* \*

11. In Part 101, Electric Plant Chart of Accounts, Accounts 351.1, 351.2, and 351.3 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

2. Transmission Plant

\* \* \* \* \*

*351.1 Computer hardware.*

*351.2 Computer software.*

*351.3 Communication equipment.*

\* \* \* \* \*

12. In Part 101, Electric Plant Chart of Accounts, Account 363 title is amended and Accounts 363.1, 363.2, and 363.3 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

3. Distribution Plant

\* \* \* \* \*

363 [Storage battery equipment] *Reserved.*

*363.1 Computer hardware.*

*363.2 Computer software.*

*363.3 Communication equipment.*

\* \* \* \* \*

13. In Part 101, Electric Plant Chart of Accounts, Account 387 removed from section 5 of the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

4. Regional Transmission and Market Operation Plant

\* \* \* \* \*

[387 Reserved]

\* \* \* \* \*

14. In Part 101, Electric Plant Chart of Accounts, new Energy Storage Plant function and Accounts 387.1, 387.2, 387.3, 387.4, 387.5, 387.6, 387.7, 387.8, 387.9, 387.10, 387.11, and 387.12 added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

5. *Energy Storage Plant* [General Plant]

\* \* \* \* \*

*387.1 Land and land rights.*

*387.2 Structures and improvements.*

*387.3 Energy storage equipment.*

*387.4 Reserved.*

*387.5 Collector system.*

387.6 *Generator step-up transformers (GSU).*

387.7 *Inverters.*

387.8 *Computer hardware.*

387.9 *Computer software.*

387.10 *Communication equipment.*

387.11 *Miscellaneous energy storage equipment.*

387.12 *Asset retirement costs for energy storage.*

\* \* \* \* \*

15. In Part 101, Electric Plant Chart of Accounts, amended General Plant function number, amended title of Account 397, and Accounts 397.1, 397.2, and 397.3 are added to the list:

**Electric Plant Chart of Accounts**

\* \* \* \* \*

6. [6] General Plant

\* \* \* \* \*

397 *Reserved.* [Communication equipment]

397.1 *Computer hardware.*

397.2 *Computer software.*

397.3 *Communication equipment.*

\* \* \* \* \*



16. In Part 101, Utility Plant, utility plant Account 108 is amended to read as follows:

**Utility Plant Account**

\* \* \* \* \*

108 Accumulated provision for depreciation of electric utility plant (Major only).

A. This account shall be credited with the following:

(1) Amounts charged to account 403, Depreciation Expense, or to clearing accounts for current depreciation expense for electric plant in service.

(2) Amounts charged to account 403.1, Depreciation expense for asset retirement costs, for current depreciation expense related to asset retirement costs in electric plant in service in a separate subaccount.

(3) Amounts charged to account 421, Miscellaneous Nonoperating Income, for depreciation expense on property included in account 105, Electric Plant Held for Future Use. Include, also, the balance of accumulated provision for depreciation on property when transferred to account 105, Electric Plant Held for Future Use, from other property accounts. Normally account 108 will not be used for current depreciation provisions because, as provided herein, the service life during which depreciation is computed commences with the date property is includible in electric plant in service; however, if special circumstances indicate the propriety of current accruals for depreciation, such charges shall be made to account 421, Miscellaneous Nonoperating Income.

(4) Amounts charged to account 413, Expenses of Electric Plant Leased to Others, for electric plant included in account 104, Electric Plant Leased to Others.

(5) Amounts charged to account 416, Costs and Expenses of Merchandising, Jobbing, and Contract Work, or to clearing accounts for current depreciation expense.

(6) Amounts of depreciation applicable to electric properties acquired as operating units or systems. (See electric plant instruction 5.)

(7) Amounts charged to account 182, Extraordinary Property Losses, when authorized by the Commission.

(8) Amounts of depreciation applicable to electric plant donated to the utility.

(The utility shall maintain separate subaccounts for depreciation applicable to electric plant in service, electric plant leased to others and electric plant held for future use.)

B. At the time of retirement of depreciable electric utility plant, this account shall be charged with the book cost of the property retired and the cost of removal and shall be credited with the salvage value and any other amounts recovered, such as insurance. When retirement, costs of removal and salvage are entered originally in retirement work orders, the net total of such work orders may be included in a separate subaccount hereunder. Upon completion of the work order, the proper distribution to subdivisions of this account shall be made as provided in the following paragraph.

C. For general ledger and balance sheet purposes, this account shall be regarded and treated as a single composite provision for depreciation. For purposes of analysis,

however, each utility shall maintain subsidiary records in which this account is segregated according to the following functional classification for electric plant:

- (1) Steam production,
- (2) Nuclear production,
- (3) Hydraulic production,
- (4) *Solar production,*
- (5) *Wind production,*
- (6) *Other renewable production,*
- ([4]7) Other production,
- ([5]8) Transmission,
- ([6]9) Distribution,
- ([7]10) Regional transmission and market operation, [and]
- (11) *Energy storage plant, and*
- ([8]12) General.

These subsidiary records shall reflect the current credits and debits to this account in sufficient detail to show separately for each such functional classification:

- (a) The amount of accrual for depreciation,
- (b) The book cost of property retired,
- (c) Cost of removal,
- (d) Salvage, and
- (e) Other items, including recoveries from insurance.

Separate subsidiary records shall be maintained for the amount of accrued cost of removal other than legal obligations for the retirement of plant recorded in account 108, Accumulated provision for depreciation of electric utility plant (Major only).

D. When transfers of plant are made from one electric plant account to another, or from or to another utility department, or from or to nonutility property accounts, the accounting for the related accumulated provision for depreciation shall be as provided in electric plant instruction 12.

E. The utility is restricted in its use of the accumulated provision for depreciation to the purposes set forth above. It shall not transfer any portion of this account to retained earnings or make any other use thereof without authorization by the Commission.

\* \* \* \* \*

17. In Part 101, Utility Plant, utility plant Account 111 is amended to read as follows:

**Utility Plant Account**

\* \* \* \* \*

111 Accumulated provision for amortization of electric utility plant (Major only).

A. This account shall be credited with the following:

(1) Amounts charged to account 404, Amortization of Limited-Term Electric Plant, for the current amortization of limited-term electric plant investments.

(2) Amounts charged to account 421, Miscellaneous Nonoperating Income, for amortization expense on property included in account 105, Electric Plant Held for Future Use. Include also the balance of accumulated provision for amortization on property when transferred to account 105, Electric Plant Held for Future Use, from other property accounts. See also paragraph A(2), account 108, Accumulated Provision for Depreciation of Electric Utility Plant.

(3) Amounts charged to account 405, Amortization of Other Electric Plant.

(4) Amounts charged to account 413, Expenses of Electric Plant Leased to Others, for the current amortization of limited-term or other investments subject to amortization included in account 104, Electric Plant Leased to Others.

(5) Amounts charged to account 425, Miscellaneous Amortization, for the amortization of intangible or other electric plant which does not have a definite or terminable life and is not subject to charges for depreciation expense, with Commission approval.

(The utility shall maintain subaccounts of this account for the amortization applicable to electric plant in service, electric plant leased to others and electric plant held for future use.)

B. When any property to which this account applies is sold, relinquished, or otherwise retired from service, this account shall be charged with the amount previously credited in respect to such property. The book cost of the property so retired less the amount chargeable to this account and less the net proceeds realized at retirement shall be

included in account 421.1, Gain on Disposition of Property, or account 421.2, Loss on Disposition of Property, as appropriate.

C. For general ledger and balance sheet purposes, this account shall be regarded and treated as a single composite provision for amortization. For purposes of analysis, however, each utility shall maintain subsidiary records in which this account is segregated according to the following functional classification for electric plant:

(1) Steam production, (2) nuclear production, (3) hydraulic production, (4) *solar production*, (5) *wind production*, (6) *other renewable production*, ([4]7) other production, ([5]8) transmission, ([6]9) distribution, [and] (10) *regional transmission and market operation*, (11) *energy storage plant*, and ([7]12) general. These subsidiary records shall reflect the current credits and debits to this account in sufficient detail to show separately for each such functional classification (a) the amount of accrual for amortization, (b) the book cost of property retired, (c) cost of removal, (d) salvage, and (e) other items, including recoveries from insurance.

D. The utility is restricted in its use of the accumulated provision for amortization to the purposes set forth above. It shall not transfer any portion of this account to retained earnings or make any other use thereof without authorization by the Commission.

\* \* \* \* \*

18. In Part 101, Current and Accrued Assets, current and accrued asset Account

158.1 is amended to read as follows:

**Current and Accrued Assets**

\* \* \* \* \*

158.1 Allowance inventory.

A. This account shall include the cost of allowances owned by the utility and not withheld by *any authoritative agency*[the Environmental Protection Agency].

See General Instruction No. 21 and account 158.2, Allowances Withheld.

B. This account shall be credited and account 509.1, Allowances, shall be debited concurrent with the monthly emissions[ of sulfur dioxide].

C. Separate subdivisions of this account shall be maintained so as to separately account for those allowances usable in the current year and in each subsequent year. The underlying records of these subdivisions shall be maintained in sufficient detail so as to identify each allowance included; the origin of each allowance; and the *historical* [acquisition] cost[, if any, of the allowance].

*(Note: For prepayments of allowances, see General Instruction No. 21.)*

\* \* \* \* \*

19. In Part 101, Current and Accrued Assets, current and accrued asset Account

158.2 is amended to read as follows:

**Current and Accrued Assets**

\* \* \* \* \*

158.2 Allowances withheld.

A. This account shall include the cost of allowances owned by the utility but withheld by *any authoritative agency*[the Environmental Protection Agency].

(See General Instruction No. 21.)

B. The inventory cost of the allowances released by *any authoritative agency*[the Environmental Protection Agency] for use by the utility shall be transferred to account 158.1, Allowance Inventory.

C. The underlying records of this account shall be maintained in sufficient detail so as to identify each allowance included; the origin of each allowance; and the *historical* [acquisition] cost. [, if any, of the allowances.]

\* \* \* \* \*

20. In Part 101, Current and Accrued Assets, new current and accrued asset

Account 158.3 is added to read as follows:

**Current and Accrued Assets**

\* \* \* \* \*

*158.3 Bundled environmental credits inventory.*

*A. This account shall include the cost of environmental credits owned by the utility, bundled with energy, and not withheld by any authoritative agency. See General Instruction No. 21 and account 158.2, Allowances and Environmental Credits Withheld.*

*B. This account shall be credited and account 555.2, Bundled Environmental Credits, shall be debited concurrent with the monthly use of environmental credits.*



*C. Separate subdivisions of this account shall be maintained so as to separately account for those environmental credits usable in the current year and in each subsequent year. The underlying records of these subdivisions shall be maintained in sufficient detail so as to identify each environmental credit included; the origin of each environmental credit; and the historical cost.*

*(Note: For prepayments of environmental credits, see General Instruction No. 21.)*

\* \* \* \* \*

21. In Part 101, Current and Accrued Assets, new current and accrued asset

Account 158.4 is added to read as follows:

**Current and Accrued Assets**

\* \* \* \* \*

*158.4 Unbundled environmental credits inventory.*

*A. This account shall include the cost of environmental credits owned by the utility, not considered bundled with energy, and not withheld by any authoritative agency. See General Instruction No. 21 and account 158.2, Allowances and Environmental Credits Withheld.*

*B. This account shall be credited and account 555.3, Unbundled Environmental Credits, shall be debited concurrent with the monthly use of environmental credits.*

*C. Separate subdivisions of this account shall be maintained so as to separately account for those environmental credits usable in the current year and in each*

*subsequent year. The underlying records of these subdivisions shall be maintained in sufficient detail so as to identify each environmental credit included; the origin of each environmental credit; and the historical cost.*

*(Note: For prepayments of environmental credits, see General Instruction No. 21.)*

\* \* \* \* \*

22. In Part 101, Electric Plant Accounts, new primary plant Account 315.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*315.1 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

- 1. Personal computers.*
- 2. Servers.*
- 3. Workstations.*
- 4. Energy Management System (EMS) hardware.*
- 5. Supervisory Control and Data Acquisition (SCADA) system hardware.*
- 6. Peripheral equipment.*
- 7. Networking components.*

\* \* \* \* \*

23. In Part 101, Electric Plant Accounts, new primary plant Account 315.2 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*315.2 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

- 1. Software licenses.*
- 2. User interface software.*
- 3. Modeling software.*
- 4. Database software.*
- 5. Tracking and monitoring software.*
- 6. Energy Management System (EMS) software.*
- 7. Supervisory Control and Data Acquisition (SCADA) system software.*
- 8. Evaluation and assessment system software.*
- 9. Operating, planning and transaction scheduling software.*
- 10. Reliability applications.*
- 11. Market application software.*

\* \* \* \* \*

24. In Part 101, Electric Plant Accounts, new primary plant Account 315.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*315.3 Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

- 1. Fiber optic cable.*
- 2. Remote terminal units.*
- 3. Microwave towers.*
- 4. Global Positioning System (GPS) equipment.*
- 5. Servers.*
- 6. Workstations.*
- 7. Telephones.*

\* \* \* \* \*

25. In Part 101, Electric Plant Accounts, new primary plant Account 324.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*324.1 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

*1. Personal computers.*

*2. Servers.*

*3. Workstations.*

*4. Energy Management System (EMS) hardware.*

*5. Supervisory Control and Data Acquisition (SCADA) system hardware.*

*6. Peripheral equipment.*

*7. Networking components.*

\* \* \* \* \*

26. In Part 101, Electric Plant Accounts, new primary plant Account 324.2 is

added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*324.2 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

1. *Software licenses.*
2. *User interface software.*
3. *Modeling software.*
4. *Database software.*
5. *Tracking and monitoring software.*
6. *Energy Management System (EMS) software.*
7. *Supervisory Control and Data Acquisition (SCADA) system software.*
8. *Evaluation and assessment system software.*
9. *Operating, planning and transaction scheduling software.*
10. *Reliability applications.*
11. *Market application software.*

\* \* \* \* \*

27. In Part 101, Electric Plant Accounts, new primary plant Account 324.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*324.3 Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

1. *Fiber optic cable.*
2. *Remote terminal units.*
3. *Microwave towers.*
4. *Global Positioning System (GPS) equipment.*
5. *Servers.*
6. *Workstations.*
7. *Telephones.*

\* \* \* \* \*

28. In Part 101, Electric Plant Accounts, new primary plant Account 334.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*334.1 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

1. *Personal computers.*
2. *Servers.*
3. *Workstations.*
4. *Energy Management System (EMS) hardware.*

5. *Supervisory Control and Data Acquisition (SCADA) system hardware.*

6. *Peripheral equipment.*

7. *Networking components.*

\* \* \* \* \*

29. In Part 101, Electric Plant Accounts, new primary plant Account 334.2 is

added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

334.2 *Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

1. *Software licenses.*

2. *User interface software.*

3. *Modeling software.*

4. *Database software.*

5. *Tracking and monitoring software.*

6. *Energy Management System (EMS) software.*

7. *Supervisory Control and Data Acquisition (SCADA) system software.*

8. *Evaluation and assessment system software.*



9. *Operating, planning and transaction scheduling software.*

10. *Reliability applications.*

11. *Market application software.*

\* \* \* \* \*

30. In Part 101, Electric Plant Accounts, new primary plant Account 334.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

334.3 *Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

1. *Fiber optic cable.*

2. *Remote terminal units.*

3. *Microwave towers.*

4. *Global Positioning System (GPS) equipment.*

5. *Servers.*

6. *Workstations.*

7. *Telephones.*

\* \* \* \* \*

31. In Part 101, Electric Plant Accounts, new primary plant Account 338.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.1 Land and land rights.*

*This account shall include the cost of land and land rights used in connection with solar power generation. (See electric plant instruction 7.)*

\* \* \* \* \*

32. In Part 101, Electric Plant Accounts, new primary plant Account 338.2 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.2 Structures and improvements.*

*This account shall include the cost in place of structures and improvements used in connection with solar power generation. (See electric plant instruction 8.)*

\* \* \* \* \*

33. In Part 101, Electric Plant Accounts, new primary plant Account 338.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.3 Reserved.*

\* \* \* \* \*

34. In Part 101, Electric Plant Accounts, new primary plant Account 338.4 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.4 Solar Panels.*

*This account shall include the installed cost of the racks, solar panels, solar tracking systems, and other equipment to be used primarily for generating Direct Current (DC) electricity.*

\* \* \* \* \*

35. In Part 101, Electric Plant Accounts, new primary plant Account 338.5 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.5 Collector system.*

*This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as capacitors and reactors) that are used to transport and consolidate the power fed from individual solar panels up to, but not including, the substation prior to interconnection to the grid. This account shall exclude the cost of transformers and other equipment used for the express purpose of interconnecting to transmission or distribution lines.*

*Items*

- 1. Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.*
- 2. Armored conductors, buried, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc.*
- 3. Brackets.*
- 4. Circuit breakers.*
- 5. Conductors, including insulated and bare wires and cables.*
- 6. Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct, and standpipe on pole or tower.*
- 7. Crossarms and braces.*
- 8. Excavation and backfill, including shoring, bracing, bridging, and disposal of excess excavated material.*
- 9. Extension arms.*
- 10. Fireproofing, in connection with any items listed herein.*
- 11. Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed.*
- 12. Ground wires, clamps, etc.*
- 13. Guards.*
- 14. Hollow-core oil-filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc.*

15. *Insulators, including pin, suspension, and other types, and tie wire or clamps.*
16. *Lightning arresters.*
17. *Paving, pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.*
18. *Permits for construction.*
19. *Pole steps and ladders.*
20. *Poles, wood, steel, concrete, or other material.*
21. *Racks complete with insulators.*
22. *Railings.*
23. *Railroad and highway crossing guards.*
24. *Reinforcing and stubbing.*
25. *Removal and relocation of subsurface obstructions.*
26. *Settings.*
27. *Sewer connections, including drains, traps, tide valves, check valves, etc.*
28. *Shaving, painting, gaining, roofing, stenciling, and tagging.*
29. *Splices.*
30. *Sumps, including pumps.*
31. *Switches.*
32. *Towers.*
33. *Tree trimming, initial cost including the cost of permits therefor.*
34. *Ventilating equipment.*

35. *Other line devices.*

\* \* \* \* \*

36. In Part 101, Electric Plant Accounts, new primary plant Account 338.6 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

338.6 *Generator step-up transformers (GSU).*

*This account shall include only the cost of the GSU transformers directly connected to the generator terminal tips and other equipment used for conveying the power to the GSU for the purpose of initially changing the voltage or frequency of electric energy for the purpose of moving the power. It shall exclude the cost of additional transformers and other equipment once the power has been initially stepped up from a generator voltage to a higher voltage.*

*Note: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purposes of transmission or distribution.*

\* \* \* \* \*

37. In Part 101, Electric Plant Accounts, new primary plant Account 338.7 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.7 Inverters.*

*This account shall include the installed cost of inverters for the purpose of converting electricity from direct current (DC) to alternating current (AC).*

\* \* \* \* \*

38. In Part 101, Electric Plant Accounts, new primary plant Account 338.8 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.8 Other accessory electrical equipment.*

*This account shall include the installed cost of other conversion or auxiliary generating apparatus and equipment used primarily in connection with the control and switching of electric energy produced by solar panels, including, weather monitoring equipment, and protection of electric circuits and equipment, as used to support the generator in the action of generating power (excluding SCADA systems) not specifically chargeable to any other account. This account shall exclude Collector System costs, account 338.5, Collector System; GSU costs, account 338.6, Generator Step-up Transformers (GSU); and Inverter costs, account 338.7, Inverters.*

*Items*

- 1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.*
- 2. Rheostats, backup storage batteries and charging equipment, circuit breakers,*

*panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, special housings, etc.*

*3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, special housing, etc.*

*4. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, trunktype boards complete, cubicles, generator signal stands, temperature-recording devices, atmospheric reading devices, frequency control equipment, master clocks, watt-hour meter, station totalizing wattmeter, storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, emergency backup batteries, special housing for batteries, etc.*

*5. Station buses, including main, auxiliary transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, current*



*transformers, potential transformers, protective relays, backup storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station ground system, special fire-extinguishing system, and test equipment.*

*Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.*

*Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.*

\* \* \* \* \*

39. In Part 101, Electric Plant Accounts, new primary plant Account 338.9 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

338.9 *Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

1. *Personal computers.*
2. *Servers.*
3. *Workstations.*

- 4. *Energy Management System (EMS) hardware.*
- 5. *Supervisory Control and Data Acquisition (SCADA) system hardware.*
- 6. *Peripheral equipment.*
- 7. *Networking components.*

\* \* \* \* \*

40. In Part 101, Electric Plant Accounts, new primary plant Account 338.10 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.10 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

- 1. *Software licenses.*
- 2. *User interface software.*
- 3. *Modeling software.*
- 4. *Database software.*
- 5. *Tracking and monitoring software.*
- 6. *Energy Management System (EMS) software.*
- 7. *Supervisory Control and Data Acquisition (SCADA) system software.*

8. *Evaluation and assessment system software.*

9. *Operating, planning and transaction scheduling software.*

10. *Reliability applications.*

11. *Market application software.*

\* \* \* \* \*

41. In Part 101, Electric Plant Accounts, new primary plant Account 338.11 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

338.11 *Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

1. *Fiber optic cable.*

2. *Remote terminal units.*

3. *Microwave towers.*

4. *Global Positioning System (GPS) equipment.*

5. *Servers.*

6. *Workstations.*

7. *Telephones.*

\* \* \* \* \*

42. In Part 101, Electric Plant Accounts, new primary plant Account 338.12 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.12 Miscellaneous power plant equipment.*

*This account shall include the installed cost of miscellaneous equipment in and about the solar plant devoted to general station use, and which is not properly includible in any of the foregoing solar power production accounts.*

*Items*

- 1. Compressed air and vacuum cleaning systems, including tanks, compressors, exhausters, air filters, piping, etc.*
- 2. Cranes and hoisting equipment, including cranes, cars, crane rails, monorails, hoists, etc., with electric and mechanical connections.*
- 3. Fire-extinguishing equipment for general station use.*
- 4. Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.*
- 5. Miscellaneous equipment, including atmospheric and weather indicating devices, intrasite communication equipment, laboratory equipment, signal systems, callophones, emergency whistles and sirens, fire alarms, and other similar equipment.*
- 6. Miscellaneous belts, pulleys, countershafts, etc.*

- 7. Refrigerating system including compressors, pumps, cooling coils, etc.
- 8. Station maintenance equipment, including lathes, shapers, planers, drill presses, hydraulic presses, grinders, etc., with motors, shafting, hangers, pulleys, etc.
- 9. Ventilating equipment, including items wholly identified with apparatus listed herein.

