exemptee, within the time allowed for the payment of the annual charges, files notice that it intends to file an application for exemption, an additional period of 30 days is allowed within which to complete and file the application for exemption. The filing of an application for exemption does not by itself alleviate the requirement to pay the annual charges, nor does it exonerate the licensee or exemptee from the assessment of penalties under §11.21. If a bill for annual charges becomes payable after an application for an exemption has been filed and while the application is still pending for decision, the bill may be paid under protest and subject to refund.

[Order 143, 13 FR 6681, Nov. 13, 1948. Redesignated and amended by Order 379, 49 FR 22778, June 1, 1984. Redesignated at 51 FR 24318, July 3, 1986; 60 FR 15048, Mar. 22, 1995; Order 737, 75 FR 43403, July 26, 2010]

§11.7 Effective date.

All annual charges imposed under this subpart will be computed beginning on the effective date of the license unless some other date is fixed in the license.

[51 FR 24318, July 3, 1986]

§11.8 Adjustment of annual charges.

All annual charges imposed under this subpart continue in effect as fixed unless changed as authorized by law.

[51 FR 24318, July 3, 1986]

Subpart B—Charges for Headwater Benefits

SOURCE: Order 453, 51 FR 24318, July 3, 1986, unless otherwise noted

§11.10 General provision; waiver and exemptions; definitions.

(a) Headwater benefits charges. (1) The Commission will assess or approve charges under this subpart for direct benefits derived from headwater projects constructed by the United States, a licensee, or a pre-1920 permittee. Charges under this subpart will amount to an equitable part of the annual costs of interest, maintenance, and depreciation expenses of such headwater projects and the costs to the Commission of determining headwater

benefits charges. Except as provided in paragraph (b) of this section, the owner of any non-Federal downstream project that receives headwater benefits must pay charges determined under this subpart.

- (2) Headwater benefits are the additional electric generation at a downstream project that results from regulation of the flow of the river by the headwater, or upstream, project, usually by increasing or decreasing the release of water from a storage reservoir.
- (b) Waiver and exemptions. The owner of a downstream project with installed generating capacity of 1.5 MW (2000 horsepower) or less or for which the Commission has granted an exemption from section 10(f) is not required to pay headwater benefits charges.
- (c) *Definitions*. For purposes of this subpart:
- (1) Energy gains means the difference between the number of kilowatt-hours of energy produced at a downstream project with the headwater project and that which would be produced without the headwater project.
- (2) Generation means gross generation of electricity at a hydroelectric project, including generation needed for station use or the equivalent for direct drive units, measured in kilowatthours. It does not include energy used for or derived from pumping in a pumped storage facility.
- (3) Headwater project costs means the total costs of an upstream project constructed by the United States, a licensee, or pre-1920 permittee.
- (4) Separable cost means the difference between the cost of a multiple-function headwater project with and without any particular function.
- (5) Remaining benefits means the difference between the separable cost of a specific function in a multiple-function project and the lesser of:
- (i) The benefits of that function in the project, as determined by the responsible Federal agency at the time the project or function was authorized; or
- (ii) The cost of the most likely alternative single-function project providing the same benefits.
- (6) Joint-use cost means the difference between the total project cost and the total separable costs. Joint-use costs

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are allocated among the project functions according to each function's percentage of the total remaining benefits.

- (7) Specific power cost means that portion of the headwater project costs that is directly attributable to the function of power generation at the headwater project, including, but not limited to, the cost of the electric generators, turbines, penstocks, and substation.
- (8) Joint-use power cost means the portion of the joint-use cost allocated to the power function of the project.
- (9) Section 10(f) costs means the annual interest, depreciation, and maintenance expense portion of the jointuse power cost, including costs of nonpower functions required by statute to be paid by revenues from the power function.
 - (10) Party means:
- (i) The owner of a non-Federal downstream hydroelectric project which is directly benefited by a headwater project constructed by the United States, a licensee, or a pre-1920 permittee;
- (ii) The owner of a headwater project constructed by the United States, a licensee, or a pre-1920 permittee;
- (iii) An operating agency of, or an agency marketing power from, a headwater project constructed by the United States; or
- (iv) Any party, as defined in §385.102(c) of this chapter.
- (11) Final charge means a charge assessed on an annual basis to recover section 10(f) costs and which represents the final determination of the charge for the period for which headwater benefits are assessed. Final charges may be established retroactively, to finalize an interim charge, or prospectively.
- (12) Interim charge means a charge assessed to recover section 10(f) costs for a specified period of headwater benefits pending determination of a final charge for that period.
 - (13) *Investment cost* means the sum of:
- (i) Project construction costs, including cost of land, labor and materials, cost of pre- and post-authorization investigations, and cost of engineering, supervision, and administration during construction of the project; and

(ii) Interest during construction.

