

Prefiled Direct Testimony and Exhibits
Bleau J. LaFave

Before the South Dakota Public Utilities Commission
of the State of South Dakota

In the Matter of the Application of
NorthWestern Corporation, d/b/a NorthWestern Energy

For Authority to Increase Electric Utility Rates
in South Dakota

Docket No. EL14-_____

December 19, 2014

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EXHIBITS

2009 SD IRP	Exhibit__(BJL-1)
2011 SD IRP Update	Exhibit__(BJL-2)
2012 SD IRP	Exhibit__(BJL-3)
RTO Integration Study, Phase 1 - Confidential	Exhibit__(BJL-4)

1 **Witness Information**

2 **Q. Please state your name and business address.**

3 **A.** My name is Bleau J. LaFave. My business address is 3010 West 69th
4 Street, Sioux Falls, South Dakota 57108.

5
6 **Q. By whom are you employed and in what capacity?**

7 **A.** My current position at NorthWestern Energy (“NorthWestern”) is Director
8 Long Term Resources. My responsibilities include overseeing the long-
9 term energy supply growth strategies for NorthWestern, including large
10 project development and acquisitions.

11
12 **Q. Please state your educational background and experience.**

13 **A.** I earned a Bachelor of Science degree in Mechanical Engineering from
14 the South Dakota School of Mines and Technology in 1994. After
15 completing my degree, I was employed by NorthWestern as a Project
16 Engineer. I have held several positions, including Operations Engineer,
17 Huron Area Engineer, Aberdeen Area Engineer, Maintenance Process
18 Leader, Support Services Process Leader, Corporate Procurement
19 Manager, Director of Utility Services, Director of Large Project
20 Development, Director South Dakota/Nebraska Supply Planning and
21 Development, Director Long Term Resources, and Vice President of
22 Operations for former subsidiary NorthWestern Services Corporation.
23 During my employment with NorthWestern, I have served in many

1 operations and administration functions with a focus on operations
2 management, procurement, logistics, contracts, fleet, facilities, utility
3 engineering, measurement, and customer service.
4

5 **Purpose of Testimony**

6 **Q. What is the purpose of your testimony?**

7 **A.** The purpose of my testimony is to provide an overview of the South
8 Dakota Integrated Resource Plans (“IRP”) and provide information
9 concerning NorthWestern’s transition to the Southwest Power Pool
10 (“SPP”).

11 The IRP overview will include:

- 12 1. Historical review of the South Dakota IRP and Ten-Year Biennial
13 filings;
- 14 2. Overview of the South Dakota Energy Supply Portfolio; and
- 15 3. Overview of generation planning.

16 The SPP transition discussion will include:

- 17 1. History and Planning;
- 18 2. Decision Process;
- 19 3. Integration;
- 20 4. Operation and Maintenance (“O&M”) General Rate Case Impacts;
21 and
- 22 5. Transmission Costs for Tracker Filings.
23

1 **South Dakota Integrated Resource Plan Overview**

2 **Q. What IRPs has NorthWestern prepared and provided to the South**
3 **Dakota Public Utilities Commission (“Commission”) since 2009?**

4 **A.** NorthWestern prepared and provided to the Commission an IRP in 2009,
5 an update in 2011, and an IRP in 2012. They are attached to my
6 testimony as Exhibit__(BJL-1) through Exhibit__(BJL-3), respectively.
7 The 2014 IRP will be provided to the Commission in January 2015.

8
9 **Q. What is the purpose of NorthWestern’s IRPs?**

10 **A.** The IRPs provide a disciplined economic evaluation of potential supply
11 (energy and capacity) to meet the next 10 years of NorthWestern’s electric
12 load-serving obligation in South Dakota. The IRPs analyze a range of
13 prospective environmental and market uncertainties that have the greatest
14 potential to impact customer needs and long-term procurement options.
15 The IRPs’ conclusions help guide NorthWestern’s investments on behalf
16 of its customers in South Dakota. The IRPs are based on then-current
17 available information and are updated from time to time to reflect
18 significant anticipated future events, such as new legislation, regional
19 operational/planning needs, or environmental requirements.

