135 FERC ¶ 61,254 UNITED STATES OF AMERICA FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Jon Wellinghoff, Chairman; Marc Spitzer, Philip D. Moeller, John R. Norris, and Cheryl A. LaFleur.

Puget Sound Energy, Inc.	Docket Nos.	ER99-845-020
Macquarie Energy LLC		ER10-622-002
Sierra Pacific Power Company		ER01-1527-016
Nevada Power Company		ER01-1529-016
NorthWestern Corporation		ER03-329-010
Montana Generation, LLC		ER07-597-005
Idaho Power Company		ER97-1481-013
Avista Corporation		ER99-1435-024
Avista Turbine Power, Inc.		ER00-1814-012
Spokane Energy, LLC		ER98-4336-016
Public Service Company of Colorado		ER98-4590-032
Portland General Electric Company		ER98-1643-018
PacifiCorp		ER97-2801-030
Cordova Energy Company LLC		ER99-2156-021
MidAmerican Energy Company		ER96-719-028
Yuma Cogeneration Associates		ER07-1236-005

ORDER ON SIMULTANEOUS TRANSMISSION IMPORT LIMIT VALUES FOR THE NORTHWEST REGION AND PROVIDING DIRECTION ON SUBMITTING STUDIES

(Issued June 17, 2011)

1. In June and July 2010, Puget Sound Energy, Inc. and Macquarie Energy LLC; Sierra Pacific Power Company and Nevada Power Company; NorthWestern Corporation and Montana Generation, LLC (together, NorthWestern); Idaho Power Company; Avista Corporation, Avista Turbine Power, Inc., and Spokane Energy, LLC (together, Avista); Xcel Energy Services Inc. (Xcel), on behalf of Public Service Company of Colorado (Public Service Colorado); Portland General Electric Company (PGE); and PacifiCorp, Cordova Energy Company LLC, MidAmerican Energy Company, and Yuma Cogeneration Associates (together, PacifiCorp) (collectively, the Northwest Transmission Owners), submitted updated market power analyses for the Northwest region in accordance with the reporting schedule adopted in Order No. 697.¹ The Northwest Transmission Owners included Simultaneous Transmission Import Limit (SIL) studies as part of their updated market power analyses.²

2. In this order, the Commission accepts the SIL values identified in Appendix A (Commission-accepted SIL values).³ The Commission-accepted SIL values identified in Appendix A will be used by the Commission to analyze updated market power analyses submitted for the Northwest region. SIL studies are used as a basis for calculating import capability to serve balancing authority area load when performing market power analyses. SIL values quantify a study area's simultaneous import capability from its aggregated first-tier area. The SIL values accepted herein, with one exception noted below, were submitted by the Northwest Transmission Owners with their updated market power analyses. The SIL values we accept include SIL values provided by some of the Northwest Transmission Owners for first-tier balancing authority areas that are not operated by public utilities as defined under Part II of the Federal Power Act (FPA).⁴

¹ Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, Order No. 697, FERC Stats. & Regs. ¶ 31,252, clarified, 121 FERC ¶ 61,260 (2007), order on reh'g, Order No. 697-A, FERC Stats. & Regs. ¶ 31,268, clarified, 124 FERC ¶ 61,055, order on reh'g, Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 (2008), order on reh'g, Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 (2009), order on reh'g, Order No. 697-D, FERC Stats. & Regs. ¶ 31,305 (2010).

² We note that prior to filing Public Service Colorado's September 2010 updated market power analysis for the Northwest region, Xcel, on behalf of Public Service Colorado, filed SIL values for the Public Service Colorado balancing authority area on March 8, 2010 for the same study period as the Northwest Transmission Owners. The Commission accepted these SIL values in *Public Service Company of New Mexico*, 133 FERC ¶ 61,031 (2010). Public Service Colorado's previously accepted SIL values are included in Appendix A with the SIL values we are accepting in this order.

³ This order does not address SIL values submitted by Deseret Generation & Transmission Co-operative, Inc. (Deseret), which does not operate its own balancing authority area. Deseret did not submit SIL studies. It submitted SIL values obtained from other sources for its first-tier balancing authority areas.

⁴ 16 U.S.C. § 824 (2006).

3. The updated market power analyses themselves, including any responsive pleadings, will be addressed in separate orders in the relevant dockets. However, we note that on November 8, 2010, PPL EnergyPlus, LLC and PPL Montana, LLC (together, PPL Companies) filed a limited protest of NorthWestern's updated market power analysis with respect to the calculation of SIL values for the NorthWestern balancing authority area. We will address PPL Companies' protest in this order.

4. Additionally in this order, based on its experience in reviewing SIL data provided over the past three years from sellers in all regions of the country, the Commission provides further direction and clarification on the performance and reporting of SIL studies. Going forward, when filing updated market power analyses with the Commission, filers are directed to submit their SIL data in the format provided in Appendix B of this order in order to properly summarize and document their SIL study results. Transmission owners should also use the Appendix B format when sharing SIL results with one another. Also in Appendix B, we provide a detailed itemization of the reporting requirements for SIL studies to facilitate their filing and review.

I. <u>Background</u>

5. In Order No. 697, the Commission adopted a regional filing schedule for filing updated market power analyses.⁵ The Commission explained that the transmission-owning utilities have the information necessary to perform SIL studies and therefore determined that such utilities would be required to file their updated market power analyses in advance of other entities in each region.⁶ These analyses are due every three years based on a regional schedule. Entities in the Northeast were the first to file their updated market power analyses in accordance with this schedule. The Commission then reviewed updated market power analyses subsequently submitted for the Southeast, Central, Southwest Power Pool, and Southwest regions. The Northwest Transmission Owners' updated market power analyses, due and filed in June 2010, are currently pending before the Commission. These analyses complete the first round of regional studies transmission owners filed in accordance with the regional reporting requirements adopted in Order No. 697.

6. On April 13, 2010, Commission staff convened a telephonic technical conference to give transmission owners in the Northwest region an opportunity to ask questions regarding their required SIL studies.⁷ Subsequently, each Northwest Transmission Owner conducted SIL studies for its respective home balancing authority area and shared

⁵ Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 882.

⁶ Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 889.

⁷ See Notice of Pre-Filing Technical Conference for Northwest Region Transmission Owners, Docket No. AD10-9-000 (April 5, 2010). its SIL values with other Northwest Transmission Owners. In June and July, 2010, as amended in August, September and October 2010, and January 2011, the Northwest Transmission Owners filed their updated market power analyses as required by Order No. 697. These updated market power analyses included SIL studies for study areas for which the Commission had not previously accepted SIL studies for the same study period.⁸ Many of the Northwest Transmission Owners amended their filings subsequent to Commission staff contacting them concerning issues regarding incomplete reporting of the three major elements comprising a SIL value, which are (1) first contingency incremental transfer capability, (2) net area interchange, and (3) affiliated long-term firm transmission reservations for imports into the study area.