[Order 453, 51 FR 24318, July 3, 1986, as amended by Order 699, 72 FR 45324, Aug. 14, 2007]

§11.11 Energy gains method of determining headwater benefits charges.

- (a) Applicability. This section applies to any determination of headwater benefits charges, unless:
- (1) The Commission has approved headwater benefits charges pursuant to an existing coordination agreement among the parties;
- (2) The parties reach, and the Commission approves, a settlement with respect to headwater benefits charges, pursuant to §11.14(a) of this subpart; or
- (3) Charges may be assessed under §11.14(b).
- (b) General rule—(1) Summary. Except as provided in paragraph (b)(3) of this section, a headwater benefits charge for a downstream project is determined under this subpart by apportioning the section 10(f) costs of the headwater project among the headwater project and all downstream projects that are not exempt from or waived from headwater benefits charges under §11.10(b) of this chapter, according to each project's share of the total energy benefits to those projects resulting from the headwater project.
- (2) Calculation; headwater benefits formula. The annual headwater benefits charge for a downstream project is derived by multiplying the section 10(f) cost by the ratio of the energy gains received by the downstream project to the sum of total energy gains received by all downstream projects (except those projects specified in §11.10(b) of this chapter) plus the energy generated at the headwater project that is assigned to the joint-use power cost, as follows:

$$P = C_p \times \frac{E_n}{E_j + E_d}$$

In which:

- P=annual payment to be made for headwater benefits received by a downstream project,
- C_p=annual section 10(f) cost of the headwater project.
- $E_n = annual \ energy \ gains \ received \ at \ a \ downstream \ project, \ or \ group \ of \ projects \ if \ owned \ by \ one \ entity,$

 E_d =annual energy gains received at all downstream projects (except those specified in \$11.10(b) of this chapter), and

 $E_{j} = portion$ of the annual energy generated at the headwater project assigned to the joint-use power cost.

- (3) If power generation is not a function of the headwater project, section 10(f) costs will be apportioned only among the downstream projects.
- (4) If the headwater project is constructed after the downstream project, liability for headwater benefits charges will accrue beginning on the day on which any energy losses at the downstream project due to filling the headwater reservoir have been offset by subsequent energy gains. If the headwater project is constructed prior to the downstream project, liability for headwater benefits charges will accrue beginning on the day on which benefits are first realized by the downstream project.
- (5) No final charge assessed by the Commission under this subpart may exceed 85 percent of the value of the energy gains. If a party demonstrates, within the time specified in §11.17(b)(3) for response to a preliminary assessment, that any final charge assessed under this subpart, not including the cost of the investigation assessed under §11.17(c), exceeds 85 percent of the value of the energy gains provided to the downstream project for the period for which the charge is assessed, the Commission will reduce the charge to not more than 85 percent of the value. For purposes of this paragraph, the value of the energy gains is the cost of obtaining an equivalent amount of electricity from the most likely alternative source during the period for which the charge is assessed.

§ 11.12 Determination of section 10(f) costs.

(a) for non-Federal headwater projects. If the headwater project was constructed by a licensee or pre-1920 permittee and a party requests the Commission to determine charges, the Commission will determine on a case-by-case basis what portion of the annual interest, maintenance, and depreciation costs of the headwater project constitutes the section 10(f) costs, for purposes of this subpart.

- (b) For Federal headwater projects. (1) If the headwater project was constructed or is operated by the United States, and the Commission has not approved a settlement between the downstream project owner and the headwater project owner, the section 10(f) cost will be determined by deriving, from information provided by the headwater project owner pursuant to §11.16 of this subpart, the joint-use power cost and the portion of the annual joint-use power cost that represents the interest, maintenance, and depreciation costs of the project.
- (2) If power is not an authorized function of the headwater project, the section 10(f) cost is the annual interest, maintenance, and depreciation portion of the headwater project costs designated as the joint-use power cost, derived by deeming a power function at the project. The value of the benefits assigned to the deemed power function, for purposes of determining the value of remaining benefits of the joint-use power cost, is the total value of downstream energy gains included in the headwater benefits formula.
- (3) For purposes of this paragraph, total value of downstream energy gains means the lesser of:
- (i) The cost of generating an equivalent amount of electricity at the most likely alternative facility at the time the headwater project became operational; or
- (ii) The incremental cost of installing electrical generation at the headwater project at the time the project became operational.

