



June 26, 2018

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street N.E.
Washington, DC 20426

via eFiling

Re: *NorthWestern Corporation*, Docket No. ER11-1858-007
Triennial Market Power Analysis | Southwest Power Pool Region

Dear Secretary Bose:

Pursuant to section 205 of the Federal Power Act,¹ 18 C.F.R. § 35.37, and Order Nos. 697² and 816³, NorthWestern Corporation d/b/a NorthWestern Energy hereby submits for filing its triennial market power analysis of the Southwest Power Pool (SPP) Region in support of its continued authorization to sell energy, capacity, and ancillary services under its market-based rate tariff.

The enclosed analysis demonstrates that NorthWestern Energy lacks horizontal generation market power in the SPP Region. NorthWestern Energy lacks vertical transmission market power, cannot erect any other barriers to entry, and has in place adequate protections to guard against affiliate abuse or reciprocal dealing. Accordingly, NorthWestern Energy respectfully requests that the Commission approve this triennial market power analysis.

I. Overview

NorthWestern Energy is a public utility engaged in the generation, transmission, and distribution of electricity and the supply and transportation of natural gas. Its facilities are located primarily in Montana and South Dakota. In South Dakota, NorthWestern Energy is a transmission-owing

¹ 16 U.S.C. § 824d.

² *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) (Clarifying Order), *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. Mont. Consumer Counsel v. FERC*, 659 F.3d 910 (9th Cir. 2011), *cert. denied*, 133 S. Ct. 26 (2012)).

³ *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 (2015) (Final Rule), *order on reh'g*, Order No. 816-A, 155 FERC ¶ 61,188 (2016).



member of the Southwest Power Pool, Inc. (SPP) and has transferred functional control of a large portion of its electric transmission facilities there to SPP. As a member of SPP, NorthWestern Energy participates in the regional day-ahead and real-time energy and ancillary services markets administered by SPP, known as the SPP Integrated Marketplace. In Montana, NorthWestern Energy is a transmission owner/operator and balancing authority area operator within the Western Electricity Coordinating Council. NorthWestern Energy's Montana and South Dakota transmission facilities are not physically connected and are not in the same geographic region.

The Commission authorized The Montana Power Company to sell power at market-based rates in Docket No. ER97-449-001.⁴ NorthWestern Energy subsequently purchased Montana Power's jurisdictional assets and succeeded to all of Montana Power's rate schedules, service agreements, and tariffs, including its market-based rate tariff.⁵ NorthWestern Energy is a Category 2 seller in the Southwest Power Pool region⁶ and the Northwest region.

NorthWestern Energy's South Dakota electric transmission facilities are located within the SPP balancing authority area. NorthWestern Energy owns 230 MW of generating capacity (summer rating) and has 60 MW of long-term firm power purchases in SPP. NorthWestern also owns 210 MW of generating capacity in MISO. NorthWestern Energy is party to grandfathered agreements⁷ under which the generation located in MISO is committed to serve NorthWestern Energy's load in SPP.

II. Updated Market Power Analysis

In accordance with the schedule adopted for filing updated market power analyses by transmission-owning utilities in the SPP Region,⁸ the enclosed market power analysis evaluates

⁴ *MP Energy, Inc.*, 78 FERC ¶ 61,005 (1997).

⁵ See *NorthWestern Energy, LLC*, Docket No. ER02-1784-000 (July 8, 2002) (delegated letter order) (accepting Notice of Succession of NorthWestern Energy, LLC to rate schedules of Montana Power); *NorthWestern Energy*, Docket No. ER03-329-000 (Feb. 13, 2003) (delegated letter order) (accepting Notice of Succession of NorthWestern Energy to rate schedules of NorthWestern Energy, LLC).

⁶ NorthWestern Energy was designated as a Category 2 seller in the SPP region effective October 1, 2015. *NorthWestern Corp.*, ER16-378-000 (Dec. 21, 2015) (delegated letter order).

⁷ Big Stone Plant Transmission Facilities Agreement, Rate Schedule 39-SD; Coyote 1 Station Transmission Facilities Agreement, Rate Schedule 40-SD; Transmission Facilities and Operating Agreement George Neal Generating Unit No. 4, Interstate Power Company, Rate Schedule FERC No. 142.

⁸ NorthWestern Energy's previous market power analysis for its South Dakota operations was for the Central region. *NorthWestern Corp.*, Docket No. ER11-1858-004 (Feb. 19, 2016) (delegated letter order). Effective September 18, 2016, NorthWestern Energy is no longer a Category 2 seller in the Central region. *NorthWestern Corp.*, ER16-2231-000 (Oct. 14, 2016) (delegated letter order).



the potential for NorthWestern Energy to exercise market power within the SPP Region based on a 12-month study period ending November 30, 2016.

As shown below, NorthWestern Energy satisfies the horizontal market power screens, does not have vertical market power, and continues to satisfy the Commission's requirements for maintaining market-based rate authorization. As required by Order No. 697 and 18 C.F.R. § 35.37, the attached affidavit and accompanying exhibits of Ms. Julie R. Solomon provide an analysis of NorthWestern Energy's horizontal and vertical market power in the relevant geographic market, SPP.

A. Horizontal Market Power

Julie R. Solomon, an experienced utility consultant with Navigant Consulting, Inc., has prepared a pivotal supplier analysis and a market share analysis of NorthWestern Energy based on data for the 12-month period ending November 30, 2016. These analyses are contained in the attached Affidavit of Julie R. Solomon and in the accompanying exhibits, including the Pivotal Supplier Analysis and Market Share Analysis in the standard screen formats prescribed in Order Nos. 697 and 816. As shown by Ms. Solomon, NorthWestern Energy passes each of these screens for each of the relevant geographic markets. Accordingly, pursuant to 18 C.F.R. § 35.37(c)(1), a rebuttable presumption exists that NorthWestern Energy lacks horizontal market power within markets in the SPP Region.

B. Vertical Market Power

1. Transmission

On October 1, 2015, NorthWestern Energy transferred functional control of its South Dakota electric transmission facilities to SPP.⁹ Transmission service over these transmission facilities is now provided by SPP under the SPP Open Access Transmission Tariff (OATT). NorthWestern maintains a Commission-approved OATT for its South Dakota operations; however, NorthWestern no longer has any customers taking transmission service under the South Dakota OATT. In addition, NorthWestern Energy maintains a separate Commission-approved OATT for its Montana operations (Northwest Region). NorthWestern Energy therefore satisfies the obligation to mitigate transmission market power.¹⁰

⁹ *NorthWestern Corp.*, 157 FERC ¶ 61,008 (2016) (letter order approving offer of settlement); 152 FERC ¶ 61,250 (2015) (accepting NorthWestern's proposed formula rate template and implementation protocols to be included in the Southwest Power Pool OATT, effective Oct. 1, 2015, subject to refund).

¹⁰ Order No. 697 at P 408.



2. Barriers to Entry

There is a rebuttable presumption that sellers cannot erect barriers to entry of potential competitors into wholesale electricity markets by virtue of ownership or control of, or affiliation with any entity that owns or controls, intrastate natural gas transportation, intrastate natural gas storage, or distribution facilities; sites for generation capacity development; or sources of coal supplies and transportation of coal supplies such as barges and rail cars.¹¹ Nevertheless, sellers with market-based rate authority are required to provide certain information with respect to these inputs into electric power production.¹²

a) Intrastate Natural Gas Transportation, Intrastate Natural Gas Storage, or Distribution Facilities¹³

In the SPP Region, NorthWestern Energy owns one intrastate natural gas transportation facility subject to the Commission's jurisdiction.¹⁴ NorthWestern Energy owns approximately 2,400 miles of distribution gas mains in South Dakota and Nebraska. NorthWestern Energy does not own any natural gas storage facilities in the SPP Region. Therefore, NorthWestern Energy lacks the ability to preclude potential competitors in wholesale electricity markets from having access to natural gas supplies for generation of electricity.

In Montana, NorthWestern Energy owns and operates approximately 2,100 miles of intrastate transmission pipeline,¹⁵ 4,800 miles of underground distribution pipeline, and three working natural gas storage fields with aggregate working gas capacity of approximately 17.75 billion cubic feet and gas deliverability of 185 million cubic feet per day. In addition, NorthWestern Energy owns and operates two transmission pipelines through its subsidiaries, Canadian–Montana Pipe Line Corporation and Havre Pipeline Company, LLC.

NorthWestern Energy does not own any other intrastate natural gas transportation facilities or natural gas storage facilities anywhere in the United States. Therefore, NorthWestern Energy lacks the ability to preclude potential competitors in wholesale electricity markets from having access to natural gas supplies for generation of electricity.

¹¹ See Order No. 697 at P 446.

¹² The Commission eliminated the requirement to provide information regarding sites for generation capacity development to demonstrate a lack of vertical market power. Order No. 816 at P 212.

¹³ 18 C.F.R. § 35.37(e)(1).

¹⁴ The Commission accepted NorthWestern's application for a blanket certificate to operate the Milbank Pipeline in Docket No. CP11-76-000. *NorthWestern Corp.*, 134 FERC ¶ 62,299 (2011).

¹⁵ The Commission accepted The Montana Power Company's application for a blanket certificate in Docket No. CP91-312-000. *Montana Power Co.*, 53 FERC ¶ 62,237 (1990).



b) Coal Supplies¹⁶

NorthWestern Energy does not own or control physical coal supply sources or control who may have access to transportation of coal supplies. For South Dakota, NorthWestern Energy is a party to two coal supply agreements under which the co-owners of the Big Stone Plant and Coyote 1 Generating Station purchase coal to supply those generating facilities. For Montana, NorthWestern Energy is a party to a coal supply agreement under which the co-owners of the Colstrip generating facility purchase coal to supply that facility.

c) Commitment regarding Barriers to Entry¹⁷

NorthWestern Energy and its affiliates have not erected barriers to entry into markets in the SPP Region and will not erect barriers to entry into the SPP market.