7. In addition to providing SIL studies for their respective balancing authority areas, some of the Northwest Transmission Owners provided SIL studies for first-tier balancing authority areas that are not operated by public utilities as defined under Part II of the FPA. Specifically, Avista filed SIL studies for the Bonneville Power Administration (BPA), Public Utility District No. 1 of Chelan County, and Public Utility District No. 1 of Grant County; Puget Sound Energy provided SIL studies for Seattle City Light and Tacoma Power; and NorthWestern provided SIL studies for the Western Area Power Administration, Upper Great Plains West.

8. We note that the Northwest Transmission owners faced some special challenges in preparing their SIL studies, including the fact that entities that are not public utilities as defined under Part II of the FPA collectively own and control a significant amount of transmission in the Northwest. The transmission grids operated by such entities are, in some cases, embedded within the grids of the Northwest Transmission Owners. In addition, some Northwest Transmission Owners rely extensively on "remote generation resources," i.e., generation capacity (whether owned or purchased) located outside their balancing authority areas, to serve a portion of their native load. Finally, the Northwest region includes some jointly-owned power plants that are directly interconnected to and serve load in several balancing authority areas. These factors complicate the development of SIL values for the Northwest region because such values need to account for transmission rights held by entities that are not public utilities as defined under Part II of the FPA and for the transmission reservations associated with affiliated remote generation resources that in some instances supply power to multiple load-serving entities.

9. To ensure greater efficiency going forward, the Commission adopts a standardized reporting format for SIL study results in Appendix B of this order, which consolidates

⁸ The relevant study period is December 1, 2007 to November 30, 2008.

and clarifies the direction given in Appendix E of the April 14 Order,⁹ Order Nos. 697 and 697-A and recent orders accepting or adopting SIL values.¹⁰

II. <u>Discussion</u>

10. We begin by commending the Northwest Transmission Owners for working together and sharing their SIL values with each other. Such coordination leads to more accurate and consistent SIL study results. The Commission will use the SIL values identified in Appendix A when reviewing the pending updated market power analyses submitted by the Northwest Transmission Owners as well as any updated market power analyses filed by non-transmission owning sellers in the Northwest region for this study period.

11. Future filers submitting screens for the balancing authority areas and study period identified in Appendix A are encouraged to use these Commission-accepted SIL values. In the alternative, a filer may propose different SIL values provided that it's accompanying SIL studies comply with Commission directives and that the filer fully supports the values used and explains why the Commission should consider a different SIL value for a particular balancing authority area other than the Commission-accepted SIL values provided in Appendix A. In the event the results¹¹ for one or more of a particular seller's screens differ if the seller-supplied SIL value is used instead of the Commission-accepted SIL value, the order on that particular filing will examine the seller-supplied SIL study and address whether the seller-supplied SIL value is acceptable. However, when the overall results of the screens would be unchanged, i.e., the seller would pass using either set of SIL values or fail using either set of SIL values, the order

¹⁰ See, e.g., Carolina Power & Light Co., 128 FERC ¶ 61,039 (order on SIL values for the Southeast region), *clarified*, 129 FERC ¶ 61,152 (2009), *AEP Service Corp.*, 131 FERC ¶ 61,146 (2010) (order on SIL values for the SPP region), *Public Service Company of New Mexico*, 133 FERC ¶ 61,031 (order on SIL values for the Southwest region).

¹¹ Results refer to the results of the market share and/or pivotal supplier screens. For example, if a seller fails the market share screen for a particular season in a particular market using either SIL value, we would consider the result unchanged. Similarly, if the seller passes the screen using either value, the result is also unchanged. However, if a seller fails a screen for a particular season in a particular market using the Commissionaccepted SIL value, but passes using the SIL value submitted by the seller, the results differ and the Commission would more closely examine the SIL study submitted as part of the seller's filing to see if the seller's SIL study provides an acceptable SIL value for that season.

⁹ AEP Power Marketing, Inc., 107 FERC ¶ 61,018 (April 14 Order), order on reh'g, 108 FERC ¶ 61,026 (2004).

would be based on the Commission-accepted SIL values found in Appendix A and would not address the seller-supplied SIL values.

12. As noted above, evaluation of the Northwest region involves many study areas for which the Commission has not approved SIL values for this study period. With one exception, the SIL values we accept herein are based on calculations by the Northwest Transmission Owners. The SIL values we accept for the PacifiCorp West balancing authority area were adjusted by the Commission to account for PacifiCorp's long-term firm transmission reservations.¹²

13. The Northwest Transmission Owners generally performed their SIL studies correctly. However, our review of these filings, as well as our review of filings for other regions, leads us to conclude that it is appropriate to provide further direction with respect to the performance and reporting of SIL study results. With respect to the Northwest Transmission Owners, instances of inadequate explanation of the SIL studies and incomplete or unclear reporting of the SIL study results delayed Commission review of these SIL studies. For example, some filers did not identify and report study area net area interchange values used in calculating their SIL values and/or simultaneous incremental import values (i.e., the first contingency incremental transfer capability) calculated as the result of the generation scaling limit. In addition, some transmission owners did not specify the elements that were monitored for overloading and the contingencies used in their studies. As discussed below, the Commission provides further guidance with respect to several issues that arose in our review of the SIL studies prepared by the Northwest Transmission Owners.

A. <u>Treatment of Long-Term Firm Transmission Reservations</u>

14. In some cases, the SIL values reported by the Northwest Transmission Owners did not identify or account for applicant/affiliated long-term firm transmission reservations. Such transmission reservations can be used to import power from applicant/affiliate generation resources located outside the study area, to serve a portion of the study area native load. These generation resources should not be scaled-down along with other

¹² In its updated market power analysis, submitted on June 30, 2010, PacifiCorp adjusted its SIL values for both the PacifiCorp East and PacifiCorp West balancing authority areas to account for affiliated long-term firm transmission reservations. In response to discussions with Commission staff, PacifiCorp submitted an amended SIL study on January 14, 2011, that yielded revised SIL values for the PacifiCorp West balancing authority area. However, PacifiCorp did not submit a revised market power analysis with its January 14, 2011 filing and therefore did not adjust the revised PacifiCorp West SIL values to account for affiliated long-term transmission firm transmission reservations. The Commission has adjusted the PacifiCorp West SIL values to account for the long-term firm transmission reservations identified by PacifiCorp in its June 30, 2010 filing.