20
21 **Q. What resources are included in NorthWestern’s portfolio?**

22 **A.** NorthWestern has shares in three steam generation coal plants which
23 provide approximately 210 MW of generating capacity averaging about 1.5

1 GWh of production each year. NorthWestern has an additional 150 MW of
2 internal combustion generation fueled by natural gas or oil for capacity.
3 Power Purchase Agreements (“PPA”) between NorthWestern and Titan
4 Wind Farm, Oak Tree Wind (a Qualifying Facility (“QF”)), and Beethoven
5 Wind (also a QF) are projected to produce 475,000 MWh per year.
6 NorthWestern has contracted for an additional 30 to 35 MW of peaking
7 capacity. The total portfolio includes 390 MW of summer peaking capacity
8 with a total average forecasted generation capable of 2 GWh each year.

9

10 **Q. Have the IRPs identified additional energy or capacity needs to serve**
11 **NorthWestern’s customers?**

12 **A.** Each IRP identified possible needs and solutions based on the specific
13 evaluations performed. The conclusions of each IRP are described below.

14 The major conclusions of the 2009 IRP determined needs for:

- 15 • An additional 50 to 75 MW of baseload generation;
- 16 • 45 MW of peaking generation;
- 17 • The possibility of 25 MW of additional wind – driven by the
18 Renewable, Recycled and Conserved Energy Objective
19 (“RRCEO”);
- 20 • The implementation of a Demand-Side Management (“DSM”)
21 program initially targeting 500 kW per year; and
- 22 • An evaluation of the benefits of different rate structures that
23 encourage energy efficiency.

1 The major conclusions of the 2011 Update included the following:

- 2 • Baseload Capacity – Continued evaluations are needed for
3 additional coal, natural gas, wind, biomass, and alternative
4 renewable energy resources.
- 5 • Peaking Capacity – Capacity to serve customers is sufficient
6 through 2015 with the addition of the Aberdeen Unit 2. Additional
7 capacity may be required in the latter years of the ten-year planning
8 period.
- 9 • Energy Efficiency – Continued evaluation of DSM opportunities
10 must be performed, with an annual goal of 0.5 MW per year.

11

12 The major conclusions of the 2012 IRP included the following:

- 13 • Future Capacity Contracts – Due to the termination of the Basin
14 Electric Power Cooperative (“Basin”) capacity contracts in 2015, a
15 Request for Proposal (“RFP”) will be conducted to determine
16 capacity availability and to provide cost comparisons to the
17 construction of new capacity generation.
- 18 • Baseload Energy Resources – NorthWestern will continue to
19 evaluate shaped market strips of power compared to the building of
20 baseload resources.
- 21 • Renewable Energy Resources – The renewable resource portfolio
22 must be diversified, and NorthWestern will strive to achieve the
23 RRCEO.

1 The forthcoming 2014 IRP concludes the following:

- 2 • Energy – The new Upper Midwest Zone (“UMZ”) and the current
3 SPP footprint are very long energy supply. NorthWestern will
4 continue to evaluate energy supply options for NorthWestern’s load
5 service.
- 6 • Capacity – With continued upward pressure on needed capacity,
7 NorthWestern will continue to evaluate market availability and
8 physical resources that would best fit NorthWestern’s portfolio.
- 9 • Regional Transmission Operation – NorthWestern will be
10 transitioning to SPP to the newly formed UMZ complying with the
11 Federal Energy Regulatory Commission (“FERC”) Order 1000 and
12 joining the Western Area Power Administration (“WAPA”) and the
13 rest of the Integrated Transmission System (“IS”).
- 14 • Carbon – NorthWestern will be active at the state and national
15 levels to protect the interests of customers and the current fleet of
16 thermal resources.