C. Change in Status

The market power analyses prepared by Ms. Solomon are based on a 12-month study period ending November 30, 2016. In addition to submitting a notice of change in status as required by 18 C.F.R. § 35.42, a seller should explain in its triennial any change in its generation fleet since the close of the relevant study period.¹⁸

On March 16, 2018, NorthWestern Energy submitted an Application for Authorization of Transaction Under Section 203 of the Federal Power Act regarding NorthWestern Energy's purchase of 100 percent of the membership interests in Two Dot Wind Farm, LLC from NJR Clean Energy Ventures II Corporation. Two Dot owned a 9.72-megawatt wind facility near Two Dot, Montana, in the Northwest Region. The Commission authorized the acquisition on May 18, 2018,¹⁹ and the transaction was completed on June 1, 2018.²⁰

There have been no other changes in NorthWestern Energy's generation fleet since the close of the relevant study period.

¹⁶ 18 C.F.R. § 35.37(e)(2).

¹⁷ 18 C.F.R. § 35.37(e)(3).

¹⁸ Oder No. 816 at P 292.

¹⁹ *NorthWestern Corp.*, 163 FERC ¶ 62,015 (2018).

²⁰ This transaction did not trigger the change-in-status reporting requirement outlined in 18 C.F.R. § 35.42(a).



III. Market-Based Rate Power Sales Tariff

Sellers with market-based rate authority must have an updated market-based rate tariff that is compliant with Order No. 714²¹ and includes the required provisions in compliance with Order No. 697. NorthWestern Energy filed the revisions to its market-based rate tariffs that were prescribed in Order No. 697 on December 31, 2007, and these tariff revisions were accepted by the Commission.²² NorthWestern Energy submitted its baseline eTariff filings on September 29, 2010, in Docket No. ER10-3171-000. Accordingly, NorthWestern Energy is in full compliance with this requirement.

IV. Request for Protection of Information from Public Disclosure

The Affidavit of Julie R. Solomon is accompanied by workpapers that include sensitive commercial information that is not publicly available. Pursuant to 18 C.F.R. §§ 35.37(f) and 388.112, NorthWestern Energy respectfully requests privileged treatment for these workpapers. These workpapers have been labeled is marked "CUI // PRIV — DO NOT RELEASE" and are being eFiled separately with a security level of "Privileged." A public version of the indicative screens and workpapers is also being submitted.

V. General Information

A. Contents of Filing

This compliance filing includes the following documents:

- 1) This transmittal letter;
- 2) Asset Appendix required by 18 C.F.R. § 35.37(a)(2), in workable electronic spreadsheet form;
- 3) Affidavit of Julie R. Solomon with exhibits JRS-1 through JRS-4, including the Pivotal Supplier Analysis and Market Share Analysis; and
- 4) Workpapers of Julie R. Solomon, in workable electronic spreadsheet form (public version and confidential version).

²¹ *Electronic Tariff Filings*, 124 FERC ¶ 61,270 (2008).

²² *NorthWestern Corp.*, Docket No. ER03-329-000 (Feb. 14, 2008) (delegated letter order).



B. Communications

Communications concerning this filing should be directed to the following representatives:

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VI. Conclusion

Based on the foregoing facts and the attached market power analysis, NorthWestern Energy respectfully requests that the Commission issue an order accepting its updated market power analysis as satisfying the Commission’s requirements for continued market-based rate authorization.

Respectfully submitted,

s/ M. Andrew McLain

M. Andrew McLain

Director – Transmission Market Strategy & FERC Compliance Officer

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○ (406) 443-8987

Enclosures

cc: Service List



Certificate of Service

I hereby certify that I have this day served the foregoing document upon each person designated on the official service list compiled by the Secretary in this proceeding, in accordance with Rule 2010 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.2010.

Dated this 26th day of June, 2018.

s/ Dori L. Quam

Dori Quam

Lead – Transmission Regulatory Support

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NorthWestern Corporation

Asset Appendix

ER11-1858-007

Generation Assets
Long-Term Firm Power Purchase Agreements
Transmission & Natural Gas Assets
End Notes

Triennial Market Power Analysis | SPP Region

Submitted June 26, 2018

Asset Appendix: Generation Assets

[A]	[B]	[C]	[D]	[E]	[F]	[G] [H] Location		[I]	[J]	[K]	[L]	[M]
Filing Entity and its Energy Affiliates	Docket # where MBR authority was granted	Generation Name (Plant or Unit Name)	Owned By	Controlled By	Date Control Transferred	Market / Balancing Authority Area	Geographic Region	In-Service Date	Capacity Rating: Nameplate (MW)	Capacity Rating: Used in Filing (MW)	Capacity Rating: Methodology Used in [K]: (N)ameplate, (S)easonal, 5-yr (U)nit, 5-yr (E)IA, (A)lternative	End Note Number (Enter text in End Note Sheet)
NorthWestern Corporation	ER03-329-000	Black Eagle Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1926	21	19	U	1
NorthWestern Corporation	ER03-329-000	Cochrane Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1958	69	35	U	1
NorthWestern Corporation	ER03-329-000	Colstrip Unit 4	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	04/01/86	740	740	S	1, 2
NorthWestern Corporation	ER03-329-000	Dave Gates Generating Station at Mill Creek	NorthWestern Corporation	NorthWestern Corporation	01/01/11	NWMT	Northwest	01/01/11	150	150	N	1
NorthWestern Corporation	ER03-329-000	Hauser Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1911	19	19	U	1
NorthWestern Corporation	ER03-329-000	Holter Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1918	48	42	U	1
NorthWestern Corporation	ER03-329-000	Madison Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1906	8	8	U	1
NorthWestern Corporation	ER03-329-000	Morony Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1930	48	30	U	1
NorthWestern Corporation	ER03-329-000	Mystic Lake Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1925	12	8	U	1
NorthWestern Corporation	ER03-329-000	Rainbow Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1910	60	41	U	1
NorthWestern Corporation	ER03-329-000	Ryan Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1915	63	48	U	1
NorthWestern Corporation	ER03-329-000	Spion Kop Wind Facility	NorthWestern Corporation	NorthWestern Corporation	11/15/12	NWMT	Northwest	12/01/12	40	11	E	1
NorthWestern Corporation	ER03-329-000	Thompson Falls Dam	NorthWestern Corporation	NorthWestern Corporation	11/18/14	NWMT	Northwest	1915	94	64	U	1
NorthWestern Corporation	ER03-329-000	Two Dot Wind	NorthWestern Corporation	NorthWestern Corporation	06/01/18	NWMT	Northwest	6/30/2014	9.7	N/A	N/A	1
NorthWestern Corporation	ER03-329-000	Aberdeen Unit #1 (3338)	NorthWestern Corporation	NorthWestern Corporation	1978	SPP	SPP	01/1978	28.8	Summer 20.5 Winter 28.0	S	1
NorthWestern Corporation	ER03-329-000	Aberdeen Unit #2 (3338)	NorthWestern Corporation	NorthWestern Corporation	05/2013	SPP	SPP	04/2013	82.2	Summer 52.0 Winter 60.0	S	1
NorthWestern Corporation	ER03-329-000	Beethoven Wind (59187)	NorthWestern Corporation	NorthWestern Corporation	09/25/15	SPP	SPP	05/28/15	80	80	S	1
NorthWestern Corporation	ER03-329-000	Clark (3341)	NorthWestern Corporation	NorthWestern Corporation	1970	SPP	SPP	01/1970	2.7	Summer 2.6 Winter 2.7	S	1
NorthWestern Corporation	ER03-329-000	Faulton (3342)	NorthWestern Corporation	NorthWestern Corporation	1969	SPP	SPP	01/1969	2.7	2.5	S	1

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(Also filed in Excel format)

Filing Entity and its Energy Affiliates	Docket # where MBR authority was granted	Generation Name (Plant or Unit Name)	Owned By	Controlled By	Date Control Transferred	Market / Balancing Authority Area	Geographic Region	In-Service Date	Capacity Rating: Nameplate (MW)	Capacity Rating: Used in Filing (MW)	Capacity Rating: Methodology Used in [K]: (N)ameplate, (S)easonal, 5-yr (U)nit, 5-yr (E)IA, (A)lternative	End Note Number (Enter text in End Note Sheet)
NorthWestern Corporation	ER03-329-000	Huron Unit 1 (3344)	NorthWestern Corporation	NorthWestern Corporation	1961	SPP	SPP	01/1961	15	Summer 11.0 Winter 14.5	S	1
NorthWestern Corporation	ER03-329-000	Huron Unit 2 (3344)	NorthWestern Corporation	NorthWestern Corporation	1992	SPP	SPP	01/1991	42.9	Summer 43.7 Winter 49.0	S	1
NorthWestern Corporation	ER03-329-000	Mobile Unit 2 (3346)	NorthWestern Corporation	NorthWestern Corporation	1991	SPP	SPP	01/1991	1.7	1.8	S	1
NorthWestern Corporation	ER03-329-000	Mobile Unit 3 (3346)	NorthWestern Corporation	NorthWestern Corporation	2009	SPP	SPP	01/2009	2.0	2.0	S	1
NorthWestern Corporation	ER03-329-000	Yankton Unit 1 (8034)	NorthWestern Corporation	NorthWestern Corporation	1974	SPP	SPP	01/1974	2.2	2.2	S	1
NorthWestern Corporation	ER03-329-000	Yankton Unit 2 (8034)	NorthWestern Corporation	NorthWestern Corporation	1974	SPP	SPP	01/1974	2.7	2.8	S	1
NorthWestern Corporation	ER03-329-000	Yankton Unit 3 (8034)	NorthWestern Corporation	NorthWestern Corporation	1975	SPP	SPP	01/1975	6.5	6.5	S	1
NorthWestern Corporation	ER03-329-000	Yankton Unit 4 (8034)	NorthWestern Corporation	NorthWestern Corporation	1963	SPP	SPP	01/1963	2.0	2.0	S	1
NorthWestern Corporation	ER03-329-000	Big Stone Plant (6098)	NorthWestern Corporation	Otter Tail Power Company	01/07/70	MISO	Central	05/1975	451	474.6	S	1, 3
NorthWestern Corporation	ER03-329-000	Coyote Station (8222)	NorthWestern Corporation	Otter Tail Power Company	07/01/77	MISO	Central	05/1981	450	429	S	1, 4
NorthWestern Corporation	ER03-329-000	George Neal South (Neal Unit 4) (7343)	NorthWestern Corporation	MidAmerican Energy Company	06/26/74	MISO	Central	07/1979	695.9	644	S	1, 5