study area generation resources. Scaling down these affiliated remote generating resources would misrepresent the transmission import capability available to "hypothetically competing first-tier resources" and thereby overstate the amount of study area native load available to competing first-tier resources. Likewise, these affiliated remote sources should not be scaled up as they do not represent uncommitted, first-tier generating capacity. These remote affiliated generating resources should be modeled at their historical output levels, consistent with prior Commission direction.¹³

15. Long-term firm transmission reservations for applicant/affiliate generation resources that serve study area load reduce the amount of study area transmission capability available to potential competitors. In some cases, these types of transmission reservations were reflected in a transmission owner's horizontal market power study but it was unclear whether the transmission owner's SIL values included or excluded these types of transmission reservations. Through discussions with the Northwest Transmission Owners, Commission staff learned that in such cases the SIL values generally did not account for these reservations and, therefore, were overstated. Failing to account for such reservations is inconsistent with the Commission's methodology for calculating SIL values.¹⁴ Although the Northwest Transmission Owners, where necessary, filed amended SIL values to properly account for long-term firm transmission reservations, to avoid this problem going forward, Appendix B explains that a transmission owner's SIL values should take into account long-term firm transmission reservations into the study area from applicant/affiliate generation resources located outside their study area.

16. The transmission capability associated with these study area import reservations also must be subtracted from the study area's native load to accurately represent the amount of study area native load available to being served by first-tier area generation when the study area native load limits the calculated SIL value. For example, PGE's calculated SIL values exceeded its peak load in each season, so PGE correctly limited its

¹⁴ See April 14 Order, 107 FERC ¶ 61,018 at Appendix E ("The power flow cases should represent...all firm/network reservations held by applicant/affiliate resources during the most recent seasonal peaks."); *Pinnacle West Capital Corp.*, 117 FERC ¶ 61,316 at P 8 ("This import limit represents the transfer capability over and above all firm, network and grandfathered transmission rights associated with the applicant's generating units."); *Public Service Company of New Mexico*, 133 FERC ¶ 61,031 at P 12.

¹³ *Pinnacle West Capital Corp.*, 117 FERC ¶ 61,316, at P 6 (2006) ("…remote generators should be modeled at their historical power output levels and not reduced to zero output nor be scaled down from the unit dispatch assigned in the [Western Electricity Coordinating Council] seasonal base cases. Units having firm/network/grandfathered transmission rights may not be displaced by hypothetically competing first-tier resources for calculating import limits.").

SIL values to peak load.¹⁵ PGE then subtracted its affiliated long-term firm transmission reservations from its seasonal peak load to derive its adjusted or net SIL values, which it used in its updated market power analysis.¹⁶ PGE's calculation appropriately limited its SIL values to the amount of its study area load open to competition from non-affiliated, first-tier generators.

17. A transmission owner's failure to identify and account for such long-term firm transmission reservations in its SIL values leads to potentially conflicting SIL values and screen results among other entities that need to study that balancing authority area. Providing an accurate, properly calculated SIL value, which identifies and properly accounts for long-term firm transmission reservations from applicant/affiliate generation resources located outside its study area, will obviate the need for other parties studying the same balancing authority area to make adjustments to the SIL value.

B. <u>Treatment of Jointly-Owned Facilities</u>

18. As noted above, the Northwest region, much like the Southwest region, has large, jointly-owned power plants that are directly interconnected to and serve load in several balancing authority areas. In the case of jointly-owned power plants, the plant's capacity should be allocated among the generator owners' balancing authority areas according to their ownership percentage.¹⁷ For example, the Colstrip coal-fired power plant is physically located in NorthWestern's balancing authority area. While a portion of Colstrip's capacity is owned by NorthWestern and used to serve load within the NorthWestern balancing authority area, the majority of the Colstrip plant's output is jointly owned by four other entities—Avista, Puget Sound Energy, PacifiCorp, and PGE —all located outside of the NorthWestern balancing authority area. In its SIL study, NorthWestern correctly allocated the Colstrip plant capacity owned by these four transmission owners to their respective balancing authority areas. Allocating jointly-owned generation capacity in this manner is appropriate because it accurately matches generator commitments and ownership to the generator owner's balancing authority area.

C. <u>Treatment of Embedded Load</u>

19. We recognize that additional direction also is needed with respect to the treatment of load within a balancing authority area that is not served by the local transmission owner. Avista, for example, wheels power supplied by BPA to federal customers embedded within Avista's balancing authority area. The federal load embedded within

¹⁶ PGE's September 27, 2010 Filing, Attachment B.

¹⁷ *PPL Montana, LLC,* 112 FERC ¶ 61,237, at P 30-33 (2005); *PPL Montana, LLC,* 115 FERC ¶ 61,204 (2006), *order on reh'g,* 120 FERC ¶ 61,096, at P 46 (2007).

¹⁵ PGE's June 29, 2010 Filing, Attachment A at 9.

Avista's balancing authority area is not part of Avista's native load because BPA, rather than Avista, is responsible for serving this load. In cases such as this, the study area's modeled net area interchange should be adjusted by the amount of the embedded load served by the third party. This same adjustment must be applied to the study area's native load. The objective is to ensure that reported net area interchange is adjusted in tandem with the reported reduction of the study area's native load. This ensures that the calculated SIL values will accurately reflect the transmission *available* to compete for the transmission owner's native load rather than the entire load embedded within the transmission owner's balancing authority area. Appendix B provides further direction on this topic.

D. <u>Guidance and Directions for Submitting SIL Studies</u>

20. As discussed herein, filers should refer to the guidance, directions and required reporting format provided in Appendix B when preparing and submitting SIL studies. Going forward, when filing updated market power analyses that include SIL studies, filers are required to submit their information using the format provided in Appendix B of this order.

21. Appendix B consolidates and clarifies direction given in Commission orders with respect to SIL studies and discusses required submittals. For example, Submittal 1 of Appendix B contains a summary table of components used to calculate SIL values and provides a spreadsheet format with numerical examples. Likewise, Submittal 2 provides a spreadsheet for identification of long-term firm transmission reservations used to import power from seller and affiliate generating resources in a first-tier area to serve native load in the study area.¹⁸ Additionally, Appendix B discusses submittals of reference base case models, seasonal benchmark case models, contingency files, monitor files, sub-system files, study area import capability study results, and documentation of instances where a seller's SIL study differs from its historical practices. Appendix B also discusses generation shift and load shift scaling methodologies.