17

18 **Q. Has NorthWestern added any resources to its portfolio based on the**
19 **conclusions of these plans?**

20 **A.** Yes. See below for more detail.

21

22 **Q. Please identify resources added and the corresponding IRP(s) in**
23 **which they were discussed.**

1 **A.** 2009 IRP:

- 2
- A capacity need was identified to ensure reliability for
- 3 NorthWestern's customers. As discussed in the Prefiled Direct
- 4 Testimony of Dennis Wagner ("Wagner Direct Testimony"), the
- 5 Aberdeen Unit #2 peaking facility was determined to be the best
- 6 resource to meet this need and was added to the portfolio in 2012.

7

8 2009 IRP, 2011 Update, and 2012 IRP:

- 9
- DSM program was implemented in 2014. As described in the
- 10 Prefiled Direct Testimony of Bobbi Schroepel the implementation
- 11 of DSM followed many years of evaluation and Commission review.
- An additional 100 MW of wind generation will be added to the
- 12 NorthWestern portfolio through QF PPAs. Although this level far
- 13 exceeds the recommended portfolio as described in each IRP, the
- 14 federal Public Utility Regulatory Policies Act of 1978 ("PURPA")
- 15 requirements dictate the addition of QF generation as long as the
- 16 price is at the utility's avoided cost. The rate for the Oak Tree QF
- 17 PPA was directed by the Commission and the contracts for Oak
- 18 Tree and B&H I (now Beethoven I) were reviewed by the
- 19 Commission and found to be consistent with the Commission's
- 20 interpretation of PURPA. The B&H II (now Beethoven II) contract
- 21 was structured in the same manner as Beethoven I.
- 22

23

1 2011 update and 2012 IRP:

- 2 • NorthWestern secured additional reserve capacity through an RFP
3 process. This contracted capacity fulfilled a short-term need from
4 2015 to 2018.

5

6 **Q. Do the IRPs provide any other guidance beyond portfolio changes**
7 **due to NorthWestern customer service need or regulatory**
8 **compliance?**

9 **A.** Yes. The IRPs provide additional guidance by reviewing the historical
10 characteristics of NorthWestern’s load growth, load peak, generation
11 performance, and market pricing.

12

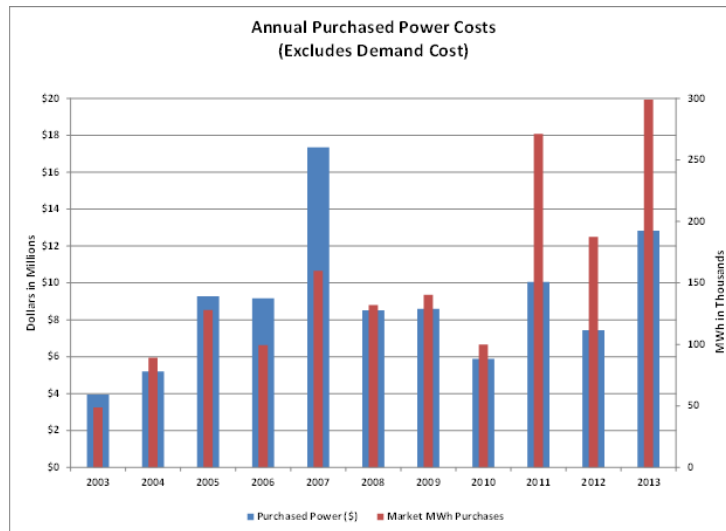
13 Each IRP examined the existing and projected environmental
14 requirements for existing resources. The Wagner Direct Testimony
15 discusses environmental upgrades to baseload generation units and
16 retirements of small peaking units; these matters were also discussed in
17 each plan.

18

19 The IRPs also evaluated changes regarding the transmission
20 organizations and market relationships with regional partners, including
21 Mid-Continent Area Power Pool (“MAPP”), Midwest Independent System
22 Operator (“MISO”), WAPA, and the IS. SPP and neighboring utilities that
23 belong to these organizations also were discussed in each IRP.

