

158 FERC ¶ 61,057  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Norman C. Bay, Chairman;  
Cheryl A. LaFleur, and Colette D. Honorable.

Public Service Company of New Mexico	Docket Nos. ER10-2302-006
Tucson Electric Power Company	ER10-2564-006
UNS Electric, Inc.	ER10-2600-006
UniSource Energy Development Company	ER10-2289-006
El Paso Electric Company	ER10-2721-006
Arizona Public Service Company	ER10-2437-003
Public Service Company of Colorado	ER10-1818-012
Northern States Power Company, a Minnesota corporation	ER10-1819-014
Northern States Power Company, a Wisconsin corporation	ER10-1820-017
Southwestern Public Service Company	ER10-1817-013

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

(Issued January 24, 2017)

1. In December 2015 and January 2016, Public Service Company of New Mexico; Tucson Electric Power Company (Tucson Electric), UNS Electric, Inc., and UniSource Energy Development Company; El Paso Electric Company; Arizona Public Service Company (Arizona Public Service); Public Service Company of Colorado, Northern States Power Company, a Minnesota corporation, Northern States Power Company, a Wisconsin corporation and Southwestern Public Service Company (collectively, Transmission Owners) submitted updated market power analyses for the Southwest

region in accordance with the regional reporting schedule.<sup>1</sup> The Transmission Owners included Simultaneous Transmission Import Limit (SIL) values for the December 2013 – November 2014 study period for balancing authority areas in the Southwest region.<sup>2</sup>

2. In this order, the Commission accepts the SIL values identified in Appendix A (Commission-accepted SIL values).<sup>3</sup> 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 the simultaneous transmission import capability into a market or balancing authority area from its aggregated first-tier area. The SIL values accepted herein are based on SIL studies submitted by the Transmission Owners with their updated market power analyses. As discussed below, the Commission-accepted SIL values identified in Appendix A will be used by the Commission to analyze updated market power analyses for the Southwest region. The updated market power analyses for

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<sup>1</sup> See *Refinements to Policies and Procedures for Market-Based Rates for Wholesale Sales of Electric Energy, Capacity and Ancillary Services by Public Utilities*, Order No. 816, FERC Stats. & Regs. ¶ 31,374, at P 353 (2015), *order on reh'g*, Order No. 816-A, FERC Stats. & Regs. ¶ 31,382 (2016). See also *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 PP 882-893, *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), *aff'd sub nom. Montana Consumer Counsel v. FERC*, 659 F.3d 910 (9th Cir. 2011), *cert. denied*, 133 S. Ct. 26 (2012).

<sup>2</sup> We note that Public Service Company of Colorado, Northern States Power Company, a Minnesota corporation, Northern States Power Company, a Wisconsin corporation, and Southwestern Public Service Company are not in the Southwest region and therefore their market power analyses were not due in December 2015, when transmission owners in the Southwest region must file their analyses. However, these utilities submitted an updated market power analysis in January 2016 to help coordinate review of the SILs. Additionally, we note that subsequent to December 2015 and January 2016, some of the Transmission Owners amended their filings to reflect updated and corrected information with respect to the SIL studies and values.

<sup>3</sup> The Commission issued an order accepting SIL values for the Tucson Electric Power Company balancing authority area in *Tucson Electric Power Co.*, 156 FERC ¶ 61,228 (2016).

the Transmission Owners, including any responsive pleadings, will be addressed in separate orders in the relevant dockets.<sup>4</sup>

3. Additionally in this order, the Commission provides further direction and clarification on the performance and reporting of SIL studies.

## **I. Background**

4. In Order No. 697, the Commission adopted a staggered filing approach for filing updated market power analyses. The Commission recognized that the transmission-owning utilities have the information necessary to perform SIL studies and therefore determined that transmission-owning utilities would be required to file their updated market power analyses in advance of other entities in each region.<sup>5</sup>

5. The Transmission Owners provided SIL studies for their respective balancing authority areas and, in most cases, their respective first-tier balancing authority areas, including balancing authority areas that are not operated by public utilities as defined under Part II of the Federal Power Act.<sup>6</sup> Specifically, SIL studies were submitted for the following first-tier balancing authority areas: Salt River Project; Los Angeles Department of Water and Power; Western Area Power Administration-Lower Colorado (WALC); Western Area Power Administration-Colorado Missouri (WACM); and the Imperial Irrigation District (IID). The Transmission Owners coordinated on the preparation of their SIL studies and shared with each other SIL values for their respective balancing authority areas.

## **II. Discussion**

6. We begin by commending the Transmission Owners for coordinating on the preparation of their SIL studies and sharing the SIL values for their respective home balancing authority areas with each other. Such a coordinated approach leads to more accurate and consistent SIL study results. We have selected, from among the SIL values submitted, the Commission-accepted SIL values that we will use in assessing

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<sup>4</sup> We note that other transmission owners in the Southwest region also submitted updated market power analyses. The updated market power analyses for those transmission owners have been or will be addressed in separate orders in the relevant dockets.

<sup>5</sup> Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 889.

<sup>6</sup> 16 U.S.C. § 824 (2012).

transmission import capability for purposes of measuring market power within the Southwest region.

7. The SIL studies prepared by the Transmission Owners generally were done correctly and in a manner consistent with prior Commission direction.<sup>7</sup> However, our review of the SIL studies and acceptance of the SIL values was hindered and delayed because of various modeling issues and incomplete or ambiguous reporting of results. Therefore, we take this opportunity to address some of these issues and offer guidance so that future filers have a better understanding of how the Commission expects such studies to be performed and reported.