22. The Office of Management and Budget (OMB) requires that OMB approve certain information collection and data retention requirements imposed by agency rules.¹⁹ The SIL Study requirements are a part of the FERC-919 information collection (OMB Control No. 1902-0234; "Electric Rate Schedule Filings: Market Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities"). In this order, the Commission is making no changes to the data elements. Therefore, the Commission

¹⁸ Submittal 2 is not required when a seller does not have long-term firm transmission reservations to import power from generating resources in the first-tier area to serve native load in the study area.

¹⁹ 5 C.F.R Part 1320 (2011).

is submitting a request for a "non-substantive change" to OMB for review and approval in accordance with Chapter 35 of the Paperwork Reduction Act of 1995.²⁰

E. NorthWestern's Revised SIL Study

23. Last, we will address responsive pleadings concerning the SIL study for the NorthWestern balancing authority area. On August 9, 2010, PPL Companies filed a motion to intervene in the NorthWestern updated market power analysis proceeding. On October 18, 2010, NorthWestern filed revisions to its SIL study. On November 8, 2010, PPL Companies filed a limited protest and requested that the Commission order NorthWestern to file further revisions to its SIL study for the NorthWestern balancing authority area. PPL Companies explain that they may use the SIL values calculated by NorthWestern Corporation in their own market power analysis and therefore wish to ensure that these SIL values provide an accurate representation of the transfer capability available to import power into the NorthWestern balancing authority area. PPL Companies made in the October 18, 2010 revised SIL study but that the SIL study needs further refinement.

24. On November 17, 2010, NorthWestern filed an answer to PPL Companies' November 8, 2010 protest. On November 24, 2010, the PPL Companies filed an answer to NorthWestern's November 17, 2010 answer.

25. On December 22, 2010, staff, acting under delegated authority, issued a data request directing NorthWestern to file a revised SIL study. In particular, staff instructed NorthWestern to revise the generation scaling analysis, provide additional documentation listing all assumptions applied to the seasonal benchmark cases, and to identify the monitored elements and contingencies used to determine the seasonal import capability limits for the NorthWestern balancing authority area. On January 21, 2011, NorthWestern filed a revised SIL study in response to the data request.

26. On February 11, 2011, PPL Companies filed comments expressing support for NorthWestern's January 21, 2011 SIL study, stating that the January 21, 2011 SIL study resolves the concerns expressed by PPL Companies in their protest and concluding that the results are reasonable and correct.

27. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2011), PPL Companies' timely, unopposed motion to intervene makes them a party to the proceeding in Docket Nos. ER03-329-010 and ER07-597-005.

28. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2011), prohibits an answer to a protest and/or answer unless otherwise ordered by the decisional authority. We will accept the answers of PPL Companies and

²⁰ 44 U.S.C. Chapter 35 (2006).

NorthWestern because they have provided information that assisted us in our decisionmaking process.

29. Upon review of the filings concerning the SIL study for the NorthWestern balancing authority area, the Commission finds that NorthWestern's SIL study filed on January 21, 2011 sufficiently responds to the data request and corrects deficiencies in NorthWestern's previously-filed SIL studies. We find that the January 21, 2011 revised SIL study meets the Commission's requirements for a SIL study. Accordingly, we will accept the SIL values submitted by NorthWestern on January 21, 2011.

The Commission orders:

(A) The specific Commission-accepted SIL values identified in Appendix A to this order are hereby accepted for purposes of analyzing updated market power analyses for the Northwest region, as discussed in the body of this order.

(B) The Commission hereby adopts the direction and format provided in Appendix B to this order.

(C) The Secretary is hereby directed to publish a copy of this order in the *Federal Register*.

By the Commission.

(SEAL)

Nathaniel J. Davis, Sr., Deputy Secretary.

Appendix A

Accepted SIL Values (MW) for the Northwest Region

Study Period of December 2007 to November 2008

Abbreviation	Balancing Authority Area	Winter 2007	Spring 2008	Summer 2008	Fall 2008
1 AVA	Avista	1,112	888	510	841
2 BPAT	Bonneville Power Administration	0	0	0	0
3 Chelan	Public Utility District No. 1 of Chelan County	0	0	0	0
4 Grant	Public Utility District No. 2 of Grant County	0	0	0	0
5 IPCO	Idaho Power	1,257	1,254	1,241	1,073
6 NWMT	NorthWestern Energy	1,571	1,391	1,518	1,391
7 PACE	PacifiCorp - East	3,736	4,214	3,959	3,980
8 PACW	PacifiCorp - West	2,553	1,545	1,476	1,084
9 PGE	Portland General Electric	1,608	1,171	1,770	1,174
10 PSCO	Public Service Company of Colorado	1,638	2,003	1,666	2,082
11 PSE	Puget Sound Energy	3,253	2,682	2,185	2,662
12 Seattle	Seattle City Light	1,767	1,411	1,155	1,411
13 SPPC	Sierra Pacific Power	1,035	892	443	918
14 Tacoma	City of Tacoma	841	591	494	591
15 WAUW	Western Area Power Administration - Upper Great Plains West	71	74	80	74

Appendix B

Directions and Required Reporting Format for Simultaneous Transmission Import Limit (SIL) Studies

To calculate aggregated simultaneous transfer capability into a study area, a seller generally submits a SIL study using either a generation shift²¹ or load shift scaling methodology.²² This Appendix B provides background information and discusses the reporting requirements for SIL studies using generation shift and load shift scaling methodologies.

Alternatively, sellers may submit adjusted simultaneous Total Transfer Capability (TTC) values in lieu of SIL studies.²³ This appendix does not address use of simultaneous TTC values.

I. Background Information

A. <u>General Commission Direction</u>

- 1. For general Commission direction, refer to Appendix E of the April 14 Order²⁴ and Order Nos. 697,²⁵ 697-A,²⁶ and 697-B.²⁷
- 2. In Order No. 697, the Commission stated the following.

²¹ See Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities, Order No. 697, FERC Stats. & Regs. ¶ 31,252, at P 354, clarified, 121 FERC ¶ 61,260 (2007) (Order Clarifying Final Rule), order on reh'g, Order No. 697-A, FERC Stats. & Regs. ¶ 31,268, clarified, 124 FERC ¶ 61,055, order on reh'g, Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 (2008), order on reh'g, Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 (2009), order on reh'g, Order No. 697-D, FERC Stats. & Regs. ¶ 31,305 (2010); AEP Power Marketing, Inc., 107 FERC ¶ 61,018, at Appendix E (April 14 Order), order on reh'g, 108 FERC ¶ 61,026 (2004).

²² See Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at P 145; *Carolina Power* & Light Co., 128 FERC ¶ 61,039 (*CP&L*), *clarified*, 129 FERC ¶ 61,152, at P 19 (2009) (*CP&L Clarification Order*).