*Note: When any item of equipment, listed herein is used wholly in connection with equipment included in another account, its cost shall be included in such other account.*

\* \* \* \* \*

43. In Part 101, Electric Plant Accounts, new primary plant Account 338.13 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.13 Asset retirement costs for solar production.*

*This account shall include asset retirement costs on plant included in solar production function.*

\* \* \* \* \*

44. In Part 101, Electric Plant Accounts, new primary plant Account 338.20 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.20 Land and land rights.*

*This account shall include the cost of land and land rights used in connection with wind power generation. (See electric plant instruction 7.)*

\* \* \* \* \*

45. In Part 101, Electric Plant Accounts, new primary plant Account 338.21 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.21 Structures and improvements.*

*This account shall include the cost in place of structures and improvements used in connection with wind power generation. (See electric plant instruction 8.)*

\* \* \* \* \*

46. In Part 101, Electric Plant Accounts, new primary plant Account 338.22 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.22 Reserved.*

\* \* \* \* \*

47. In Part 101, Electric Plant Accounts, new primary plant Account 338.23 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

338.23 *Wind turbines.*

*This account shall include the cost installed of the mechanical turbine parts and generator equipment, including nacelle, gearbox, etc., to be used primarily for generating electricity.*

\* \* \* \* \*

48. In Part 101, Electric Plant Accounts, new primary plant Account 338.24 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

338.24 *Wind towers and fixtures.*

*This account shall include the cost installed of towers and appurtenant fixtures used for supporting wind power production. Foundations shall be included in account 338.21 Structures and Improvements.*

\* \* \* \* \*

49. In Part 101, Electric Plant Accounts, new primary plant Account 338.25 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

338.25 *Reserved.*

\* \* \* \* \*

50. In Part 101, Electric Plant Accounts, new primary plant Account 338.26 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.26 Collector system.*

*This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as capacitors and reactors) that are used to transport and consolidate the power fed from individual wind turbines up to, but not including, the substation prior to interconnection to the grid. This account shall exclude the cost of transformers and other equipment used for the express purpose of interconnecting to transmission or distribution lines.*

*Items*

- 1. Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.*
- 2. Armored conductors, buried, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc.*
- 3. Brackets.*
- 4. Circuit breakers.*
- 5. Conductors, including insulated and bare wires and cables.*
- 6. Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct,*



*and standpipe on pole or tower.*

*7. Crossarms and braces.*

*8. Excavation and backfill, including shoring, bracing, bridging, and disposal of excess excavated material.*

*9. Extension arms.*

*10. Fireproofing, in connection with any items listed herein.*

*11. Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed.*

*12. Ground wires, clamps, etc.*

*13. Guards.*

*14. Hollow-core oil-filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc.*

*15. Insulators, including pin, suspension, and other types, and tie wire or clamps.*

*16. Lightning arresters.*

*17. Paving, pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.*

*18. Permits for construction.*

*19. Pole steps and ladders.*

*20. Poles, wood, steel, concrete, or other material.*

*21. Racks complete with insulators.*

*22. Railings.*

- 23. *Railroad and highway crossing guards.*
- 24. *Reinforcing and stubbing.*
- 25. *Removal and relocation of subsurface obstructions.*
- 26. *Settings.*
- 27. *Sewer connections, including drains, traps, tide valves, check valves, etc.*
- 28. *Shaving, painting, gaining, roofing, stenciling, and tagging.*
- 29. *Splices.*
- 30. *Sumps, including pumps.*
- 31. *Switches.*
- 32. *Towers.*
- 33. *Tree trimming, initial cost including the cost of permits therefor.*
- 34. *Ventilating equipment.*
- 35. *Other line devices.*

\* \* \* \* \*

51. In Part 101, Electric Plant Accounts, new primary plant Account 338.27 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

338.27 *Generator step-up transformers (GSU).*

*This account shall include only the cost of the GSU transformers and other equipment used for conveying the power to the pad-mount GSU for the purpose of*

*initially changing the voltage or frequency of electric energy for the purpose of moving the power. It shall exclude the cost of additional transformers and other equipment once the power has been initially stepped up from a generator voltage to a higher voltage.*

*Note: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purposes of transmission or distribution.*

\* \* \* \* \*

52. In Part 101, Electric Plant Accounts, new primary plant Account 338.28 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.28 Inverters.*

*This account shall include the installed cost of inverters for the purpose of converting electricity from direct current (DC) to alternating current (AC).*

\* \* \* \* \*

53. In Part 101, Electric Plant Accounts, new primary plant Account 338.29 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.29 Other accessory electrical equipment.*

*This account shall include the installed cost of other conversion or auxiliary*

*generating apparatus and equipment used primarily in connection with the control and switching of electric energy produced by wind turbines, including weather monitoring equipment, and protection of electric circuits and equipment, as used to support the generator in the action of generating power (excluding SCADA systems) not specifically chargeable to any other account. This account shall exclude Collector System costs, account 338.26, Collector System; GSU costs, account 338.27, Generator Step-up Transformers (GSU); and Inverter costs, account 338.28, Inverters.*

#### *Items*

- 1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.*
- 2. Rheostats, backup storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, special housings, etc.*
- 3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, special housing, etc.*
- 4. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment*

*mounted or mechanically connected, trunktype boards complete, cubicles, station supervisory control boards, generator signal stands, temperature-recording devices, atmospheric reading devices, frequency control equipment, master clocks, watt-hour meter, station totalizing wattmeter, storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and conduit, special supports for conduit, switchboards, emergency backup batteries, special housing for batteries, etc.*

*5. Station buses, including main, auxiliary transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, current transformers, potential transformers, protective relays, backup storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station ground system, special fire-extinguishing system, and test equipment.*

*Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.*

*Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.*

\* \* \* \* \*

54. In Part 101, Electric Plant Accounts, new primary plant Account 338.30 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.30 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

- 1. Personal computers.*
- 2. Servers.*
- 3. Workstations.*
- 4. Energy Management System (EMS) hardware.*
- 5. Supervisory Control and Data Acquisition (SCADA) system hardware.*
- 6. Peripheral equipment.*
- 7. Networking components.*

\* \* \* \* \*

55. In Part 101, Electric Plant Accounts, new primary plant Account 338.31 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.31 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

- 1. Software licenses.*
- 2. User interface software.*
- 3. Modeling software.*
- 4. Database software.*
- 5. Tracking and monitoring software.*
- 6. Energy Management System (EMS) software.*
- 7. Supervisory Control and Data Acquisition (SCADA) system software.*
- 8. Evaluation and assessment system software.*
- 9. Operating, planning and transaction scheduling software.*
- 10. Reliability applications.*
- 11. Market application software.*

\* \* \* \* \*

56. In Part 101, Electric Plant Accounts, new primary plant Account 338.32 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.32 Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

- 1. *Fiber optic cable.*
- 2. *Remote terminal units.*
- 3. *Microwave towers.*
- 4. *Global Positioning System (GPS) equipment.*
- 5. *Servers.*
- 6. *Workstations.*
- 7. *Telephones.*

\* \* \* \* \*

57. In Part 101, Electric Plant Accounts, new primary plant Account 338.33 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.33 Miscellaneous power plant equipment.*

*This account shall include the installed cost of miscellaneous equipment in and about the wind plant devoted to general station use, and which is not properly includible in any of the foregoing wind power production accounts.*

\* \* \* \* \*



58. In Part 101, Electric Plant Accounts, new primary plant Account 338.34 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*338.34 Asset retirement costs for wind production.*

*This account shall include asset retirement costs on plant included in wind production function.*

\* \* \* \* \*

59. In Part 101, Electric Plant Accounts, new primary plant Account 339.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.1 Land and land rights.*

*This account shall include the cost of land and land rights used in connection with other renewable power generation. (See electric plant instruction 7.)*

\* \* \* \* \*

60. In Part 101, Electric Plant Accounts, new primary plant Account 339.2 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.2 Structures and improvements.*

*This account shall include the cost in place of structures and improvements used in connection with other renewable power generation. (See electric plant instruction 8.)*

*Note: this includes mirrors for solar boiler systems.*

\* \* \* \* \*

61. In Part 101, Electric Plant Accounts, new primary plant Account 339.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.3 Fuel holders.*

*This account shall include the cost installed of renewable fuel handling and storage equipment used between the point of fuel delivery to the station and the intake through which fuel is either directly drawn to the engine, or into a boiler system, inclusive.*

*Items*

- 1. Blower and fans.*
- 2. Boilers and pumps.*
- 3. Economizers.*
- 4. Exhauster outfits.*
- 5. Flues and piping.*
- 6. Pipe system.*
- 7. Producers.*

8. *Regenerators.*

9. *Scrubbers.*

10. *Steam injectors.*

11. *Tanks for storage of electrolytes, hydrogen, renewable natural gas, algae, etc.*

12. *Vaporizers.*

\* \* \* \* \*

62. In Part 101, Electric Plant Accounts, new primary plant Account 339.4 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

339.4 *Boilers.*

*This account shall include the cost installed of furnaces, boilers, steam and feed water piping, boiler apparatus and accessories used in the production of steam or other vapor, to be used primarily for generating electricity. This account includes solar boiler systems*

1. *Boiler feed system, including feed water heaters, evaporator condensers, heater drain pumps, heater drainers, deaerators, and vent condensers, boiler feed pumps, surge tanks, feed water regulators, feed water measuring equipment, and all associated drives.*

2. *Boiler plant cranes and hoists and associated drives.*

3. *Boilers and equipment, including boilers and baffles, economizers, superheaters, foundations and settings, water walls, arches, grates, insulation, blow-down system, drying out of new boilers, also associated motors or other power equipment.*
4. *Draft equipment, including air preheaters and accessories, induced and forced draft fans, air ducts, combustion control mechanisms, and associated motors or other power equipment.*
5. *Gas-burning equipment, including holders, burner equipment and piping, control equipment, etc.*
6. *Instruments and devices, including all measuring, indicating, and recording equipment for boiler plant service together with mountings and supports.*
7. *Lighting systems.*
8. *Stacks, including foundations and supports, stack steel and ladders, stack concrete, stack lining, stack painting (first), when set on separate foundations, independent of substructure or superstructure of building.*
9. *Station piping, including pipe, valves, fittings, separators, traps, desuperheaters, hangers, excavation, covering, etc., for station piping system, including all steam, condensate, boiler feed and water supply piping, etc.,*
10. *Ventilating equipment.*

11. *Water purification equipment, including softeners and accessories, evaporators and accessories, heat exchangers, filters, tanks for filtered or softened water, pumps, motors, etc.*

12. *Water-supply systems, including pumps, motors, strainers, raw-water storage tanks, boiler wash pumps, intake and discharge pipes and tunnels not a part of a building.*

\* \* \* \* \*

63. In Part 101, Electric Plant Accounts, new primary plant Account 339.5 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.5 Reserved.*

\* \* \* \* \*

64. In Part 101, Electric Plant Accounts, new primary plant Account 339.6 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.6 Generators.*

*This account shall include the cost installed of other renewable generators of all types apart from wind and solar.*

*Items*

1. *Cranes, hoists, etc., including items wholly identified with such apparatus.*
2. *Fire-extinguishing equipment.*
3. *Foundations and settings, specially constructed for and not expected to outlast the apparatus for which provided.*
4. *Generator cooling system, including air cooling and washing apparatus, air fans and accessories, air ducts, etc.*
5. *Generators—main, a.c. or d.c., including field rheostats and connections for self-excited units and excitation system when identified with the generating unit.*
6. *Lighting systems.*
7. *Lubricating system, including tanks, filters, strainers, pumps, piping, coolers, etc.*
8. *Mechanical meters, and recording instruments.*
9. *Platforms, railings, steps, gratings, etc., appurtenant to apparatus listed herein.*
10. *Cooling system, including towers, pumps, tank, and piping.*
11. *Piping—main exhaust, including connections between generator and condenser and between condenser and hotwell.*
12. *Piping—main steam, including connections from main throttle valve to turbine inlet.*
13. *Circulating pumps, including connections between condensers and intake and discharge tunnels.*

14. *Tunnels, intake and discharge, for condenser system, when not a part of structure, water screens, etc.*

15. *Water screens, motors, etc.*

16. *Moisture separator for turbine steam.*

17. *Turbine lubricating oil (initial charge).*

\* \* \* \* \*

65. In Part 101, Electric Plant Accounts, new primary plant Account 339.7 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

339.7 *Reserved.*

\* \* \* \* \*

66. In Part 101, Electric Plant Accounts, new primary plant Account 339.8 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

339.8 *Other accessory electrical equipment.*

*This account shall include the installed cost of other conversion or auxiliary generating apparatus and equipment used primarily in connection with the control and switching of electric energy produced by other renewable, including weather monitoring equipment, and protection of electric circuits and equipment as used to support the*

*generator in the action of generating power (excluding SCADA systems) not specifically chargeable to any other account.*

*Items*

- 1. Auxiliary generators, including boards, compartments, switching equipment, control equipment, and connections to auxiliary power bus.*
- 2. Rheostats, backup storage batteries and charging equipment, circuit breakers, panels and accessories, knife switches and accessories, surge arresters, instrument shunts, conductors and conduit, special supports for conduit, special housings, etc.*
- 3. Generator main connections, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, current transformers, potential transformers, protective relays, isolated panels and equipment, conductors and conduit, special supports for generator main leads, grounding switch, special housing, etc.*
- 4. Station control system, including station switchboards with panel wiring, panels with instruments and control equipment only, panels with switching equipment mounted or mechanically connected, trunktype boards complete, cubicles, station supervisory control boards, generator signal stands, temperature-recording devices, atmospheric reading devices, frequency control equipment, master clocks, watt-hour meter, station totalizing wattmeter, backup storage batteries, panels and charging sets, instrument transformers for supervisory metering, conductors and*



*conduit, special supports for conduit, switchboards, emergency backup batteries, special housing for batteries, etc.*

*5. Station buses, including main, auxiliary transfer, synchronizing and fault ground buses, including oil circuit breakers and accessories, disconnecting switches and accessories, operating mechanisms and interlocks, reactors and accessories, voltage regulators and accessories, compensators, resistors, current transformers, potential transformers, protective relays, backup storage batteries and charging equipment, isolated panels and equipment, conductors and conduit, special supports, special housings, concrete pads, general station ground system, special fire-extinguishing system, and test equipment.*

*Note A: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electric energy for the purpose of transmission or distribution.*

*Note B: When any item of equipment listed herein is used wholly to furnish power to equipment included in another account, its cost shall be included in such other account.*

\* \* \* \* \*

67. In Part 101, Electric Plant Accounts, new primary plant Account 339.9 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.9 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

*1. Personal computers.*

*2. Servers.*

*3. Workstations.*

*4. Energy Management System (EMS) hardware.*

*5. Supervisory Control and Data Acquisition (SCADA) system hardware.*

*6. Peripheral equipment.*

*7. Networking components.*

\* \* \* \* \*

68. In Part 101, Electric Plant Accounts, new primary plant Account 339.10 is

added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.10 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

- 1. *Software licenses.*
- 2. *User interface software.*
- 3. *Modeling software.*
- 4. *Database software.*
- 5. *Tracking and monitoring software.*
- 6. *Energy Management System (EMS) software.*
- 7. *Supervisory Control and Data Acquisition (SCADA) system software.*
- 8. *Evaluation and assessment system software.*
- 9. *Operating, planning and transaction scheduling software.*
- 10. *Reliability applications.*
- 11. *Market application software.*

\* \* \* \* \*

69. In Part 101, Electric Plant Accounts, new primary plant Account 339.11 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.11 Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

- 1. *Fiber optic cable.*
- 2. *Remote terminal units.*
- 3. *Microwave towers.*
- 4. *Global Positioning System (GPS) equipment.*
- 5. *Servers.*
- 6. *Workstations.*
- 7. *Telephones.*

\* \* \* \* \*

70. In Part 101, Electric Plant Accounts, new primary plant Account 339.12 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.12 Miscellaneous power plant equipment.*

*This account shall include the installed cost of miscellaneous equipment in and about the other renewable plant devoted to general station use, and which is not properly includible in any of the foregoing other renewable power production accounts.*

\* \* \* \* \*

71. In Part 101, Electric Plant Accounts, new primary plant Account 339.13 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*339.13 Asset retirement costs for other renewable production.*

*This account shall include asset retirement costs on plant included in other renewable production function.*

\* \* \* \* \*

72. In Part 101, Electric Plant Accounts, new primary plant Account 345.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*345.1 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

- 1. Personal computers.*
- 2. Servers.*
- 3. Workstations.*
- 4. Energy Management System (EMS) hardware.*
- 5. Supervisory Control and Data Acquisition (SCADA) system hardware.*
- 6. Peripheral equipment.*
- 7. Networking components.*

\* \* \* \* \*

73. In Part 101, Electric Plant Accounts, new primary plant Account 345.2 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*345.2 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

- 1. Software licenses.*
- 2. User interface software.*
- 3. Modeling software.*
- 4. Database software.*
- 5. Tracking and monitoring software.*
- 6. Energy Management System (EMS) software.*
- 7. Supervisory Control and Data Acquisition (SCADA) system software.*
- 8. Evaluation and assessment system software.*
- 9. Operating, planning and transaction scheduling software.*
- 10. Reliability applications.*
- 11. Market application software.*

\* \* \* \* \*

74. In Part 101, Electric Plant Accounts, new primary plant Account 345.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

345.3 *Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

- 1. *Fiber optic cable.*
- 2. *Remote terminal units.*
- 3. *Microwave towers.*
- 4. *Global Positioning System (GPS) equipment.*
- 5. *Servers.*
- 6. *Workstations.*
- 7. *Telephones.*

\* \* \* \* \*

75. In Part 101, Electric Plant Accounts, Account 348, name of the account amended and the instructions are deleted to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

348 *Reserved. [Energy Storage Equipment—Production- ]*

[A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes. Where energy storage equipment can perform more than one function or purpose, the cost of the equipment shall be allocated among production, transmission, and distribution plant based on the services provided by the asset and the allocation of the asset's cost through rates approved by a relevant regulatory agency. Reallocation of the cost of equipment recorded in this account shall be in accordance with Electric Plant Instruction No. 12, Transfers of Property.]

[B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage equipment shall not be charged to this account but to accounts Account 548.1, Operation of Energy Storage Equipment, and Account 553.1, Maintenance of Energy Storage Equipment., as appropriate.]

[C. The records supporting this account shall show, by months, the function(s) each energy storage asset supports or performs. ]

**[Items]**

1. Batteries/Chemical
2. Compressed Air
3. Flywheels
4. Superconducting Magnetic Storage
5. Thermal]



[Note: The cost of pumped storage hydroelectric plant shall be charged to hydraulic production plant. These are examples of items includible in this account. This list is not exhaustive.]

\* \* \* \* \*

76. In Part 101, Electric Plant Accounts, Account 351 title is amended and instructions deleted to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

351 *Reserved*. [Energy storage equipment – transmission]

[A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes. Where energy storage equipment can perform more than one function or purposes, the cost of the equipment shall be allocated among production, transmission, and distribution plant based on the services provided by the asset and the allocation of the asset's cost through rates approved by a relevant regulatory agency. Reallocation of the cost of equipment recorded in this account shall be in accordance with Electric Plant Instruction No. 12, Transfers of Property.]

[B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage equipment shall not be charged to this account but to Account 562.1, Operation of Energy Storage Equipment, and Account, 570.1, Maintenance of Energy Storage Equipment, as appropriate.]

[C. The records supporting this account shall show, by months, the function(s) each energy storage asset supports or performs.]

[Items]

- [1. Batteries/Chemical
- 2. Compressed Air
- 3. Flywheels
- 4. Superconducting Magnetic Storage
- 5. Thermal]

\* \* \* \* \*

77. In Part 101, Electric Plant Accounts, new primary plant Account 351.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*351.1 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

- 1. Personal computers.*
- 2. Servers.*
- 3. Workstations.*
- 4. Energy Management System (EMS) hardware.*

5. *Supervisory Control and Data Acquisition (SCADA) system hardware.*

6. *Peripheral equipment.*

7. *Networking components.*

\* \* \* \* \*

78. In Part 101, Electric Plant Accounts, new primary plant Account 351.2 is

added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

351.2 *Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

1. *Software licenses.*

2. *User interface software.*

3. *Modeling software.*

4. *Database software.*

5. *Tracking and monitoring software.*

6. *Energy Management System (EMS) software.*

7. *Supervisory Control and Data Acquisition (SCADA) system software.*

8. *Evaluation and assessment system software.*

9. *Operating, planning and transaction scheduling software.*

10. *Reliability applications.*

11. *Market application software.*

\* \* \* \* \*

79. In Part 101, Electric Plant Accounts, new primary plant Account 351.3 is

added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

351.3 *Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

1. *Fiber optic cable.*

2. *Remote terminal units.*

3. *Microwave towers.*

4. *Global Positioning System (GPS) equipment.*

5. *Servers.*

6. *Workstations.*

7. *Telephones.*

\* \* \* \* \*

80. In Part 101, Electric Plant Accounts, Account 363, name of the account is amended and the instructions are deleted to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

363 [Energy Storage Equipment - Distribution] *Reserved.*

[A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes. Where energy storage equipment can perform more than one function or purpose, the cost of the equipment shall be allocated among production, transmission, and distribution plant based on the services provided by the asset and the allocation of the asset's cost through rates approved by a relevant regulatory agency. Reallocation of the cost of equipment recorded in this account shall be in accordance with Electric Plant Instruction No. 12, Transfers of Property.]

[B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage equipment shall not be charged to this account but to Account 582.1, Operation of Energy Storage Equipment, and Account, 592.1, Maintenance of Energy Storage Equipment, as appropriate.]

[C. The records supporting this account shall show, by months, the function(s) each energy storage asset supports or performs.]

[Items]

- [1. Batteries/Chemical
- 2. Compressed Air
- 3. Flywheels
- 4. Superconducting Magnetic Storage
- 5. Thermal]

\* \* \* \* \*

- 1. In Part 101, Electric Plant Accounts, new primary plant Account 363.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*363.1 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

- 1. Personal computers.*
- 2. Servers.*
- 3. Workstations.*
- 4. Energy Management System (EMS) hardware.*
- 5. Supervisory Control and Data Acquisition (SCADA) system hardware.*
- 6. Peripheral equipment.*
- 7. Networking components.*

\* \* \* \* \*

81. In Part 101, Electric Plant Accounts, new primary plant Account 363.2 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

363.2 *Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

1. *Software licenses.*
2. *User interface software.*
3. *Modeling software.*
4. *Database software.*
5. *Tracking and monitoring software.*
6. *Energy Management System (EMS) software.*
7. *Supervisory Control and Data Acquisition (SCADA) system software.*
8. *Evaluation and assessment system software.*
9. *Operating, planning and transaction scheduling software.*
10. *Reliability applications.*
11. *Market application software.*

\* \* \* \* \*

82. In Part 101, Electric Plant Accounts, new primary plant Account 363.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*363.3 Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

- 1. Fiber optic cable.*
- 2. Remote terminal units.*
- 3. Microwave towers.*
- 4. Global Positioning System (GPS) equipment.*
- 5. Servers.*
- 6. Workstations.*
- 7. Telephones.*

\* \* \* \* \*

83. In Part 101, Electric Plant Accounts, new primary plant Account 387.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*



*387.1 Land and land rights.*

*This account shall include the cost of land and land rights used in connection with energy storage plant. (See electric plant instruction 7.)*

\* \* \* \* \*

84. In Part 101, Electric Plant Accounts, new primary plant Account 387.2 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.2 Structures and improvements.*

*This account shall include the cost in place of structures and improvements used in connection with energy storage plant. (See electric plant instruction 8.)*

\* \* \* \* \*

85. In Part 101, Electric Plant Accounts, new primary plant Account 387.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.3 Energy storage equipment.*

*A. This account shall include the cost installed of energy storage equipment used to store energy for load managing purposes.*

*B. Labor costs and power purchased to energize the equipment are includible on the first installation only. The cost of removing, relocating and resetting energy storage equipment shall not be charged to this account but to operations and maintenance expense accounts for energy storage expenses, as appropriate.*

*Items*

- 1. Batteries/Chemical.*
- 2. Compressed Air.*
- 3. Flywheels.*
- 4. Superconducting Magnetic Storage.*
- 5. Thermal.*

*Note: The cost of pumped storage hydroelectric plant shall be charged to hydraulic production plant. These are examples of items includible in this account. This list is not exhaustive.*

\* \* \* \* \*

86. In Part 101, Electric Plant Accounts, new primary plant Account 387.4 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.4 Reserved.*

\* \* \* \* \*

87. In Part 101, Electric Plant Accounts, new primary plant Account 387.5 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.5 Collector system.*

*This account shall include all cost of cabling, junction boxes, connection cabinets, and all facilities and devices (such as capacitors and reactors) that are used to transport and consolidate the power fed from individual storage facilities up to, but not including, the substation prior to interconnection to the grid. This account shall exclude the cost of transformers and other equipment used for the express purpose of interconnecting to transmission or distribution lines.*

*Items*

- 1. Anchors, head arm, and other guys, including guy guards, guy clamps, strain insulators, pole plates, etc.*
- 2. Armored conductors, buried, submarine, including insulators, insulating materials, splices in terminal chamber, potheads, etc.*
- 3. Brackets.*
- 4. Circuit breakers.*
- 5. Conductors, including insulated and bare wires and cables.*
- 6. Conduit, concrete, brick and tile, including iron pipe, fiber pipe, Murray duct,*

*and standpipe on pole or tower.*

*7. Crossarms and braces.*

*8. Excavation and backfill, including shoring, bracing, bridging, and disposal of excess excavated material.*

*9. Extension arms.*

*10. Fireproofing, in connection with any items listed herein.*

*11. Foundations and settings specially constructed for and not expected to outlast the apparatus for which constructed.*

*12. Ground wires, clamps, etc.*

*13. Guards.*

*14. Hollow-core oil-filled cable, including straight or stop joints, pressure tanks, auxiliary air tanks, feeding tanks, terminals, potheads and connections, etc.*

*15. Insulators, including pin, suspension, and other types, and tie wire or clamps.*

*16. Lightning arresters.*

*17. Paving, pavement disturbed, including cutting and replacing pavement, pavement base, and sidewalks.*

*18. Permits for construction.*

*19. Pole steps and ladders.*

*20. Poles, wood, steel, concrete, or other material.*

*21. Racks complete with insulators.*

*22. Railings.*

- 23. *Railroad and highway crossing guards.*
- 24. *Reinforcing and stubbing.*
- 25. *Removal and relocation of subsurface obstructions.*
- 26. *Settings.*
- 27. *Sewer connections, including drains, traps, tide valves, check valves, etc.*
- 28. *Shaving, painting, gaining, roofing, stenciling, and tagging.*
- 29. *Splices.*
- 30. *Sumps, including pumps.*
- 31. *Switches.*
- 32. *Towers.*
- 33. *Tree trimming, initial cost including the cost of permits therefor.*
- 34. *Ventilating equipment.*
- 35. *Other line devices.*

\* \* \* \* \*

88. In Part 101, Electric Plant Accounts, new primary plant Account 387.6 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

387.6 *Generator step-up transformers (GSU).*

*This account shall include only the cost of the GSU transformers and other equipment used for conveying the power to the pad-mount GSU for the purpose of*

*initially changing the voltage or frequency of electric energy for the purpose of moving the power. It shall exclude the cost of additional transformers and other equipment once the power has been initially stepped up from a generator voltage to a higher voltage.*

*Note: Do not include in this account transformers and other equipment used for changing the voltage or frequency of electricity for the purposes of transmission or distribution.*

\* \* \* \* \*

89. In Part 101, Electric Plant Accounts, new primary plant Account 387.7 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.7 Inverters.*

*This account shall include the installed cost of inverters for the purpose of converting electricity from direct current (DC) to alternating current (AC).*

\* \* \* \* \*

90. In Part 101, Electric Plant Accounts, new primary plant Account 387.8 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.8 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous information technology equipment to provide scheduling, system control and dispatching.*

*Items*

- 1. Personal computers.*
- 2. Servers.*
- 3. Workstations.*
- 4. Energy Management System (EMS) hardware.*
- 5. Supervisory Control and Data Acquisition (SCADA) system hardware.*
- 6. Peripheral equipment.*
- 7. Networking components.*

\* \* \* \* \*

91. In Part 101, Electric Plant Accounts, new primary plant Account 387.9 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.9 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

- 1. Software licenses.*

2. *User interface software.*
3. *Modeling software.*
4. *Database software.*
5. *Tracking and monitoring software.*
6. *Energy Management System (EMS) software.*
7. *Supervisory Control and Data Acquisition (SCADA) system software.*
8. *Evaluation and assessment system software.*
9. *Operating, planning and transaction scheduling software.*
10. *Reliability applications.*
11. *Market application software.*

\* \* \* \* \*

92. In Part 101, Electric Plant Accounts, new primary plant Account 387.10 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.10 Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

1. *Fiber optic cable.*
2. *Remote terminal units.*



3. *Microwave towers.*

4. *Global Positioning System (GPS) equipment.*

5. *Servers.*

6. *Workstations.*

7. *Telephones.*

\* \* \* \* \*

93. In Part 101, Electric Plant Accounts, new primary plant Account 387.11 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.11 Miscellaneous energy storage equipment.*

*This account shall include the installed cost of miscellaneous equipment in and about the energy storage equipment devoted to general station use, and which is not properly includible in any of the foregoing energy storage plant accounts.*

\* \* \* \* \*

94. In Part 101, Electric Plant Accounts, new primary plant Account 387.12 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*387.12 Asset retirement costs for energy storage plant.*

*This account shall include asset retirement costs on plant included in the energy storage plant function.*

\* \* \* \* \*

95. In Part 101, Electric Plant Accounts, Account 397 title is amended, and instructions deleted as follows:

**Electric Plant Accounts**

\* \* \* \* \*

397 Reserved. [Communication equipment.]

[This account shall include the cost installed of telephone, telegraph, and wireless equipment for general use in connection with utility operations.]