Asset Appendix: Long-Term Firm Power Purchase Agreements (PPA)

[A]	[B]	[C]	[D] [E] [F] Location			[G]	[H]	[I]	[J]
Filing Entity and its Energy Affiliates	Seller Name	Amount of PPA (MW)	Market / Balancing Authority Area (Source)	Market / Balancing Authority Area (Sink)	Geographic Region (Sink)	Start Date (mo/da/yr)	End Date (mo/da/yr)	Type of PPA (Unit or System)	End Note Number (Enter text in End Notes Sheet)
NorthWestern Corporation	Avangrid Renewables, LLC	50	MIDC	MIDC	Northwest	01/01/16	12/31/16	System	
NorthWestern Corporation	Avangrid Renewables, LLC	25	MIDC	MIDC	Northwest	01/01/17	12/31/17	System	
NorthWestern Corporation	Avangrid Renewables, LLC	25	MIDC	MIDC	Northwest	01/01/16	12/31/16	System	
NorthWestern Corporation	Basin Creek Equity Partners LLC	51.8	NWMT	NWMT	Northwest	02/23/04	12/31/24	Unit	6
NorthWestern Corporation	Citigroup Energy Inc	25	MIDC	MIDC	Northwest	07/01/10	06/30/20	System	
NorthWestern Corporation	Invenergy, LLC	135	NWMT	NWMT	Northwest	12/29/04	12/31/26	Unit	7
NorthWestern Corporation	Morgan Stanley Capital Group Inc	25	NWMT	NWMT	Northwest	07/01/12	06/30/17	System	
NorthWestern Corporation	Morgan Stanley Capital Group Inc	25	MIDC	MIDC	Northwest	07/01/13	06/30/17	System	
NorthWestern Corporation	Morgan Stanley Capital Group Inc	25	MIDC	MIDC	Northwest	03/01/15	06/30/17	System	
NorthWestern Corporation	River Bend Solar, LLC	2	NWMT	NWMT	Northwest	03/29/17	04/01/42	Unit	8
NorthWestern Corporation	Talen Energy Marketing, LLC	25	NWMT	NWMT	Northwest	07/01/10	06/30/17	System	
NorthWestern Corporation	Tiber Montana, LLC	7	NWMT	NWMT	Northwest	01/01/10	12/31/25	Unit	9
NorthWestern Corporation	TransAlta Energy Marketing (US), Inc	25	MIDC	MIDC	Northwest	01/01/16	12/31/16	System	
NorthWestern Corporation	TransAlta Energy Marketing (US), Inc	25	MIDC	MIDC	Northwest	01/01/17	12/31/17	System	
NorthWestern Corporation	TransAlta Energy Marketing (US), Inc	25	MIDC	MIDC	Northwest	01/01/16	12/31/16	System	
NorthWestern Corporation	TransAlta Energy Marketing (US), Inc	25	MIDC	MIDC	Northwest	01/01/17	12/31/17	System	
NorthWestern Corporation	TransAlta Energy Marketing (US), Inc	25	NWMT	NWMT	Northwest	07/01/12	06/30/17	System	
NorthWestern Corporation	Turnbull Hydro	13	NWMT	NWMT	Northwest	11/10/09	12/31/32	Unit	10
NorthWestern Corporation	Missouri River Energy Services	30 30 35	SPP	SPP	SPP	01/01/2016 01/01/2017 01/01/2018	12/31/2016 12/31/2017 12/31/2018	Unit	11
NorthWestern Corporation	Rolling Thunder I Power Partners, LLC	25	SPP	SPP	SPP	12/09/08	12/31/29	Unit	12

Asset Appendix: Transmission Assets / Natural Gas Assets

Electric Transmission Assets and/or Natural Gas Intrastate Pipelines and/or Gas Storage Facilities

[A]	[B]	[C]	[D]	[E]	[F]	[G] [H]		[I]	[J]
Filing Entity and its Energy Affiliates	Cite to order accepting OATT or order approving the transfer of transmission facilities to an RTO or ISO	Asset Name and Use	Owned By	Controlled By	Date Control Transferred	Location		Size	End Note Number (Enter text in End Notes Sheet)
						Market / Balancing Authority Area	Geographic Region	Size: (e.g., length and kV for electric, length and diameter for pipelines, and capacity for gas storage)	
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Montana 50-kV Lines	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	816 miles, 50 kV	13
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Montana 69-kV Lines	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	1,301 miles, 69 kV	13
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Montana 100-kV Lines	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	1,780 miles, 100 kV	13
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Montana 115-kV Lines	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	338 miles, 115 kV	13
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Montana 161-kV Lines	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	1,184 miles, 161 kV	13
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Montana 230-kV Lines	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	963 miles, 230 kV	13
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Colstrip Project 500kV Transmission Line - Colstrip to Broadview	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	229 miles, 500 kV - Colstrip to Broadview	13, 14
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of The Montana Power Company effective July 9, 1996).	Colstrip Project 500kV Transmission Line - Broadview to Townsend	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	266 miles, 500 kV - Broadview to Townsend	13, 15

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(Also filed in Excel format)

Filing Entity and its Energy Affiliates	Cite to order accepting OATT or order approving the transfer of transmission facilities to an RTO or ISO	Asset Name and Use	Owned By	Controlled By	Date Control Transferred	Market / Balancing Authority Area	Geographic Region	Size: (e.g., length and kV for electric, length and diameter for pipelines, and capacity for gas storage)	End Note Number (Enter text in End Notes Sheet)
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of Northwestern Public Service Company).	South Dakota 34.5-kV Lines	NorthWestern Corporation	NorthWestern Corporation	various	SPP	SPP	595 miles, 34.5 kV	16
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of Northwestern Public Service Company).	South Dakota Non-SPP 69-kV Lines	NorthWestern Corporation	NorthWestern Corporation	various	SPP	SPP	162.26 miles, 69 kV	16
NorthWestern Corporation	152 FERC ¶61,250 (2015) (accepting NorthWestern's proposed formula rate template and implementation protocols to be included in the Southwest Power Pool OATT, effective Oct. 1, 2015, subject to refund).	South Dakota SPP 69-kV Lines	NorthWestern Corporation	Southwest Power Pool, Inc.	10/01/15	SPP	SPP	97.74 miles, 69 kV	
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of Northwestern Public Service Company).	South Dakota Non-SPP 115-kV Lines	NorthWestern Corporation	NorthWestern Corporation	various	SPP	SPP	5.2 miles, 115 kV	16
NorthWestern Corporation	152 FERC ¶61,250 (2015) (accepting NorthWestern's proposed formula rate template and implementation protocols to be included in the Southwest Power Pool OATT, effective Oct. 1, 2015, subject to refund).	South Dakota SPP 115-kV Lines	NorthWestern Corporation	Southwest Power Pool, Inc.	10/01/15	SPP	SPP	343.8 miles, 115 kV	
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of Northwestern Public Service Company).	Big Stone Plant Transmission Facilities	NorthWestern Corporation	Otter Tail Power Company	04/03/72	MISO	Central	18.17 miles, 230 kV	16, 17
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of Northwestern Public Service Company).	Coyote 1 Station Transmission Facilities	NorthWestern Corporation	Montana-Dakota Utilities Co.	11/30/78	MISO	Central	23.1 miles, 345 kV	16, 18
NorthWestern Corporation	80 FERC ¶61,143 (1997) (accepting Order No. 888 compliance tariff of Northwestern Public Service Company).	Neal 4 Transmission	NorthWestern Corporation	MidAmerican Energy Company	05/13/77	MISO	Central	2 miles, 345 kV	16, 19
NorthWestern Corporation	N/A	Montana gas distribution pipelines, less than 2"	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	3,477 miles, less than 2"	
NorthWestern Corporation	N/A	Montana gas distribution pipelines, 2" to 4"	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	874 miles, 2" to 4"	
NorthWestern Corporation	N/A	Montana gas distribution pipelines, 4" to 8"	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	382 miles, 4" to 8"	
NorthWestern Corporation	N/A	Montana gas distribution pipelines, 8" to 12"	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	32 miles, 8" to 12"	

NorthWestern Corporation
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(Also filed in Excel format)