§11.13 Energy gains calculations.

(a) Energy gains at a downstream project. (1) Energy gains at a downstream project are determined by simulating operation of the downstream project with and without the effects of the headwater project. Except for determinations which are not complex or in which headwater benefits are expected to be small, calculations will be made by application of the Headwater Benefits Energy Gains Model, as presented in The Headwater Benefits Energy Gains (HWBEG) Model Description and Users Manual, which is available for the

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National Technical Information Service, U.S. Department of Commerce, 5285 Port Royal Road, Springfield, VA 22161.

- (2) If more than one headwater project provide energy gains to a downstream project, the energy gains at the downstream project are attributed to the headwater projects according to the time sequence of commencement of operation in which each headwater project provided energy gains at the downstream project, by:
- (i) Crediting the headwater project that is first in time with the amount of energy gains that it provided to the downstream project prior to operation of the headwater project that is next in time; and
- (ii) Crediting any subsequent headwater project with the additional increment of energy gains provided by it to the downstream project.
- (3) Annual energy losses at a downstream project, or group of projects owned by the same entity, that are attributable to the headwater project will be subtracted from energy gains for the same annual period at the downstream project or group of projects. A net loss in one calendar year will be subtracted from net gains in subsequent years until no net loss remains.
- (b) Energy generated at the headwater project. (1) Except as provided in paragraphs (b)(2) and (b)(3) of this section, the portion of the total annual energy generation at the headwater project that is to be attributed to the joint-use power cost is derived by multiplying the total annual generation at the headwater project and the ratio of the project investment cost assigned to the joint-use power cost to the sum of the investment cost assigned to both the specific power cost and the joint-use power cost of the headwater project, as follows:

$$E_j = E \times \frac{C_j}{C_s + C_j}$$

In which:

 E_j =annual energy generated at the headwater project to be attributed to the joint-use power cost.

E=total annual generation at the headwater project,

 C_j =project investment costs assigned to the joint-use power cost, and

 C_s =project investment costs assigned to specific power costs.

- (2) If the headwater project contains a pumped storage facility, calculation of the portion of the total annual energy generation at the headwater project that is attributable to the joint-use power cost will be determined on a case-by-case basis.
- (3) If no power is generated at the headwater project, the amount of energy attributable to the joint-use power cost under this section is the total of all downstream energy gains included in the headwater benefits formula.

§ 11.14 Procedures for establishing charges without an energy gains investigation.

- (a) Settlements. (1) Owners of downstream and headwater projects subject to this subpart may negotiate a settlement for headwater benefits charges. Settlements must be filed with the Commission for its approval, according to the provisions of §385.602.
- (2) If the headwater project is a Federal project, any settlement under this section must result in headwater benefits payments that approximate those that would result under the energy gains method.
- (b) Continuation of previous headwater benefits determinations. (1) For any downstream project being assessed headwater benefit charges on or before September 16, 1986, the Commission will continue to assess charges to that project on the same basis until changes occur in the river basin, including hydrology or project development, that affect headwater benefits.
- (2) Any procedures that apply to §11.17(b)(5) of this subpart will apply to any prospectively fixed charges that are continued under this paragraph.

§ 11.15 Procedures for determining charges by energy gains investigation.

(a) Purpose of investigations; limitation. Except as permitted under §11.14, the Commission will conduct an investigation to obtain information for establishing headwater benefits charges under this subpart. The Commission will investigate and determine charges for a project downstream from a non-

Federal headwater project only if the parties are unable to agree to a settlement and one of the parties requests the Commission to determine charges.