[Items]

- [1. Antennae.
2. Booths.
3. Cables.
4. Distributing boards.
5. Extension cords.
6. Gongs.
7. Hand sets, manual and dial.
8. Insulators.
9. Intercommunicating sets.
10. Loading coils.

- 11. Operators' desks.
- 12. Poles and fixtures used wholly for telephone or telegraph wire.
- 13. Radio transmitting and receiving sets.
- 14. Remote control equipment and lines.
- 15. Sending keys.
- 16. Storage batteries.
- 17. Switchboards.
- 18. Telautograph circuit connections.
- 19. Telegraph receiving sets.
- 20. Telephone and telegraph circuits.
- 21. Testing instruments.
- 22. Towers.
- 23. Underground conduit used wholly for telephone or telegraph wires and cable wires.]

\* \* \* \* \*

96. In Part 101, Electric Plant Accounts, new primary plant Account 397.1 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*397.1 Computer hardware.*

*This account shall include the cost of computer hardware and miscellaneous*

*information technology equipment to provide scheduling, system control and dispatching.*

*Items*

- 1. *Personal computers.*
- 2. *Servers.*
- 3. *Workstations.*
- 4. *Energy Management System (EMS) hardware.*
- 5. *Supervisory Control and Data Acquisition (SCADA) system hardware.*
- 6. *Peripheral equipment.*
- 7. *Networking components.*

\* \* \* \* \*

97. In Part 101, Electric Plant Accounts, new primary plant Account 397.2 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

*397.2 Computer software.*

*This account shall include the cost of off-the-shelf and in-house developed software purchased and used to provide scheduling, system control and dispatching activities.*

*Items*

- 1. *Software licenses.*

- 2. *User interface software.*
- 3. *Modeling software.*
- 4. *Database software.*
- 5. *Tracking and monitoring software.*
- 6. *Energy Management System (EMS) software.*
- 7. *Supervisory Control and Data Acquisition (SCADA) system software.*
- 8. *Evaluation and assessment system software.*
- 9. *Operating, planning and transaction scheduling software.*
- 10. *Reliability applications.*
- 11. *Market application software.*

\* \* \* \* \*

98. In Part 101, Electric Plant Accounts, new primary plant Account 397.3 is added to read as follows:

**Electric Plant Accounts**

\* \* \* \* \*

397.3 *Communication equipment.*

*This account shall include the cost of communication equipment owned and used to acquire or share data and information used to control and dispatch the system.*

*Items*

- 1. *Fiber optic cable.*
- 2. *Remote terminal units.*

3. *Microwave towers.*

4. *Global Positioning System (GPS) equipment.*

5. *Servers.*

6. *Workstations.*

7. *Telephones.*

\* \* \* \* \*

\*\*\*\*\*

99. In Part 101, Income Chart of Accounts, utility operating income Accounts

411.11 and 411.12 are added as follows:

**Income Chart of Accounts**

\* \* \* \* \*

1. Utility Operating Income

\* \* \* \* \*

*411.11 Gains from disposition of environmental credits.*

*411.12 Losses from disposition of environmental credits.*

\* \* \* \* \*

100. In Part 101, Operation and Maintenance Expense Chart of Accounts,

Accounts 513.1, 513.2, and 513.3 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

1. Power Production Expenses

\* \* \* \* \*

a. steam power generation

\* \* \* \* \*

Maintenance

\* \* \* \* \*

*513.1 Maintenance of computer hardware (Major only).*

*513.2 Maintenance of computer software (Major only).*

*513.3 Maintenance of communication equipment (Major only).*

\* \* \* \* \*

101. In Part 101, Operation and Maintenance Expense Chart of Accounts, Accounts 531.1, 531.2, and 531.3 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

1. Power Production Expenses

\* \* \* \* \*

b. nuclear power generation

\* \* \* \* \*

Maintenance

\* \* \* \* \*

*531.1 Maintenance of computer hardware (Major only).*

*531.2 Maintenance of computer software (Major only).*

*531.3 Maintenance of communication equipment (Major only).*

\* \* \* \* \*

102. In Part 101, Operation and Maintenance Expense Chart of Accounts,

Accounts 544.1, 544.2, and 544.3 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

1. Power Production Expenses

\* \* \* \* \*

c. hydraulic power generation

\* \* \* \* \*

Maintenance

\* \* \* \* \*

*544.1 Maintenance of computer hardware (Major only).*

*544.2 Maintenance of computer software (Major only).*

*544.3 Maintenance of communication equipment (Major only).*

\* \* \* \* \*

103. In Part 101, Operation and Maintenance Expense Chart of Accounts, amend

the account titles for Account 548.1 and 553.1, and Accounts 553.2, 553.3 are

added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*



1. Power Production Expenses

\* \* \* \* \*

d. other power generation

\* \* \* \* \*

Operation

\* \* \* \* \*

548.1 *Reserved.* [Operation of energy storage equipment]

\* \* \* \* \*

Maintenance

\* \* \* \* \*

553.1 *Maintenance of computer hardware (Major only).*

[Maintenance of energy storage equipment]

553.2 *Maintenance of computer software (Major only).*

553.3 *Maintenance of communication equipment (Major only).*

\* \* \* \* \*

104. In Part 101, Operation and Maintenance Expense Chart of Accounts,

Accounts 555.2 and 555.3 are added as follows:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

1. Power Production Expenses

\* \* \* \* \*

e. other power supply expenses

\* \* \* \* \*

Operation

\* \* \* \* \*

555.2 Bundled environmental credits.

555.3 Unbundled environmental credits.

\* \* \* \* \*

105. In Part 101, Operation and Maintenance Expense Chart of Accounts, sub-function f. solar generation and Accounts 558.1, 558.2, 558.3, 558.4, 558.5, 558.6, 558.7, 558.8, 558.9, 558.10, 558.11, and 558.12 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

1. Power Production Expenses

\* \* \* \* \*

a. solar generation

\* \* \* \* \*

Operation

\* \* \* \* \*

558.1 Operation supervision and engineering.

558.2 Solar panel generation and other plant operating expenses

(Major only).

*558.3 Reserved.*

*558.4 Rents.*

*558.5 Operation supplies and expenses (Nonmajor only).*

\* \* \* \* \*

*Maintenance*

\* \* \* \* \*

*558.6 Maintenance supervision and engineering (Major only).*

*558.7 Maintenance of solar panels, structures, and equipment (Major only).*

*558.8 Maintenance of computer hardware (Major only).*

*558.9 Maintenance of computer software (Major only).*

*558.10 Maintenance of communication equipment (Major only).*

*558.11 Maintenance of miscellaneous solar generation plant (Major only).*

*558.12 Maintenance of solar generation plant (Nonmajor only).*

\* \* \* \* \*

106. In Part 101, Operation and Maintenance Expense Chart of Accounts, sub-function g. wind generation and Accounts 558.13, 558.14, 558.15, 558.16, 558.17, 558.18, 558.19, 558.20, 558.21, 558.22, 558.23, and 558.24 are added to the list:

### Operation and Maintenance Expense Chart of Accounts

\* \* \* \* \*

1. Power Production Expenses

\* \* \* \* \*

b. *wind generation*

\* \* \* \* \*

*Operation*

\* \* \* \* \*

*558.13 Operation supervision and engineering.*

*558.14 Wind turbine generation and other plant operating expenses*

*(Major only).*

*558.15 Reserved.*

*558.16 Rents.*

*558.17 Operation supplies and expenses (Nonmajor only).*

\* \* \* \* \*

*Maintenance*

\* \* \* \* \*

*558.18 Maintenance supervision and engineering (Major only).*

*558.19 Maintenance of wind turbines, structures, and equipment*

*(Major only).*

*558.20 Maintenance of computer hardware (Major only).*

*558.21 Maintenance of computer software (Major only).*

*558.22 Maintenance of communication equipment (Major only).*

*558.23 Maintenance of miscellaneous wind generation plant (Major only).*

*558.24 Maintenance of wind generation plant (Nonmajor only).*

\* \* \* \* \*

107. In Part 101, Operation and Maintenance Expense Chart of Accounts, sub-function h. other renewable generation and Accounts 559.1, 559.2, 559.3, 559.4, 559.5, 559.6, 559.7, 559.8, 559.9, 559.10, 559.11, 559.12, 559.13, 559.14, 559.15, 559.16 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

1. Power Production Expenses

\* \* \* \* \*

*c. other renewable generation*

\* \* \* \* \*

*Operation*

\* \* \* \* \*

*559.1 Operation supervision and engineering.*

*559.2 Other miscellaneous generation and other plant operating expenses (Major only).*

559.3 *Fuel.*

559.4 *Rents.*

559.5 *Operation supplies and expenses (Nonmajor only).*

\* \* \* \* \*

*Maintenance*

\* \* \* \* \*

559.6 *Maintenance supervision and engineering (Major only).*

559.7 *Maintenance of structures (Major only).*

559.8 *Reserved.*

559.9 *Maintenance of boilers (Major only).*

559.10 *Maintenance of generating and electric equipment (Major only).*

559.11 *Reserved.*

559.12 *Maintenance of computer hardware (Major only).*

559.13 *Maintenance of computer software (Major only).*

559.14 *Maintenance of communication equipment (Major only).*

559.15 *Maintenance of miscellaneous other renewable generation plant (Major only).*

559.16 *Maintenance of other renewable generation plant (Nonmajor only).*

\* \* \* \* \*

108. In Part 101, Operation and Maintenance Expense Chart of Accounts, Accounts 562.1, 569.1, 569.2, 569.3, and 570.1 titles are amended to read as follows:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

2. Transmission Expenses

\* \* \* \* \*

Operation

\* \* \* \* \*

562.1 [Operation of Energy Storage Equipment] *Reserved.*

\* \* \* \* \*

Maintenance

\* \* \* \* \*

569.1 Maintenance of computer hardware (*Major only*).

569.2 Maintenance of computer software (*Major only*).

569.3 Maintenance of communication equipment (*Major only*).

570.1 [Maintenance of Energy Storage Equipment] *Reserved.*

\* \* \* \* \*

109. In Part 101, Operation and Maintenance Expense Chart of Accounts, function 4. Energy Storage Expenses and Accounts 577.1, 577.2, 577.3, 577.4, 577.5, 578.1, 578.2, 578.3, 578.4, 578.5, 578.6, and 578.7 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

1. *Energy Storage Expenses* [Distribution Expenses]

\* \* \* \* \*

*Operation*

\* \* \* \* \*

*577.1 Operation supervision and engineering.*

*577.2 Operation of energy storage equipment (Major only).*

*577.3 Storage fuel.*

*577.4 Rents.*

*577.5 Operation supplies and expenses (Nonmajor only).*

\* \* \* \* \*

*Maintenance*

\* \* \* \* \*

*578.1 Maintenance supervision and engineering (Major only).*

*578.2 Maintenance of energy storage equipment and structures  
(Major only).*

*578.3 Maintenance of computer hardware (Major only).*

*578.4 Maintenance of computer software (Major only).*

*578.5 Maintenance of communication equipment (Major only).*



578.6 *Maintenance of miscellaneous other energy storage plant (Major only).*

578.7 *Maintenance of other energy storage plant (Nonmajor only).*

\* \* \* \* \*

110. In Part 101, Operation and Maintenance Expense Chart of Accounts, amend function number for Distribution Expenses and title to Accounts 584.1 and 592.2. Accounts 592.3, 592.4 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

2. [4.] *Distribution Expenses* [Customer Accounts Expenses]

\* \* \* \* \*

Operation

\* \* \* \* \*

584.1 *Reserved.* [Operation of energy storage equipment]

\* \* \* \* \*

Maintenance

\* \* \* \* \*

592.2 *Maintenance of computer hardware (Major only).*

[Maintenance of energy storage equipment]

592.3 *Maintenance of computer software (Major only).*

592.4 *Maintenance of communication equipment (Major only).*

\* \* \* \* \*

111. In Part 101, Operation and Maintenance Expense Chart of Accounts, amend function number for Customer Accounts Expenses:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

3. [5.] *Customer Accounts Expenses* [Customer Service and Informational Expenses]

\* \* \* \* \*

112. In Part 101, Operation and Maintenance Expense Chart of Accounts, amend function number for Customer Service and Informational Expenses:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

4. [6.] *Customer Service and Informational Expenses* [Sales Expenses]

\* \* \* \* \*

113. In Part 101, Operation and Maintenance Expense Chart of Accounts, amend function number for Sales Expenses:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

5. [7.] *Sales Expenses* [Administrative and General Expenses]

\* \* \* \* \*

114. In Part 101, Operation and Maintenance Expense Chart of Accounts, amend function number for Administrative and General Expenses and Accounts 935.1, 935.2, and 935.3 are added to the list:

**Operation and Maintenance Expense Chart of Accounts**

\* \* \* \* \*

6. [8.] *Administrative and General Expenses*

\* \* \* \* \*

Maintenance

\* \* \* \* \*

*935.1 Maintenance of computer hardware (Major only).*

*935.2 Maintenance of computer software (Major only).*

*935.3 Maintenance of communication equipment (Major only).*

\* \* \* \* \*

115. In Part 101, Utility Operating Income Accounts, new utility operating income Account 411.11 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*411.11 Gains from disposition of environmental credits.*

*This account shall be credited with the gain on the sale, exchange, or other disposition of environmental credits in accordance with paragraph (H) of General*

*Instruction No. 21. Income taxes relating to gains recorded in this account shall be recorded in account 409.1, Income Taxes, Utility Operating Income.*

*Note: Revenues for environmental credits associated with the sale of energy shall be recorded in the appropriate operating revenue account consistent with General Instruction No. 21 (J).*

\* \* \* \* \*

116. In Part 101, Utility Operating Income Accounts, new utility operating income Account 411.11 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*411.12 Losses from disposition of environmental credits.*

*This account shall be debited with the loss on the sale, exchange, or other disposition of environmental credits in accordance with paragraph (H) of General Instruction No. 21. Income taxes relating to losses recorded in this account shall be recorded in account 409.1, Income Taxes, Utility Operating Income.*

\* \* \* \* \*

117. In Part 101, Operation and Maintenance Expense Accounts, operation expense Account 509 instructions are amended to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

509 Allowances.

This account shall include the cost of allowances expensed concurrent with the monthly emissions[ of sulfur dioxide]. (See General Instruction No. 21.)

\* \* \* \* \*

118. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 513.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*513.1 Maintenance of computer hardware (Major only).*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the steam power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

119. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 513.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*513.2 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the steam power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

120. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 513.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*513.3 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the steam power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

121. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 531.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*531.1 Maintenance of computer hardware (Major only).*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the nuclear power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

122. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 531.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

531.2 Maintenance of computer software (Major only).

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the nuclear power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

123. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 531.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

531.3 Maintenance of communication equipment (Major only).

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the nuclear power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

124. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 544.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*544.1 Maintenance of computer hardware (Major only).*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the hydraulic power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

125. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 544.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*544.2 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the hydraulic power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

126. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 544.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*544.3 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred*



*in the maintenance of communication equipment serving the hydraulic power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

127. In Part 101, Operation and Maintenance Expense Accounts, operation expense Account 548.1 title amended and instructions deleted to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

548.1 [Operation of Energy Storage Equipment] *Reserved.*

[This account shall include the cost of labor, materials used and expenses incurred in the operation of energy storage equipment includible in Account 348, Energy Storage Equipment - Production, which are not specifically provided for or are readily assignable to other production operation expense accounts.]

\* \* \* \* \*

128. In Part 101, Operation and Maintenance Expense Accounts, maintenance expense Account 553.1 title and instructions amended to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

553.1 [Maintenance of Energy Storage Equipment] *Maintenance of computer hardware (Major only).*

[This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage equipment includible in Account 348, Energy Storage Equipment - Production, which are not specifically provided for or are readily assignable to other production maintenance expense accounts.]

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the other power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

129. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 553.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*553.2 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the other power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

130. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 553.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*553.3 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the other power generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

131. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 555.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*555.2 Bundled environmental credits.*

*For environmental credits that were bundled with energy, this account shall include the cost of environmental credits expensed concurrent with the monthly usage. (See General Instruction No. 21.)*

\* \* \* \* \*

132. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 555.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*555.3 Unbundled environmental credits.*

*For environmental credits that were unbundled from energy, this account shall*

*include the cost of environmental credits expensed concurrent with the monthly usage.*

*(See General Instruction No. 21.)*

\* \* \* \* \*

133. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.1 Operation supervision and engineering.*

*A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of solar power generating stations. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)*

*B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of solar power generating stations.*

*Labor:*

- 1. Supervising solar production.*
- 2. Operating solar panels, auxiliary apparatus and switching and other electric equipment.*
- 3. Operating switchboards, switch gear and electric control and protective equipment.*

*4. Keeping electric plant log and records and preparing reports on electric plant operations.*

*5. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*

*6. Cleaning electric plant equipment when not incidental to maintenance work.*

\* \* \* \* \*

134. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.2 Solar panel generation and other plant operating expenses (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in operating solar generation and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other solar generation operation expense accounts.*

*Labor:*

*1. Operating switchboards, switch gear and electric control and protective equipment.*

*2. Operating solar generators and auxiliary apparatus and switching and other electric equipment.*

3. *Keeping electric plant log and records and preparing reports on electric plant operations.*
4. *Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*
5. *Cleaning electric plant equipment when not incidental to maintenance work.*
6. *General clerical work.*
7. *Guarding and patrolling plant and yard.*
8. *Building service.*
9. *Care of grounds including snow removal, cutting grass, etc.*
10. *Miscellaneous labor.*

*Materials and Expenses:*

11. *Lubricants and control system oils.*
12. *General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.*
13. *First-aid supplies and safety equipment.*
14. *Employees' service facilities expenses.*
15. *Building service supplies.*
16. *Communication service.*
17. *Miscellaneous office supplies and expenses, printing and stationery.*
18. *Transportation expenses.*
19. *Meals, traveling and incidental expenses.*

20. *Water for fire protection or general use.*

21. *Research, development, and demonstration expenses.*

\* \* \* \* \*

135. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

558.3 *Reserved.*

\* \* \* \* \*

136. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.4 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

558.4 *Rents.*

*This account shall include all rents of property of others used, occupied or operated in connection with solar power generation. (See operating expense instruction 3.)*

\* \* \* \* \*

137. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.5 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

558.5 *Operation supplies and expenses (Nonmajor only).*

*This account shall include the cost of materials used and expenses incurred in the operation of solar power generating stations.*

*Items:*

- 1. *Lubricants and control system oils.*
- 2. *General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.*
- 3. *First-aid supplies and safety equipment.*
- 4. *Employees' service facilities expenses.*
- 5. *Building service supplies.*
- 6. *Communication service.*
- 7. *Miscellaneous office supplies and expenses, printing and stationery.*
- 8. *Transportation expenses.*
- 9. *Meals, traveling and incidental expenses.*
- 10. *Water for fire protection or general use.*

\* \* \* \* \*

138. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.6 is added to read as follows:

**Operation and Maintenance Expense Accounts**



\* \* \* \* \*

*558.6 Maintenance supervision and engineering (Major only).*

*This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of solar generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account.*

*(See operating expense instruction 1.)*

\* \* \* \* \*

139. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.7 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.7 Maintenance of solar panels, structures, and equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of solar structures, solar panels, and other solar plant equipment, the book cost of which is includible in account 338.2, Structures and Improvements, account 338.4, Solar Panels, account 338.5, Collector Systems, account 338.6, Generator Step-up Transformers, account 338.7, Inverters, and account 338.8, Other Accessory Electrical Equipment. (See operating expense instruction 2.)*

140. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.8 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.8 Maintenance of computer hardware (Major only).*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the solar generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

141. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.9 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.9 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the solar generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

142. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.10 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.10 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the solar generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

143. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.11 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.11 Maintenance of miscellaneous solar generation plant (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous solar generation plant, the book cost of which is includible in account 338.12, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)*

\* \* \* \* \*

144. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.12 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.12 Maintenance of solar generation plant (Nonmajor only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of solar generation plant the book cost of which is includible in plant accounts 338.1 to 338.12, inclusive. (See operating expense instruction 2.)*

\* \* \* \* \*

145. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.13 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.13 Operation supervision and engineering.*

*A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of wind power generating stations. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)*

*B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of wind power generating stations.*

*Labor:*

- 1. Supervising wind production.*
- 2. Operating wind turbines, generators and auxiliary apparatus and switching and other electric equipment.*
- 3. Operating switchboards, switch gear and electric control and protective equipment.*

*4. Keeping electric plant log and records and preparing reports on electric plant operations.*

*5. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*

*6. Cleaning electric plant equipment when not incidental to maintenance work.*

\* \* \* \* \*

146. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.14 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.14 Wind turbine generation and other plant operating expenses (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in operating wind generation and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other wind generation operation expense accounts.*

*Labor:*

*1. Operating switchboards, switch gear and electric control and protective equipment.*

*2. Operating wind turbines, generators and auxiliary apparatus and switching and other electric equipment.*

3. *Keeping electric plant log and records and preparing reports on electric plant operations.*
4. *Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*
5. *Cleaning electric plant equipment when not incidental to maintenance work.*
6. *General clerical work.*
7. *Guarding and patrolling plant and site.*
8. *Building service.*
9. *Care of grounds including snow removal, cutting grass, etc.*
10. *Miscellaneous labor.*

*Materials and Expenses:*

11. *Lubricants and control system oils.*
12. *General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.*
13. *First-aid supplies and safety equipment.*
14. *Employees' service facilities expenses.*
15. *Building service supplies.*
16. *Communication service.*
17. *Miscellaneous office supplies and expenses, printing and stationery.*
18. *Transportation expenses.*
19. *Meals, traveling and incidental expenses.*

20. *Water for fire protection or general use.*

21. *Research, development, and demonstration expenses.*

\* \* \* \* \*

147. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.15 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.15 Reserved.*