Filing Entity and its Energy Affiliates	Cite to order accepting OATT or order approving the transfer of transmission facilities to an RTO or ISO	Asset Name and Use	Owned By	Controlled By	Date Control Transferred	Market / Balancing Authority Area	Geographic Region	Size: (e.g., length and kV for electric, length and diameter for pipelines, and capacity for gas storage)	End Note Number (Enter text in End Notes Sheet)
NorthWestern Corporation	N/A	Montana gas distribution pipelines, over 12"	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	2 miles, greater than 12"	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, less than 4" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	302 miles, NPS 4" or less	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, 6" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	346 miles, NPS 6"	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, 8" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	317 miles, NPS 8"	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, 10" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	346 miles, NPS 10"	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, 12" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	382 miles, NPS 12"	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, 16" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	381 miles, NPS 16"	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, 20" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	20 miles, NPS 20"	
NorthWestern Corporation	N/A	Montana gas transmission pipelines and interconnection facilities, 24" NPS	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	2 miles, NPS 24"	
NorthWestern Corporation	N/A	Three natural gas storage facilities	NorthWestern Corporation	NorthWestern Corporation	11/15/02	NWMT	Northwest	Aggregate working gas capacity ≈ 17.75 BCF. Gas deliverability ≈ 185 MMCFD.	
NorthWestern Corporation	N/A	SD/NE gas distribution pipelines, less than 2"	NorthWestern Corporation	NorthWestern Corporation	various	SPP	SPP	1,510 miles, less than 2"	
NorthWestern Corporation	N/A	SD/NE gas distribution pipelines, 2" to 4"	NorthWestern Corporation	NorthWestern Corporation	various	SPP	SPP	672 miles, 2" to 4"	
NorthWestern Corporation	N/A	SD/NE gas distribution pipelines, 4" to 8"	NorthWestern Corporation	NorthWestern Corporation	various	SPP	SPP	232 miles, 4" to 8"	
NorthWestern Corporation	N/A	SD/NE gas distribution pipelines, 8" to 12"	NorthWestern Corporation	NorthWestern Corporation	various	SPP	SPP	10 miles, 8" to 12"	
NorthWestern Corporation	N/A	Milbank Pipeline, less than 4"	NorthWestern Corporation	NorthWestern Corporation	04/01/11	SPP	SPP	12 miles, NPS 4" or less	
NorthWestern Corporation	N/A	Milbank Pipeline, 6"	NorthWestern Corporation	NorthWestern Corporation	04/01/11	SPP	SPP	43 miles, NPS 6"	

Filing Entity and its Energy Affiliates	Cite to order accepting OATT or order approving the transfer of transmission facilities to an RTO or ISO	Asset Name and Use	Owned By	Controlled By	Date Control Transferred	Market / Balancing Authority Area	Geographic Region	Size: (e.g., length and kV for electric, length and diameter for pipelines, and capacity for gas storage)	End Note Number (Enter text in End Notes Sheet)
NorthWestern Corporation / Havre Pipeline Company, LLC	N/A	Havre Pipeline - gas transmission pipeline, 6" NPS	Havre Pipeline Company, LLC	NorthWestern Corporation	12/02/13	NWMT	Northwest	0.29 miles, NPS 6"	
NorthWestern Corporation / Havre Pipeline Company, LLC	N/A	Havre Pipeline - gas transmission pipeline, 8" NPS	Havre Pipeline Company, LLC	NorthWestern Corporation	12/02/13	NWMT	Northwest	0.89 miles, NPS 8"	
NorthWestern Corporation / Havre Pipeline Company, LLC	N/A	Havre Pipeline - gas transmission pipeline, 12" NPS	Havre Pipeline Company, LLC	NorthWestern Corporation	12/02/13	NWMT	Northwest	23.8 miles, NPS 12"	
NorthWestern Corporation / Havre Pipeline Company, LLC	N/A	Havre Pipeline - gas transmission pipeline, 16" NPS	Havre Pipeline Company, LLC	NorthWestern Corporation	12/02/13	NWMT	Northwest	45.6 miles, NPS 16"	
NorthWestern Corporation / Canadian-Montana Pipe Line Corporation	N/A	CMPL - gas transmission pipeline	Canadian-Montana Pipe Line Corporation	NorthWestern Corporation	11/15/02	AESO	Northwest	4 miles, 16"	

Asset Appendix: End Notes

End Notes for Entries in the Generation, Long-term PPA and Transmission Lists

[A] End Note Number	[B] Sheet (Generation, PPA or Transmission / Natural Gas)	[C] Explanatory Note
1	Generation	The Commission authorized The Montana Power Company to sell power at market-based rates in Docket No. ER97-449-001. <i>MP Energy, Inc.</i> , 78 FERC ¶161,005 (1997). NorthWestern succeeded to all of Montana Power's rate schedules, service agreements, tariffs, and supplements effective 11/15/2002. See Docket Nos. ER02-1784-000 & ER03-329-000.
2	Generation	Colstrip 4 is a jointly-owned unit in which NorthWestern owns a 30% interest. Capacity is dynamically dispatched by each joint owner. Columns [J] and [K] represent capacity for the entire unit, including all owners' shares. NorthWestern's share of the summer seasonal capacity rating is 222 MW.
3	Generation	Big Stone is a jointly-owned unit in which NorthWestern owns a 23.4% interest. Columns [J] and [K] represent capacity for the entire unit, including all owners' shares. NorthWestern's share of the seasonal capacity is 111.15 MW.
4	Generation	Coyote Station is a jointly-owned unit in which NorthWestern owns a 10% interest. Columns [J] and [K] represent capacity for the entire unit, including all owners' shares. NorthWestern's share of the seasonal capacity is 42.9 MW.
5	Generation	George Neal South is a jointly-owned unit in which NorthWestern owns an 8.7% interest. Columns [J] and [K] represent capacity for the entire unit, including all owners' shares. NorthWestern's share of the seasonal capacity is 56 MW.
6	Long-Term Firm PPAs	Basin Creek Power Plant
7	Long-Term Firm PPAs	Judith Gap Wind Farm
8	Long-Term Firm PPAs	River Bend Solar, LLC is a QF that was granted market-based rate authority on 9/1/2016 in Docket No. ER16-1913-000.
9	Long-Term Firm PPAs	Tiber Dam Hydroelectric
10	Long-Term Firm PPAs	Upper Turnbull Hydro 1 (5.7 MW) and Lower Turnbull Hydro 1 (7.8 MW)
11	Long-Term Firm PPAs	Watertown Peaking Plant
12	Long-Term Firm PPAs	Titan I Wind Project
13	Transmission	NorthWestern purchased Montana Power's jurisdictional transmission and distribution assets and succeeded to all of Montana Power's rate schedules, service agreements, tariffs, and supplements effective 11/15/2002. See Docket Nos. ER02-1784-000 & ER03-329-000.
14	Transmission	The Colstrip Project 500kV Transmission Line is jointly owned. Column [I] lists miles for the entire Colstrip-to-Broadview segment. NorthWestern owns a 36% interest in this segment.
15	Transmission	The Colstrip Project 500kV Transmission Line is jointly owned. Column [I] lists miles for the entire Broadview-to-Townsend segment. NorthWestern owns a 24% interest in this segment.
16	Transmission	NorthWestern succeeded to all tariffs, rate schedules, supplements, and service agreements of NorthWestern Public Service Company effective 1/3/2003. See Docket No. ER03-376-000.
17	Transmission	The Big Stone Plant Transmission Facilities are jointly owned. The Big Stone Plant-to-Gary 230-kV transmission line is approximately 34 miles in length, with NorthWestern owning 18.17 miles of this line.
18	Transmission	The Coyote 1 Transmission Facilities are jointly owned. NorthWestern owns 23.1 miles of the Coyote-to-Center 345-kV line.
19	Transmission	Neal 4 Transmission is jointly owned. Column [I] represents NorthWestern's 8.681% interest in this 23.59-mile line.

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

NorthWestern Corporation

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Docket No. ER11-1858-___

AFFIDAVIT OF JULIE R. SOLOMON

INTRODUCTION

My name is Julie R. Solomon. I am a Managing Director of Navigant Consulting, Inc. My business address is 1200 19th Street, N.W., Suite 700, Washington, DC 20036. A large portion of my consulting activities involves electric utility industry restructuring and the transition from regulation to competition. I have been involved extensively in consulting on market power issues concerning mergers, other asset transactions and market-based rate applications. I have filed a number of affidavits before the Federal Energy Regulatory Commission (the “Commission”) in connection with electric utility mergers, the purchase and sale of jurisdictional assets, applications for market-based rates, and triennial updates. Included among these, I previously have filed affidavits with the Commission on behalf of NorthWestern Corporation (“NorthWestern”) in connection with past triennial updates. My resume is attached as Exhibit JRS-1.

I have been asked by NorthWestern Corporation (NorthWestern or “Seller”) to perform an analysis of market power issues in compliance with the Commission’s guidelines contained in *Order No. 697*,¹ and *Order No. 816*.² In South Dakota, NorthWestern is a transmission owner within the Southwest Power Pool, Inc. (“SPP”) and has transferred functional control of a large portion of its electric transmission facilities there to SPP. Here I provide an evaluation of

¹ *Market-Based Rates for Wholesale Sales of Elec. Energy, Capacity and Ancillary Servs. by Pub. Utils.*, Order No. 697, FERC Stats. & Regs. ¶ 31,252, *clarified*, 121 FERC ¶ 61,260 (2007), *order on reh'g and clarification*, Order No. 697-A, FERC Stats. & Regs. ¶ 31,268, *order on reh'g and clarification*, 124 FERC ¶ 61,055, *order on reh'g and clarification*, Order No. 697-B, FERC Stats. & Regs. ¶ 31,285 (2008), *order on reh'g and clarification*, Order No. 697-C, FERC Stats. & Regs. ¶ 31,291 (2009), *order on reh'g and clarification*, Order No. 697-D, FERC Stats. & Regs. ¶ 31,305, *order on clarification*, 131 FERC ¶ 61,021, *reh'g denied*, 134 FERC ¶ 61,046 (2010), *appeal docketed sub nom. Mont. Consumer Counsel v. FERC, Nos. 08-71827, et al.* (9th Cir. filed May 1, 2008) (collectively, “Order No. 697”) (codified at 18 C.F.R. pt. 35).

² *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, 153 FERC ¶ 61,065 (2015), 153 FERC ¶ 61,065 (2015), *order on reh'g*, Order No. 816-A, 155 FERC ¶ 61,188 (2016).

horizontal and vertical market power issues for SPP, the only relevant market in the context of this NorthWestern's triennial market-based rate filing.³

My analysis of horizontal and vertical market power issues is conducted in a manner consistent with the Commission's orders governing market-based rate authority.