1 **Q. What are the historical characteristics of NorthWestern’s load**
2 **growth, load peak, and cost of purchased power?**

3 **A.** As described in the forthcoming 2014 IRP, NorthWestern’s customer
4 electric load growth over the past ten years has averaged about 39,300
5 MWh per year (2.4%) with a peak load growth of 4 MW per year (1.1%).
6 As shown in the graph below, historic energy purchase costs followed the
7 drop in the market due to the economic downturn. With the exception of
8 replacement power purchased due to an extended baseload generation
9 outage in 2011, the overall cost of power purchased for NorthWestern
10 customers has declined since 2007. Recent baseload generation outages
11 have increased the amount of energy purchased from the market, but the
12 lower market prices have kept costs down.



13 **Q. How has NorthWestern’s IRP process helped to provide long-term**
14 **rate stability for its customers?**

1 **A.** Each IRP studied, discussed, and communicated portfolio needs to serve
2 NorthWestern’s customers. The process helped focus planning and
3 evaluation efforts to meet the portfolio needs.
4

5 **Q.** **You discussed above that the IRPs included evaluations of the**
6 **regional organizations. Please discuss this further.**

7 **A.** Each IRP addressed structures and changes of regional organizations and
8 NorthWestern’s participation in each. The 2012 IRP discussed WAPA,
9 MAPP, MRO, and North American Electric Reliability Corporation
10 (“NERC”). It also provided a high-level review of Regional Transmission
11 Organizations (“RTO”) including MISO and SPP as the regulatory
12 landscape changed and other regional utilities migrated to the RTO
13 systems.
14

15 **NorthWestern RTO Evaluations**

16 **Q.** **Please provide more information about the IS.**

17 **A.** The IS is an electric transmission system located in the Western Upper
18 Great Plains (“UGP”) region. The IS is comprised of about 10,000 miles of
19 transmission lines owned by WAPA, Basin and Heartland Consumers
20 Power District (“Heartland”).
21

1 **Q. The forthcoming 2014 IRP describes changes to the organizational**
2 **structure of the NorthWestern transmission system. What are the**
3 **current arrangements?**

4 **A.** NorthWestern pays WAPA/IS network transmission fees on a monthly
5 basis, based on NorthWestern's load ratio share of the demand on the IS.
6 In turn, the NorthWestern revenue requirement for these facilities is
7 treated as a "facility credit" by WAPA/IS and credited to NorthWestern on
8 a pro-rata monthly basis on the monthly network transmission invoice.
9 WAPA also provides various transmission services including transmission
10 O&M, area balancing, ancillary services, and scheduling for
11 NorthWestern.

12
13 MAPP serves as the regional transmission planning organization, the
14 reliability planning coordinator, and the transmission services coordinator.

15
16 **Q. The forthcoming 2014 IRP discusses plans to move the**
17 **NorthWestern transmission system to SPP. What are the primary**
18 **reasons for joining SPP?**

19 **A.** The two main drivers for joining SPP are FERC Order 1000 and the
20 migration of the existing IS to SPP.

21
22 **Q. Please describe NorthWestern's response to FERC Order 1000.**

1 **A.** As described in the Prefiled Direct Testimony of Michael Cashell, the
2 current arrangements with WAPA and MAPP do not qualify under the
3 requirements of FERC Order 1000. FERC issued the order on July 21,
4 2011, and it has two central components: (1) transmission planning and
5 (2) cost allocation. The transmission planning component requires
6 NorthWestern to join a regional planning group that satisfies certain
7 identified criteria. It also requires that NorthWestern coordinate through
8 this regional group with an even larger group of neighboring utilities at an
9 inter-regional level (see map below). With respect to cost allocation,
10 FERC Order 1000 requires that the regional planning entity that
11 NorthWestern participates in have a process for allocating the costs of
12 new transmission facilities.



13 **Q.** Why does the IS migration to SPP influence the decision for
14 NorthWestern to join SPP?