\* \* \* \* \*

148. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.16 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.16 Rents.*

*This account shall include all rents of property of others used, occupied or operated in connection with wind power generation. (See operating expense instruction 3.)*

\* \* \* \* \*

149. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 558.17 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

558.17 *Operation supplies and expenses (Nonmajor only).*

*This account shall include the cost of materials used and expenses incurred in the operation of wind power generating stations.*

*Items:*

- 1. *Lubricants and control system oils.*
- 2. *General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.*
- 3. *First-aid supplies and safety equipment.*
- 4. *Employees' service facilities expenses.*
- 5. *Building service supplies.*
- 6. *Communication service.*
- 7. *Miscellaneous office supplies and expenses, printing and stationery.*
- 8. *Transportation expenses.*
- 9. *Meals, traveling and incidental expenses.*
- 10. *Water for fire protection or general use.*

\* \* \* \* \*

150. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.18 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*



*558.18 Maintenance supervision and engineering (Major only).*

*This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of wind generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account.*

*(See operating expense instruction 1.)*

\* \* \* \* \*

151. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.19 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.19 Maintenance of wind turbines, structures, and equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of wind structures, the book cost of which is includible in account 338.21, Structures and Improvements, account 338.23, Wind Turbines, account 338.24, Wind Towers and Fixtures, account 338.26, Collector Systems, account 338.27, Generator Step-up Transformers, account 338.28, Inverters, and account 338.29, Other Accessory Electrical Equipment. (See operating expense instruction 2.)*

\* \* \* \* \*

152. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.20 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.20 Maintenance of computer hardware (Major only).*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the wind generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

153. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.21 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.21 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the wind generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

154. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.22 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.22 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the wind generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

155. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.23 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.23 Maintenance of miscellaneous wind generation (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous wind generation plant, the book cost of which is includible in account 338.33, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)*

\* \* \* \* \*

156. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 558.24 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*558.24 Maintenance of wind generation (Nonmajor only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of wind generation plant the book cost of which is includible in plant accounts 338.20 to 338.33, inclusive. (See operating expense instruction 2.)*

\* \* \* \* \*

157. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 559.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.1 Operation supervision and engineering.*

*A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of other renewable power generating stations. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)*

*B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of other renewable power generating stations.*

*Labor:*

- 1. Supervising other renewable production.*
- 2. Operating other renewable prime movers, generators and auxiliary apparatus and switching and other electric equipment.*
- 3. Operating switchboards, switch gear and electric control and protective equipment.*

4. *Keeping electric plant log and records and preparing reports on electric plant operations.*

5. *Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*

6. *Cleaning electric plant equipment when not incidental to maintenance work.*

\* \* \* \* \*

158. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 559.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

559.2 *Other miscellaneous generation and other plant operating expenses (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in operating other renewable generation and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other renewable generation operation expense accounts.*

*Labor:*

1. *Operating switchboards, switch gear and electric control and protective equipment.*

2. *Operating other renewable prime movers, generators and auxiliary apparatus and switching and other electric equipment.*
3. *Keeping electric plant log and records and preparing reports on electric plant operations.*
4. *Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*
5. *Cleaning electric plant equipment when not incidental to maintenance work.*
6. *General clerical work.*
7. *Guarding and patrolling plant and yard.*
8. *Building service.*
9. *Care of grounds including snow removal, cutting grass, etc.*
10. *Miscellaneous labor.*

*Materials and Expenses:*

11. *Lubricants and control system oils.*
12. *General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.*
13. *First-aid supplies and safety equipment.*
14. *Employees' service facilities expenses.*
15. *Building service supplies.*
16. *Communication service.*
17. *Miscellaneous office supplies and expenses, printing and stationery.*

18. *Transportation expenses.*

19. *Meals, traveling and incidental expenses.*

20. *Water for fire protection or general use.*

21. *Research, development, and demonstration expenses.*

\* \* \* \* \*

159. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 559.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

559.3 *Fuel.*

*This account shall include the cost delivered at the station (see account 151, Fuel Stock, for Major utilities, and account 154, Plant Materials and Operating Supplies, for Nonmajor utilities) of all fuel, such as electrolytes, hydrogen, renewable natural gas, algae, etc., used in other power generation.*

\* \* \* \* \*

160. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 559.4 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

559.4 *Rents.*

*This account shall include all rents of property of others used, occupied or operated in connection with other renewable power generation. (See operating expense instruction 3.)*

\* \* \* \* \*

161. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 559.5 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.5 Operation supplies and expenses (Nonmajor only).*

*This account shall include the cost of materials used and expenses incurred in the operation of other renewable power generating stations.*

*Items:*

- 1. Lubricants and control system oils.*
- 2. General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.*
- 3. First-aid supplies and safety equipment.*
- 4. Employees' service facilities expenses.*
- 5. Building service supplies.*
- 6. Communication service.*
- 7. Miscellaneous office supplies and expenses, printing and stationery.*
- 8. Transportation expenses.*



9. *Meals, traveling and incidental expenses.*

10. *Water for fire protection or general use.*

\* \* \* \* \*

162. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.6 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

559.6 *Maintenance supervision and engineering (Major only).*

*This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of other renewable power generation facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account. (See operating expense instruction 1.)*

\* \* \* \* \*

163. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.7 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

559.7 *Maintenance of structures (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of other renewable structures, the book cost of which is includible in*

*account 339.2, Structures and Improvements, and account 339.3 Fuel holders. (See operating expense instruction 2.)*

\* \* \* \* \*

164. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.8 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.8 Reserved.*

\* \* \* \* \*

165. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.9 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.9 Maintenance of boilers (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of steam plant, the book cost of which is includible in account 339.4, Boiler Plant Equipment. (See operating expense instruction 2.)*

\* \* \* \* \*

166. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.10 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.10 Maintenance of generating and electric equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in maintenance of plant, the book cost of which is includible in account 339.6.*

*Generators, and account 339.8, Other Accessory Electric Equipment. (See operating expense instruction 2.)*

\* \* \* \* \*

167. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.11 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.11 Reserved.*

\* \* \* \* \*

168. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.12 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.12 Maintenance of computer hardware (Major only).*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the other renewable generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

169. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.13 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.13 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the other renewable generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

170. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.14 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.14 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the other renewable generation subfunction. (See operating expense instruction 2.)*

\* \* \* \* \*

171. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.15 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.15 Maintenance of miscellaneous other renewable generation plant (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous other renewable generation plant, the book cost of which is includible in account 339.12, Miscellaneous Power Plant Equipment. (See operating expense instruction 2.)*

\* \* \* \* \*

172. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 559.16 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*559.16 Maintenance of other renewable generation plant (Nonmajor only).*

*This account shall include the cost of labor, materials used and expenses incurred*

*in the maintenance of other renewable generation plant the book cost of which is includible in plant accounts 339.1 to 339.12, inclusive. (See operating expense instruction 2.)*

\* \* \* \* \*

173. In Part 101, Operation and Maintenance Expense Accounts, operation expense Account 562.1 title is amended and instructions are deleted to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

562.1 [Operation of Energy Storage Equipment] *Reserved.*

[This account shall include the cost of labor, materials used and expenses incurred in the operation of energy storage equipment includible in Account 351, Energy Storage Equipment - Transmission, which are not specifically provided for or are readily assignable to other transmission operation expense accounts.]

\* \* \* \* \*

174. In Part 101, Operation and Maintenance Expense Accounts, maintenance expense Account 569.1 title and instructions are amended to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

569.1 Maintenance of computer hardware (*Major only*).

This account shall include the cost of labor, materials used and expenses incurred

in the maintenance of computer hardware serving the transmission function. (*See operating expense instruction 2.*)

\* \* \* \* \*

175. In Part 101, Operation and Maintenance Expense Accounts, maintenance expense Account 569.2 title and instructions are amended to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

569.2 Maintenance of computer software. (*Major only*).

This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the transmission function. (*See operating expense instruction 2.*)

Items

- 1. Telephone support.
- 2. Onsite support.
- 3. Software updates and minor revisions.

\* \* \* \* \*

176. In Part 101, Operation and Maintenance Expense Accounts, maintenance expense Account 569.3 title and instructions are amended to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

569.3 Maintenance of communication equipment (*Major only*).

This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the transmission function. (*See operating expense instruction 2.*)

\* \* \* \* \*

177. In Part 101, Operation and Maintenance Expense Accounts, maintenance expense Account 570.1 title is amended and instructions are deleted to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

570.1 [Maintenance of Energy Storage Equipment] *Reserved*.

[This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage equipment includible in Account 351, Energy Storage Equipment - Transmission, which are not specifically provided for or are readily assignable to other transmission maintenance expense accounts.]

\* \* \* \* \*

178. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 577.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*



*577.1 Operation supervision and engineering.*

*A. For Major Utilities, this account shall include the cost of labor and expenses incurred in the general supervision and direction of the operation of energy storage plant. Direct supervision of specific activities shall be charged to the appropriate account. (See operating expense instruction 1.)*

*B. For Nonmajor Utilities, this account shall include the cost of supervision and labor in the operation of energy storage equipment.*

*Labor:*

- 1. Supervising energy storage equipment operation.*
- 2. Operating energy storage equipment and auxiliary apparatus and switching and other electric equipment.*
- 3. Operating switchboards, switch gear and electric control and protective equipment.*
- 4. Keeping electric plant log and records and preparing reports on electric plant operations.*
- 5. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*
- 6. Cleaning electric plant equipment when not incidental to maintenance work.*

\* \* \* \* \*

179. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 577.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*577.2 Operation of energy storage equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in operating energy storage plant and their auxiliary apparatus, switch gear and other electric equipment to the points where electricity leaves for conversion for transmission or distribution, or are not readily assignable to other energy storage operation expense accounts.*

*Labor:*

- 1. Operating switchboards, switch gear and electric control and protective equipment.*
- 2. Operating energy storage and auxiliary apparatus and switching and other electric equipment.*
- 3. Keeping electric plant log and records and preparing reports on electric plant operations.*
- 4. Testing, checking and adjusting meters, gauges, and other instruments, relays, controls and other equipment in the electric plant.*
- 5. Cleaning electric plant equipment when not incidental to maintenance work.*
- 6. General clerical work.*
- 7. Guarding and patrolling plant and yard.*
- 8. Building service.*

9. *Care of grounds including snow removal, cutting grass, etc.*

10. *Miscellaneous labor.*

*Materials and Expenses:*

11. *Lubricants and control system oils.*

12. *General operating supplies, such as tools, gaskets, packing waste, gauge glasses, hose, indicating lamps, record and report forms, etc.*

13. *First-aid supplies and safety equipment.*

14. *Employees' service facilities expenses.*

15. *Building service supplies.*

16. *Communication service.*

17. *Miscellaneous office supplies and expenses, printing and stationery.*

18. *Transportation expenses.*

19. *Meals, traveling and incidental expenses.*

20. *Water for fire protection or general use.*

21. *Research, development, and demonstration expenses.*

\* \* \* \* \*

180. In Part 101, Operation and Maintenance Expense Accounts, new operation

expense Account 577.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

577.3 *Storage fuel.*

*This account shall include the cost delivered at the station (see account 151, Fuel Stock, for Major utilities, and account 154, Plant Materials and Operating Supplies, for Nonmajor utilities) of all fuel, such as electrolytes, hydrogen, renewable natural gas, algae, etc., used in energy storage.*

\* \* \* \* \*

181. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 577.4 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*577.4 Rents.*

*This account shall include all rents of property of others used, occupied or operated in connection with energy storage. (See operating expense instruction 3.)*

\* \* \* \* \*

182. In Part 101, Operation and Maintenance Expense Accounts, new operation expense Account 577.5 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*577.5 Operation supplies and expenses (Nonmajor only).*

*This account shall include the cost of materials used and expenses incurred in the operation of energy storage equipment.*

*Items:*

- 1. *Lubricants and control system oils.*
- 2. *General operating supplies, such as tools, packing waste, hose, indicating lamps, record and report forms, etc.*
- 3. *First-aid supplies and safety equipment.*
- 4. *Employees' service facilities expenses.*
- 5. *Building service supplies.*
- 6. *Communication service.*
- 7. *Miscellaneous office supplies and expenses, printing and stationery.*
- 8. *Transportation expenses.*
- 9. *Meals, traveling and incidental expenses.*
- 10. *Water for fire protection or general use.*

\* \* \* \* \*

183. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 578.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*578.1 Maintenance supervision and engineering (Major only).*

*This account shall include the cost of labor and expenses incurred in the general supervision and direction of maintenance of energy storage facilities. Direct field supervision of specific jobs shall be charged to the appropriate maintenance account.*

*(See operating expense instruction 1.)*

\* \* \* \* \*

184. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 578.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*578.2 Maintenance of energy storage equipment and structures (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage structures, energy storage equipment, and other energy storage plant the book cost of which is includible in account 387.2, Structures and Improvements, account 387.3, Energy Storage Equipment, account 387.5, Collector Systems, account 387.6, Generator Step-up Transformers, and account 387.7, Inverters.*

*(See operating expense instruction 2.)*

\* \* \* \* \*

185. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 578.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*578.3 Maintenance of computer hardware (Major only).*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the energy storage function. (See operating expense instruction 2.)*

\* \* \* \* \*

186. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 578.4 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*578.4 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the energy storage function. (See operating expense instruction 2.)*

\* \* \* \* \*

187. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 578.5 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*578.5 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the energy storage function.*

*(See operating expense instruction 2.)*

\* \* \* \* \*

188. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 578.6 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*578.6 Maintenance of miscellaneous other energy storage plant (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in maintenance of miscellaneous energy storage plant, the book cost of which is includible in account 387.11, Miscellaneous Energy Storage Equipment. (See operating expense instruction 2.)*

\* \* \* \* \*

189. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 578.7 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*578.7 Maintenance of other energy storage plant (Nonmajor only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage plant the book cost of which is includible in plant accounts 387.1 to 387.11, inclusive. (See operating expense instruction 2.)*

\* \* \* \* \*



190. In Part 101, Operation and Maintenance Expense Accounts, operation expense Account 584.1 title is amended and instructions are deleted to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

584.1 [Operation of Energy Storage Equipment] *Reserved.*

[This account shall include the cost of labor, materials used and expenses incurred in the operation of energy storage equipment includible in Account 363, Energy Storage Equipment - Distribution, which are not specifically provided for or are readily assignable to other distribution operation expense accounts.]

\* \* \* \* \*

191. In Part 101, Operation and Maintenance Expense Accounts, maintenance expense Account 592.2 title is amended and instructions are deleted to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

592.2 [Maintenance of Energy Storage Equipment] *Maintenance of computer hardware (Major only).*

[This account shall include the cost of labor, materials used and expenses incurred in the maintenance of energy storage equipment includible in Account 363, Energy

Storage Equipment - Distribution, which are not specifically provided for or are readily assignable to other distribution maintenance expense accounts.]

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware serving the distribution function.*

\* \* \* \* \*

192. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 592.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*592.3 Maintenance of computer software (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the cost of ongoing support for software products serving the distribution function. (See operating expense instruction 2.)*

\* \* \* \* \*

193. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 592.4 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*592.4 Maintenance of communication equipment (Major only).*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment serving the distribution function. (See operating expense instruction 2.)*

\* \* \* \* \*

194. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 935.1 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

935.1 *Maintenance of computer hardware.*

*The account shall include the cost of labor, materials used and expenses incurred in the maintenance of computer hardware used for administrative and general purposes. (See operating expense instruction 2.)*

\* \* \* \* \*

195. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 935.2 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

935.2 *Maintenance of computer software.*

*This account shall include the cost of labor, materials used and expenses incurred for annual computer software license renewals, annual software update services and the*

*cost of ongoing support for software products used for administrative and general purposes. (See operating expense instruction 2.)*

\* \* \* \* \*

196. In Part 101, Operation and Maintenance Expense Accounts, new maintenance expense Account 935.3 is added to read as follows:

**Operation and Maintenance Expense Accounts**

\* \* \* \* \*

*935.3 Maintenance of communication equipment.*

*This account shall include the cost of labor, materials used and expenses incurred in the maintenance of communication equipment used for administrative and general purposes. (See operating expense instruction 2.)*

Note: The following Appendix will not be published in the Code of Federal Regulations.

**XI. Appendix B: New and Amended Form 1/1F/3-Q (electric)**

**(The form changes were done considering a PDF format but would ultimately be configured for XBRL presentation. The following forms schedules represent an option for implementation and do not necessarily represent how the schedule will appear once designed, developed, and deployed.)**

Note: Deletions are in brackets and Additions are in italics.

As indicated in the labels at the bottom of each schedule, the first schedules show changes to the pages of FERC Form No. 1 as well as pages that are the same in FERC Form Nos. 1-F and 3-Q (stating where page numbers differ), followed by schedules that have changes that only affect FERC Form No. 1-F, and lastly schedule changes to FERC Form No. 60.



Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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LIST OF SCHEDULES (Electric Utility)

Enter in column (c) the terms "none," "not applicable," or "NA," as appropriate, where no information or amounts have been reported for certain pages. Omit pages where the respondents are "none," "not applicable," or "NA".

Line No.	Title of Schedule (a)	Reference Page No. (b)	Remarks (c)
1	General Information		
2	Control Over Respondent		
3	Corporations Controlled by Respondent		
4	Officers		
5	Directors		
6	Information on Formula Rates		
7	Important Changes During the Year		
8	Comparative Balance Sheet		
9	Statement of Income for the Year		
10	Statement of Retained Earnings for the Year		
11	Statement of Cash Flows		
12	Notes to Financial Statements		
13	Statement of Accum Comp Income, Comp Income, and Hedging Activities		
14	Summary of Utility Plant & Accumulated Provisions for Dep, Amort & Dep		
15	Nuclear Fuel Materials		
16	Electric Plant in Service		
17	Electric Plant Leased to Others		
18	Electric Plant Held for Future Use		
19	Construction Work in Progress-Electric		
20	Accumulated Provision for Depreciation of Electric Utility Plant		
21	Investment of Subsidiary Companies		
22	Materials and Supplies		
23	Allowances and Environmental Credits		
24	Extraordinary Property Losses		
25	Unrecovered Plant and Regulatory Study Costs		
26	Transmission Service and Generation Interconnection Study Costs		
27	Other Regulatory Assets		
28	Miscellaneous Deferred Debits		
29	Accumulated Deferred Income Taxes		
30	Capital Stock		
31	Other Paid-in Capital		
32	Capital Stock Expense		
33	Long-Term Debt		
34	Reconciliation of Reported Net Income with Taxable Inc for Fed Inc Tax		
35	Taxes Accrued, Prepaid and Charged During the Year		

36 Accumulated Deferred Investment Tax Credits			
Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)
Year/Period of Report End of			
LIST OF SCHEDULES (Electric Utility) (continued)			
Enter in column (c) the terms "none," "not applicable," or "NA," as appropriate, where no information or amounts have been reported for certain pages. Omit pages where the respondents are "none," "not applicable," or "NA".			
Line No.	Title of Schedule (a)	Reference Page No. (b)	Remarks (c)
37	Other Deferred Credits		
38	Accumulated Deferred Income Taxes-Accelerated Amortization Property		
39	Accumulated Deferred Income Taxes-Other Property		
40	Accumulated Deferred Income Taxes-Other		
41	Other Regulatory Liabilities		
42	Electric Operating Revenues		
43	Regional Transmission Service Revenues (Account 457.1)		
44	Sales of Electricity by Rate Schedules		
45	Sales for Resale		
46	Electric Operation and Maintenance Expenses		
47	Purchased Power		
48	Transmission of Electricity for Others		
49	Transmission of Electricity by ISO/RTOs		
50	Transmission of Electricity by Others		
51	Miscellaneous General Expenses-Electric		
52	Depreciation and Amortization of Electric Plant		
53	Regulatory Commission Expenses		
54	Research, Development and Demonstration Activities		
55	Distribution of Salaries and Wages		
56	Common Utility Plant and Expenses		
57	Amounts included in ISO/RTO Settlement Statements		
58	Purchase and Sale of Ancillary Services		
59	Monthly Transmission System Peak Load		
60	Monthly ISO/RTO Transmission System Peak Load		
61	Electric Energy Account		
62	Monthly Peaks and Output		
63	Steam Electric Generating Plant Statistics		
63.1	Renewable Generating Plant Statistics		
64	Hydroelectric Generating Plant Statistics		
65	Pumped Storage Generating Plant Statistics		
66	Generating Plant Statistics Pages		
66.1	Energy Storage Operations (Large Plants)		
66.2	Energy Storage Operations (Small Plants)		

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
LIST OF SCHEDULES (Electric Utility) (continued)				
Enter in column (c) the terms "none," "not applicable," or "NA," as appropriate, where no information or amounts have been reported for certain pages. Omit pages where the respondents are "none," "not applicable," or "NA".				
Line No.	Title of Schedule (a)	Reference Page No. (b)	Remarks (c)	
67	Transmission Line Statistics Pages			
68	Transmission Lines Added During the Year			
69	Substations			
70	Transactions with Associated (Affiliated) Companies			
71	Footnote Data			
	<p>Stockholders' Reports Check appropriate box:</p> <p>Two copies will be submitted</p> <p>No annual report to stockholders is prepared</p>			



Name of Respondent	This Report Is: (1) <input type="checkbox"/> An Original (2) <input checked="" type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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**COMPARATIVE BALANCE SHEET (ASSETS AND OTHER DEBITS)**

Line No.	Title of Account (a)	Ref. Page No. (b)	Current Year End of Quarter/Year Balance (c)	Prior Year End Balance 12/31 (d)
1	<b>UTILITY PLANT</b>			
2	Utility Plant (101-106, 114)	200-201		
3	Construction Work in Progress (107)	200-201		
4	TOTAL Utility Plant (Enter Total of lines 2 and 3)			
5	(Less) Accum. Prov. for Depr. Amort. Depl. (108, 110, 111, 115)	200-201		
6	Net Utility Plant (Enter Total of line 4 less 5)			
7	Nuclear Fuel in Process of Ref., Conv., Enrich., and Fab. (120.1)	202-203		
8	Nuclear Fuel Materials and Assemblies-Stock Account (120.2)			
9	Nuclear Fuel Assemblies in Reactor (120.3)			
10	Spent Nuclear Fuel (120.4)			
11	Nuclear Fuel Under Capital Leases (120.6)			
12	(Less) Accum. Prov. for Amort. of Nucl. Fuel Assemblies (120.5)	202-203		
13	Net Nuclear Fuel (Enter Total of lines 7-11 less 12)			
14	Net Utility Plant (Enter Total of lines 6 and 13)			
15	Utility Plant Adjustments (116)			
16	Gas Stored Underground - Noncurrent (117)			
17	<b>OTHER PROPERTY AND INVESTMENTS</b>			
18	Nonutility Property (121)			
19	(Less) Accum. Prov. for Depr. and Amort. (122)			
20	Investments in Associated Companies (123)			
21	Investment in Subsidiary Companies (123.1)	224-225		
22	(For Cost of Account 123.1, See Footnote Page 224, line 42)			
23	Noncurrent Portion of Allowances and Environmental Credits	228-229		
24	Other Investments (124)			
25	Sinking Funds (125)			
26	Depreciation Fund (126)			
27	Amortization Fund - Federal (127)			
28	Other Special Funds (128)			
29	Special Funds (Non Major Only) (129)			
30	Long-Term Portion of Derivative Assets (175)			
31	Long-Term Portion of Derivative Assets - Hedges (176)			
32	TOTAL Other Property and Investments (Lines 18-21 and 23-31)			
33	<b>CURRENT AND ACCRUED ASSETS</b>			
34	Cash and Working Funds (Non-major Only) (130)			
35	Cash (131)			
36	Special Deposits (132-134)			
37	Working Fund (135)			
38	Temporary Cash Investments (136)			
39	Notes Receivable (141)			
40	Customer Accounts Receivable (142)			
41	Other Accounts Receivable (143)			
42	(Less) Accum. Prov. for Uncollectible Acct.-Credit (144)			

43	Notes Receivable from Associated Companies (145)			
44	Accounts Receivable from Assoc. Companies (146)			
45	Fuel Stock (151)	227		
46	Fuel Stock Expenses Undistributed (152)	227		
47	Residuals (Elec) and Extracted Products (153)	227		
48	Plant Materials and Operating Supplies (154)	227		
49	Merchandise (155)	227		
50	Other Materials and Supplies (156)	227		
51	Nuclear Materials Held for Sale (157)	202-203/227		
52	Allowances and Environmental Credits (158.1, [and] 158.2, 158.3, and 158.4)	228-229		

FERC FORM NO. 1 (ED. 12-22) Page 110

Name of Respondent	This Report Is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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**COMPARATIVE BALANCE SHEET (ASSETS AND OTHER DEBITS)(Continued)**

Line No.	Title of Account (a)	Ref. Page No. (b)	Current Year End of Quarter/Year Balance (c)	Prior Year End Balance 12/31 (d)
53	(Less) Noncurrent Portion of Allowances <i>and Environmental Credits</i>			
54	Stores Expense Undistributed (163)	227		
55	Gas Stored Underground - Current (164.1)			
56	Liquefied Natural Gas Stored and Held for Processing (164.2-164.3)			
57	Prepayments (165)			
58	Advances for Gas (166-167)			
59	Interest and Dividends Receivable (171)			
60	Rents Receivable (172)			
61	Accrued Utility Revenues (173)			
62	Miscellaneous Current and Accrued Assets (174)			
63	Derivative Instrument Assets (175)			
64	(Less) Long-Term Portion of Derivative Instrument Assets (175)			
65	Derivative Instrument Assets - Hedges (176)			
66	(Less) Long-Term Portion of Derivative Instrument Assets - Hedges (176)			
67	Total Current and Accrued Assets (Lines 34 through 66)			
68	<b>DEFERRED DEBITS</b>			
69	Unamortized Debt Expenses (181)			
70	Extraordinary Property Losses (182.1)	230a		
71	Unrecovered Plant and Regulatory Study Costs (182.2)	230b		
72	Other Regulatory Assets (182.3)	232		
73	Prelim. Survey and Investigation Charges (Electric) (183)			
74	Preliminary Natural Gas Survey and Investigation Charges 183.1)			
75	Other Preliminary Survey and Investigation Charges (183.2)			
76	Clearing Accounts (184)			
77	Temporary Facilities (185)			
78	Miscellaneous Deferred Debits (186)	233		
79	Def. Losses from Disposition of Utility Plt. (187)			
80	Research, Devel. and Demonstration Expend. (188)	352-353		
81	Unamortized Loss on Reaquired Debt (189)			
82	Accumulated Deferred Income Taxes (190)	234		
83	Unrecovered Purchased Gas Costs (191)			
84	Total Deferred Debits (lines 69 through 83)			
85	TOTAL ASSETS (lines 14-16, 32, 67, and 84)			

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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STATEMENT OF INCOME

Quarterly

1. Report in column (c) the current year to date balance. Column (c) equals the total of adding the data in column (g) plus the data in column (i) plus the data in column (k). Report in column (d) similar data for the previous year. This information is reported in the annual filing only.
2. Enter in column (e) the balance for the reporting quarter and in column (f) the balance for the same three month period for the prior year.
3. Report in column (g) the quarter to date amounts for electric utility function; in column (i) the quarter to date amounts for gas utility, and in column (k) the quarter to date amounts for other utility function for the current year quarter.
4. Report in column (h) the quarter to date amounts for electric utility function; in column (j) the quarter to date amounts for gas utility, and in column (l) the quarter to date amounts for other utility function for the prior year quarter.
5. If additional columns are needed, place them in a footnote.