SUMMARY OF CONCLUSIONS

Based on the analyses discussed herein, under the Commission's guidelines, NorthWestern satisfies the Commission's horizontal market power screens in the SPP market, and, therefore, lack horizontal market power.

The analysis I have conducted is consistent with Order No. 697, Order No. 816 and related orders. I have performed the two indicative horizontal market power screens required by the Commission, namely a pivotal supplier analysis based on the annual peak demand of the relevant market ("Pivotal Supplier Analysis") and a market share analysis ("Market Share Analysis") applied on a seasonal basis for the relevant study period of December 2015-November 2016. Here I provide an evaluation of market power for the default relevant geographic markets in which the NorthWestern owns generation in the Southwest Power Pool Region, namely SPP.

NorthWestern also lacks vertical market power. NorthWestern's transmission system is under the functional control of SPP and subject to the SPP Open Access Transmission Tariff ("OATT"), which the Commission has "deemed to mitigate a seller's transmission market power."⁴ NorthWestern cannot erect barriers to entry. NorthWestern owns intrastate natural gas transportation and storage facilities through their natural gas local distribution operations, but there is no basis to dispute the Commission's rebuttable presumption that such ownership does not allow a seller to raise entry barriers.⁵ NorthWestern does not own or control physical sources of coal

³ NorthWestern owns some generation in the Midcontinent Independent System Operator, Inc. ("MISO"), but is a Category 1 Seller in the Central Region (MISO). NorthWestern has grandfathered agreements in place to move its generation located in MISO to load in SPP, and I treat this generation as such in my analysis of SPP.

⁴ *Order No. 697* at P 21.

⁵ *Order No. 697* at P 22.

supplies or have control over who may access transportation of coal in SPP. There are no other issues that raise any relevant competitive concerns.

DESCRIPTION OF NORTHWESTERN

NorthWestern owns and operates electric generation, transmission and distribution facilities located primarily in Montana and South Dakota, and natural gas transmission, storage and local distribution facilities located in Montana, South Dakota and Nebraska. NorthWestern's Montana and South Dakota transmission facilities are not physically connected. Its Montana operations are within the Western Interconnection and its South Dakota operations are within the Eastern Interconnection.

NorthWestern does not operate a BAA in the Eastern Interconnection. Its South Dakota transmission facilities are interconnected to SPP. NorthWestern owns 230 MW of generating capacity and has 60 MW of long term firm purchases in SPP. NorthWestern also owns 210 MW in MISO, which is committed to serving NorthWestern's South Dakota load in SPP.

HORIZONTAL MARKET POWER

Background and Analytic Approach

In *Order No. 697* and *Order No. 816*, the Commission codified a methodology for assessing market power to be used by applicants requesting market-based rate authority under Section 205 of the Federal Power Act.⁶ The Commission applies two screens – the Pivotal Supplier Analysis and the Market Share Analysis – intended to demonstrate a lack of horizontal market power. If an entity fails to pass either of the screens, there is a presumption of horizontal market power and further analysis is required.

In *Order No. 697*, the Commission defines the default relevant market as the BAA or the RTO/ISO market, as applicable, where the seller is located.⁷ Sellers located in, and members of, RTOs may use the geographic region under the control of the RTO as the default relevant

⁶ 16 U.S.C. § 824d.

⁷ Order No. 697 at P 231.

geographic market.⁸ If the Commission has made specific findings of submarkets within a regional transmission organization/independent system operator (“RTO/ISO”), for sellers in those submarkets the default relevant market becomes the submarket of the RTO/ISO.⁹ No submarkets have been identified in SPP. Thus, SPP is the only relevant market.

Pivotal Supplier Analysis

The Pivotal Supplier Analysis seeks to determine if load can be served without an applicant’s generation. Order No. 697 specifies a number of calculations for the Pivotal Supplier screen.¹⁰

First, Total Uncommitted Supply is calculated based on installed capacity (adjusted for long-term firm purchases and sales) plus imports less the reserve requirement (i.e., operating reserves) less the average daily peak native load for the peak month.

Second, Wholesale Load is calculated based on the difference between the annual peak load (needle peak) and the average daily peak native load for the peak month.

Third, Net Uncommitted Supply is calculated based on the difference between Total Uncommitted Supply and Wholesale Load. Seller’s Uncommitted Capacity is based on Seller’s Total Installed Capacity less its average daily peak native load.

If Seller’s Uncommitted Capacity is less than the Net Uncommitted Supply, the Pivotal Supplier Analysis is passed.

Market Share Analysis

The Market Share Analysis evaluates, for each of the four seasons, whether the applicant has a dominant position in the market, with dominance defined as a market share in excess of 20 percent.

⁸ *Id.* at P 235.

⁹ *Id.* at P 236.

¹⁰ *See id.*, Appendix A, Part I.

Order No. 697 specifies a number of calculations for the market share screen.¹¹

First, Seller and Affiliate Capacity is calculated based on installed capacity (adjusted for long-term firm purchases and sales) plus imports less planned outages. Non-Affiliate Capacity is calculated in a similar manner.

Second, Capacity Deductions are calculated based on average peak native load in the season (averaged over all days) plus operating reserves.

Third, Seller's Uncommitted Capacity is calculated by subtracting the Capacity Deductions attributed to Seller from Seller and Affiliate Capacity; and Total Competing Supply is calculated by subtracting the Capacity Deductions attributed to others from Non-Affiliate Capacity. Total Seasonal Uncommitted Capacity is the sum of Seller's Uncommitted Capacity and Total Competing Supply.

Finally, Seller's Market Share is calculated as Seller's Uncommitted Capacity as a percent of Total Seasonal Uncommitted Capacity.

If Seller's Market Share is less than 20 percent in all seasons, the Market Share Analysis is passed.

Assumptions

Relevant Geographic Market. My analysis considers SPP as the only relevant geographic market.

Study Period. My analysis is based on a December 2015-November 2016 study period, consistent with the Commission's schedule for triennial market-based rate filings.¹² The following seasons are used in the analysis: Winter (December-February), Spring (March-May), Summer (June-August) and Fall (September-November).

SPP Data. For my analysis, I relied primarily on information prepared by SPP at the request of its member Transmission Owners to compile data consistent with Order No. 697 on an aggregate

¹¹ See *id.*, Appendix A, Part II.

¹² <https://www.ferc.gov/industries/electric/gen-info/mbr/filings/triennial/spp.asp>.

basis for SPP. The SPP information includes data on generating capacity, long-term purchases and sales, operating reserves, planned outages, load, and Simultaneous Import Limits (“SIL”).¹³

Generating Capacity. For purposes of the ratings for NorthWestern’s owned or affiliated generation, I rely on seasonal capacity ratings (summer and winter) based on data from the Energy Information Administration’s “Annual Electric Generator Report”, Form EIA-860,¹⁴ as of 2016.

For the Pivotal Supplier Analysis, I use summer ratings, consistent with the time of system peak. For the Market Share Analysis, I use summer ratings for the Summer season, and winter ratings for all other seasons.

Other Company-Specific Data. NorthWestern provided me with hourly load it served in the SPP during the relevant study period. For purposes of my analysis, I conservatively assigned no operating reserves or planned outages to NorthWestern.

SIL and Import Allocation. SPP determined that the SIL into SPP is zero. For purposes of the indicative screens, I treated NorthWestern’s generation in MISO as “Remote Capacity (from outside the study area).”

Results of Analysis

The detailed results of the Pivotal Supplier Analysis and the Market Share Analysis are contained in Exhibits JRS-3 and JRS-4, respectively. These analyses have been conducted in a manner consistent with Order Nos. 697 and 816, and, as required, an electronic version of the screens is being submitted.¹⁵ Below I describe the detailed results of the Pivotal Supplier and Market Share Analyses.

¹³ On June 25, 2018, SPP filed a study (*SPP 2018 Simultaneous Import Limit Study* (“SPP Report”)), in Docket No. AD10-2-012 that provides market data for the study period. Relevant information from the SPP Report is provided in my workpapers.

¹⁴ <http://www.eia.gov/cneaf/electricity/page/eia860.html>.

¹⁵ I am submitting both confidential and public versions of the indicative screens and workpapers. Company-specific confidential data (hourly load data) is included in the confidential version.

Based on summer ratings, NorthWestern owns 230 MW of generation within SPP and has 60 MW of long-term purchases within SPP. NorthWestern also has 210 MW of generation in MISO, which I treated as remote capacity imported into SPP.

Pivotal Supplier Analysis. NorthWestern's Installed Capacity in SPP or imported into SPP is 440 MW and its Long-Term Firm Purchases are 60 MW. NorthWestern has 259 MW of load. Thus, Seller's Uncommitted Capacity is 241 MW. Total Uncommitted Supply is 38,415 MW and Net Uncommitted Supply is 32,398 MW.

Because Seller's Uncommitted Capacity is less than the Net Uncommitted Supply, the Pivotal Supplier Screen is passed. See Exhibit JRS-3.

Market Share Analysis. NorthWestern's Installed Capacity in SPP or imported into SPP ranges from 440 MW to 464 MW and its Long-Term Firm Purchases are 60 MW. NorthWestern's load ranges from 191 MW to 255 MW. Thus, Seller's Uncommitted Capacity ranges from 244 MW to 333 MW. Total Seasonal Uncommitted Capacity ranges from 38,556 MW to 48,895 MW.

Seller's Market Share is less than one percent in all seasons. Because Seller's Market Share is less than 20 percent in all seasons, the Market Share Screen is passed. See Exhibit JRS-4.

Thus, on the basis of the Commission's screens, NorthWestern does not have horizontal market power in SPP.

VERTICAL MARKET POWER

Transmission

NorthWestern owns transmission in SPP, which is subject to SPP's OATT, which the Commission has deemed to mitigate a seller's transmission market power.¹⁶

Barriers to Entry

NorthWestern cannot erect barriers to entry.