8. The contingencies used in SIL studies are vital to determining the limiting element(s) and, subsequently, the final SIL values. Filers should study contingencies that are “historically used and identified in the seller’s [available transfer capability (ATC)] methodology and [Open Access Same-Time Information System (OASIS)] practices documentation.”<sup>8</sup> This requirement applies for both the study area and the first-tier areas. As balancing authorities are already expected to communicate with each other on system conditions, the Commission believes that this is a reasonable and comprehensive approach.

9. Each filer should provide documentation to support that the contingency lists provided are consistent with the balancing authority area’s OASIS practices. The contingency lists used by each filer must be valid, representative of the study area and first-tier OASIS practices, and must solve in powerflow simulations. Valid contingencies take into account the realistic conditions and operating procedures for the filer’s system and the first-tier areas. For example, parallel lines are typically designed and operated such that the loss of one line would not overload the other line(s). If a contingency appears to overload other parallel line(s), the filer must explain this in its contingency results report. Additionally, methods for modeling the transmission system may include breaking elements up into segments. The contingency of such an element should be represented by these segments.

10. Every contingency checked must solve in each powerflow case in which it is used. If a contingency does not solve when run in the powerflow simulation, confirming that it would not cause an overload somewhere within the system is difficult. This potential overload could be a limiting element that would affect the final SIL values.

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<sup>7</sup> See, e.g., *Puget Sound Energy, Inc.*, 135 FERC ¶ 61,254, Appendix B (2011).

<sup>8</sup> *Id.*, Appendix B.

11. The Commission notes that inaccurate normal and emergency line ratings in the powerflow models can result in erroneous calculated SIL values. As such, filers should review the line ratings of their study area and the first-tier areas to ensure that they are accurate. In order to aid in verifying line overloads, filers must submit facility rating documents for themselves and any study area for which they are performing a SIL analysis. Historically accurate line ratings should aid in confirming the validity of line overloads identified in the SIL study.
12. Generating units that are fully committed under long-term power purchase agreements (PPAs) should not be scaled up or down, regardless of where they are operating in the model. Partially committed units should only be scaled above the amount of their commitment. Solar and wind units should not be scaled either up or down. This generation generally is not dispatchable and typically is fully committed under long-term PPAs. If the study assumes that certain solar or wind generation units are dispatchable, historical evidence must be provided. Filers should provide a list of all partially and fully committed generation units in the study area and first-tier areas.
13. As stated in Order No. 697, filers may use historical capacity factors for certain energy-limited resources, such as hydroelectric and wind capacity.<sup>9</sup> The historical data used to perform the sensitivities and determine the capacity factors should be consistent in both the SIL and economic studies submitted by the filer.
14. Changes in SIL values from the previous study period should be explained in the filing. Significant changes that affect the study area should be identified, for example, major generation capacity additions or retirements, the addition of a new high-voltage transmission line or other topology changes, modified line ratings, and changes in operating procedures or study methodology. Clearly explaining and identifying significant changes in the SIL study results that occur between filings will prevent delays in the analysis of filings and reduce the need for Commission staff to request filers to provide additional information. Documentation of any changes should extend back approximately five years from the study period utilized in the filing to show how the study area's topology has evolved over time.
15. The Commission will use the Commission-accepted SIL values identified in Appendix A when reviewing the currently pending updated market power analyses submitted by the Transmission Owners as well as the updated market power analyses filed by the non-transmission owning filers in the Southwest region for this study period. Future filers submitting screens for the areas and study period identified in Appendix A

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<sup>9</sup> Order No. 697, FERC Stats. & Regs. ¶ 31,252 at P 344.

are encouraged to use these Commission-accepted SIL values. In the alternative, such filers may propose different SIL values provided that their SIL studies comply with Commission directives and they explain why the Commission should consider a different SIL value for a particular balancing authority area rather than the Commission-accepted SIL values provided in Appendix A. In the event that the results<sup>10</sup> 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 would be based on the Commission-accepted SIL values found in Appendix A and would not address the seller-supplied SIL values.

The Commission orders:

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

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

By the Commission.

( S E A L )

Nathaniel J. Davis, Sr.,  
Deputy Secretary.

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<sup>10</sup> 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.

<b>Appendix A</b>						
<b>Accepted SIL Values (MW) for the Southwest Region</b>						
Study Period of December 2013 to November 2014						
			<b>Winter</b>	<b>Spring</b>	<b>Summer</b>	<b>Fall</b>
	<b>Abbreviation</b>	<b>Study Area</b>	<b>2013</b>	<b>2014</b>	<b>2014</b>	<b>2014</b>
1	APS	Arizona Public Service Company	41	1,046	1,160	1,409
2	EPE	El Paso Electric Company	48	55	149	139
3	IID	Imperial Irrigation District	196	429	0	0
4	LADWP	Los Angeles Department of Water and Power	0	0	0	0
5	PNM	Public Service Company of New Mexico	1,203	1,069	1,362	1,285
6	PSCO	Public Service Company of Colorado	1,965	1,549	1,318	1,473
7	SRP	Salt River Project	530	1,746	800	722
8	WACM	Western Area Power Administration - Colorado Missouri	0	0	0	0
9	WALC	Western Area Power Administration - Lower Colorado	0	0	246	188