Annual or Quarterly if applicable

6. Do not report fourth quarter data in columns (e) and (f)
7. Report amounts for accounts 412 and 413, Revenues and Expenses from Utility Plant Leased to Others, in another utility column in a similar manner to a utility department. Spread the amount(s) over lines 2 thru 26 as appropriate. Include these amounts in columns (c) and (d) totals.
8. Report amounts in account 414, Other Utility Operating Income, in the same manner as accounts 412 and 413 above.

Line No.	Title of Account (a)	(Ref.) Page No. (b)	Total Current Year to Date Balance for Quarter/Year (c)	Total Prior Year to Date Balance for Quarter/Year (d)	Current 3 Months Ended Quarterly Only No 4th Quarter (e)	Prior 3 Months Ended Quarterly Only No 4th Quarter (f)
1	UTILITY OPERATING INCOME					
2	Operating Revenues (400)					
3	Operating Expenses					
4	Operation Expenses (401)					
5	Maintenance Expenses (402)					
6	Depreciation Expense (403)					
7	Depreciation Expense for Asset Retirement Costs (403.1)					
8	Amort. & Depl. of Utility Plant (404-405)					
9	Amort. of Utility Plant Acq. Adj. (406)					
10	Amort. Property Losses, Unrecov Plant and Regulatory Study Costs (407)					
11	Amort. of Conversion Expenses (407)					
12	Regulatory Debits (407.3)					
13	(Less) Regulatory Credits (407.4)					
14	Taxes Other Than Income Taxes (408.1)					
15	Income Taxes - Federal (409.1)					
16	- Other (409.1)					
17	Provision for Deferred Income Taxes (410.1)					
18	(Less) Provision for Deferred Income Taxes-Cr. (411.1)					
19	Investment Tax Credit Adj. - Net (411.4)					
20	(Less) Gains from Disp. of Utility Plant (411.6)					
21	Losses from Disp. of Utility Plant (411.7)					
22	(Less) Gains from Disposition of Allowances (411.8)					
23	Losses from Disposition of Allowances (411.9)					
24	Accretion Expense (411.10)					
24.1	(Less) Gains from Disposition of Environmental Credits (411.11)					
24.2	Losses from Disposition of Environmental Credits (411.12)					
25	TOTAL Utility Operating Expenses (Enter Total of lines 4 thru 24.2)					
26	Net Util Oper Inc (Enter Tot line 2 less 25) Carry to Pg117,line 27					

Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
	(1) An Original (2) A Resubmission		

STATEMENT OF INCOME FOR THE YEAR (Continued)

- 9. Use page 122 for important notes regarding the statement of income for any account thereof.
- 10. Give concise explanations concerning unsettled rate proceedings where a contingency exists such that refunds of a material amount may need to be made to the utility's customers or which may result in material refund to the utility with respect to power or gas purchases. State for each year effected the gross revenues or costs to which the contingency relates and the tax effects together with an explanation of the major factors which affect the rights of the utility to retain such revenues or recover amounts paid with respect to power or gas purchases.
- 11. Give concise explanations concerning significant amounts of any refunds made or received during the year resulting from settlement of any rate proceeding affecting revenues received or costs incurred for power or gas purchases, and a summary of the adjustments made to balance sheet, income, and expense accounts.
- 12. If any notes appearing in the report to stockholders are applicable to the Statement of Income, such notes may be included at page 122.
- 13. Enter on page 122 a concise explanation of only those changes in accounting methods made during the year which had an effect on net income, including the basis of allocations and apportionments from those used in the preceding year. Also, give the appropriate dollar effect of such changes.
- 14. Explain in a footnote if the previous year's/quarter's figures are different from that reported in prior reports.
- 15. If the columns are insufficient for reporting additional utility departments, supply the appropriate account titles report the information in a footnote to this schedule.

ELECTRIC UTILITY		GAS UTILITY		OTHER UTILITY		Line No.
Current Year to Date (in dollars) (g)	Previous Year to Date (in dollars) (h)	Current Year to Date (in dollars) (i)	Previous Year to Date (in dollars) (j)	Current Year to Date (in dollars) (k)	Previous Year to Date (in dollars) (l)	
						1
						2
						3
						4
						5
						6
						7
						8
						9
						10
						11
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						22
						23
						24
						24.1
						24.2
						25
						26

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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STATEMENT OF CASH FLOWS

(1) Codes to be used:(a) Net Proceeds or Payments;(b)Bonds, debentures and other long-term debt; (c) Include commercial paper; and (d) Identify separately such items as investments, fixed assets, intangibles, etc.  
 (2) Information about noncash investing and financing activities must be provided in the Notes to the Financial statements. Also provide a reconciliation between "Cash and Cash Equivalents at End of Period" with related amounts on the Balance Sheet.  
 (3) Operating Activities - Other: Include gains and losses pertaining to operating activities only. Gains and losses pertaining to investing and financing activities should be reported in those activities. Show in the Notes to the Financials the amounts of interest paid (net of amount capitalized) and income taxes paid.  
 (4) Investing Activities: Include at Other (line 31) net cash outflow to acquire other companies. Provide a reconciliation of assets acquired with liabilities assumed in the Notes to the Financial Statements. Do not include on this statement the dollar amount of leases capitalized per the USofA General Instruction 20; instead provide a reconciliation of the dollar amount of leases capitalized with the plant cost.

Line No.	Description (See Instruction No. 1 for Explanation of Codes) (a)	Current Year to Date Quarter/Year (b)	Previous Year to Date Quarter/Year (c)
1	Net Cash Flow from Operating Activities:		
2	Net Income (Line 78(c) on page 117)		
3	Noncash Charges (Credits) to Income:		
4	Depreciation and Depletion		
5	Amortization of Limited Plant		
6	Impairment of long-lived asset and losses on regulatory assets		
7	Amortization of regulatory debits/credits		
8	Deferred Income Taxes (Net)		
9	Investment Tax Credit Adjustment (Net)		
10	Net (Increase) Decrease in Receivables		
11	Net (Increase) Decrease in Inventory		
12	Net (Increase) Decrease in Allowances and Environmental Credits Inventory		
13	Net Increase (Decrease) in Payables and Accrued Expenses		
14	Net (Increase) Decrease in Other Regulatory Assets		
15	Net Increase (Decrease) in Other Regulatory Liabilities		
16	(Less) Allowance for Other Funds Used During Construction		
17	(Less) Undistributed Earnings from Subsidiary Companies		
18	Other (provide details in footnote):		
19	Pension		
20	Gain on disposal of noncurrent assets		
21			
22	Net Cash Provided by (Used in) Operating Activities (Total 2 thru 21)		
23			
24	Cash Flows from Investment Activities:		
25	Construction and Acquisition of Plant (including land):		
26	Gross Additions to Utility Plant (less nuclear fuel)		
27	Gross Additions to Nuclear Fuel		
28	Gross Additions to Common Utility Plant		
29	Gross Additions to Nonutility Plant		
30	(Less) Allowance for Other Funds Used During Construction		

31	Other (provide details in footnote):		
32			
33			
34	Cash Outflows for Plant (Total of lines 26 thru 33)		
35			
36	Acquisition of Other Noncurrent Assets (d)		
37	Proceeds from Disposal of Noncurrent Assets (d)		
38			
39	Investments in and Advances to Assoc. and Subsidiary Companies		
40	Contributions and Advances from Assoc. and Subsidiary Companies		
41	Disposition of Investments in (and Advances to)		
42	Associated and Subsidiary Companies		
43			
44	Purchase of Investment Securities (a)		
45	Proceeds from Sales of Investment Securities (a)		

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FERC FORM NO. 1-F (ED. 12-22) Page 10

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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STATEMENT OF CASH FLOWS

(1) Codes to be used:(a) Net Proceeds or Payments;(b)Bonds, debentures and other long-term debt; (c) Include commercial paper; and (d) Identify separately such items as investments, fixed assets, intangibles, etc.  
 (2) Information about noncash investing and financing activities must be provided in the Notes to the Financial statements. Also provide a reconciliation between "Cash and Cash Equivalents at End of Period" with related amounts on the Balance Sheet.  
 (3) Operating Activities - Other: Include gains and losses pertaining to operating activities only. Gains and losses pertaining to investing and financing activities should be reported in those activities. Show in the Notes to the Financials the amounts of interest paid (net of amount capitalized) and income taxes paid.  
 (4) Investing Activities: Include at Other (line 31) net cash outflow to acquire other companies. Provide a reconciliation of assets acquired with liabilities assumed in the Notes to the Financial Statements. Do not include on this statement the dollar amount of leases capitalized per the USofA General Instruction 20; instead provide a reconciliation of the dollar amount of leases capitalized with the plant cost.

Line No.	Description (See Instruction No. 1 for Explanation of Codes) (a)	Current Year to Date Quarter/Year (b)	Previous Year to Date Quarter/Year (c)
46	Loans Made or Purchased		
47	Collections on Loans		
48			
49	Net (Increase) Decrease in Receivables		
50	Net (Increase ) Decrease in Inventory		
51	Net (Increase) Decrease in Allowances and Environmental Credits Held for Speculation		
52	Net Increase (Decrease) in Payables and Accrued Expenses		
53	Other (provide details in footnote):		
54			
55			
56	Net Cash Provided by (Used in) Investing Activities		
57	Total of lines 34 thru 55)		

58			
59	Cash Flows from Financing Activities:		
60	Proceeds from Issuance of:		
61	Long-Term Debt (b)		
62	Preferred Stock		
63	Common Stock		
64	Other (provide details in footnote):		
65			
66	Net Increase in Short-Term Debt (c)		
67	Other (provide details in footnote):		
68			
69			
70	Cash Provided by Outside Sources (Total 61 thru 69)		
71			
72	Payments for Retirement of:		
73	Long-term Debt (b)		
74	Preferred Stock		
75	Common Stock		
76	Other (provide details in footnote):		
77			
78	Net Decrease in Short-Term Debt (c)		
79	Bond Issuance Costs		
80	Dividends on Preferred Stock		
81	Dividends on Common Stock		
82	Net Cash Provided by (Used in) Financing Activities		
83	(Total of lines 70 thru 81)		
84			
85	Net Increase (Decrease) in Cash and Cash Equivalents		
86	(Total of lines 22,57 and 83)		
87			
88	Cash and Cash Equivalents at Beginning of Period		
89			
90	Cash and Cash Equivalents at End of period		

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**FERC FORM NO. 1-F (ED. 12-22) Page 11**

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
ELECTRIC PLANT IN SERVICE (Account 101, 102, 103 and 106)			



1. Report below the original cost of electric plant in service according to the prescribed accounts.
2. In addition to Account 101, Electric Plant in Service (Classified), this page and the next include Account 102, Electric Plant Purchased or Sold; Account 103, Experimental Electric Plant Unclassified; and Account 106, Completed Construction Not Classified-Electric.
3. Include in column (c) or (d), as appropriate, corrections of additions and retirements for the current or preceding year.
4. For revisions to the amount of initial asset retirement costs capitalized, included by primary plant account, increases in column (c) additions and reductions in column (e) adjustments.
5. Enclose in parentheses credit adjustments of plant accounts to indicate the negative effect of such accounts.
6. Classify Account 106 according to prescribed accounts, on an estimated basis if necessary, and include the entries in column (c). Also to be included in column (c) are entries for reversals of tentative distributions of prior year reported in column (b). Likewise, if the respondent has a significant amount of plant retirements which have not been classified to primary accounts at the end of the year, include in column (d) a tentative distribution of such retirements, on an estimated basis, with appropriate contra entry to the account for accumulated depreciation provision. Include also in column (d)

Line No.	Account (a)	Balance Beginning of Year (b)	Additions (c)
1	1. INTANGIBLE PLANT		
2	(301) Organization		
3	(302) Franchises and Consents		
4	(303) Miscellaneous Intangible Plant		
5	TOTAL Intangible Plant (Enter Total of lines 2, 3, and 4)		
6	2. PRODUCTION PLANT		
7	A. Steam Production Plant		
8	(310) Land and Land Rights		
9	(311) Structures and Improvements		
10	(312) Boiler Plant Equipment		
11	(313) Engines and Engine-Driven Generators		
12	(314) Turbogenerator Units		
13	(315) Accessory Electric Equipment		
13.1	(315.1) Computer Hardware		
13.2	(315.2) Computer Software		
13.3	(315.3) Communication Equipment		
14	(316) Misc. Power Plant Equipment		
15	(317) Asset Retirement Costs for Steam Production		
16	TOTAL Steam Production Plant (Enter Total of lines 8 thru 15)		
17	B. Nuclear Production Plant		
18	(320) Land and Land Rights		
19	(321) Structures and Improvements		
20	(322) Reactor Plant Equipment		
21	(323) Turbogenerator Units		
22	(324) Accessory Electric Equipment		
22.1	(324.1) Computer Hardware		
22.2	(324.2) Computer Software		
22.3	(324.3) Communication Equipment		
23	(325) Misc. Power Plant Equipment		
24	(326) Asset Retirement Costs for Nuclear Production		
25	TOTAL Nuclear Production Plant (Enter Total of lines 18 thru 24)		
26	C. Hydraulic Production Plant		
27	(330) Land and Land Rights		
28	(331) Structures and Improvements		
29	(332) Reservoirs, Dams, and Waterways		
30	(333) Water Wheels, Turbines, and Generators		
31	(334) Accessory Electric Equipment		
31.1	(334.1) Computer Hardware		
31.2	(334.2) Computer Software		
31.3	(334.3) Communication Equipment		
32	(335) Misc. Power PLant Equipment		
33	(336) Roads, Railroads, and Bridges		
34	(337) Asset Retirement Costs for Hydraulic Production		
35	TOTAL Hydraulic Production Plant (Enter Total of lines 27 thru 34)		
35.1	D. Solar Production Plant		
35.2	(338.1) Land and Land Rights		
35.3	(338.2) Structures and Improvements		
35.5	(338.4) Solar Panels		

35.6	(338.5) Collector System		
35.7	(338.6) Generator Step-up Transformers (GSU)		
35.8	(338.7) Inverters		
35.9	(338.8) Other Accessory Electrical Equipment		
35.10	(338.9) Computer Hardware		
35.11	(338.10) Computer Software		
35.12	(338.11) Communication Equipment		
35.13	(338.12) Miscellaneous Power Plant Equipment		
35.14	(338.13) Asset Retirement Costs for Solar Production		
35.15	TOTAL Solar Prod Plant (Enter Total of lines 35.2 thru 35.14)		
35.16	E. Wind Production Plant		
35.17	(338.20) Land and Land Rights		
35.18	(338.21) Structures and Improvements		
35.20	(338.23) Wind Turbines		
35.21	(338.24) Wind Towers and Fixtures		
35.23	(338.26) Collector System		
35.24	(338.27) Generator Step-up Transformers (GSU)		
35.25	(338.28) Inverters		
35.26	(338.29) Other Accessory Electrical Equipment		
35.27	(338.30) Computer Hardware		
35.28	(338.31) Computer Software		
35.29	(338.32) Communication Equipment		
35.30	(338.33) Miscellaneous Power Plant Equipment		
35.31	(338.34) Asset Retirement Costs for Wind Production		
35.32	TOTAL Wind Prod Plant (Enter Total of lines 35.17 thru 35.31)		
35.33	F. Other Renewable Production Plant		
35.34	(339.1) Land and Land Rights		
35.35	(339.2) Structures and Improvements		
35.36	(339.3) Fuel Holders		
35.37	(339.4) Boilers		
35.39	(339.6) Generators		
35.41	(339.8) Other Accessory Electrical Equipment		
35.42	(339.9) Computer Hardware		
35.43	(339.10) Computer Software		
35.44	(339.11) Communication Equipment		
35.45	(339.12) Miscellaneous Power Plant Equipment		
35.46	(339.13) Asset Retirement Costs for Other Renewable Production		
35.47	TOTAL Other Renewable Prod Plant (Enter Total of lines 35.34 thru 35.46)		
36	D]G. Other Production Plant		
37	(340) Land and Land Rights		
38	(341) Structures and Improvements		
39	(342) Fuel Holders, Products, and Accessories		
40	(343) Prime Movers		
41	(344) Generators		
42	(345) Accessory Electric Equipment		
42.1	(345.1) Computer Hardware		
42.2	(345.2) Computer Software		
42.3	(345.3) Communication Equipment		
43	(346) Misc. Power Plant Equipment		
44	(347) Asset Retirement Costs for Other Production		
[44.1]	[(348) Energy Storage Equipment – Production]		
45	TOTAL Other Prod. Plant (Enter Total of lines 37 thru 44)		
46	TOTAL Prod. Plant (Enter Total of lines 16, 25, 35, 35.15, 35.32, 35.47, and 45)		

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
ELECTRIC PLANT IN SERVICE (Account 101, 102, 103 and 106) (Continued)				
Line No.	Account (a)	Balance Beginning of Year (b)	Additions (c)	
47	3. TRANSMISSION PLANT			
48	(350) Land and Land Rights			
[48.1]	[(351) Energy Storage Equipment – Transmission]			
48.2	(351.1) Computer Hardware			
48.3	(351.2) Computer Software			
48.4	(351.3) Communication Equipment			
49	(352) Structures and Improvements			
50	(353) Station Equipment			
51	(354) Towers and Fixtures			
52	(355) Poles and Fixtures			
53	(356) Overhead Conductors and Devices			
54	(357) Underground Conduit			
55	(358) Underground Conductors and Devices			
56	(359) Roads and Trails			
57	(359.1) Asset Retirement Costs for Transmission Plant			
58	TOTAL Transmission Plant (Enter Total of lines 48 thru 57)			
59	4. DISTRIBUTION PLANT			
60	(360) Land and Land Rights			
61	(361) Structures and Improvements			
62	(362) Station Equipment			
[63]	[(363) Energy Storage Equipment - Distribution]			
63.1	(363.1) Computer Hardware			
63.2	(363.2) Computer Software			
63.3	(363.3) Communication Equipment			
64	(364) Poles, Towers, and Fixtures			
65	(365) Overhead Conductors and Devices			
66	(366) Underground Conduit			
67	(367) Underground Conductors and Devices			
68	(368) Line Transformers			
69	(369) Services			
70	(370) Meters			
71	(371) Installations on Customer Premises			
72	(372) Leased Property on Customer Premises			
73	(373) Street Lighting and Signal Systems			
74	(374) Asset Retirement Costs for Distribution Plant			
75	TOTAL Distribution Plant (Enter Total of lines 60 thru 74)			
76	5. REGIONAL TRANSMISSION AND MARKET OPERATION PLANT			
77	(380) Land and Land Rights			
78	(381) Structures and Improvements			
79	(382) Computer Hardware			
80	(383) Computer Software			
81	(384) Communication Equipment			
82	(385) Miscellaneous Regional Transmission and Market Operation Plant			
83	(386) Asset Retirement Costs for Regional Transmission and Market Oper			
84	TOTAL Transmission and Market Operation Plant (Total lines 77 thru 83)			
84.1	6. Energy Storage Plant			
84.2	(387.1) Land and Land Rights			
84.3	(387.2) Structures and Improvements			
84.4	(387.3) Energy Storage Equipment			
84.6	(387.5) Collector System			
84.7	(387.6) Generator Step-up Transformers (GSU)			
84.8	(387.7) Inverters			
84.9	(387.8) Computer Hardware			
84.10	(387.9) Computer Software			

84.11	(387.10) Communication Equipment		
84.12	(387.11) Miscellaneous Energy Storage Equipment		
84.13	(387.12) Asset Retirement Costs for Energy Storage		
84.14	TOTAL Energy Storage Plant (Total lines 84.2 thru 84.13)		
85	[6]7. GENERAL PLANT		
86	(389) Land and Land Rights		
87	(390) Structures and Improvements		
88	(391) Office Furniture and Equipment		
89	(392) Transportation Equipment		
90	(393) Stores Equipment		
91	(394) Tools, Shop and Garage Equipment		
92	(395) Laboratory Equipment		
93	(396) Power Operated Equipment		
94	(397.1) [Communication Equipment] Computer Hardware		
94.1	(397.2) Computer Software		
94.2	(397.3) Communication Equipment		
95	(398) Miscellaneous Equipment		
96	SUBTOTAL (Enter Total of lines 86 thru 95)		
97	(399) Other Tangible Property		
98	(399.1) Asset Retirement Costs for General Plant		
99	TOTAL General Plant (Enter Total of lines 96, 97 and 98)		
100	TOTAL (Accounts 101 and 106)		
101	(102) Electric Plant Purchased (See Instr. 8)		
102	(Less) (102) Electric Plant Sold (See Instr. 8)		
103	(103) Experimental Plant Unclassified		
104	TOTAL Electric Plant in Service (Enter Total of lines 100 thru 103)		

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Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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ELECTRIC PLANT IN SERVICE (Account 101, 102, 103 and 106) (Continued)			

distributions of these tentative classifications in columns (c) and (d), including the reversals of the prior years tentative account distributions of these amounts. Careful observance of the above instructions and the texts of Accounts 101 and 106 will avoid serious omissions of the reported amount of respondent's plant actually in service at end of year.

7. Show in column (f) reclassifications or transfers within utility plant accounts. Include also in column (f) the additions or reductions of primary account classifications arising from distribution of amounts initially recorded in Account 102, include in column (e) the amounts with respect to accumulated provision for depreciation, acquisition adjustments, etc., and show in column (f) only the offset to the debits or credits distributed in column (f) to primary account classifications.

8. For Account 399, state the nature and use of plant included in this account and if substantial in amount submit a supplementary statement showing subaccount classification of such plant conforming to the requirement of these pages.