¹⁶ *Order No. 697* at P 21.

NorthWestern owns intrastate natural gas distribution and transmission pipelines in the South Dakota. The Commission has established a rebuttable presumption that such ownership does not allow a seller to raise entry barriers.¹⁷ NorthWestern does not own or control physical sources of coal supplies or have control over who may access transportation of coal in SPP. There are no other issues that raise any relevant competitive concerns.

I understand that an affirmative statement on behalf of NorthWestern is included in its submission that it has not erected barriers to entry and will not erect barriers to entry.

Based on these facts, NorthWestern has demonstrated a lack of vertical market power.

CONCLUSION

On the basis of the foregoing analysis, NorthWestern satisfies the Commission's horizontal and vertical market power tests for market-based rate authority in the SPP Region.

¹⁷ *Id.*, at P 22.

Julie R. Solomon

Managing Director

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 Washington, DC
 Direct: 202.481-8492

Professional Summary

Julie Solomon is a Managing Director in the Energy practice at Navigant. Julie has more than 25 years of consulting experience, specializing in the areas of regulatory and utility economics, financial analysis and business valuation. Ms. Solomon has participated in analysis of proposed regulatory reforms, supply options and utility industry restructuring in the gas and electric industries. She also has advised utility clients in corporate strategy and corporate restructuring, and consulted to legal counsel on a variety of litigation and regulatory matters, including antitrust litigation and contract disputes. She has filed testimony in numerous proceedings before the Federal Energy Regulatory Commission. Much of her current practice focuses on regulatory and market power issues concerning mergers and acquisitions and compliance filings in the electricity market.

Areas of Expertise

- **Competition Issues:** Advises clients in the electric and gas utility industry on competition issues, including the impact of mergers on competition. Directed a large number of analytic studies relating to obtaining merger approval from regulatory authorities.
- **Restructuring:** Advises clients in the electric utility industry on restructuring strategies, including potential mergers and acquisitions, market reforms, functional unbundling and cost savings.
- **Regulatory and Litigation Matters:** Consults in the electric and gas utility industries in a variety of regulatory and litigation matters, including rate proceedings, prudence reviews, proposed regulatory reforms, power purchase disputes, analysis of supply options, privatization and restructuring.

Professional Experience

Mergers and Acquisitions (Market Power and Competition Issues)

- Advised clients and conducted analytic studies in connection with a large number of major electric and electric-gas mergers and asset transactions of regulated companies. Provided testimony to FERC for a number of such transactions (see testimony list for examples).
- Advised clients and provided confidential pre-screening analyses for potential mergers and acquisitions.
- Conducted numerous analytic studies in connection with FERC market-based rate applications

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Managing Director

and compliance filings for electricity sellers. Provided testimony to FERC for a number of these types of transactions.

- Conducted numerous analytic studies in connection with FERC market-based rate applications and compliance filings for gas storage facilities. Provided testimony to FERC for a number of these types of transactions (see testimony list for examples).

Utility Restructuring, Litigation and Stranded Cost

- Conducted analytic studies and provided litigation support in connection with stranded cost proceedings in a number of states.
- Provided analytic support evaluating the benefits of proposed transmission lines in support of state regulatory proceedings.
- Assisted in the valuation of the interests of several firms in various cogeneration projects for the purpose of combining these interests into a new entity or selling interests to third parties.
- Analyzed the financial feasibility and viability of a large number of cogeneration projects, assisted in the preparation of presentations and filings and presented testimony to the relevant public utility commission.
- Participated in a study to analyze the financial effects of a variety of restructuring options for a utility, including transfer and/or sale of assets and subsequent sale-leasebacks, and debt restructuring alternatives.
- Provided litigation support in major utility rate proceedings, including assisting in the preparation of responses to interrogatories and data requests, preparation of company and outside expert witnesses for deposition and hearings, and assistance in the deposition and cross-examination of intervenor witnesses.

Julie R. Solomon

Managing Director

Work History

Managing Director, Navigant	2010 – Present
Vice President, Charles River Associates	2001 – 2010
Senior Vice President, Putnam, Hayes and Bartlett, Inc. and PHB Hagler Bailly, Inc	1986 – 2000
Economist, Economic Consulting Services, Inc.	1979 – 1986
Economist, U.S. Department of Labor	1976 – 1979

Education

Master of Business Administration, Finance	The Wharton School, University of Pennsylvania
Bachelor of Arts, Economics	Connecticut College

Testimony or Expert Report (2015-2017)

- » Affidavit on behalf of Energia Sierra Juarez U.S. 2, LLC, Docket No. ER18-863, application for market-based rates, February 9, 2018.
- » Affidavit on behalf of Ameren Illinois Company, Docket No. ER18-556, market-based rate triennial filing, December 28, 2017.
- » Affidavit on behalf of Northern Indiana Public Service Company, Docket No. ER18-560, market-based rate triennial filing, December 28, 2017.
- » Affidavit on behalf of Exelon Southeast Entities, Docket No. ER17-615 et al., market-based rate triennial filing, December 22, 2017.
- » Affidavit on behalf of Public Service Company of Oklahoma, et al., Docket No. EC18-40, application for authorization of disposition of jurisdictional facilities, December 22, 2017.
- » Affidavit on behalf of Duke Energy Corporation, Docket No. ER12-1946 et al., market-based rate triennial filing, December 21, 2017.
- » Affidavit on behalf of AES MBR Affiliates, Docket No. ER10-3145 et al., market-based rate triennial filing, December 21, 2017.
- » Affidavit on behalf of Dynegy Inc., et al., Docket No. EC18-23, application for authorization of disposition of jurisdictional facilities, November 22, 2017.
- » Affidavit on behalf of CXA Sundevil Power I, Inc. et al., Docket No. EC18-22, application for authorization of disposition of jurisdictional facilities, November 17, 2017.
- » Affidavit (with Matthew E. Arenchild) on behalf of Powerex Corp., Docket No. ER10-3297, market-based rate change in status filing, November 15, 2017.
- » Affidavit on behalf of Panda Hummel Station LLC, Docket No. ER18-276, application for market-based rates, November 9, 2017.
- » Affidavit on behalf of Public Service Company of NH et al., Docket No. EC18-12, application for authorization of disposition of jurisdictional facilities, October 27, 2017.

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- » Affidavit on behalf of Aspen Generating, LLC et al., Docket No. EC17-197, application for authorization of disposition of jurisdictional facilities, September 29, 2017.
- » Affidavit on behalf of Calpine Corporation, LLC et al., Docket No. EC17-182, application for authorization of disposition of jurisdictional facilities, September 15, 2017.
- » Affidavit on behalf of Great Valley Solar 3, LLC, Docket No. ER17-2385, application for market-based rates, August 30, 2017.
- » Affidavit on behalf of Stuttgart Solar, LLC, Docket No. ER17-2270, application for market-based rates, August 9, 2017.
- » Affidavit on behalf of Cottonwood Wind Project, LLC, Docket No. ER17-2152, application for market-based rates, July 26, 2017.
- » Affidavit on behalf of Great Valley Solar 1, LLC, Docket No. ER17-2141, application for market-based rates, July 25, 2017.
- » Affidavit on behalf of Great Valley Solar 2, LLC, Docket No. ER17-2142, application for market-based rates, July 25, 2017.
- » Affidavit (with Matthew E. Arenchild) on behalf of PPL Southeast Companies, Docket No. ER10-1511 et al., market-based rate triennial filing, June 30, 2017.
- » Affidavit on behalf of Duke Energy Progress, LLC et al., Docket No. ER17-1963, market-based rate triennial filing, June 30, 2017.
- » Affidavit on behalf of Cube Yadkin Generation, LLC, Docket No. ER17-2026, market-based rate triennial filing, June 30, 2017.
- » Affidavit on behalf of NextEra Companies, Docket No. ER10-1852 et al., market-based rate triennial filing, June 30, 2017.
- » Affidavit on behalf of Brookfield Companies, Docket No. ER11-2292 et al., market-based rate triennial filing, June 30, 2017.
- » Affidavit (with Matthew E. Arenchild) on behalf of Alabama Power Company et al., Docket No. ER10-2881 et al., market-based rate triennial filing, June 30, 2017.
- » Affidavit on behalf of Lockhart Power Company, Docket No. ER10-2651, market-based rate triennial filing, June 29, 2017.
- » Affidavit on behalf of Astoria Energy LLC, Docket No. ER10-2253 et al., market-based rate triennial filing, June 29, 2017.
- » Affidavit on behalf of Cambria CoGen Company, Docket No. ER11-2370, market-based rate triennial filing, June 28, 2017.
- » Affidavit on behalf of ENGIE Northeast MBR Sellers, Docket No. ER17-1370 et al., market-based rate triennial filing, June 28, 2017.
- » Affidavit on behalf of Bishop Hill Energy LLC et al., Docket No. EC17-122, application for authorization of disposition of jurisdictional facilities, May 25, 2017.
- » Affidavit on behalf of Dynegy Buyers and AES Sellers, Docket No. EC17-117, application for authorization of disposition of jurisdictional facilities, May 21, 2017.
- » Affidavit on behalf of Spruce Generation, LLC, Docket No. EC17-102, application for authorization of disposition of jurisdictional facilities, April 6, 2017.