- (b) Notification. The Commission will notify each downstream project owner and each headwater project owner when it initiates an investigation under this section, and the period of project operations to be studied will be specified. An investigation will continue until a final charge has been established for all years studied in the investigation.
- (c) Jurisdictional objections. If any project owner wishes to object to the assessment of a headwater benefits charge on jurisdictional grounds, such objection must:
- (1) Be raised within 30 days after the notice of the investigation is issued; and
- (2) State in detail the grounds for its objection.
- (d) *Investigations*. (1) For any downstream project for which a final charge pursuant to an investigation has never been established, the Commission will conduct an initial investigation to determine a final charge.
- (2) The Commission may, for good cause shown by a party or on its own motion, initiate a new investigation of a river basin to determine whether, because of any change in the hydrology, project development, or other characteristics of the river basin that effects headwater benefits, it should:
- (i) Establish a new final charge to replace a final charge previously established under §11.17(b)(5); or
- (ii) Revise any variable of the headwater benefits formula that has become a constant in calculating a final charge.
- (3) Scope of investigations. (i) The Commission will establish a final charge pursuant to an investigation based on information available to the Commission through the annual data submission requirements of §11.16, if such information is adequate to establish a reasonably accurate final charge.
- (ii) If the information available to the Commission is not sufficient to provide a reasonably accurate calculation of the final charge, the Commission will request additional data and conduct any studies, including studies

of the hydrology of the river basin and project operations, that it determines necessary to establish the charge.

§11.16 Filing requirements.

- (a) Applicability. (1) Any party subject to a headwater benefits determination under this subpart must supply project-specific data, in accordance with this section, by February 1 of each year for data from the preceding calendar year.
- (2) Within 30 days of notice of initiation of an investigation under §11.15, a party must supply project-specific data, in accordance with this section, for the years specified in the notice.
- (b) Data required from owner of the headwater project. The owner of any headwater project constructed by the United States, a licensee, or a pre-1920 permittee that is upstream from a non-Federal hydroelectric project must submit the following:
- (1) Name and location of the headwater project, including the name of the stream on which it is located.
- (2) The total nameplate rating of installed generating capacity of the project, expressed in kilowatts, with the portion of total capacity that represents pumped storage generating capacity separately designated.
- (3) A description of the total storage capacity of the reservoir and allocation of storage capacity to each of its functions, such as dead storage, power storage, irrigation storage, and flood control storage. Identification, by reservoir elevation, of the portion of the reservoir assigned to each of its respective storage functions.
- (4) An elevation-capacity curve, or a tabulation of reservoir pool elevations with corresponding reservoir storage capacities.
- (5) A copy of rule curves, coordination contracts, agreements, or other relevant data governing the release of water from the reservoir, including a separate statement of their effective dates.
- (6) A curve or tabulation showing actual reservoir pool elevations throughout the immediately preceding calendar year and for each year included in an investigation.
- (7) The total annual gross generation of the hydroelectric plant in kilowatt-

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hours, not including energy from pumped storage operation.

- (8) The total number of kilowatthours of energy produced from pumped storage operation.
- (9) The investigation costs attributed to the power generation function of the project as of the close of the calendar year or at a specified date during the year, categorized according to that portion that is attributed to the specific power costs, and that portion that is attributed to the joint-use power costs.
- (10) The portion of the joint-use power cost, and other costs required by law to be allocated to joint-use power cost, each item shown separately, that are attributable to the annual costs of interest, maintenance, and depreciation, identifying the annual interest rate and the method used to compute the depreciation charge, or the interest rate and period used to compute amortization if used in lieu of depreciation, including any differing interest rates used for major replacements or rehabilitation.
- (c) Data required from owners of downstream projects. The owner of any hydroelectric project which is downstream from a headwater project constructed by the United States, a licensee, or pre-1920 permittee must submit the following:
- (1) Name and location of the downstream project, including the name of the stream on which it is located.
- (2) Total nameplate rating of the installed generating capacity of the plant, expressed in kilowatts, with the portion of total capacity that represents pumped storage generating capacity separately designated.
- (3) Record of daily gross generation, not including energy used for pumped storage, and any unit outage which may have occurred.
- (4) The total number of kilowatthours of energy produced from pumped storage operation.
- (d) Abbreviated data submissions. (1) For those items in paragraphs (b) and (c) of this section in which data for the current period are the same as data furnished for a prior period, the data need not be resubmitted if the owner identifies the last period for which the data were reported.

- (2) The Commission will notify the project owner that certain data items in paragraphs (b) and (c) are no longer required to be submitted annually if:
- (i) A variable in the headwater benefits formula has become a constant; or
- (ii) A prospective final charge, as described in §11.17(b)(5), has been established.
- (e) Additional data. Owners of headwater projects or downstream projects must furnish any additional data required by the Commission staff under paragraph (a) of this section and may provide other data which they consider relevant.