9. For each amount comprising the reported balance and changes in Account 102, state the property purchased or sold, name of vendor or purchase, and date of transaction. If proposed journal entries have been filed with the Commission as required by the Uniform System of Accounts, give also date

Retirements (d)	Adjustments (e)	Transfers (f)	Balance at End of Year (g)	Line No.
				1
				2
				3
				4
				5
				6
				7
				8
				9
				10
				11
				12
				13
				13.1
				13.2
				13.3
				14
				15
				16
				17
				18
				19
				20
				21
				22
				22.1
				22.2
				22.3
				23
				24
				25
				26
				27
				28
				29
				30
				31
				31.1
				31.2
				31.3
				32
				33
				34
				35
				35.1
				35.2
				35.3
				35.5

					35.6
					35.7
					35.8
					35.9
					35.10
					35.11
					35.12
					35.13
					35.14
					35.15
					35.16
					35.17
					35.18
					35.20
					35.21
					35.22
					35.23
					35.24
					35.25
					35.26
					35.27
					35.28
					35.29
					35.30
					35.31
					35.32
					35.33
					35.34
					35.35
					35.36
					35.38
					35.40
					35.41
					35.42
					35.43
					35.44
					35.45
					35.46
					35.47
					35.48
					35.49
					36
					37
					38
					39
					40
					41
					[44.1]
					42
					42.1
					42.2
					42.3
					43
					44
					45
					46

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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ELECTRIC PLANT IN SERVICE (Account 101, 102, 103 and 106) (Continued)				
Retirements (d)	Adjustments (e)	Transfers (f)	Balance at End of Year (g)	Line No.
				47
				48
				[48.1]
				48.2
				48.3
				48.4
				49
				50
				51
				52
				53
				54
				55
				56
				57
				58
				59
				60
				61
				62
				[63]
				63.1
				63.2
				63.3
				64
				65
				66
				67
				68
				69
				70
				71
				72
				73
				74
				75
				76
				77
				78
				79
				80
				81
				82
				83
				84
				84.1
				84.2
				84.3
				84.4
				84.6
				84.7
				84.8
				84.9
				84.10
				84.11
				85
				86
				87
				88

					89
					90
					91
					92
					93
					94
					94.1
					94.2
					95
					96
					97
					98
					99
					100
					101
					102
					103
					104



Name of Respondent	This Report Is:	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
	(1) An Original (2) A Resubmission		

**ACCUMULATED PROVISION FOR DEPRECIATION OF ELECTRIC UTILITY PLANT (Account 108)**

1. Explain in a footnote any important adjustments during year.
2. Explain in a footnote any difference between the amount for book cost of plant retired, Line 12, column (c), and that reported for electric plant in service, pages 204-207, column d), excluding retirements of non-depreciable property.
3. The provisions of Account 108 in the Uniform System of accounts require that retirements of depreciable plant be recorded when such plant is removed from service. If the respondent has a significant amount of plant retired at year end which has not been recorded and/or classified to the various reserve functional classifications, make preliminary closing entries to tentatively functionalize the book cost of the plant retired. In addition, include all costs included in retirement work in progress at year end in the appropriate functional classifications.
4. Show separately interest credits under a sinking fund or similar method of depreciation accounting.

**Section A. Balances and Changes During Year**

Line No.	Item (a)	Total (c+d+e) (b)	Electric Plant in Service (c)	Electric Plant Held for Future Use (d)	Electric Plant Leased to Others (e)
1	Balance Beginning of Year				
2	Depreciation Provisions for Year, Charged to				
3	(403) Depreciation Expense				
4	(403.1) Depreciation Expense for Asset Retirement Costs				
5	(413) Exp. of Elec. Plt. Leas. to Others				
6	Transportation Expenses-Clearing				
7	Other Clearing Accounts				
8	Other Accounts (Specify, details in footnote):				
9					
10	TOTAL Deprec. Prov for Year (Enter Total of lines 3 thru 9)				
11	Net Charges for Plant Retired:				
12	Book Cost of Plant Retired				
13	Cost of Removal				
14	Salvage (Credit)				
15	TOTAL Net Chrgs. for Plant Ret. (Enter Total of lines 12 thru 14)				
16	Other Debit or Cr. Items (Describe, details in footnote):				
17	ARO Depr Reclassed to Reg Asset				
18	Book Cost or Asset Retirement Costs Retired				
19	Balance End of Year (Enter Totals of lines 1, 10, 15, 16, and 18)				

**Section B. Balances at End of Year According to Functional Classification**

20	Steam Production				
21	Nuclear Production				
22	Hydraulic Production-Conventional				
23	Hydraulic Production-Pumped Storage				
23.1	Solar Production				
23.2	Wind Production				
23.3	Other Renewable Production				
24	Other Production				
25	Transmission				
26	Distribution				

27	Regional Transmission and Market Operation				
27.1	Energy Storage				
28	General				
29	TOTAL (Enter Total of lines 20 thru 28)				

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**FERC FORM NO. 3Q (ED. 12-22) Page 208**

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
<b>ELECTRIC PRODUCTION, OTHER POWER SUPPLY EXPENSES, TRANSMISSION AND DISTRIBUTION EXPENSES</b>				
Report electric production, other power supply expenses, transmission, regional control and market operation, energy storage, and distribution expenses through the reporting period.				
Line No.	Account (a)	Year to Date Quarter (b)		
1	1. POWER PRODUCTION AND OTHER SUPPLY EXPENSES			
2	Steam Power Generation - Operation (500-509)			
3	Steam Power Generation - Maintenance (510-515)			
4	Total Power Production Expenses - Steam Power			
5	Nuclear Power Generation - Operation (517-525)			
6	Nuclear Power Generation - Maintenance (528-532)			
7	Total Power Production Expenses - Nuclear Power			
8	Hydraulic Power Generation - Operation (535-540.1)			
9	Hydraulic Power Generation - Maintenance (541-545.1)			
10	Total Power Production Expenses - Hydraulic Power			
10.1	Solar Generation - Operation (558.1-558.5)			
10.2	Solar Generation - Maintenance (558.6-558.12)			
10.3	Total Power Production Expenses - Solar			
10.4	Wind Generation - Operation (558.13-558.17)			
10.5	Wind Generation - Maintenance (558.18-558.24)			
10.6	Total Power Production Expenses - Wind			
10.7	Other Renewable Generation - Operation (559.1-559.5)			
10.8	Other Renewable Generation - Maintenance (559.6-559.16)			
10.9	Total Power Production Expenses - Other Renewable			
11	Other Power Generation - Operation (546-550.1)			
12	Other Power Generation - Maintenance (551-554.1)			
13	Total Power Production Expenses - Other Power			
14	Other Power Supply Expenses			
15	Purchased Power (555)			
15.1	Power Purchased for Storage Operations (555.1)			
15.2	Bundled Environmental Credits (555.2)			
15.3	Unbundled Environmental Credits (555.3)			
16	System Control and Load Dispatching (556)			
17	Other Expenses (557)			
18	Total Other Power Supply Expenses (line 15-17)			
19	Total Power Production Expenses (Total of lines 4, 7, 10, 10.3, 10.6, 10.9, 13 and 18)			
20	2. TRANSMISSION EXPENSES			
21	Transmission Operation Expenses			
22	(560) Operation Supervision and Engineering			
23				
24	(561.1) Load Dispatch-Reliability			
25	(561.2) Load Dispatch-Monitor and Operate Transmission System			
26	(561.3) Load Dispatch-Transmission Service and Scheduling			
27	(561.4) Scheduling, System Control and Dispatch Services			
28	(561.5) Reliability, Planning and Standards Development			
29	(561.6) Transmission Service Studies			
30	(561.7) Generation Interconnection Studies			
31	(561.8) Reliability, Planning and Standards Development Services			
32	(562) Station Expenses			
33	(563) Overhead Line Expenses			
34	(564) Underground Line Expenses			
35	(565) Transmission of Electricity by Others			

36	(566) Miscellaneous Transmission Expenses	
37	(567) Rents	
38	(567.1) Operation Supplies and Expenses (Non-Major)	

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Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
<b>ELECTRIC PRODUCTION, OTHER POWER SUPPLY EXPENSES, TRANSMISSION AND DISTRIBUTION EXPENSES</b>				
Report electric production, other power supply expenses, transmission, regional control and market operation, <i>energy storage</i> , and distribution expenses through the reporting period.				
Line No.	Account  (a)	Year to Date Quarter (b)		
39	TOTAL Transmission Operation Expenses (Lines 22 - 38)			
40	Transmission Maintenance Expenses			
41	(568) Maintenance Supervision and Engineering			
42	(569) Maintenance of Structures			
43	(569.1) Maintenance of Computer Hardware			
44	(569.2) Maintenance of Computer Software			
45	(569.3) Maintenance of Communication Equipment			
46	(569.4) Maintenance of Miscellaneous Regional Transmission Plant			
47	(570) Maintenance of Station Equipment			
48	(571) Maintenance Overhead Lines			
49	(572) Maintenance of Underground Lines			
50	(573) Maintenance of Miscellaneous Transmission Plant			
51	(574) Maintenance of Transmission Plant			
52	TOTAL Transmission Maintenance Expenses (Lines 41 - 51)			
53	Total Transmission Expenses (Lines 39 and 52)			
54	<b>3. REGIONAL MARKET EXPENSES</b>			
55	Regional Market Operation Expenses			
56	(575.1) Operation Supervision			
57	(575.2) Day-Ahead and Real-Time Market Facilitation			
58	(575.3) Transmission Rights Market Facilitation			
59	(575.4) Capacity Market Facilitation			
60	(575.5) Ancillary Services Market Facilitation			
61	(575.6) Market Monitoring and Compliance			
62	(575.7) Market Facilitation, Monitoring and Compliance Services			
63	Regional Market Operation Expenses (Lines 55 - 62)			
64	Regional Market Maintenance Expenses			
65	(576.1) Maintenance of Structures and Improvements			
66	(576.2) Maintenance of Computer Hardware			
67	(576.3) Maintenance of Computer Software			
68	(576.4) Maintenance of Communication Equipment			
69	(576.5) Maintenance of Miscellaneous Market Operation Plant			
70	Regional Market Maintenance Expenses (Lines 65-69)			
71	TOTAL Regional Control and Market Operation Expenses (Lines 63,70)			
71.1	<b>4. ENERGY STORAGE EXPENSES</b>			
71.2	Energy Storage Operation Expenses (577.1-577.5)			
71.3	Energy Storage Maintenance Expenses (578.1-578.7)			
71.4	Total Energy Storage Expenses (Lines 71.2 and 71.3)			
72	<b>4-5. DISTRIBUTION EXPENSES</b>			
73	Distribution Operation Expenses (580-589)			
74	Distribution Maintenance Expenses (590-598)			
75	Total Distribution Expenses (Lines 73 and 74)			

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
<b>ELECTRIC CUSTOMER ACCOUNTS, SERVICE, SALES, ADMINISTRATIVE AND GENERAL EXPENSES</b>				
Report the amount of expenses for customer accounts, service, sales, and administrative and general expenses year to date.				
Line No.	Account  (a)	Year to Date Quarter (b)		
1	(901-905) Customer Accounts Expenses			
2	(907-910) Customer Service and Information Expenses			
3	(911-917) Sales Expenses			
4	<b>89. ADMINISTRATIVE AND GENERAL EXPENSES</b>			
5	Operations			
6	920 Administrative and General Salaries			
7	921 Office Supplies and Expenses			
8	(Less) 922 Administrative Expenses Transferred-Credit			
9	923 Outside Services Employed			
10	924 Property Insurance			
11	925 Injuries and Damages			
12	926 Employee Pensions and Benefits			
13	927 Franchise Requirements			
14	928 Regulatory Commission Expenses			
15	(Less) 929 Duplicate Charges-Credit			
16	930.1 General Advertising Expenses			
17	930.2 Miscellaneous General Expenses			
18	931 Rents			
19	TOTAL Operation (Total of lines 6 thru 18)			
20	Maintenance			
21	935 Maintenance of General Plant			
21.1	935.1 Maintenance of Computer Hardware			
21.2	935.2 Maintenance of Computer Software			
21.3	935.3 Maintenance of Communication Equipment			
21.4	TOTAL Maintenance (Enter Total of lines 21 thru 21.3)			
22	TOTAL Administrative and General Expenses (Total of lines 19 and 21.4)			

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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MATERIALS AND SUPPLIES

- For Account 154, report the amount of plant materials and operating supplies under the primary functional classifications as indicated in column (a); estimates of amounts by function are acceptable. In column (d), designate the department or departments which use the class of material.
- Give an explanation of important inventory adjustments during the year (in a footnote) showing general classes of material and supplies and the various accounts (operating expenses, clearing accounts, plant, etc.) affected debited or credited. Show separately debit or credits to stores expense clearing, if applicable.

Line No.	Account (a)	Balance Beginning of Year (b)	Balance End of Year (c)	Department or Departments which Use Material (d)
1	Fuel Stock (Account 151)			
2	Fuel Stock Expenses Undistributed (Account 152)			
3	Residuals and Extracted Products (Account 153)			
4	Plant Materials and Operating Supplies (Account 154)			
5	Assigned to - Construction (Estimated)			
6	Assigned to - Operations and Maintenance			
7	Production Plant (Estimated)			
8	Transmission Plant (Estimated)			
9	Distribution Plant (Estimated)			
10	Regional Transmission and Market Operation Plant (Estimated)			
10.1	Energy Storage Plant (Estimated)			
11	Assigned to - Other (provide details in footnote)			
12	TOTAL Account 154 (Enter Total of lines 5 thru 11)			
13	Merchandise (Account 155)			
14	Other Materials and Supplies (Account 156)			
15	Nuclear Materials Held for Sale (Account 157) (Not applic to Gas Util)			
16	Stores Expense Undistributed (Account 163)			
17	Stored (Account 164)			
18				
19				
20	TOTAL Materials and Supplies (Per Balance Sheet)			

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission		Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
<i>Allowances and Environmental Credits (Accounts 158.1, [and] 158.2, 158.3, and 158.4)</i>					
<p>1. Report below the [particulars (]details[)] called for concerning] <i>related to allowances and Environmental Credits. Additional information about the type of allowances/environmental credits required by other regulatory bodies can be disclosed within the footnote data.</i></p> <p>2. Report all acquisitions of allowances and <i>Environmental Credits</i> at cost.</p> <p>3. Report allowances and <i>Environmental Credits</i> in accordance with a weighted average cost allocation method and other accounting as prescribed by General Instruction No. 21 in the Uniform System of Accounts.</p> <p>4. Report the allowances and <i>Environmental Credits</i> transactions by the period they are first eligible for use: the current year's allowances and <i>Environmental Credits</i> in columns (b)-(c), allowances and <i>Environmental Credits</i> for the three succeeding years in columns (d)-(i), starting with the following year, and allowances and <i>Environmental Credits</i> for the remaining succeeding years in columns (j)-(k).</p> <p>5. Report on line 4 [the ]<i>authoritative agency</i> [Environmental Protection Agency (EPA) ]issued allowances. Report withheld portions Lines 36-40.</p>					
Line No.	[SO2 ]Allowances Inventory and <i>Environmental Credits</i> (Accounts 158.1, 158.3, and 158.4) (a)	Current Year		No. (d)	Amt. (e)
		No. (b)	Amt. (c)		
1	Balance-Beginning of Year				
2					
3	Acquired During Year:				
4	Issued (Less Withheld Allow)				
5	Returned by [EPA] <i>authoritative agency</i>				
6					
7					
8	Purchases/Transfers:				
9					
10					
11					
12					
13					
14					
15	Total				
16					
17	Relinquished During Year:				
18	Charges to Account 509, 555.2, and 555.3				
19	Other:				
20	Allowances Used				
21	Cost of Sales/Transfers:				
22					
23					
24					
25					
26					
27					
28	Total				
29	Balance-End of Year				
30					
31	Sales:				
32	Net Sales Proceeds(Assoc. Co.)				
33	Net Sales Proceeds (Other)				
34	Gains				
35	Losses				
	Allowances Withheld (Acct 158.2)				
36	Balance-Beginning of Year				



37	Add: Withheld by [EPA] <i>authoritative agency</i>				
38	Deduct: Returned by [EPA] <i>authoritative agency</i>				
39	Cost of Sales				
40	Balance-End of Year				
41					
42	Sales:				
43	Net Sales Proceeds (Assoc. Co.)				
44	Net Sales Proceeds (Other)				
45	Gains				
46	Losses				



								40
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								46

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[Delete Pages 228b and 229b]

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
<b>ELECTRIC OPERATION AND MAINTENANCE EXPENSES</b>				
If the amount for previous year is not derived from previously reported figures, explain in footnote.				
Line No.	Account (a)	Amount for Current Year (b)	Amount for Previous Year (c)	
1	<b>1. POWER PRODUCTION EXPENSES</b>			
2	<b>A. Steam Power Generation</b>			
3	Operation			
4	(500) Operation Supervision and Engineering			
5	(501) Fuel			
6	(502) Steam Expenses			
7	(503) Steam from Other Sources			
8	(Less) (504) Steam Transferred-Cr.			
9	(505) Electric Expenses			
10	(506) Miscellaneous Steam Power Expenses			
11	(507) Rents			
12	(509) Allowances			
13	<b>TOTAL Operation (Enter Total of Lines 4 thru 12)</b>			
14	<b>Maintenance</b>			
15	(510) Maintenance Supervision and Engineering			
16	(511) Maintenance of Structures			
17	(512) Maintenance of Boiler Plant			
18	(513) Maintenance of Electric Plant			
18.1	<i>(513.1) Maintenance of Computer Hardware</i>			
18.2	<i>(513.2) Maintenance of Computer Software</i>			
18.3	<i>(513.3) Maintenance of Communication Equipment</i>			
19	(514) Maintenance of Miscellaneous Steam Plant			
20	<b>TOTAL Maintenance (Enter Total of Lines 15 thru 19)</b>			
21	<b>TOTAL Power Production Expenses-Steam Power (Entr Tot lines 13 &amp; 20)</b>			
22	<b>B. Nuclear Power Generation</b>			
23	Operation			
24	(517) Operation Supervision and Engineering			
25	(518) Fuel			
26	(519) Coolants and Water			
27	(520) Steam Expenses			
28	(521) Steam from Other Sources			
29	(Less) (522) Steam Transferred-Cr.			
30	(523) Electric Expenses			
31	(524) Miscellaneous Nuclear Power Expenses			
32	(525) Rents			
33	<b>TOTAL Operation (Enter Total of lines 24 thru 32)</b>			
34	<b>Maintenance</b>			
35	(528) Maintenance Supervision and Engineering			
36	(529) Maintenance of Structures			
37	(530) Maintenance of Reactor Plant Equipment			
38	(531) Maintenance of Electric Plant			
38.1	<i>(531.1) Maintenance of Computer Hardware</i>			
38.2	<i>(531.2) Maintenance of Computer Software</i>			
38.3	<i>(531.3) Maintenance of Communication Equipment</i>			
39	(532) Maintenance of Miscellaneous Nuclear Plant			
40	<b>TOTAL Maintenance (Enter Total of lines 35 thru 39)</b>			
41	<b>TOTAL Power Production Expenses-Nuc. Power (Entr tot lines 33 &amp; 40)</b>			
42	<b>C. Hydraulic Power Generation</b>			
43	Operation			
44	(535) Operation Supervision and Engineering			
45	(536) Water for Power			
46	(537) Hydraulic Expenses			
47	(538) Electric Expenses			
48	(539) Miscellaneous Hydraulic Power Generation Expenses			
49	(540) Rents			

50	TOTAL Operation (Enter Total of Lines 44 thru 49)		
51	C. Hydraulic Power Generation (Continued)		
52	Maintenance		
53	(541) Main[en]tenance Supervision and Engineering		
54	(542) Maintenance of Structures		
55	(543) Maintenance of Reservoirs, Dams, and Waterways		
56	(544) Maintenance of Electric Plant		
56.1	(544.1) Maintenance of Computer Hardware		
56.2	(544.2) Maintenance of Computer Software		
56.3	(544.3) Maintenance of Communication Equipment		
57	(545) Maintenance of Miscellaneous Hydraulic Plant		
58	TOTAL Maintenance (Enter Total of lines 53 thru 57)		
59	TOTAL Power Production Expenses-Hydraulic Power (tot of lines 50 & 58)		

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
ELECTRIC OPERATION AND MAINTENANCE EXPENSES (Continued)				
If the amount for previous year is not derived from previously reported figures, explain in footnote.				
Line No.	Account (a)	Amount for Current Year (b)	Amount for Previous Year (c)	
60	D. Other Power Generation			
61	Operation			
62	(546) Operation Supervision and Engineering			
63	(547) Fuel			
64	(548) Generation Expenses			
[64.1]	[(548.1) Operation of Energy Storage Equipment]			
65	(549) Miscellaneous Other Power Generation Expenses			
66	(550) Rents			
67	TOTAL Operation (Enter Total of lines 62 thru 66)			
68	Maintenance			
69	(551) Maintenance Supervision and Engineering			
70	(552) Maintenance of Structures			
71	(553) Maintenance of Generating and Electric Plant			
71.1	(553.1) Maintenance of Computer Hardware [of Energy Storage Equipment]			
71.2	(553.2) Maintenance of Computer Software			
71.3	(553.3) Maintenance of Communication Equipment			
72	(554) Maintenance of Miscellaneous Other Power Generation Plant			
73	TOTAL Maintenance (Enter Total of lines 69 thru 72)			
74	TOTAL Power Production Expenses-Other Power (Enter Tot of 67 & 73)			
75	E. Other Power Supply Expenses			
76	(555) Purchased Power			
76.1	(555.1) Power Purchased for Storage Operations			
76.2	(555.2) Bundled Environmental Credits			
76.3	(555.3) Unbundled Environmental Credits			
77	(556) System Control and Load Dispatching			
78	(557) Other Expenses			
79	TOTAL Other Power Supply Exp (Enter Total of lines 76 thru 78)			
79.1	F. Solar Generation			
79.2	Operation			
79.3	(558.1) Operation Supervision and Engineering			
79.4	(558.2) Solar Panel Generation and Other Plant Operating Expenses			
79.6	(558.4) Rents			
79.7	TOTAL Operation (Enter Total of Lines 79.3 thru 79.6)			
79.8	Maintenance			
79.9	(558.6) Maintenance Supervision and Engineering			

79.10	(558.7) Maintenance of Solar Panels, Structures, and Equipment		
79.11	(558.8) Maintenance of Computer Hardware		
79.12	(558.9) Maintenance of Computer Software		
79.13	(558.10) Maintenance of Communication Equipment		
79.14	(558.11) Maintenance of Miscellaneous Solar Generation Plant		
79.15	TOTAL Maintenance (Enter Total of lines 79.9 thru 79.14)		
79.16	TOTAL Power Production Expenses-Solar (total of lines 79.7 & 79.15)		
79.17	G. Wind Generation		
79.18	Operation		
79.19	(558.13) Operation Supervision and Engineering		
79.20	(558.14) Wind Turbine Generation and Other Plant Operating Expenses		
79.21	(558.16) Rents		
79.22	TOTAL Operation (Enter Total of Lines 79.19 thru 79.21)		
79.23	Maintenance		
79.24	(558.18) Maintenance Supervision and Engineering		
79.25	(558.19) Maintenance of Wind Turbines, Structures, and Equipment		
79.26	(558.20) Maintenance of Computer Hardware		
79.27	(558.21) Maintenance of Computer Software		
79.28	(558.22) Maintenance of Communication Equipment		
79.29	(558.23) Maintenance of Miscellaneous Wind Generation Plant		
79.30	TOTAL Maintenance (Enter Total of lines 79.24 thru 79.29)		
79.31	TOTAL Power Production Expenses-Wind (total of lines 79.22 & 79.30)		
79.32	H. Other Renewable Generation		
79.33	Operation		
79.34	(559.1) Operation Supervision and Engineering		
79.35	(559.2) Other Miscellaneous Generation and Other Plant Operating Expenses		
79.36	(559.3) Fuel		
79.37	(559.4) Rents		
79.38	TOTAL Operation (Enter Total of Lines 79.34 thru 79.37)		
79.39	Maintenance		
79.40	(559.6) Maintenance Supervision and Engineering		
79.41	(559.7) Maintenance of Structures		
79.42	(559.9) Maintenance of Boilers		
79.43	(559.10) Maintenance of Generating and Electric Equipment		
79.44	(559.12) Maintenance of Computer Hardware		
79.45	(559.13) Maintenance of Computer Software		
79.46	(559.14) Maintenance of Communication Equipment		
79.47	(559.15) Maintenance of Miscellaneous Renewable Production Plant		
79.48	TOTAL Maintenance (Enter Total of lines 79.40 thru 79.47)		
79.49	TOTAL Power Prod Exp-Other Renewable (total of lines 79.38 & 79.48)		
80	TOTAL Power Prod Exp (Total of lines 21, 41, 59, 74, [& ]79, 79.16, 79.31, & 79.49)		
81	2. TRANSMISSION EXPENSES		
82	Operation		
83	(560) Operation Supervision and Engineering		
84			
85	(561.1) Load Dispatch-Reliability		
86	(561.2) Load Dispatch-Monitor and Operate Transmission System		
87	(561.3) Load Dispatch-Transmission Service and Scheduling		
88	(561.4) Scheduling, System Control and Dispatch Services		
89	(561.5) Reliability, Planning and Standards Development		
90	(561.6) Transmission Service Studies		

91	(561.7) Generation Interconnection Studies		
92	(561.8) Reliability, Planning and Standards Development Services		
93	(562) Station Expenses		
[93.1]	[(562.1) Operation of Energy Storage Equipment]		
94	(563) Overhead Lines Expenses		
95	(564) Underground Lines Expenses		
96	(565) Transmission of Electricity by Others		
97	(566) Miscellaneous Transmission Expenses		
98	(567) Rents		
99	TOTAL Operation (Enter Total of lines 83 thru 98)		
100	Maintenance		
101	(568) Maintenance Supervision and Engineering		
102	(569) Maintenance of Structures		
103	(569.1) Maintenance of Computer Hardware		
104	(569.2) Maintenance of Computer Software		
105	(569.3) Maintenance of Communication Equipment		
106	(569.4) Maintenance of Miscellaneous Regional Transmission Plant		
107	(570) Maintenance of Station Equipment		
[107.1]	[(570.1) Maintenance of Energy Storage Equipment]		
108	(571) Maintenance of Overhead Lines		
109	(572) Maintenance of Underground Lines		
110	(573) Maintenance of Miscellaneous Transmission Plant		
111	TOTAL Maintenance (Total of lines 101 thru 110)		
112	TOTAL Transmission Expenses (Total of lines 99 and 111)		

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Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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**ELECTRIC OPERATION AND MAINTENANCE EXPENSES (Continued)**

If the amount for previous year is not derived from previously reported figures, explain in footnote.