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- » Affidavit on behalf of Westar Energy, Inc., Docket No. ER10-2507, market-based rate change in status filing, March 29, 2017.
- » Affidavit on behalf of AEP Generation, Inc., Docket No. EC17-90, application for authorization of disposition of jurisdictional facilities, May 10, 2017.
- » Affidavit on behalf of Chambersburg Energy, LLC et al., Docket No. EC17-83, application for authorization of disposition of jurisdictional facilities, February 17, 2017.
- » Affidavit on behalf of Morgan Stanley Public Utilities, Docket No. ER10-2906, et al., market-based rate triennial filing, December 30, 2016.
- » Affidavit on behalf of AVANGRID Northwest MBR Sellers, Docket No. ER10-2822, et al., market-based rate triennial filing, December 30, 2016.
- » Affidavit (with Julie M. Carey) on behalf of the Constellation Energy Nuclear Group entities under Docket No. ER10-2179, et al., market-based rate triennial filing, December 29, 2016.
- » Affidavit (with Julie M. Carey) on behalf of the Exelon Northeast entities under Docket No. ER10-2997, et al., market-based rate triennial filing, December 29, 2016.
- » Affidavit on behalf of TransAlta MBR Sellers, Docket No. ER10-2847, et al., market-based rate triennial filing, December 29, 2016.
- » Affidavit on behalf of Powerex Corp., Docket No. ER17-704, market-based rate triennial filing, December 29, 2016.
- » Affidavit (with Julie M. Carey) on behalf of the Dominion Northeast Region Companies under Docket No. Dominion Northeast Region Companies, et al., market-based rate triennial filing, December 29, 2016.
- » Affidavit on behalf of the Eversource Companies, Docket No. ER10-1801, et al., market-based rate triennial filing, December 27, 2016.
- » Affidavit on behalf of New Brunswick Energy Marketing Corporation, Docket No. ER14-225, market-based rate triennial filing, December 22, 2016.
- » Affidavit on behalf of Duke Energy Corporation subsidiaries, Docket No. ER10-1325, et al., market-based rate triennial filing, December 21, 2016.
- » Affidavit on behalf of AES MBR Affiliates, Docket No. ER10-3145, et al., market-based rate triennial filing, December 21, 2016.
- » Affidavit on behalf of Helix Generation, LLC et al., Docket No. EC17-38, application for authorization of disposition of jurisdictional facilities, November 21, 2016.
- » Affidavit on behalf of Gavin Power, LLC; Darby Power, LLC; Lawrenceburg Power, LLC; and Waterford Power, LLC, Docket No. EC16-243 et al., application for market-based rates, October 31, 2016.
- » Affidavit on behalf of AEP Generation Resources, Inc. et al., Docket No. EC17-11, application for authorization of disposition of jurisdictional facilities, October 13, 2016.
- » Affidavit on behalf of Panda Stonewall LLC, Docket No. ER16-2643, application for market-based rates, September 22, 2016.
- » Affidavit on behalf of Rutherford Farm, LLC, Docket No. ER16-2509, application for market-based rates, August 30, 2016.

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- » Affidavit on behalf of CXA Sundevil I, Inc. s, Docket No. ER16-2496, application for market-based rates, August 26, 2016.
- » Affidavit on behalf of Entergy Nuclear FitzPatrick, LLC and Exelon Generation Company, LLC, Docket No. EC16-169, application for authorization of disposition of jurisdictional facilities, August 19, 2016.
- » Affidavit on behalf of Bluestem Wind Energy, LLC, Docket No. ER16-2363, application for market-based rates, August 2, 2016.
- » Affidavit on behalf of Talen Energy Corporation, et al., Docket No. EC16-151, application for authorization of disposition of jurisdictional facilities, July 15, 2016.
- » Affidavit on behalf of Florida Power & Light Company, Docket No. EC16-148, application for authorization of disposition of jurisdictional facilities, July 13, 2016.
- » Supplemental Affidavit on behalf of Dynegy Inc. et al., Docket Nos. EC16-93 and -94, July 8, 2016.
- » Affidavit on behalf of Arlington Valley, LLC et al., Docket No. ER10-2756 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of Sundevil Holdings et al., Docket No. ER16-2107 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit (with Matthew E. Arenchild) on behalf of BHE Northwest Companies, Docket No. ER10-3246 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of BHE Renewables, LLC, Docket No. ER13-520 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of Atlantic Renewable Projects II LLC et al., Docket No. ER10-2822 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of the Calpine MBR Sellers, Docket No. ER10-2042 et al., market-based rate triennial filing, June 30, 2016.
- » Affidavit on behalf of the NorthWestern Corporation, Docket No. ER11-1858, market-based rate triennial filing, June 29, 2016.
- » Affidavit on behalf of the ArcLight Energy Marketing et al., LLC, Docket No. ER16-2014 et al., market-based rate triennial filing, June 24, 2016.
- » Affidavit on behalf of River Bend Solar, LLC Docket No. ER16-1913, application for market-based rates, June 10, 2016.
- » Affidavit (with Matthew E. Arenchild) on behalf of Nevada Power Company et al., Docket No. EC16-130, application for authorization of disposition of jurisdictional facilities, June 7, 2016.
- » Affidavit on behalf of Apple Energy, LLC, Docket No. ER16-1887, application for market-based rates, June 6, 2016.
- » Affidavit on behalf of Marshall Solar, LLC, Docket No. ER16-1872, application for market-based rates, June 3, 2016.
- » Affidavit on behalf of the Dominion Companies, Docket No. ER13-2109 et al., notice of change in status filing, May 25, 2016.
- » Affidavit on behalf of Eastern Shore Solar LLC, Docket No. ER16-1750, application for market-based rates, May 20, 2016.

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- » Affidavit on behalf of Roswell Solar LLC and Chaves County Solar, LLC, Docket No. ER16-1440 and ER16-1672, applications for market-based rates, May 20, 2016 and May 17, 2016.
- » Affidavit on behalf of Exelon MBR Entities, Docket No. ER10-2997 et al., notice of change in status filing, April 22, 2016.
- » Affidavit on behalf of Live Oak Solar LLC, White Oak Solar, LLC, and White Pine Solar, LLC, Docket No. ER16-1354, ER16-1293 and ER16-1277, applications for market-based rates, April 6, 2016, March 30, 2016 and March 25, 2016.
- » Affidavit on behalf of Atlas Power Finance, LLC, Dynegy Inc., Energy Capital Partners III, LLC, and GDF SUEZ Energy North America, Inc., Docket No. EC16-93, application for authorization of disposition of jurisdictional facilities, March 25, 2016.
- » Affidavit on behalf of Dynegy Inc. and Energy Capital Partners III, LLC, Docket No. EC16-94, application for authorization of disposition of jurisdictional facilities, March 25, 2016.
- » Affidavit on behalf of Grande Prairie Wind, LLC, Docket No. ER16-1258, application for market-based rates, March 22, 2016.
- » Affidavit on behalf of Florida Power & Light Company, Docket No. ER16-628-001, application for market-based rates, March 21, 2016.
- » Affidavit on behalf of Essential Power, LLC, Docket No. EC16-82, application for authorization of disposition of jurisdictional facilities, February 29, 2016.
- » Affidavit on behalf of Duke Energy Florida, LLC, Docket No. EC16-69, application for authorization of disposition of jurisdictional facilities, February 10, 2016.
- » Affidavit on behalf of Nassau Energy, LLC, Docket No. ER16-806, application for market-based rates, January 21, 2016.
- » Affidavit on behalf of ECP MBR Sellers, Docket No. ER16-72, market-based rate triennial filing, December 31, 2015.
- » Affidavit on behalf of SDG&E Sellers, Docket No. ER14-474, market-based rate triennial filing, December 30, 2015.
- » Affidavit on behalf of New Harquahala Generating Company, Docket No. ER15-2013, market-based rate triennial filing, December 30, 2015.
- » Affidavit on behalf of Exelon SPP Entities, Docket No. ER14-474, market-based rate triennial filing, December 29, 2015.
- » Affidavit on behalf of Florida Power & Light Company, Docket No. ER16-628-000, application for market-based rates, December 23, 2015.
- » Affidavit on behalf of ENGIE Portfolio Management, LLC et al, Docket No. ER16-581 et al., application for market-based rates, December 18, 2015.
- » Affidavit on behalf of Marshall Wind Energy, LLC, Docket No. ER16-438, market-based rate triennial filing, December 18, 2015.
- » Affidavit on behalf of Marshall Wind Energy, LLC, Docket No. ER16-438, application for market-based rates, December 1, 2015.
- » Affidavit on behalf of Calpine Granite Holdings, LLC, Docket No. EC16-19, application for authorization of disposition of jurisdictional facilities, October 27, 2015.

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- » Affidavit on behalf of Berkshire Hathaway, Inc., Docket No. EC16-10, application for authorization of disposition of jurisdictional facilities, October 8, 2015.
- » Affidavit on behalf of Panda Patriot, LLC, Docket No. ER15-2472, application for market-based rates, September 29, 2015.
- » Affidavit on behalf of Talen Energy Corporation, Docket No. EC14-112, Motion to Amend Mitigation Plan, September 25, 2015.
- » Affidavit on behalf of BHE MBR Sellers, Docket No. ER12-162, notification of change in status, September 25, 2015.
- » Affidavit on behalf of Talen Energy Corporation, Docket No. EC14-112, Motion to Amend Mitigation Plan, September 8, 2015.
- » Affidavit on behalf of BHE MBR Sellers, Docket No. ER13-521, response to Commission Staff Deficiency Letter and Request for Additional Information, September 24, 2015.
- » Affidavit on behalf of BHE MBR Sellers, Docket No. ER13-521, supplemental filing, September 8, 2015.
- » Affidavit on behalf of GDF SUEZ MBR Sellers, Docket No. ER14-1699, notice of change, August 31, 2015.
- » Affidavits on behalf of PacifiCorp and NV Energy, Docket No. ER15-2283, EIM analysis, July 27, 2015.
- » Affidavit on behalf of NorthWestern Corporation and Beethoven Wind, LLC, Docket No. EC15-176, application for authorization of disposition of jurisdictional facilities, July 24 2015.
- » Affidavit on behalf of MidAmerican Energy Services, LLC, Docket No. ER15-2211, application for market-based rates, July 24, 2015.
- » Affidavit on behalf of The Empire District Electric Company, Docket No. ER10-2738, market-based rate triennial filing, June 30, 2015.
- » Affidavit on behalf of Exelon MBR Sellers, Docket No. ER10-2172 *et al.*, market-based rate triennial filing, June 30, 2015.
- » Affidavit on behalf of Oklahoma Gas & Electric, Docket No. ER11-2105, market-based rate triennial filing, June 30, 2015.
- » Affidavit on behalf of LG&E Energy Marketing, Inc., Docket No. ER10-1714, market-based rate triennial filing, June 30, 2015.
- » Affidavit on behalf of Westar Energy, Inc., Docket No. ER10-2507, market-based rate triennial filing, June 29, 2015.
- » Affidavit on behalf of the Alabama Power Company, *et al.*, Docket No. EL15-39, *et al.*, response to show cause order, June 26, 2015.
- » Affidavit on behalf of Wisconsin Electric Power Company, Docket No. ER15-2019 market-based rate triennial filing, June 26, 2015.
- » Affidavit on behalf of Panda Liberty LLC, Docket No. ER15-1841, market-based rate application, June 2, 2015.
- » Affidavit on behalf of CCI U.S. Asset Holdings LLC, Docket No. EC15-108, application for authorization of disposition of jurisdictional facilities, March 31, 2015.