²³ See Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 364; Order No. 697-A, FERC Stat. & Regs. ¶ 31,268 at P 142.

 24 April 14 Order, 107 FERC \P 61,018 at Appendix E (describing SIL study requirements).

²⁵ Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 346-364.

- The Commission will continue to require sellers to submit the Appendix E a. analysis, i.e., the SIL study, to calculate aggregated simultaneous transfer capability into the balancing authority area being studied. The Commission reaffirms that the SIL study is "intended to provide a reasonable simulation of historical conditions" and is not "a theoretical maximum import capability or best import case scenario." To determine the amount of transfer capability under the SIL study, "historical operating conditions and practices of the applicable transmission provider (e.g., modeling the system in a reliable and economic fashion as it would have been operated in real time) are reflected." In addition, the "analysis should not deviate from" and "must reasonably reflect" it's [Open Access Same-Time Information System (OASIS)] operating practices and "the techniques used must have been historically available to customers." We also reaffirm that the power flow cases (which are used as inputs to the SIL study) should represent the transmission provider's tariff provisions and firm/network reservations held by seller/affiliate resources during the most recent seasonal peaks.²⁸
- b. [A] SIL study must reflect transmission capability no greater than the capability measures that were historically shown on the OASIS or that were historically used to measure transmission capability into markets unless there is a demonstrated change in transmission capability, and account for the actual practice of posting [available transfer capability (ATC)] to OASIS in order to capture a realistic approximation of first-tier generation access to the seller's market....[W]hen actual OASIS practices conflict with the instructions of Appendix E, sellers should follow OASIS practices and must provide adequate support in the form of documentation of these processes.²⁹
- c. With regard to simultaneous transmission import limit studies (SILs), the Commission adopts the requirement that the SIL study be used as a basis for transmission access for both the indicative screens and the DPT analysis. Further, the Commission clarifies that the SIL study as shown in Appendix E of the April 14 Order is the only study that meets our requirements. The Commission provides guidance regarding how to

- ²⁸ Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 354 (footnotes omitted).
- ²⁹ Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 356.

²⁶ Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at P 132-146.

²⁷ Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 at P 4-6, 11-13.

perform the SIL study, including accounting for specific OASIS practices.³⁰

B. Definition of the Regions and Study Periods for Updated Market Power Analyses

For a list of the regions and study periods, see Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at Appendix D, D-1; Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 at Appendix D-2; Errata Notice, 128 FERC ¶ 61,014 (2009).

C. Definition of the Seasons used in a SIL Study

A SIL study covers a study year from December of one year through November of the following year.³¹ The seasons are defined as Winter (December/January/February), Spring (March/April/May), Summer (June/July/August), and Fall (September, October, November).³²

D. Prior Commission Direction on Scaling

- 1. Historical Operating Practices: "[T]he Commission requires the use of a study that captures historical transmission operating practices. The SIL study is not a prediction of import possibilities; rather, it is a simulation of historical conditions. We assume that such historical conditions are the result of 'expert judgment' used when determining generation dispatch and/or scaling techniques to make transmission capacity available during actual system conditions. Accordingly, this expert judgment is captured when conducting an SIL study that is based on historical operating practices."³³
- 2. Simultaneous Incremental Scaling (Generation-Shift methodology): "Each such model run therefore incrementally scales generation, while taking into account each single contingency condition while monitoring relevant transmission elements for overloads."³⁴ And "[g]eneration scaling is a power flow study option that can simultaneously increase in one area and decrease in another area the output of generation to maintain generation balance in the model.

³⁰ Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 19.

 31 Order Clarifying Final Rule, 121 FERC \P 61,260 at P 16; Order No. 697-A, FERC Stats. & Regs. \P 31,268 at P 373.

³² Order Clarifying Final Rule, 121 FERC ¶ 61,260 at P 11; April 14 Order, 107 FERC ¶ 61,018 at P 100 n.85.

³³ Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 360.

³⁴ *CP&L*, 128 FERC ¶ 61,039 at P 8.

Generation scaling in the first-tier area incrementally increases the output of available uncommitted generation. Generation scaling in the study area incrementally decreases the output of on-line generators. A 'single contingency condition' is the unexpected failure of a single system component, such as a generator, transmission line, circuit breaker, switch or other electrical equipment."³⁵

- 3. Remote Resources: Sellers scaling remote generation resources that are brought into the study area to serve native load should follow their historical practices.³⁶
- 4. Load Shift Scaling: "Using the generation shift methodology to produce the Commission-adjusted SIL values does not preclude the use of the alternative load shift scaling methodology. As the Commission noted in Order No. 697-A, '[w]e would allow sellers to use load shift methodology to calculate [SIL] while scaling their load beyond the historical peak load, provided they submit adequate support and justification for the scaling factor used in their load shift methodology and how the resulting SIL number compares had the company used a generation shift methodology.' We believe that using either the load shift or the generation shift methodology should produce similar results."³⁷

II. <u>Reporting Requirements</u>

A. Submittal 1: Summary Table of SIL Components

³⁵ *CP&L*, 128 FERC ¶ 61,039 at P 8 n.7.

³⁶ See Pinnacle West Capital Corp., 117 FERC ¶ 61,316, at P 6-9 (2006).

³⁷ *CP&L Clarification Order*, 129 FERC ¶ 61,152 at P 19 (quoting Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at P 145) (footnote omitted). The Commission noted that:

Sellers using a load-shift scaling methodology may need to scale load in the study area above the historical peak load during the energy transfer portion of the SIL study when the seller is looking for an overload in any of the monitor and contingency file lists of transmission equipment. If the study area is a significant exporter of energy, the load in the study area might need to be scaled above the historical peak value to "absorb" the energy that is usually exported to the first tier, where the load is being scaled down. The seller would still need to limit the SIL values used in the indicative screens and the Delivered Price Test to seasonal, historical peak load values as those peak values "reasonably simulate the historical conditions that were present including....the actual peak demand." *See* April 14 Order, 107 FERC ¶ 61,018 at Appendix E.

Id. P 19 n.12.

- 1.1 Submittal 1 is part of a spreadsheet (Submittals 1 and 2 SIL Calculation.xls) that calculates the SIL values to be used in the market share screens. Obtain a copy of the spreadsheet from the FERC web site and submit an electronic copy of the spreadsheet file with your filing. The file is posted on the market-based rate section of the FERC web site (http://www.ferc.gov/industries/electric/gen-info/mbr.asp) under "Quick Links."
- 1.2 The final SIL values (i.e., row 10 of Table 1) reported in Submittal 1 must be filed as part of a public document.
- 1.3 Below is a representation of Submittal 1. See Endnotes at the end of this Appendix for references in Table 1 (e.g., *Note i, Note ii*).