Line No.	Account (a)	Amount for Current Year (b)	Amount for Previous Year (c)
113	3. REGIONAL MARKET EXPENSES		
114	Operation		
115	(575.1) Operation Supervision		
116	(575.2) Day-Ahead and Real-Time Market Facilitation		
117	(575.3) Transmission Rights Market Facilitation		
118	(575.4) Capacity Market Facilitation		
119	(575.5) Ancillary Services Market Facilitation		
120	(575.6) Market Monitoring and Compliance		
121	(575.7) Market Facilitation, Monitoring and Compliance Services		
122	(575.8) Rents		
123	Total Operation (Lines 115 thru 122)		
124	Maintenance		
125	(576.1) Maintenance of Structures and Improvements		
126	(576.2) Maintenance of Computer Hardware		
127	(576.3) Maintenance of Computer Software		
128	(576.4) Maintenance of Communication Equipment		
129	(576.5) Maintenance of Miscellaneous Market Operation Plant		
130	Total Maintenance (Lines 125 thru 129)		
131	TOTAL Regional Transmission and Market Op Expns (Total 123 and 130)		
131.1	4. ENERGY STORAGE EXPENSES		
131.2	Operation		
131.3	(577.1) Operation Supervision and Engineering		
131.4	(577.2) Operation of Energy Storage Equipment		
131.5	(577.3) Storage Fuel		
131.6	(577.4) Rents		
131.7	Total Operation (Lines 131.3 thru 131.6)		
131.8	Maintenance		
131.9	(578.1) Maintenance Supervision and Engineering		
131.10	(578.2) Maintenance of Energy Storage Equipment, Structures		
131.11	(578.3) Maintenance of Computer Hardware		



131.12	(578.4) Maintenance of Computer Software		
131.13	(578.5) Maintenance of Communication Equipment		
131.14	(578.6) Maintenance of Miscellaneous Other Energy Storage Plant		
131.15	Total Maintenance (Lines 131.9 thru 131.14)		
131.16	TOTAL Energy Storage Expenses (Total of 131.7 and 131.15)		
132	4. ]5. DISTRIBUTION EXPENSES		
133	Operation		
134	(580) Operation Supervision and Engineering		
135	(581) Load Dispatching		
136	(582) Station Expenses		
137	(583) Overhead Line Expenses		
138	(584) Underground Line Expenses		
[138.1]	[(584.1) Operation of Energy Storage Equipment]		
139	(585) Street Lighting and Signal System Expenses		
140	(586) Meter Expenses		
141	(587) Customer Installations Expenses		
142	(588) Miscellaneous Expenses		
143	(589) Rents		
144	TOTAL Operation (Enter Total of lines 134 thru 143)		
145	Maintenance		
146	(590) Maintenance Supervision and Engineering		
147	(591) Maintenance of Structures		
148	(592) Maintenance of Station Equipment		
148.1	(592.2) Maintenance of Computer Hardware [Energy Storage Equipment]		
148.2	(592.3) Maintenance of Computer Software		
148.3	(592.4) Maintenance of Communication Equipment		
149	(593) Maintenance of Overhead Lines		
150	(594) Maintenance of Underground Lines		
151	(595) Maintenance of Line Transformers		
152	(596) Maintenance of Street Lighting and Signal Systems		
153	(597) Maintenance of Meters		
154	(598) Maintenance of Miscellaneous Distribution Plant		
155	TOTAL Maintenance (Total of lines 146 thru 154)		
156	TOTAL Distribution Expenses (Total of lines 144 and 155)		
157	5.]6. CUSTOMER ACCOUNTS EXPENSES		
158	Operation		
159	(901) Supervision		
160	(902) Meter Reading Expenses		
161	(903) Customer Records and Collection Expenses		
162	(904) Uncollectible Accounts		
163	(905) Miscellaneous Customer Accounts Expenses		
164	TOTAL Customer Accounts Expenses (Total of lines 159 thru 163)		

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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**ELECTRIC OPERATION AND MAINTENANCE EXPENSES (Continued)**

If the amount for previous year is not derived from previously reported figures, explain in footnote.

Line No.	Account (a)	Amount for Current Year (b)	Amount for Previous Year (c)
165	6.17. CUSTOMER SERVICE AND INFORMATIONAL EXPENSES		
166	Operation		
167	(907) Supervision		
168	(908) Customer Assistance Expenses		
169	(909) Informational and Instructional Expenses		
170	(910) Miscellaneous Customer Service and Informational Expenses		
171	TOTAL Customer Service and Information Expenses (Total 167 thru 170)		
172	7.18. SALES EXPENSES		
173	Operation		
174	(911) Supervision		
175	(912) Demonstrating and Selling Expenses		
176	(913) Advertising Expenses		
177	(916) Miscellaneous Sales Expenses		
178	TOTAL Sales Expenses (Enter Total of lines 174 thru 177)		
179	8.19. ADMINISTRATIVE AND GENERAL EXPENSES		
180	Operation		
181	(920) Administrative and General Salaries		
182	(921) Office Supplies and Expenses		
183	(Less) (922) Administrative Expenses Transferred-Credit		
184	(923) Outside Services Employed		
185	(924) Property Insurance		
186	(925) Injuries and Damages		
187	(926) Employee Pensions and Benefits		
188	(927) Franchise Requirements		
189	(928) Regulatory Commission Expenses		
190	(929) (Less) Duplicate Charges-Cr.		
191	(930.1) General Advertising Expenses		
192	(930.2) Miscellaneous General Expenses		
193	(931) Rents		
194	TOTAL Operation (Enter Total of lines 181 thru 193)		
195	Maintenance		
196	(935) Maintenance of General Plant		
196.1	(935.1) Maintenance of Computer Hardware		
196.2	(935.2) Maintenance of Computer Software		
196.3	(935.3) Maintenance of Communication Equipment		
196.4	TOTAL Maintenance (Enter Total of lines 196 thru 196.3)		
197	TOTAL Administrative & General Expenses (Total of lines 194 and 196.4)		
198	TOTAL Elec Op and Maint Expns (Total 80,112,131,131.20,156,164,171,178,197)		

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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**DEPRECIATION AND AMORTIZATION OF ELECTRIC PLANT (Account 403, 404, 405)**  
(Except amortization of acquisition adjustments)

1. Report in section A for the year the amounts for : (b) Depreciation Expense (Account 403; (c) Depreciation Expense for Asset Retirement Costs (Account 403.1; (d) Amortization of Limited-Term Electric Plant (Account 404); and (e) Amortization of Other Electric Plant (Account 405).

2. Report in Section 8 the rates used to compute amortization charges for electric plant (Accounts 404 and 405). State the basis used to compute charges and whether any changes have been made in the basis or rates used from the preceding report year.

3. Report all available information called for in Section C every fifth year beginning with report year 1971, reporting annually only changes to columns (c) through (g) from the complete report of the preceding year.

Unless composite depreciation accounting for total depreciable plant is followed, list numerically in column (a) each plant subaccount, account or functional classification, as appropriate, to which a rate is applied. Identify at the bottom of Section C the type of plant included in any sub-account used.

In column (b) report all depreciable plant balances to which rates are applied showing subtotals by functional Classifications and showing composite total. Indicate at the bottom of section C the manner in which column balances are obtained. If average balances, state the method of averaging used.

For columns (c), (d), and (e) report available information for each plant subaccount, account or functional classification Listed in column (a). If plant mortality studies are prepared to assist in estimating average service Lives, show in column (f) the type mortality curve selected as most appropriate for the account and in column (g), if available, the weighted average remaining life of surviving plant. If composite depreciation accounting is used, report available information called for in columns (b) through (g) on this basis.

4. If provisions for depreciation were made during the year in addition to depreciation provided by application of reported rates, state at the bottom of section C the amounts and nature of the provisions and the plant items to which related.

**A. Summary of Depreciation and Amortization Charges**

Line No.	Functional Classification (a)	Depreciation Expense (Account 403) (b)	Depreciation Expense for Asset Retirement Costs (Account 403.1) (c)	Amortization of Limited Term Electric Plant (Account 404) (d)	Amortization of Other Electric Plant (Acc 405) (e)	Total (f)
1	Intangible Plant					
2	Steam Production Plant					
3	Nuclear Production Plant					
4	Hydraulic Production Plant-Conventional					
5	Hydraulic Production Plant-Pumped Storage					
5.1	Solar Production Plant					
5.2	Wind Production Plant					
5.3	Other Renewable Production Plant					
6	Other Production Plant					
7	Transmission Plant					
8	Distribution Plant					
9	Regional Transmission and Market Operation					
9.1	Energy Storage Plant					
10	General Plant					
11	Common Plant-Electric					
12	TOTAL					

**B. Basis for Amortization Charges**

[The amortization charges shown in Column (d), Line 1 - Intangible Plant, represent the straight line amortization of the development costs related to software. See note for Column (d), Line 1 for additional details regarding the system software included in Intangible Plant. Note that software is typically amortized over a 5 year period unless another life is deemed more appropriate.]

[The amortization charges shown in Column (d), Line 11 - Common Plant-Electric, represent the straight line amortization of the development costs related to software. See note for Column (d), Line 11 for additional details regarding the system software included in Common Plant. Note that software is typically amortized over a 5 year period unless another life is deemed more appropriate.]

This schedule excludes all amortized Limited Term Plant ([software,] leasehold improvements, right of ways, etc.).



Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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**RESEARCH, DEVELOPMENT, AND DEMONSTRATION ACTIVITIES**

1. Describe and show below costs incurred and accounts charged during the year for technological research, development, and demonstration (R, D & D) project initiated, continued or concluded during the year. Report also support given to others during the year for jointly-sponsored projects. (Identify recipient regardless of affiliation.) For any R, D & D work carried with others, show separately the respondent's cost for the year and cost chargeable to others (See definition of research, development, and demonstration in Uniform System of Accounts).
2. Indicate in column (a) the applicable classification, as shown below:

Classifications:

- |                                                                                                                                                                                                                                                                                                                                                                                                                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p>A. Electric R, D &amp; D Performed Internally:</p> <p>(1) Generation</p> <p>a. hydroelectric</p> <p>i. Recreation fish and wildlife</p> <p>ii Other hydroelectric</p> <p>b. Fossil-fuel steam</p> <p>c. Internal combustion or gas turbine</p> <p>d. Nuclear</p> <p>e. <i>Solar</i></p> <p>f. <i>Wind</i></p> <p>g. <i>Other renewable</i></p> <p>h. [e. ]Unconventional generation</p> <p>i. [f. ]Siting and heat rejection</p> | <p>(2) Transmission</p> <p>a. Overhead</p> <p>b. Underground</p> <p>(3) Distribution</p> <p>(4) Regional Transmission and Market Operation</p> <p>(5) <i>Energy Storage</i></p> <p>([5]6) Environment (other than equipment)</p> <p>([6]7) Other (Classify and include items in excess of \$50,000.)</p> <p>([7]8) Total Cost Incurred</p> <p>B. Electric, R, D &amp; D Performed Externally:</p> <p>(1) Research Support to the electrical Research Council or the Electric Power Research Institute</p> |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Line No.	Classification (a)	Description (b)
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Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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DISTRIBUTION OF SALARIES AND WAGES

Report below the distribution of total salaries and wages for the year. Segregate amounts originally charged to clearing accounts to Utility Departments, Construction, Plant Removals, and Other Accounts, and enter such amounts in the appropriate lines and columns provided. In determining this segregation of salaries and wages originally charged to clearing accounts, a method of approximation giving substantially correct results may be used.

Line No.	Classification (a)	Direct Payroll Distribution (b)	Allocation of Payroll charged for Clearing Accounts (c)	Total (d)
1	Electric			
2	Operation			
3	Production			
4	Transmission			
5	Regional Market			
5.1	<i>Energy Storage</i>			
6	Distribution			
7	Customer Accounts			
8	Customer Service and Informational			
9	Sales			
10	Administrative and General			
11	TOTAL Operation (Enter Total of lines 3 thru 10)			
12	Maintenance			
13	Production			
14	Transmission			
15	Regional Market			
15.1	<i>Energy Storage</i>			
16	Distribution			
17	Administrative and General			
18	TOTAL Maintenance (Total of lines 13 thru 17)			
19	Total Operation and Maintenance			
20	Production (Enter Total of lines 3 and 13)			
21	Transmission (Enter Total of lines 4 and 14)			
22	Regional Market (Enter Total of Lines 5 and 15)			
22.1	<i>Energy Storage (Enter Total of Lines 5.1 and 15.1)</i>			
23	Distribution (Enter Total of lines 6 and 16)			
24	Customer Accounts (Transcribe from line 7)			
25	Customer Service and Informational (Transcribe from line 8)			
26	Sales (Transcribe from line 9)			
27	Administrative and General (Enter Total of lines 10 and 17)			
28	TOTAL Oper. and Maint. (Total of lines 20 thru 27)			
29	Gas			
30	Operation			
31	Production-Manufactured Gas			
32	Production-Nat. Gas (Including Expl. and Dev.)			
33	Other Gas Supply			
34	Storage, LNG Terminaling and Processing			
35	Transmission			
36	Distribution			
37	Customer Accounts			
38	Customer Service and Informational			
39	Sales			
40	Administrative and General			
41	TOTAL Operation (Enter Total of lines 31 thru 40)			
42	Maintenance			

43	Production-Manufactured Gas		
44	Production-Natural Gas (Including Exploration and Development)		
45	Other Gas Supply		
46	Storage, LNG Terminaling and Processing		
47	Transmission		



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Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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ELECTRIC ENERGY ACCOUNT

Report below the information called for concerning the disposition of electric energy generated, purchased, exchanged and wheeled during the year.

Line No.	Item (a)	MegaWatt Hours (b)	Line No.	Item (a)	MegaWatt Hours (b)
1	SOURCES OF ENERGY		21	DISPOSITION OF ENERGY	
2	Generation (Excluding Station Use):		22	Sales to Ultimate Consumers (Including Interdepartmental Sales)	
3	Steam		23	Requirements Sales for Resale (See instruction 4, page 311.)	
4	Nuclear		24	Non-Requirements Sales for Resale (See instruction 4, page 311.)	
5	Hydro-Conventional				
6	Hydro-Pumped Storage				
6.1	Solar				
6.2	Wind				
6.3	Other Renewable				
7	Other				
8	Less Energy for Pumping		25	Energy Furnished Without Charge	
9	Net Generation (Enter Total of lines 3 through 8)		26	Energy Used by the Company (Electric Dept Only, Excluding Station Use)	
10	Purchases (other than for Energy Storage)		27	Total Energy Losses	
10.1	Purchases for Energy Storage		27.1	Total Energy Stored	
11	Power Exchanges:		28	TOTAL (Enter Total of Lines 22 Through 27.1) (MUST EQUAL LINE 20)	
12	Received				
13	Delivered				
14	Net Exchanges (Line 12 minus line 13)				
15	Transmission For Other (Wheeling)				
16	Received				
17	Delivered				
18	Net Transmission for Other (Line 16 minus line 17)				
19	Transmission By Others Losses				
20	TOTAL (Enter Total of lines 9, 10, 10.1, 14, 18 and 19)				

<i>Name of Respondent</i>	<i>This Report Is:</i> (1) An Original (2) A Resubmission	<i>Date of Report</i> (Mo, Da, Yr)	<i>Year/Period of Report</i> End of _____
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**RENEWABLE GENERATING PLANT STATISTICS (Large Plants)**

1. Report data for plant in Service only. 2. Report in this page renewable plants of 10,000 Kw or more. 3. Indicate by a footnote any plant leased or operated as a joint facility. 4. If net peak demand for 60 minutes is not available, give data which is available, specifying period. 5. Items under Cost of Plant are based on U. S. of A. Accounts. Production expenses do not include Purchased Power, System Control and Load Dispatching, and Other Expenses Classified as Other Power Supply Expenses.

Line No.	Item (a)	Plant Name: (b)	Plant Name: (c)
1	Kind of Plant (Solar, Wind, Biomass, etc.)		
2	Type of Constr (PV Tracking, Offshore, Boiler, etc)		
3	Year Originally Constructed		
4	Year Last Unit was Installed		
5	Total Installed Cap (Max Gen Name Plate Ratings-MW)		
6	Net Peak Demand on Plant - MW (60 minutes)		
7	Plant Hours Connected to Load		
8	Net Continuous Plant Capability (Megawatts)		
9	Net Generation, Exclusive of Plant Use - KWh		
10	Cost of Plant: Land and Land Rights		
11	Structures and Improvements		
12	Solar Panels, Wind Turbines, and Generators		
13	Fuel Holders		
14	Boilers		
15	Collector System		
16	Generator Step-up Transformers (GSU)		
17	Inverters		
18	Other Accessory Electrical Equipment		
19	Computer Hardware		
20	Computer Software		
21	Communication Equipment		
22	Miscellaneous Power Plant Equipment		
23	Asset Retirement Costs		
24	Total Cost (10-23)		
25	Cost per KW of Installed Capacity (line 24/5) Including		
26	Production Expenses: Oper, Supv, & Engr		
27	Generation and Other Plant Operating Expenses		
28	Fuel		
29	Steam Expenses		
30	Electric Expenses		
31	Misc Steam Power Expenses		
32	Rents		
33	Environmental Credits		
34	Maintenance Supervision and Engineering		
35	Maintenance of Structures and Equipment		
36	Maintenance of Boiler Plant		
37	Maintenance of Electric Plant		
38	Maintenance of Computer Hardware		
39	Maintenance of Computer Software		
40	Maintenance of Communication Equipment		
41	Maintenance of Misc Plant		
42	Total Production Expenses		
43	Expenses per Net KWh		

Name of Respondent	This Report Is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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GENERATING PLANT STATISTICS (Small Plants)

1. Small generating plants are steam plants of, less than 25,000 Kw; internal combustion and gas turbine-plants, conventional hydro plants, [and] pumped storage plants, and renewable plants of less than 10,000 Kw installed capacity (name plate rating). 2. Designate any plant leased from others, operated under a license from the Federal Energy Regulatory Commission, or operated as a joint facility, and give a concise statement of the facts in a footnote. If licensed project, give project number in footnote.

Line No.	Name of Plant (a)	Year Orig. Const. (b)	Installed Capacity Name Plate Rating (In MW) (c)	Net Peak Demand MW (60 min.) (d)	Net Generation Excluding Plant Use (e)	Cost of Plant (f)
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Name of Respondent	This Report Is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr)	Year/Period of Report End of _____
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GENERATING PLANT STATISTICS (Small Plants) (Continued)

3. List plants appropriately under subheadings for steam, hydro, nuclear, *renewable*, internal combustion and gas turbine plants. For nuclear, see instruction 11, Page 403. 4. If net peak demand for 60 minutes is not available, give the which is available, specifying period. 5. If any plant is equipped with combinations of steam, hydro internal combustion or gas turbine equipment, report each as a separate plant. However, if the exhaust heat from the gas turbine is utilized in a steam turbine regenerative feed water cycle, or for preheated combustion air in a boiler, report as one plant.

Plant Cost (Incl Asset Retire. Costs) Per MW (g)	Operation Exc'l. Fuel (h)	Production Expenses		Kind of Fuel (k)	Fuel Costs (in cents (per Million Btu) (l))	Line No.
		Fuel (i)	Maintenance (j)			
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Name of Respondent	This Report is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo., Da., Yr.)	Year/Period of Report _____ End of
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ENERGY STORAGE OPERATIONS (Large Plants)

1. Large Plants are plants of 10,000 KW or more.
2. In columns (a) and (b) [and (c)] report the name of the energy storage project[, functional classification (Production, Transmission, Distribution)], and location.
3. In column [(d) c], report Megawatt hours (MWH) purchased, generated, or received in exchange transactions for storage.
4. In column[s] [(e) (d) [(f) and (g)] report MWHs delivered to the grid to support production, transmission and distribution. The amount reported in column [(d)] (c) should include MWHs delivered/provided to a generator's own load requirements or used for the provision of ancillary services.
5. In column[s] [(h), (i), and (j)] (e), report MWHs lost during conversion, storage and discharge of energy.
6. In column [(k)] (f) report the MWHs sold.
7. In column [(l) (g), report revenues from energy storage operations. In a footnote, disclose the revenue accounts and revenue amounts related to the income generating activity.
8. In column [(m)] (h), report the cost of power purchased for storage operations and reported in Account 555.1, Power Purchased for Storage Operations. If power was purchased from an affiliated seller specify how the cost of the power was determined. In columns [(n) and (o)] (i) and (j), report fuel costs for storage operations associated with self-generated power included in Account 501 and other costs associated with self-generated power.
9. In column[s] (q), (r) and (s) (l) report the total project plant costs including but not exclusive of land and land rights, structures and improvements, energy storage equipment, turbines, compressors, generators, switching and conversion equipment, lines and equipment whose primary purpose is to integrate or tie energy storage assets into the power grid, and any other costs associated with the energy storage project included in the property accounts listed.

Line No.	Name of the Energy Storage Project (a)	[Functional Classification (b)]	Location of the Project [(c) (b)]	MWHs [(d) (c)]
1		Delete col		
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35	TOTAL				
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Name of Respondent	This Report is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo., Da., Yr.)	Year/Period of Report End of _____
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ENERGY STORAGE OPERATIONS (Large Plants) (Continued)

Line No.	MWHs delivered to the grid [to support] (d)			MWHs Lost During Conversion, Storage and Discharge of Energy (e)			MWHs Sold ([k] l)	Revenues from Energy Storage Operations ([l] g)
	[Line No.]	[Production ([e])]	[Transmission ([f])]	[Distribution ([g])]	[Production ([h])]	[Transmission ([i])]		
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Name of Respondent		This Report is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission		Date of Report (Mo., Da., Yr.)	Year/Period of Report End of _____		
ENERGY STORAGE OPERATIONS (Large Plants) (Continued)							
Line No.	Power Purchased for Storage Operations (555.1) (Dollars) ([m ]h)	Fuel Costs from associated fuel accounts for Storage Operations Associated with Self-Generated Power (Dollars) ([n ]i)	Other Costs Associated with Self-Generated Power (Dollars) ([o ]j)	Project Costs included in ([p ]k)	[Production (Dollars) (q)] Total Project Plant Costs (l)	[Transmission (Dollars) (r)]	[Distribution (Dollars) (s)]
1				Account 101		Delete col	Delete col
2				Account 103			
3				Account 106			
4				Account 107			
5				Other			
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Name of Respondent	This Report is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo., Da., Yr.)	Year/Period of Report End of _____
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**ENERGY STORAGE OPERATIONS (Small Plants)**

1. Small Plants are plants less than 10,000 KW.
2. In columns (a)[.] and (b) [and (c)] report the name of the energy storage project, [functional classification (Production, Transmission, Distribution)], and location.
3. In column [(d )c], report project plant cost including but not exclusive of land and land rights, structures and improvements, energy storage equipment and any other costs associated with the energy storage project.
4. In column [(e )d], report operation expenses excluding fuel, [(f )e], maintenance expenses, [(g )f] fuel costs for storage operations and [(h )g] cost of power purchased for storage operations and reported in Account 555.1, Power Purchased for Storage Operations. If power was purchased from an affiliated seller specify how the cost of the power was determined.
5. If any other expenses, report in column [(i )h] and footnote the nature of the item(s).