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- » Affidavit on behalf of Florida Power & Light Company, Docket No. EC15-102, application for authorization of disposition of jurisdictional facilities, March 23, 2015.
- » Affidavit on behalf of Osprey Energy Center, LLC, Docket No. EC15-96, application for authorization of disposition of jurisdictional facilities, March 13, 2015.
- » Affidavit on behalf of the Berkshire Hathaway Energy MBR Sellers, Docket No. EL15-22, *et al.*, response to show cause order, February 9, 2015.
- » Affidavit on behalf of ECP MBR Sellers, Docket No. ER13-2477, notice of change in status, January 20, 2015.

Testimony list prior to 2015 available upon request.

Generation and Purchases by the Northwestern Energy in the Southwest Power Pool Region and First-Tier Markets

Balancing Authority Area	Plant Name	Capacity		Ownership Share	Net Interest	
		Summer (MW)	Winter (MW)		Summer (MW)	Winter (MW)
SPP						
Owned Generation						
SPP	Aberdeen CTs	72.5	88.0	100.0%	72.5	88.0
SPP	Clark	2.6	2.7	100.0%	2.6	2.7
SPP	Faulkton	2.5	2.5	100.0%	2.5	2.5
SPP	Huron	54.7	63.5	100.0%	54.7	63.5
SPP	Mobile Unit	3.8	3.8	100.0%	3.8	3.8
SPP	Yankton	13.5	13.5	100.0%	13.5	13.5
SPP	Beethoven Wind	80.0	80.0	100.0%	80.0	80.0
Purchases						
SPP	Missouri River Energy Services				35.0	35.0 ^{1/}
SPP	Rolling Thunder I Power Partners, LLC				25.0	25.0
SPP, Total					289.6	314.0
MISO						
MISO	Coyote	429.0	429.0	10.0%	42.9	42.9
MISO	Big Stone	474.6	474.6	23.4%	111.1	111.1
MISO	George Neal South	644.0	644.0	8.7%	56.0	56.0
MISO, Total					210.0	210.0

^{1/} The amount purchased was 30 MW during the study period, but currently is 35 MW.

Note: Generation ratings are based on EIA-860 or Company Data
<http://www.eia.gov/cneaf/electricity/page/eia860.html>

Part I – Pivotal Supplier Analysis

Applicant-> **NorthWestern Energy**
 Market -> **SPP**
 Data Year -> **Dec 2015-Nov 2016**

As filed by the Applicant/Seller

Row		Reference
Generation		
Seller and Affiliate Capacity (owned or controlled)		
A	Installed Capacity (from inside the study area)	230 Exhibit JRS-2
A1	Remote Capacity (from outside the study area)	210 Exhibit JRS-2 (generation in MISO)
B	Long-Term Firm Purchases (from inside the study area)	60 Exhibit JRS-2
B1	Long-Term Firm Purchases (from outside the study area)	0
C	Long-Term Firm Sales (in and outside the study area)	0
D	Uncommitted Capacity Imports	0
Non-Affiliate Capacity (owned or controlled)		
E	Installed Capacity (from inside the study area)	85,382 Wkp-SPP Data (installed Capacity), less Row A and A1
E1	Remote Capacity (from outside the study area)	0
F	Long-Term Firm Purchases (from inside the study area)	4,287 Wkp-SPP Data (Long-Term Purchases), less Row B
F1	Long-Term Firm Purchases (from outside the study area)	0
G	Long-Term Firm Sales (in and outside the study area)	5,624 Wkp-SPP Data (Long-Term Sales)
H	Uncommitted Capacity Imports	0 SIL is zero
I	Study Area Reserve Requirement	1,530 Wkp-SPP Data (Operating Reserves, Market)
J	Amount of Line I Attributable to Seller, if any	0 Conservatively assumed to be zero
K	Total Uncommitted Supply (A+A1+B+B1+D+E+E1+F+F1+H-C-G-I-M)	38,415
Load		
L	Balancing Authority Area Annual Peak Load	50,617 Wkp-SPP Data (Integrated Hourly Max)
M	Average Daily Peak Native Load in Peak Month	44,600 Wkp-SPP Data (Integrated Hourly Monthly Avg)
N	Amount of Line M Attributable to Seller, if any	259 Wkp-NorthWestern Load
O	Wholesale Load (L-M)	6,017
P	Net Uncommitted Supply (K-O)	32,398
Q	Seller's Uncommitted Capacity (A+A1+B+B1+D-C-J-N)	241
	Result of Pivotal Supplier Screen (Pass if Line Q < Line P) (Fail if Line Q > Line P)	Pass
	Total Imports (Sum D,H), as filed by Seller ->	-
	% of SIL for Seller's imported capacity ->	#DIV/0!
	% of SIL for Other's imported capacity ->	#DIV/0!
	SIL value ->	-
	Do Total Imports exceed the SIL value? ->	No

Part II -- Market Share Analysis

Applicant-> **NorthWestern Energy**
 Study Area -> **SPP**
 Data Year -> **Dec 2015-Nov 2016**

As filed by the Applicant/Seller

Row		Winter (MW)	Spring (MW)	Summer (MW)	Fall (MW)	Reference
Seller and Affiliate Capacity (owned, controlled or under LT contract)						
A	Installed Capacity (inside the study area)	254	254	230	254	Exhibit JRS-2
A1	Remote Capacity (from outside the study area)	210	210	210	210	Exhibit JRS-2 (generation in MISO)
B	Long-Term Firm Purchases (inside the study area)	60	60	60	60	Exhibit JRS-2
B1	Long-Term Firm Purchases (from outside the study area)	0	0	0	0	
C	Long-Term Firm Sales (in and outside the study area)	0	0	0	0	
D	Seasonal Average Planned Outages	0	0	0	0	Conservatively assumed to be zero
E	Uncommitted Capacity Imports	0	0	0	0	
Capacity Deductions						
F	Average Peak Native Load in the Season	31,750	28,370	43,024	31,868	Wkp-SPP Data (Integrated Hourly Seasonal)
G	Amount of Line F Attributable to Seller, if any	234	191	255	197	Wkp-NorthWesternLoad
H	Amount of Line F Attributable to Non-Affiliates, if any	31,516	28,179	42,769	31,671	
I	Study Area Reserve Requirement	1,597	1,670	1,530	1,224	Wkp-SPP Data (Operating Reserves, Market)
J	Amount of Line I Attributable to Seller, if any	0	0	0	0	Conservatively assumed to be zero
K	Amount of Line I Attributable to Non-Affiliates, if any	1,597	1,670	1,530	1,224	
Non-Affiliate Capacity						
L	Installed Capacity (inside the study area)	86,521	85,239	85,382	85,489	Wkp-SPP Data (installed Capacity), less Row A and A1
L1	Remote Capacity (from outside the study area)	0	0	0	0	
M	Long-Term Firm Purchases (inside the study area)	4,249	4,252	4,287	4,350	Wkp-SPP Data (Long-Term Purchases), less Row B
M1	Long-Term Firm Purchases (from outside the study area)	0	0	0	0	
N	Long-Term Firm Sales (in and outside the study area)	5,624	5,624	5,624	5,614	Wkp-SPP Data (Long-Term Sales)
O	Seasonal Average Planned Outages	3,428	8,343	1,435	5,971	Wkp-SPP Data (Planned Outages)
P	Uncommitted Capacity Imports	0	0	0	0	SIL is zero
Supply Calculation						
Q	Total Competing Supply (L+L1+M+M1+P-H-K-N-O)	48,605	45,675	38,311	45,359	
R	Seller's Uncommitted Capacity (A+A1+B+B1+E-C-D-G-J)	290	333	244	327	
S	Total Seasonal Uncommitted Capacity (Q+R)	48,895	46,008	38,556	45,686	
T	Seller's Market Share (R÷S)	0.6%	0.7%	0.6%	0.7%	
	Results (Pass if < 20% and Fail if ≥ 20%)	Pass	Pass	Pass	Pass	
U	Total Imports, as filed by Seller (E+P)	0	0	0	0	
V	SIL value*	-	-	-	-	
	Do Total Imports exceed SIL value? (is U<=V)	No	No	No	No	

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

NorthWestern Corporation

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Docket No. ER11-1858-___

AFFIDAVIT

District of Columbia

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JULIE R. SOLOMON being duly sworn, deposes and states: that she prepared the Affidavit and Exhibits of Julie R. Solomon and that the statements contained therein and the Exhibits attached hereto are true and correct to the best of her knowledge and belief.


Julie R. Solomon

SUBSCRIBED AND SWORN TO BEFORE ME, this the 25th day of June 2018.


Notary Public, District of Columbia

Printed Name: Janet P. Cashion

My Commission Expires: July 14, 2022