15 **A.** NorthWestern's transmission system has 14 interconnections with other
16 transmission entities that provide delivery of capacity and energy, as well

1 as system stability. Of the 14 NorthWestern transmission
2 interconnections, ten are with IS. NorthWestern’s reliability, access to
3 markets, ancillary services, and power delivery are heavily tied to IS.

4

5 **Q. Did NorthWestern evaluate options for joining other RTOs or the**
6 **possibility of not belonging to an RTO?**

7 **A.** Yes, NorthWestern conducted a study, contracting with Navigant
8 Consulting (“Navigant”), to evaluate joining SPP, MISO, or operating
9 alone.

10

11 **Q. What did the study conclude?**

12 **A.** As identified in the confidential report from Navigant (provided under
13 separate cover as Exhibit__(BJL-4) - Confidential), the study determined
14 joining SPP would be the least cost, lowest risk alternative for
15 NorthWestern.

16

17 **Q. What are the key cost drivers that support the determination that**
18 **joining SPP is the lowest cost option?**

19 **A.** As described in the Navigant report, the migration of the IS to SPP
20 significantly affects the costs associated with each option. If the IS joins
21 SPP, all of NorthWestern’s load will be within the SPP footprint. This
22 means that NorthWestern will minimize Point-To-Point (“PTP”) charges
23 needed to deliver energy to the load by offsetting these charges with

1 Network Transmission agreements under which NorthWestern continues
2 to receive transmission facility credits or their equivalent.

3
4 Joining MISO would include a similar Network Transmission agreement,
5 but significant SPP PTP charges would be required to deliver the energy
6 from NorthWestern's coal plants through the IS to NorthWestern's
7 customers.

8
9 In the "stand alone" option, there would be no Network Transmission
10 agreement and resulting credit. NorthWestern would be responsible for
11 PTP charges from all supply sources to the NorthWestern load and would
12 also be responsible for conducting balancing authority operations itself.
13 The balancing authority is currently being performed by WAPA under the
14 Network Integration Service Agreement.

15

16 **Q. What critical assumptions are being made in this evaluation?**

17 **A.** The two main assumptions included in all scenarios are the finalization of
18 IS migration to SPP and the continuance of the pseudo tie arrangement
19 with MISO to deliver energy and capacity from NorthWestern's ownership
20 share of the three coal generation plants.

21

22 **Q. Are these fair assumptions?**

1 **A.** Yes, the members of the IS have filed a request with FERC seeking
2 approval to join SPP and continue to complete the work to transfer into
3 SPP. For the pseudo tie arrangement for our coal generation,
4 NorthWestern has discussed the arrangement with both SPP and MISO.
5 Each entity indicated that the current arrangement will continue following
6 the transition.

7
8 **Q. Did the Navigant report estimate the economic impact on South
9 Dakota customers of joining SPP versus the status quo? If so, what
10 is the impact?**

11 **A.** Yes. The report estimates joining SPP will increase costs by
12 approximately \$1.7 million per year, not including setup costs and RTO
13 trade benefits. As discussed below, this estimate has been updated since
14 the report was issued.

15
16 **Q. If the status quo is less expensive, why should NorthWestern join
17 SPP?**

18 **A.** The status quo is not a realistic option because the IS will not exist in the
19 future after its transition to SPP. There is no scenario that allows for the
20 “status quo” to continue. The comparison was included in the report to
21 estimate the cost impact of migrating to SPP in comparison to the current
22 state of the transmission system.

23

1 **Q. How does joining SPP impact NorthWestern’s arrangements with**
2 **MAPP and WAPA?**

3 **A.** NorthWestern will terminate its agreement with MAPP. All of the services
4 provided by MAPP will be conducted by SPP. Services from WAPA will
5 be diminished considerably. NorthWestern will be subject to the SPP tariff
6 including charges and revenue as part of the services offered. SPP will be
7 the balancing authority for the area and provide ancillary services in
8 accordance with the tariff. NorthWestern will still have O&M agreements
9 with WAPA covering interconnected resources.