Required Reporting for Simultaneous Import Limit (SIL) Studies, with Numerical Examples

Submittal 1: Summary Table of the Components Used to Calculate SIL Values

Table 1: SIL Computation

Instructions:

- 1 Delete the text 'XX' in the row 'Study Period' and enter the last two digits of the years in the study period.
- 2 Delete the text 'Name of Home BAA/Market' and enter the name of the study area.
- 3 If you are studying first-tier areas, replace the text 'Name of First-Tier BAA' with the name of the first-tier areas.
- 4 If you are studying more than one first-tier area, copy the relevant columns of Tables 1 and 2 to empty columns on the right of this spreadsheet for each of the first-tier areas studied.
- 5 Do not enter data in the white-background cells as these contain formulas which compute the cell values.
- 6 Note that Row 5 in Table 1 is the sum of the seasonal columns from Table 2.
- 7 Include an electronic copy of this spreadsheet with your filing.
- 8 The SIL values (i.e., row 10 of Table 1) must be filed as part of a public document.
- NOTE: See the footnotes below for further instruction and references to prior Commission direction on the component or calculation in that row.

Study Period: December 1, 20XX to November 30, 20XX

Name of Home BAA/Market Winter Spring Summer Fall Row Description of Component (MW) (MW) (MW)					Winter (MW)		First-Tie Summer (MW)	r BAA Fall (MW)		
1	Incremental transfer capability values (either the First Contingency Incremental Transfer Capability (FCITC), Normal Incremental Transfer Capability (NITC) or equivalent values). <i>Note i</i>	1,700	1,800	1,900	2,000		3,000	3,200	3,400	3,600
2	Modeled Net Area Interchange (NAI) including the sum of long-term firm reservations from Table 2. <i>Note ii</i>	500	600	700	800		200	300	400	500
3	Indicate whether the Study Area NAI is export or import.	Import	Import	Import	Import		Export	Export	Export	Export
4	(row 4 = row 1 +/- row 2). Note iii	2,200	2,400	2,600	2,800		2,800	2,900	3,000	3,100
5	Sum of the long-term firm transmission reservations from Table 2. <i>Note iv</i>	310	150	310	150		230	180	230	180
6	(row 6 = row 4 - row 5). <i>Note v</i>	1,890	2,250	2,290	2,650		2,570	2,720	2,770	2,920
7	Seasonal historical peak load (identify source if not from FERC Form No. 714). <i>Note vi</i>	1,400	1,900	2,500	2,000		1,400	1,900	2,500	2,000
8	Study area adjusted native load. (row 8 = row 7 - row 5). <i>Note vii</i>	1,090	1,750	2,190	1,850		1,170	1,720	2,270	1,820
9	Amount of uncommitted generation modeled in the first-tier area. Note viii	13,580	12,800	14,500	12,800		13,580	12,800	14,500	12,800
10	SIL values (row 10 = the minimum of the values entered in rows 6, 8 and 9 for each season). Use these SIL values in the Market Share Screens. <i>Note ix</i>	1,090	1,750	2,190	1,850		1,170	1,720	2,270	1,820

B. <u>Submittal 2: Identification of Long-Term Firm Transmission Reservations used</u> to Import Power from Generating Resources in the First-Tier Area to Serve

Native Load in the Study Area³⁸

Submittal 2 is part of the same spreadsheet that calculates the SIL values to be used in the market share screens. Submittal 2 identifies and sums the long-term firm reservations from affiliated remote generating resources in the first-tier area. The file (Submittals 1 and 2 SIL Calculation.xls) is posted on the market-based rate section of the FERC web site (http://www.ferc.gov/industries/electric/gen-info/mbr.asp) under "Quick Links."

Below is a representation of Submittal 2.

Submittal 2: Identify Long-Term Firm Transmission Reservations Used to Import Power from Generating Resources in the First-Tier Area to Serve Native Load in the Study Area

Table 2: Long-Term Firm Transmission Reservations

Instructions:

- 1 Enter all megawatt values as non-negative integers in rows 1 through 4.
- 2 Complete the "Description of Remote Resource" column as necessary in each row.
- 3 Insert new rows into the table between Lines 4 and 5 as many times as necessary to create an entry for each remote resource/Purchase Power Agreement you are reporting.
- 4 The total row will automatically sum the remote resources and place the total into Submittal 1.
- 5 Include an electronic copy of this spreadsheet with your filing.

	Name of Home BAA/Market						
		Winter	Spring	Summer	Fall		Winter
	Description of Remote Resource	(MW)	(MW)	(MW)	(MW)	_	(MW)
1	MW Share of Remote Plant #1	100	-	100	-		50
2	MW Share of Remote Plant #2	50	50	50	50		100
3	MW Share of Remote Plant #3	60	-	60	-		-
	Purchased Power Agreement where the						
4	energy is imported into the study area						
	with long-term firm reservations	100	100	100	100		80
	Sum of the long-term firm reservations					1	
5	(enter value in row 5 of Table 1 above)	310	150	310	150		230

Name of First-Tier BAA						
Winter	Spring	Spring Summer				
(MW)	(MW)	(MW)	(MW)			
50	50	50	50			
100	•	100	-			
-	50	-	50			
80	80	80	80			
230	180	230	180			

C. Submittal 3: Reference Base Case Model(s)³⁹

- 3.1 Provide in .RAW file format, the reference base case model(s) used as a starting point for developing seasonal benchmark cases (e.g., regional, OASIS or Eastern Interconnection Reliability Assessment Group (ERAG)).
- 3.2 Identify the source of the reference base case model(s) (e.g., OASIS, ERAG).

D. Submittal 4: Seasonal Benchmark Case Models⁴⁰

³⁸ See generally Public Service Company of New Mexico, 133 FERC ¶ 61,031, at P 12 (2010); Pinnacle West Capital Corp., 117 FERC ¶ 61,316 at P 8; April 14 Order, 107 FERC ¶ 61,018 at Appendix E.

 39 See generally April 14 Order, 107 FERC \P 61,018 at Appendix E.

⁴⁰ See generally April 14 Order, 107 FERC ¶ 61,018 at Appendix E.