Line No.	Name of the Energy Storage Project (a)	[Functional Classification (b)]	Location of the Project ((c )b)	Project Cost ((d )c)
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36	TOTAL			

Name of Respondent	This Report is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo., Da., Yr.)	Year/Period of Report End of _____
ENERGY STORAGE OPERATIONS (Small Plants)(Continued)			

Plant Operating Expenses					
Line No.	Operations (Excluding Fuel used in Storage Operations) ([e ]d)	Maintenance ([f ]e)	Cost of fuel used in storage operations ([g ]f)	Account No. 555.1, Power Purchased for Storage Operations ([h ]g)	Other Expenses ([I ]h)
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Name of Respondent		This Report is: (1) <b>G</b> An Original (2) <b>G</b> A Resubmission	Date of Report (Mo, Da, Yr)	Year of Report Dec 31, _____
PART III: COMPARATIVE BALANCE SHEET				
	Assets and Other Debits <i>(a)</i>	Balance at Beginning of Year <i>(b)</i>	Balance at End of Year <i>(c)</i>	
01	Utility plant (101 - 107, 114, 118)			
02	Accumulated Provision for Depreciation and Amortization (110, 119)			
03	NET UTILITY PLANT (Enter total of line 01 less 02)			
04	Utility Plant Adjustments (116)			
05	Gas Stored Underground - Noncurrent			
06	Nonutility Property (121)			
07	Less Accumulated Provision For Depreciation and Amortization - Credit (122)			
08	Noncurrent Portion of Allowances and Environmental Credits			
09	Other Investments and Special Funds (124-129)			
10	Current and Accrued Assets:			
11	Cash and Working Funds (130)			
12	Temporary Cash Investments (136)			
13	Notes and Accounts Receivable (141, 142, 143, 145, 146) (Report amounts applicable to associated companies in a footnote)			
14	Accumulated provision for Uncollectible Accounts - Credit (144)			
15	Plant Materials and Operating Supplies (154)			
16	Allowances and Environmental Credits (158.1, [and] 158.2, and 158.3)			
17	(Less) Noncurrent Portion of Allowances and Environmental Credits			
18	Gas Stored (164.1, 164.2)			
19	Prepayments (165)			
20	Miscellaneous Current and Accrued Assets (174)			
21	Derivative Instrument Assets (175)			
22	Derivative Instruments Assets - Hedges (176)			
23	TOTAL CURRENT AND ACCRUED ASSETS (Enter total of lines 11 thru 22)			
24	Deferred Debits:			
25	Unamortized Debt Expense (181)			
26	Extraordinary Property Losses (182.1)			
27	Unrecovered Plant and Regulatory Study Costs (182.2)			
28	Other Regulatory Assets (182.3)			
29	Miscellaneous Deferred Debits (186)			
30	Deferred Losses from Disposition of Utility Plant (187)			
31	Unamortized Loss on Reacquired Debt (189)			
32	Accumulated Deferred Income Taxes (190)			
33	Unrecovered Purchased Gas Costs (191)			

34	TOTAL DEFERRED DEBITS <i>(Enter total of Lines 25 thru 33)</i>		
35	TOTAL ASSETS AND OTHER DEBITS <i>(Enter total lines 03 thru 09, 23 and 34)</i>		

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Name of Respondent	This Report is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr)	Year of Report Dec 31, _____
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**PART IV: STATEMENT OF INCOME FOR THE YEAR**

1. Report amounts for accounts 412 and 413, Revenues and expenses from Utility Plant Leased to Others, in the Other Utility column (h, l or j, k) in a similar manner to a utility department. Spread the amount(s) over lines 01 to 22 as appropriate. Include revenues these amounts in column (b) and (c) totals.  
 2. Report amounts for account 414, Other Utility Operating rights Income, in the same manner as accounts 412 and 413.  
 3. Provide an explanation in Part VII. Notes to Financial Statements, of such unsettled rate

proceedings where a contingency exists that refunds of a material amount may need to be made to the utility's customers or which may result in a material refund to the utility with respect to power or gas purchases. State for each year affected the gross or costs to which the contingency relates and the tax effects; include an explanation for the major factors which affect the of the utility to retain such revenues or to recover amounts paid with respect to power or gas

	Account	Total (d to k)		Electric Utility	
		Current Year (b)	Change From Previous Year (c)	Current Year (d)	Change From previous Year (e)
01	UTILITY OPERATING INCOME				
02	Operating Revenues (400)				
03	Operating Expenses:				
04	Operating Expenses (401)				
05	Maintenance Expense (402)				
06	Depreciation Expense (403)				
07	Depreciation Expense for Asset Retirement Costs (403.1)				
08	Amortization Expense (Specify by account)				
09					
10	Regulatory Debits (407.3)				
11	(Less) Regulatory Credits (407.4)				
12	Taxes Other Than Income Taxes (408.1)				
13	Federal Income Taxes (409.1)				
14	Other Income Taxes (409. 1)				
15	Provision For Deferred Income Taxes (410.1)				
16	Provision For Deferred Income Taxes - Credit (411.1)				
17	Investment Tax Credit Adjustments - Net (411.4)				
18	Gains From Disposition of Utility Plant (411.6)				
19	Losses From Disposition of Utility Plant (411.7)				
20	Gains From Disposition of Allowances (411.8)				
21	Losses From Disposition of Allowances (411.9)				
22	Accretion Expense (411.10)				
22.1	Gains From Disposition of Environmental Credits (411.11)				

22.2	Losses From Disposition of Environmental Credits (411.12)				
23	TOTAL UTILITY OPERATING EXPENSES (Enter total of lines 04 thru 22.2)				
24	Net Utility Operating Income (Enter total of line 02 less 23)				

**FERC FORM NO. 1-F (REVISED 12-22) Page 6**

Name of Respondent	This Report is: (1) <input type="checkbox"/> An Original (2) <input type="checkbox"/> A Resubmission	Date of Report (Mo, Da, Yr)	Year of Report Dec 31, _____
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**PART IX: ALLOWANCES AND Environmental Credits (Accounts 158.1, [and ]158.2, 158.3, and 158.4)**

- Report below the [particulars (details)] called for concerning related to allowances and Environmental Credits. Additional information about the type of allowances/environmental credits required by other regulatory bodies can be disclosed within the footnote data.
- Report all acquisitions of allowances and Environmental Credits at cost.
- Report allowances and Environmental Credits in accordance with a weighted average cost allocation method and other accounting as prescribed by General Instruction No. 21 in the Uniform System of Accounts.
- Report the allowances and Environmental Credits transactions by the period they are first eligible for use: the current year's allowances and Environmental Credits in columns (b)-(c), allowances and Environmental Credits for the three succeeding years in columns (d)-(i), starting with the following year, and allowances and Environmental Credits for the remaining succeeding years in columns (j)-(k).
- Report on line 4 the authoritative agency [Environmental Protection Agency (EPA)] issued allowances. Report withheld portions on lines 36-40.

Line No	Allowance Inventory and Environmental Credits (Accounts 158.1, 158.3, and 158.4)  (a)	Current Year		20____	
		No (b)	Amt. (c)	No. (d)	Amt. (e)
01	Balance--Beginning of Year				
02					
03	Acquired During Year:				
04	Issued (Less Withheld Allow.)				
05	Returned by [EPA] authoritative agency				
06					
07	Purchases/Transfers:				
08					
09					
10					
11					
12					
13					
14					
15	Total				
16					
17	Relinquished During Year:				
18	Charges to Account 509, 555.2, and 555.3				
19	Other.				
20					
21	Cost of Sales Transfers:				
22					
23					
24					
25					
26					
27					
28	Total				
29	Balance-End of Year				

30					
31	Sales:				
32	Net Sales Proceeds (Assoc. Co.)				
33	Net Sales Proceeds (Other)				
34	Gains				
35	Losses				
	Allowances Withheld Account 158.2)				
36	Balance-Beginning of Year				
37	Add: Withheld by [EPA] <i>authoritative agency</i>				
38	Deduct: Returned by [EPA] <i>authoritative agency</i>				
39	Cost of Sales				
40	Balance-End of Year				
41					
42	Sales:				
43	Net Sales Proceeds (Assoc. Co.)				
44	Net Sale Proceeds (Other)				
45	Gains				
46	Losses				



								40
								41
								42
								43
								44
								45
								46



PART XVII: ELECTRIC OPERATION AND MAINTENANCE EXPENSES		
L I N E  N O	ITEM  (a)	OPERATION & MAINTENANCE EXPENSES  (b)
1	Production expenses:	\$
2	Steam generation .....	
3	Hydraulic generation .....	
4	Other generation .....	
5	Purchased power (including power exchanges) .....	
6	Other power supply expenses .....	
6.1	<i>Solar generation</i> .....	
6.2	<i>Wind generation</i> .....	
6.3	<i>Other renewable generation</i> .....	
7	Total production expenses .....	\$
8	Transmission expenses .....	
8.1	<i>Energy storage expenses</i> .....	
9	Distribution expenses .....	
10	Customer accounts expenses .....	
11	Customer service and informational expenses .....	
12	Sales expenses .....	
13	Administrative and general expenses .....	
14	Total electric operation and maintenance expenses .....	\$

Name of Respondent	This Report is: (1) G An Original (2) G A Resubmission	Date of Report (Mo, Da, Yr)	Year of Report Dec 31, _____
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PART XX: UTILITY PLANT DATA

Line No.	Item (a)	Balance at Beginning of Year (b)	Additions During Year (c)	Retirements During Year (d)	Transfers and Adjustments (e)	Balance at End of Year (f)
1	Electric utility plant					
2	Electric plant in service:					
3	Intangible plant . . . . .					
4	Production Plant:					
5	Steam production . . . .					
6	Hydraulic production					
6.1	Solar production					
6.2	Wind production					
6.3	Other renewable prod					
7	Other production . . . .					
8	Transmission plant . . . .					
9	Distribution plant . . . . .					
10	Energy storage plant . . . . .					
11	General plant . . . . .					
12	Total electric plant in					
	Service[s] . . . . .					
13	Property Under Capital Leases					
14	Electric plant purchased . . .					
15	Electric plant sold . . . . .					
16	Electric plant in process of reclassification . . . . .					
17	Electric plant leased to others					
18	Electric plant held for future use . . . . .					
19	Construction work in progress -Electric . . . . .					
20	Electric plant acquisition adjustments . . . . .					
21	Other electric plant adjustments (explain) . . . . .					
22	. . . . .					
23	Total electric plant . . .					
24	Plant of other utility departments (specify) . . . . .					
25						
26						
27						
28						
29						
30						
31						
32						
33						
34						
35						

36					
37					
38					
39					
40					
41					
42					
43					
44					
45					
46					
47	Total Utility Plant....				

Name of Respondent			This Report Is: (1) An Original (2) A Resubmission			Resubmission Date (Mo, Da, Yr)	Year/Period of Report  Dec 31,	
Line No.	Account Number  (a)	Title of Account  (b)	Associate Company Direct Cost  (c)	Associate Company Indirect Cost  (d)	Associate Company Total Cost  (e)	Nonassociate Company Direct Cost (f)	Nonassociate Company Indirect Cost (g)	Nonassociate Company Total Cost (h)
35	517-525	Total Nuclear Power Generation Operation Expenses						
36	528-532	Total Nuclear Power Generation Maintenance Expenses						
37	535-540.1	Total Hydraulic Power Generation Operation Expenses						
38	541-545.1	Total Hydraulic Power Generation Maintenance Expenses						
39	546-550.1	Total Other Power Generation Operation Expenses						
40	551-554.1	Total Other Power Generation Maintenance Expenses						
41	555-557	Total Other Power Supply Operation Expenses						
41.1	558.1-558.5	Total Solar Power Generation Operation Expenses						
41.2	558.6-558.12	Total Solar Power Generation Maintenance Expenses						
41.3	558.13-558.17	Total Wind Power Generation Operation Expenses						
41.4	558.18-558.24	Total Wind Power Generation Maintenance Expenses						
41.5	559.1-559.5	Total Other Renewable Power Generation Operation Expenses						
41.6	559.6-559.16	Total Other Renewable Power Generation Maintenance Expenses						
42	560	Operation Supervision and Engineering						
43	561.1	Load Dispatch-Reliability						
44	561.2	Load Dispatch-Monitor and Operate Transmission System						
45	561.3	Load Dispatch-Transmission Service and Scheduling						
46	561.4	Scheduling, System Control and Dispatch Services						
47	561.5	Reliability Planning and Standards Development						
48	561.6	Transmission Service Studies						
49	561.7	Generation Interconnection Studies						
	561.8	Reliability Planning and Standards						

50		Development Services						
51	562	Station Expenses (Major Only)						
52	563	Overhead Line Expenses (Major Only)						
53	564	Underground Line Expenses (Major Only)						
54	565	Transmission of Electricity by Others (Major Only)						
55	566	Miscellaneous Transmission Expenses (Major Only)						
56	567	Rents						
57	567.1	Operation Supplies and Expenses (Nonmajor Only)						
58		Total Transmission Operation Expenses						
59	568	Maintenance Supervision and Engineering (Major Only)						
60	569	Maintenance of Structures (Major Only)						
61	569.1	Maintenance of Computer Hardware						
62	569.2	Maintenance of Computer Software						
63	569.3	Maintenance of Communication Equipment						
64	569.4	Maintenance of Miscellaneous Regional Transmission Plant						
65	570	Maintenance of Station Equipment (Major Only)						
66	571	Maintenance of Overhead Lines (Major Only)						
67	572	Maintenance of Underground Lines (Major Only)						
68	573	Maintenance of Miscellaneous Transmission Plant (Major Only)						

Name of Respondent		This Report Is: (1) An Original (2) A Resubmission		Resubmission Date (Mo, Da, Yr)	Year/Period of Report  Dec 31,			
Line No.	Account Number  (a)	Title of Account  (b)	Associate Company Direct Cost  (c)	Associate Company Indirect Cost  (d)	Associate Company Total Cost  (e)	Nonassociate Company Direct Cost (f)	Nonassociate Company Indirect Cost (g)	Nonassociate Company Total Cost (h)
69	574	Maintenance of Transmission Plant (Nonmajor Only)						
70		Total Transmission Maintenance Expenses						
71	575.1-575.8	Total Regional Market Operation Expenses						
72	576.1-576.5	Total Regional Market Maintenance Expenses						
72.1	577.1-577.5	Total Energy Storage Operation Expenses						
72.2	578.1-578.7	Total Energy Storage Maintenance Expenses						
73	580-589	Total Distribution Operation Expenses						
74	590-598	Total Distribution Maintenance Expenses						
75		Total Electric Operation and Maintenance Expenses						
76	700-798	Production Expenses (Provide selected accounts in a footnote)						
77	800-813	Total Other Gas Supply Operation Expenses						
78	814-826	Total Underground Storage Operation Expenses						
79	830-837	Total Underground Storage Maintenance Expenses						
80	840-842.3	Total Other Storage Operation Expenses						
81	843.1-843.9	Total Other Storage Maintenance Expenses						
82	844.1-846.2	Total Liquefied Natural Gas Terminaling and Processing Operation Expenses						
83	847.1-847.8	Total Liquefied Natural Gas Terminaling and Processing Maintenance Expenses						
84	850	Operation Supervision and Engineering						
85	851	System Control and Load Dispatching.						
86	852	Communication System Expenses						
87	853	Compressor Station Labor and Expenses						
88	854	Gas for Compressor Station Fuel						
89	855	Other Fuel and Power for						

		Compressor Stations						
90	856	Mains Expenses						
91	857	Measuring and Regulating Station Expenses						
92	858	Transmission and Compression of Gas By Others						
93	859	Other Expenses						
94	860	Rents						
95		Total Gas Transmission Operation Expenses						
96	861	Maintenance Supervision and Engineering						
97	862	Maintenance of Structures and Improvements						
98	863	Maintenance of Mains						
99	864	Maintenance of Compressor Station Equipment						
100	865	Maintenance of Measuring And Regulating Station Equipment						
101	866	Maintenance of Communication Equipment						
102	867	Maintenance of Other Equipment						
103		Total Gas Transmission Maintenance Expenses						
104	870-881	Total Distribution Operation Expenses						

Name of Respondent			This Report Is: (1) An Original (2) A Resubmission		Resubmission Date (Mo, Da, Yr)	Year/Period of Report  Dec 31,		
Line No.	Account Number (a)	Title of Account (b)	Associate Company Direct Cost (c)	Associate Company Indirect Cost (d)	Associate Company Total Cost (e)	Nonassociate Company Direct Cost (f)	Nonassociate Company Indirect Cost (g)	Nonassociate Company Total Cost (h)
105	885-894	Total Distribution Maintenance Expenses						
106		Total Natural Gas Operation and Maintenance Expenses						
107	901	Supervision						
108	902	Meter reading expenses						
109	903	Customer records and collection expenses						
110	904	Uncollectible accounts						
111	905	Miscellaneous customer accounts expenses						
112	906	Total Customer Accounts Operation Expenses						
113	907	Supervision						
114	908	Customer assistance expenses						
115	909	Informational And Instructional Advertising Expenses						
116	910	Miscellaneous Customer Service And Informational Expenses						
117		Total Service and Informational Operation Accounts						
118	911	Supervision						
119	912	Demonstrating and Selling Expenses						
120	913	Advertising Expenses						
121	916	Miscellaneous Sales Expenses						
122		Total Sales Operation Expenses						
123	920	Administrative and General Salaries						
124	921	Office Supplies and Expenses						
125	923	Outside Services Employed						
126	924	Property Insurance						
127	925	Injuries and Damages						
128	926	Employee Pensions and Benefits						
129	928	Regulatory Commission Expenses						
130	930.1	General Advertising Expenses						
131	930.2	Miscellaneous General Expenses						
132	931	Rents						
133		Total Administrative and General Operation Expenses						
134	935	Maintenance of Structures and Equipment						
135		Total Administrative and General Maintenance Expenses						
136		Total Cost of Service						





Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Resubmission Date (Mo, Da, Yr)	Year/Period of Report Dec 31,
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**Schedule XVI- Analysis of Charges for Service- Associate and Non-Associate Companies (continued)**

Line No.	Account Number (a)	Title of Account (b)	Total Charges for Services Direct Cost (i)	Total Charges for Services Indirect Cost (j)	Total Charges for Services Total Cost (k)
35	517-525	Total Nuclear Power Generation Operation Expenses			
36	528-532	Total Nuclear Power Generation Maintenance Expenses			
37	535-540.1	Total Hydraulic Power Generation Operation Expenses			
38	541-545.1	Total Hydraulic Power Generation Maintenance Expenses			
39	546-550.1	Total Other Power Generation Operation Expenses			
40	551-554.1	Total Other Power Generation Maintenance Expenses			
41	555-557	Total Other Power Supply Operation Expenses			
41.1	558.1-558.5	Total Solar Power Generation Operation Expenses			
41.2	558.6-558.12	Total Solar Power Generation Maintenance Expenses			
41.3	558.13-558.17	Total Wind Power Generation Operation Expenses			
41.4	558.18-558.24	Total Wind Power Generation Maintenance Expenses			
41.5	559.1-559.5	Total Other Renewable Power Generation Operation Expenses			
41.6	559.6-559.16	Total Other Renewable Power Generation Maintenance Expenses			
42	560	Operation Supervision and Engineering			
43	561.1	Load Dispatch-Reliability			
44	561.2	Load Dispatch-Monitor and Operate Transmission System			
45	561.3	Load Dispatch-Transmission Service and Scheduling			
46	561.4	Scheduling, System Control and Dispatch Services			
47	561.5	Reliability Planning and Standards Development			
48	561.6	Transmission Service Studies			
49	561.7	Generation Interconnection Studies			
50	561.8	Reliability Planning and Standards Development Services			

51	562	Station Expenses (Major Only)			
52	563	Overhead Line Expenses (Major Only)			
53	564	Underground Line Expenses (Major Only)			
54	565	Transmission of Electricity by Others (Major Only)			
55	566	Miscellaneous Transmission Expenses (Major Only)			
56	567	Rents			
57	567.1	Operation Supplies and Expenses (Nonmajor Only)			
58		Total Transmission Operation Expenses			
59	568	Maintenance Supervision and Engineering (Major Only)			
60	569	Maintenance of Structures (Major Only)			
61	569.1	Maintenance of Computer Hardware			
62	569.2	Maintenance of Computer Software			
63	569.3	Maintenance of Communication Equipment			
64	569.4	Maintenance of Miscellaneous Regional Transmission Plant			
65	570	Maintenance of Station Equipment (Major Only)			
66	571	Maintenance of Overhead Lines (Major Only)			
67	572	Maintenance of Underground Lines (Major Only)			
68	573	Maintenance of Miscellaneous Transmission Plant (Major Only)			

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Resubmission Date (Mo, Da, Yr)	Year/Period of Report Dec 31,
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**Schedule XVI- Analysis of Charges for Service- Associate and Non-Associate Companies (continued)**

Line No.	Account Number (a)	Title of Account (b)	Total Charges for Services Direct Cost (i)	Total Charges for Services Indirect Cost (j)	Total Charges for Services Total Cost (k)
69	574	Maintenance of Transmission Plant (Nonmajor Only)			
70		Total Transmission Maintenance Expenses			
71	575.1-575.8	Total Regional Market Operation Expenses			
72	576.1-576.5	Total Regional Market Maintenance Expenses			
72.1	577.1-577.5	Total Energy Storage Operation Expenses			
72.2	578.1-578.7	Total Energy Storage Maintenance Expenses			
73	580-589	Total Distribution Operation Expenses			
74	590-598	Total Distribution Maintenance Expenses			
75		Total Electric Operation and Maintenance Expenses			
76	700-798	Production Expenses (Provide selected accounts in a footnote)			
77	800-813	Total Other Gas Supply Operation Expenses			
78	814-826	Total Underground Storage Operation Expenses			
79	830-837	Total Underground Storage Maintenance Expenses			
80	840-842.3	Total Other Storage Operation Expenses			
81	843.1-843.9	Total Other Storage Maintenance Expenses			
82	844.1-846.2	Total Liquefied Natural Gas Terminaling and Processing Operation Expenses			
83	847.1-847.8	Total Liquefied Natural Gas Terminaling and Processing Maintenance Expenses			
84	850	Operation Supervision and Engineering			
85	851	System Control and Load Dispatching.			
86	852	Communication System Expenses			
87	853	Compressor Station Labor and Expenses			
88	854	Gas for Compressor Station Fuel			

89	855	Other Fuel and Power for Compressor Stations			
90	856	Mains Expenses			
91	857	Measuring and Regulating Station Expenses			
92	858	Transmission and Compression of Gas By Others			
93	859	Other Expenses			
94	860	Rents			
95		Total Gas Transmission Operation Expenses			
96	861	Maintenance Supervision and Engineering			
97	862	Maintenance of Structures and Improvements			
98	863	Maintenance of Mains			
99	864	Maintenance of Compressor Station Equipment			
100	865	Maintenance of Measuring And Regulating Station Equipment			
101	866	Maintenance of Communication Equipment			
102	867	Maintenance of Other Equipment			
103		Total Gas Transmission Maintenance Expenses			
104	870-881	Total Distribution Operation Expenses			

Name of Respondent	This Report Is: (1) An Original (2) A Resubmission	Resubmission Date (Mo, Da, Yr)	Year/Period of Report Dec 31,
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**Schedule XVI- Analysis of Charges for Service- Associate and Non-Associate Companies (continued)**

Line No.	Account Number (a)	Title of Account (b)	Total Charges for Services Direct Cost (i)	Total Charges for Services Indirect Cost (j)	Total Charges for Services Total Cost (k)
105	885-894	Total Distribution Maintenance Expenses			
106		Total Natural Gas Operation and Maintenance Expenses			
107	901	Supervision			
108	902	Meter reading expenses			
109	903	Customer records and collection expenses			
110	904	Uncollectible accounts			
111	905	Miscellaneous customer accounts expenses			
112	906	Total Customer Accounts Operation Expenses			
113	907	Supervision			
114	908	Customer assistance expenses			
115	909	Informational And Instructional Advertising Expenses			
116	910	Miscellaneous Customer Service And Informational Expenses			
117		Total Service and Informational Operation Accounts			
118	911	Supervision			
119	912	Demonstrating and Selling Expenses			
120	913	Advertising Expenses			
121	916	Miscellaneous Sales Expenses			
122		Total Sales Operation Expenses			
123	920	Administrative and General Salaries			
124	921	Office Supplies and Expenses			
125	923	Outside Services Employed			
126	924	Property Insurance			
127	925	Injuries and Damages			
128	926	Employee Pensions and Benefits			
129	928	Regulatory Commission Expenses			
130	930.1	General Advertising Expenses			
131	930.2	Miscellaneous General Expenses			
132	931	Rents			
133		Total Administrative and General Operation Expenses			
134	935	Maintenance of Structures and Equipment			
135		Total Administrative and General Maintenance Expenses			
136		Total Cost of Service			