10
11 NorthWestern will be responsible for scheduling and settlement of its
12 resources.

13
14 **NorthWestern Southwest Power Pool Integration**

15 **Q. Please describe NorthWestern’s future relationship with SPP.**

16 **A.** With WAPA/IS joining SPP, IS will become the UMZ in SPP. SPP will be
17 the transmission provider for the UMZ and will invoice and collect the UMZ
18 transmission rates. NorthWestern will continue to pay a load ratio share of
19 the WAPA/IS revenue requirement, but will pay these network
20 transmission charges to SPP under Schedule 9 of the SPP Open Access
21 Transmission Tariff (“SPP tariff”).

22

1 As a member of SPP, NorthWestern will become a transmission owner
2 (“TO”) in SPP. SPP will determine network transmission rates for the
3 UMZ by combining the transmission revenue requirement for each of the
4 TOs with facilities in the UMZ. Each UMZ TO (e.g., WAPA, Basin,
5 Heartland, and NorthWestern) will develop its transmission revenue
6 requirement individually under protocols that will be included in
7 Attachment H (Annual Transmission Revenue Requirement for Network
8 Integration Transmission Service) to the SPP tariff.

9
10 SPP will collect the revenue from network transmission services provided
11 in the UMZ, and then distribute these revenues to the TOs based on each
12 TO’s share of the UMZ revenue requirement. SPP will also allocate
13 through and out transmission service within the UMZ and other zones in
14 SPP to all SPP TOs according to SPP tariff rules.

15
16 As such, rather than receiving a facility credit deduction on its monthly
17 network transmission service invoice as is done today, as part of SPP,
18 NorthWestern will be invoiced the full monthly network transmission
19 service and will receive a separate monthly distribution credit to recover
20 the revenue requirement associated with the NorthWestern transmission
21 facilities included in the SPP tariff.

22

1 **Q. What are the milestones and major tasks necessary for the transition**
2 **to SPP and the associated timeline?**

3 **A.** The final integration date for the SPP transition is scheduled for October 1,
4 2015. The timeline and tasks below are based on that date.

- 5 • October 31, 2014 – Letter of Intent.
- 6 • October 31, 2014 – Identification of the NorthWestern facilities to
7 be included under the SPP tariff.
- 8 • November 7, 2014 – Information exchange with SPP including
9 grandfather agreements, generation assets, points of delivery,
10 interconnection agreements, meter locations, and loss calculations.
- 11 • November 14, 2014 – FERC revenue requirements and rate
12 calculations.
- 13 • December 1, 2014 – Retail rate detail estimates.
- 14 • December 1, 2014 – Auction Revenue Rights submittal.
- 15 • December 1, 2014 – Transmission contract reviews (WAPA,
16 MAPP).
- 17 • January 1, 2015 – FERC Order 1000 compliance filing.
- 18 • January 31, 2015 – Wheeling customer meetings.
- 19 • August 1, 2015 – Communication Installation.
- 20 • August 1, 2015 – Training.
- 21 • October 1, 2015 – Non-transmission wheeling customer transition.
- 22 • October 1, 2015 – SPP transition.

23

1 **Q. How does SPP define transmission facilities that can be included**
2 **under their tariff?**

3 **A.** According to the SPP tariff: Transmission Facilities shall include all
4 facilities that meet the following criteria:

- 5 1. All existing non-radial power lines, substations, and associated
6 facilities, operated at 60 kV or above, plus all radial lines and
7 associated facilities operated at or above 60 kV that serve two or
8 more eligible customers not Affiliates of each other. Rate treatment
9 for transmission upgrades completed after October 1, 2005 will be
10 determined pursuant to Section 1.3 (h) of this Tariff. For the
11 purpose of the application of this criterion, “open loops” are radial
12 lines. Additionally, at such time an existing radial is incorporated
13 into a looped transmission circuit that existing radial would be
14 eligible for inclusion in rates on the same basis as the remainder of
15 the facilities in the loop.
- 16 2. All facilities that are utilized for interconnecting the various internal
17 zones to each other as well as those facilities that interconnect SPP
18 with other surrounding entities.
- 19 3. Control equipment and facilities necessary to control and protect
20 facilities qualifying as Transmission Facilities.
- 21 4. For substations connected to power lines qualifying as
22 Transmission Facilities, where power is transformed from a voltage
23 higher than 60 kV to a voltage lower than 60 kV, facilities on the