- 4.1 Provide documentation listing all historical assumptions applied to each reference base case model necessary to develop each seasonal benchmark case model.
- 4.2 Provide, in .RAW file format, seasonal benchmark case models for each of the following seasons:
 - 4.2.1 Winter (December– February)
 - 4.2.2 Spring (March May)
 - 4.2.3 Summer (June August)
 - 4.2.4 Fall (September November)
- 4.3 A seasonal benchmark case model should simulate historical seasonal conditions that were present during the modeled season including:
 - 4.3.1 Seasonal generation and transmission facility ratings;
 - 4.3.2 Seasonal thermal, voltage, or stability operating limits (collectively, System Operating Limits (SOL)); Interconnection Reliability Operating Limit (IROL);
 - 4.3.3 Facility de-ratings used to maintain reserve margins (Transmission Reliability Margin (TRM), Capacity Benefit Margin (CBM), Generator operating limits (P_{max}, P_{min});
 - 4.3.4 Wind generator output limitations (capacity factors);
 - 4.3.5 Seasonal and long-term firm reservations;⁴¹
 - 4.3.6 Generating unit dispatch historically used;
 - 4.3.7 Any generating units owned by the study area utility that are located in the first-tier area, including the study area utility's portion of jointly-owned units should be modeled, in the seasonal benchmark case model, in the first-tier area and any long-term reservations from these facilities used to serve study area native load shall be included in the study area net area interchange;

⁴¹ See generally Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 368 ("[T]he Commission will require sellers to account for firm and network transmission reservations having a duration of longer than 28 days."); *id.* P 368 n.375 ("The simultaneous import limit study must account for short-term firm transmission rights including point-to-point on-peak/off-peak transmission reservations (firm or network transmission commitments) which have been stacked, or successively arranged, into an aggregated point-to-point transmission reservation longer than 28 days."); Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at P 144 ("[W]e will require applicants to allocate their seasonal and longer transmission reservations to themselves from the calculated SIL, where seasonal reservations are greater than one month and less than 365 consecutive days in duration…"); Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 at P 25.

- 4.3.8 Uncommitted generation that is unavailable for dispatch should be "blocked" from participating in first-tier area export transfers (units off-line for maintenance, mothballed units, uncommitted generating units that are not available for dispatch by the seller, and hydro units limited by drought conditions);
- 4.3.9 Seasonal peak loads (if the seasonal benchmark case models do not use seasonal historical peak load from FERC Form No. 714, please identify the source of your load data and indicate if the load values include losses).

E. <u>Submittal 5: The Contingency File</u>⁴²

Provide, in electronic format, for each seasonal benchmark case model, a listing of each study area's and its first-tier area's transmission and generation contingencies historically used and identified in the seller's ATC methodology and OASIS practices documentation.

F. <u>Submittal 6: The Monitor File</u>⁴³

Provide in electronic format, for each seasonal benchmark case model, a listing of each study area's and first-tier area's transmission and generation elements historically monitored and identified in the seller's ATC methodology and OASIS practices documentation.

G. Submittal 7: The Sub-System File⁴⁴

- 7.1 Provide in electronic format, for each seasonal benchmark case model, a listing of each balancing authority area which makes up each study area and first-tier area, including the acronym, full name, any alternative name(s) (e.g., Central and Southwest Services (CSWS) and American Electric Power-West (AEP-W)).
- 7.2 When Using the Generation Shift Scaling Methodology
- ⁴² See generally April 14 Order, 107 FERC ¶ 61,018 at Appendix E.
- ⁴³ See generally April 14 Order, 107 FERC ¶ 61,018 at Appendix E.
- ⁴⁴ See generally April 14 Order, 107 FERC ¶ 61,018 at Appendix E.

- 7.2.1 Provide a listing of first-tier area generating units and portions of jointly-owned first-tier area generating units to be scaled-up in the first-tier area, including any first-tier area generation or portions of jointly-owned first-tier area generating units physically located within the study area, according to the same methods used historically in assessing available transmission for non-affiliate resources. Do not include off-line generating units that are unavailable for dispatch (units off-line for maintenance, mothballed units, uncommitted generating units that are not available for dispatch by the seller, and hydro units limited by drought conditions).
- 7.2.2 Provide a listing of study area generating units and portions of jointly-owned study area generating units located within the study area that will be scaled-down. Study area generation or portions of jointly-owned study area generating units physically located within the first-tier area shall not be scaled either up or down.⁴⁵
- 7.3 When Using the Load Shift Scaling Methodology⁴⁶
 - 7.3.1 Provide a listing of first-tier area load bus numbers and load amounts (in megawatts (MW)) to be scaled-up in the first-tier area. Do not include loads within the first-tier area which area served by non-first-tier area generation resources.
 - 7.3.2 Provide the scaling factors used in the load shift methodology.
 - 7.3.3 Provide an explanation supporting and justifying the scaling factors used in the load shift methodology.
 - 7.3.4 Provide an explanation for how the resulting SIL value compares had a generation shift methodology been used in determining the study area's seasonal import capability.

H. Submittal 8: Study Area Import Capability Study Results⁴⁷

⁴⁵ See Pinnacle West Capital Corp., 117 FERC ¶ 61,316 at P 6 ("Specifically, these remote generators should be modeled at their historical power output levels and not reduced to zero output nor be scaled down from the unit dispatch assigned in the WECC seasonal base cases. Units having firm/network/grandfathered transmission rights may not be displaced by hypothetically competing first-tier resources for calculating import limits.").

⁴⁶ See generally Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at P 145; *CP&L Clarification Order*, 129 FERC ¶ 61,152 at P 19.

⁴⁷ See generally April 14 Order, 107 FERC ¶ 61,018 at Appendix E.

- 8.1 Provide in electronic format, each seasonal study result, identifying the study area's simultaneous First-Contingency Incremental Transfer Capability (FCITC) limit or equivalent in MW, and the limiting monitored facility and its associated single-contingency facility.
- 8.2 Provide an explanation why any lesser FCITC, Normal Incremental Transfer Capability (NITC) or equivalent limit was ignored. For all seasonal study results where lower FCITC limits were ignored due to the application of an operating guide, provide a description of the operating guide.

I. <u>Submittal 9: Operating Guides</u>⁴⁸

Provide copies of all Operating Guide descriptions that were applied in the Scaling section (Submittal 7).

J. <u>Submittal 10: Sellers with Non-Affiliated Load served by first-tier area</u> <u>generation using the seller's transmission system</u>⁴⁹

- 10.1 Sellers with non-affiliated load served by first-tier area generation using the seller's transmission system will need to ensure that they:
 - 10.1.1 Identify and report the amount of study area non-affiliated load for each seasonal benchmark case;
 - 10.1.2 Do not report any study area non-affiliated load as study area native load;
 - 10.1.3 Do not model or report any first-tier area generation serving nonaffiliated study area load as study area net area interchange;
 - 10.1.4 Provide documentation and any supporting data for the amount of non-affiliated load.