§ 11.17 Procedures for payment of charges and costs.

- (a) Payment for benefits from a non-Federal headwater project. Any billing procedures and payments determined between a non-Federal headwater project owner and a downstream project owner will occur according to the agreement of those parties.
- (b) Charges and payment for benefits from a Federal headwater project—(1) Interim charges. (i) If the Commission has not established a final charge and an investigation is pending, the Commission will issue a downstream project owner a bill for the interim charge and costs and a staff report explaining the calculation of the interim charge.
- (ii) An interim charge will be a percentage of the estimate by the Commission staff of what the final charge will be, as follows:
- (A) 100 percent of the estimated final charge if the Commission previously has completed an investigation of the project for which it is assessed; or
- (B) 80 percent of the estimated final charge if the Commission has not completed an investigation of the project for which it is assessed.
- (iii) When a final charge is established for a period for which an interim charge was paid, the Commission will apply the amount paid to the final charge.
- (2) Preliminary assessment of a final charge. Unless the project owner was assessed a final charge in the previous year, the Commission will issue to the downstream project owner a preliminary assessment of any final charge when it is determined. A staff technical

report explaining the basis of the assessment will be enclosed with the preliminary assessment. Copies of the preliminary assessment will be mailed to all parties.

- (3) Opportunity to respond. After issuance of a preliminary assessment of a final charge, parties may respond in writing within 60 days after the preliminary assessment.
- (4) Order and bill. (i) After the opportunity for written response by the parties to the preliminary assessment of a final charge, the Commission will issue to the downstream project owner an order establishing the final charge. Copies of the order will be mailed to all parties. A bill will be issued for the amount of the final charge and costs.
- (ii) If a final charge is not established prospectively under paragraph (b)(5) of this section, the Commission will issue an order and a bill for the final charge and costs each year until prospective final charges are established. After the Commission issues an order establishing a prospective final charge, a bill will be issued annually for the amount of the final charge and costs.
- (5) Prospective final charges. When the Commission determines that historical data, including the hydrology, development, and other characteristics of the river basin, demonstrate sufficient stability to project average energy gains and section 10(f) costs, the Commission will issue to the downstream project owner an order establishing the final charge from future years. Copies of the order will be mailed to all parties. The prospective final charge will remain in effect until a new investigation is initiated under §11.15(d)(2).
- (6) Payment under protest. Any payment of a final charge required by this section may be made under protest if a party is also appealing the final charge pursuant to §385.1902, or requesting rehearing. If payment is made under protest, that party will avoid any penalty for failure to pay under §11.21.
- (7) Accounting for payments pending appeal or rehearing. The Commission will retain any payment received for final charges from bills issued pursuant to this section in a special account. No disbursements to the U.S. Treasury will be made from the account until 31 days after the bill is issued. If an ap-

peal under §385.1902 or a request for rehearing is filed by any party, no disbursements to the U.S. Treasury will be made until final disposition of the appeal or request for rehearing.

- (c) Charges for costs of determinations of headwater benefits charges. (1) Any owner of a downstream project that benefits from a Federal headwater project must pay to the United States the cost of making any investigation, study, or determination relating to the assessment of the relevant headwater benefits charge under this subpart.
- (2) If any owner of a headwater or downstream project requests that the Commission determine headwater benefits charges for benefits provided by non-Federal headwater projects, the headwater project owners must pay a pro rata share of 50 percent of the cost of making the investigation and determination, in proportion to the benefits provided by their projects, and the downstream project owners must pay a pro rata share of the remaining 50 percent in proportion to the energy gains received by their projects.
- (3) Any charge assessed under this paragraph is separate from and will be added to, any final or interim charge under this subpart.

Subpart C—General Procedures

§11.20 Time for payment.

Annual charges must be paid no later than 45 days after rendition of a bill by the Commission. If the licensee or exemptee believes that the bill is incorrect, no later than 45 days after its rendition the licensee or exemptee may file an appeal of the bill with the Chief Financial Officer. No later than 30 days after the date of issuance of the Chief Financial Officer's decision on the appeal, the licensee or exemptee may file a request for rehearing of that decision pursuant to §385.713 of this chapter. In the event that a timely appeal to the Chief Financial Officer or a timely request to the Commission for rehearing is filed, the payment of the bill may be made under protest, and subject to refund pending the outcome of the appeal or rehearing.

[60 FR 15048, Mar. 22, 1995]