1 high voltage side of the transformer will be included with the
2 exception of transformer isolation equipment.

3 5. The portion of the direct-current interconnections with areas outside
4 of the SPP Region (DC ties) that are owned by a Transmission
5 Owner in the SPP Region, including those portions of the DC tie
6 that operate at a voltage lower than 60 kV.

7 6. All facilities operated below 60 kV that have been determined to be
8 transmission pursuant to the seven (7) factor test set forth in FERC
9 Order No. 888, 61 Fed Reg. 21,540, 21,620 (1996), or any
10 applicable successor test.

11

12 **Q. What NorthWestern facilities will be included under the SPP tariff?**

13 **A.** Most of the 115 kV facilities will be included, with the exception of a radial
14 line in Aberdeen and a radial line in Yankton. All of the 69 kV facilities are
15 radial; therefore, only 69 kV facilities that serve more than one
16 transmission customer, including NorthWestern as a customer, will be
17 included. NorthWestern and SPP are also reviewing inclusion of the
18 shared ownership of the transmission facilities that deliver power from the
19 three coal generation facilities.

20

21 **Q. How do facilities included under the SPP tariff differ from those**
22 **under the WAPA tariff?**

1 **A.** The WAPA tariff included the 115 kV facilities that will be included under
2 SPP. WAPA guidelines did not include any 69 kV facilities.

3

4 **Q. Why would NorthWestern include the additional 69 kV facilities and**
5 **the transmission facilities associated with the three coal plants**
6 **under the SPP tariff?**

7 **A.** The larger the proportional share of the transmission assets included in
8 the UMZ for SPP, the larger the share of revenue from this zone credited
9 to NorthWestern's customers.

10

11 NorthWestern RTO Integration Costs

12 **Q. What are the costs of the transition to integrate to SPP?**

13 **A.** Based on the plan to integrate NorthWestern to SPP, the following costs
14 are estimated:

- 15 • Internal labor – NorthWestern will expend significant effort in
16 multiple departments to achieve a successful transition.
- 17 • Project management – NorthWestern has hired Navigant to assist
18 in the transition to SPP. These costs are estimated to be \$15,000
19 per month, or \$180,000 in total.
- 20 • Setup costs – These are estimated to be approximately \$7,500 per
21 month (@\$90,000 for total transition).

22

1 **Q. What ongoing costs are necessary to support operating in the SPP**
2 **system?**

3 **A.** NorthWestern estimates the following as on-going costs related to support
4 for operating in the SPP system:

- 5 • Marketing & Settlements – NorthWestern has never participated in
6 an ISO market. To facilitate the transition to future internal
7 operations, NorthWestern plans to contract with a third party that
8 has SPP experience to assist in the setup and transition of the
9 marketing operations with an ongoing cost estimate of \$55,200 per
10 month (\$660,000 per year). NorthWestern will continue to evaluate
11 the assistance of the outside resources.
- 12 • Communications and Transmission System Upgrades –
13 NorthWestern is currently estimating the cost of communications,
14 metering, and system upgrades that are required to operate and
15 participate in the SPP market. The majority of these costs will be
16 capitalized. NorthWestern is still evaluating the system to identify
17 these requirements and their costs.
- 18 • Labor – NorthWestern estimates the need for two positions – one in
19 transmission operating and planning, and one in supply planning.
20 The supply position will be a reallocation of an existing position.