K. Submittal 11: Special Cases

Provide documentation of all instances where your SIL study differs from your historical practices.

⁴⁸ See generally April 14 Order, 107 FERC ¶ 61,018 at Appendix E.

⁴⁹ See Puget Sound Energy, Inc., 135 FERC ¶ 61,254, at P 19 (2011).

Endnotes for Table 1: ^{i ii iii iv v vi vii viii ix}

Enter an integer value for the FCITC or incremental SIL value. A negative FCITC or incremental SIL value may indicate a serious modeling error such as an N-0 or N-1 base case overload and must be addressed or explained.

ⁱⁱ See generally AEP, 131 FERC ¶ 61,146 at P 5 ("The net area interchange is also determined in the seasonal power flow model and represents 'the sum of a study area's scheduled energy transactions' already flowing into and out of the study area at the seasonal peak that is modeled." (citing CP&L, 128 FERC ¶ 61,039 at P 9)).

Enter a non-negative integer value for Net Area Interchange. Different sellers apparently use different nomenclature to represent net imports into a study area. Here, the direction of the interchange, either export from or import into the study area, is explicitly declared in the text in row 3 and the direction is not indicated by the sign of the interchange value. *See generally AEP*, 131 FERC ¶ 61,146 at P 14 ("The Commission previously has given guidance on how to combine the FCITC and net area interchange values in calculating the SIL. However, this guidance was based on the assumption that the industry standard was to report a study area exporting power as a positive value (a positive net area interchange). SPP, however, used the reverse notation, causing some SPP Transmission Owners to subtract net area interchange from the FCITC value when they should have added." (footnote omitted)).

ⁱⁱⁱ See generally AEP, 131 FERC ¶ 61,146 at P 14 ("For a study area whose net area interchange represents net exports from the study area, the SIL value is equal to FCITC minus net exports. Therefore, net exports from a study area reduce the SIL value. Conversely, for a study area whose net area interchange represents net imports into the study area, the SIL value is equal to FCITC plus net imports. Therefore, net imports into a study area increase the SIL value."); *CP&L Clarification Order*, 129 FERC ¶ 61,152 at P 23 n.15.

ⁱ See generally AEP Service Corp., 131 FERC ¶ 61,146, at P 5 (2010) (AEP) ("FCITC is calculated in the power flow model and represents the additional power that can flow into a study area by increasing available uncommitted generation in the first-tier area while simultaneously decreasing generation in the study area.").

^{iv} See generally Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 368 ("[T]he Commission will require sellers to account for firm and network transmission reservations having a duration of longer than 28 days."); *id*. P 368 n.375 ("The simultaneous import limit study must account for short-term firm transmission rights including point-to-point on-peak/off-peak transmission reservations (firm or network transmission commitments) which have been stacked, or successively arranged, into an aggregated point-to-point transmission reservation longer than 28 days."); *id*. P 369 ("[W]e clarify that the seller's firm, network, and grandfathered transmission reservations longer than 28 days, including reservations for designated resources to serve retail load, shall be fully accounted for in the simultaneous import limit study."); Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at P 142 ("[W]e clarify that the use of simultaneous TTC in the SIL study must properly account for all firm transmission reservations, transmission reliability margin, and capacity benefit margin.").

^v See generally Order No. 697-A, FERC Stats. & Regs. ¶ 31,268 at P 144 ("Therefore, we will require applicants to allocate their seasonal and longer transmission reservations to themselves from the calculated SIL, where seasonal reservations are greater than one month and less than 365 consecutive days in duration, as defined in the Commission's EQR Data Dictionary."); Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 at P 6 "[T]he Commission clarifies and reaffirms that it will require applicants to allocate their seasonal and longer transmission reservations to themselves from the calculated simultaneous transmission import limit *only* up to the uncommitted first-tier generation capacity owned, operated or controlled by the seller and its affiliates.").

^{vi} See generally CP&L Clarification Order, 129 FERC ¶ 61,152 at P 26 ("We clarify that seasonal, historical peak load is one limitation on the SIL values reported in the indicative screens and the Delivered Price Test. This SIL value limitation applies to both scaling methodologies when conducting a SIL study (load-shift and generation-shift methodologies)." (footnote omitted)); *id*. P 26 n.16 ("The other two limitations are: (1) when transmission equipment reaches an operating limit during the energy transfer calculation portion of the SIL study (these are 'the real-life physical limitations of first-tier balancing authority areas that impede power flowing from remote first-tier resources into the seller's study area'; and (2) when the available uncommitted generation in the first-tier area is exhausted and no transmission equipment has reached an operating limit

during the scaling process." (citations omitted)).

Here, enter the highest hourly net energy for load value for each season from FERC Form No. 714 or equivalent and identify the source of the data if not FERC Form No. 714. Do not enter the average seasonal peak load value used in the wholesale market share screen because it is not the single, highest hourly load recorded for each season.

^{vii} *Puget Sound Energy, Inc.*, 135 FERC ¶ 61,254, at P 16 (2011) ("The transmission capability associated with these study area import reservations also must be subtracted from the study area's native load to accurately represent the amount of study area native load available to being served by first-tier area generation when the study area native load limits the calculated SIL value. For example, PGE's calculated SIL values exceeded its peak load in each season, so PGE correctly limited its SIL values to peak load. PGE then subtracted its affiliated long-term firm transmission reservations from its seasonal peak load to derive its adjusted or net SIL values, which it used in its updated market power analysis. PGE's calculation appropriately limited its SIL values to the amount of its study area load open to competition from non-affiliated, first-tier generators." (footnotes omitted)).

^{viii} See generally April 14 Order, 107 FERC ¶ 61,018 at Appendix E ("[T]he applicant shall scale up available generation in the exporting (aggregated first tier areas)"); *CP&L Clarification Order*, 129 FERC ¶ 61,152 at P 26 & n.16.

^{ix} See generally Public Service Company of New Mexico, 133 FERC ¶ 61,031 at P 12-13 (accepting SIL values limited by peak load and reduced by amount of transmission reservations allocated to transmission owners' remote resources brought into the study area to serve native load); *AEP*, 131 FERC ¶ 61,146 at P 13 ("Because each of the SPP Transmission Owners was to subtract its own reservations in calculating its final SIL values, this value should account for the largest quantity of transmission reservations into the study area, thus providing a reasonable estimate of remaining import capability to use in the preliminary market power screens."); *CP&L Clarification Order*, 129 FERC ¶ 61,152 at P 26 ("The SIL value reported in the indicative screens and the Delivered Price Test, however, cannot exceed the seasonal historical peak load value.").