21

1 SPP Transmission Costs

2 **Q. Please identify the costs to NorthWestern customers under the SPP**
3 **tariff and how they relate to the costs and services NorthWestern is**
4 **currently paying to WAPA.**

5 **A.** The SPP tariff consists of several schedules that cover different services
6 and revenues provided by SPP membership. The schedule descriptions
7 and effect on NorthWestern are described below.

8 **Transmission-Related Charges to NorthWestern under the SPP Tariff**

- 9 • Schedule 1 (scheduling and dispatch): Currently, WAPA does not
10 assess a Schedule 1 charge to NorthWestern. Instead, under Contract
11 12-UGPR-79, WAPA provides energy marketing and load
12 management for NorthWestern and includes scheduling and dispatch
13 as part of these services. NorthWestern anticipates that, upon entry
14 into SPP, a separate SPP UMZ Schedule 1 scheduling and dispatch
15 charge will be assessed to all transmission customers in the UMZ,
16 including NorthWestern, based on WAPA's costs for these
17 services. At that time, Contract 12-UGPR-79 is expected to be
18 terminated. To replace the energy marketing and load management
19 services currently provided to NorthWestern by WAPA under Contract
20 12-UGPR-79, NorthWestern anticipates either hiring additional staff to
21 perform these services internally at NorthWestern and/or contracting
22 for these services.

- 1 • Schedule 1A (Tariff Administration Service): SPP assesses Schedule
2 1A RTO administrative charges for transmission services provided in
3 SPP. These charges will be assessed to NorthWestern based on its
4 12 Coincident Peak (“CP”) demand in the UMZ.
- 5 • Schedule 9 (Network Integration Transmission Service): As noted
6 above, NorthWestern will pay for network transmission service under
7 SPP Schedule 9 rather than take network service from WAPA. In turn,
8 SPP will distribute the revenues it collects for NorthWestern’s higher-
9 voltage transmission assets included in the SPP tariff to NorthWestern.
- 10 • Schedule 11 (Base Plan Zonal and Region-wide
11 Charge): NorthWestern will pay for Schedule 11 charges, both
12 regional and zonal, as part of SPP. These charges are designed to
13 recover the costs of higher-voltage projects that are shared across the
14 SPP footprint and allocated to the UMZ. Under the WAPA/IS
15 agreement with SPP, the UMZ will not pay for Schedule 11
16 transmission projects with a “need by” date prior to October
17 2015. These Schedule 11 charges will be assessed based on
18 NorthWestern’s 12 CP demand in the UMZ. SPP distributes revenues
19 it collects under Schedule 11 to the TOs owning upgrades that are
20 recovered under Schedule 11.
- 21 • Schedule 12 (FERC Assessment Charge): NorthWestern currently
22 pays FERC charges for wholesale market transactions directly to

1 FERC. As a member of SPP, NorthWestern will pay for FERC fees
2 under SPP Schedule 12 for its entire load.

- 3 • Schedules 7 and 8 (Point-to-Point): SPP will administer Schedules 7
4 and 8 point-to-point transactions under its tariff and distribute short-
5 term revenues it collects under Schedules 7 and 8 to TOs based on
6 the MW-mile impact of the transaction and the share each TO has of
7 the total SPP revenue requirement.

8
9 In addition, NorthWestern purchases of ancillary services (e.g., reactive
10 power, operating reserves) will be purchased through SPP rather than
11 WAPA.

12

13 **Q. What is the estimated cost impact to NorthWestern of being in SPP**
14 **relative to the status quo?**

15 **A.** See the table below, which shows the estimated 2016 cost impact (in
16 millions) to NorthWestern of being in SPP in comparison to the costs
17 under the current arrangements with WAPA. The estimate was prepared
18 by Navigant in June 2014.

	Status Quo	Join SPP	Incr- ease
Network Transmission	7.7	8.3	0.6
RTO Administrative Costs		0.9	0.9
FERC Annual Charges	0.0	0.1	0.1
Internal Staffing/Equipment		0.1	0.1
Total	7.7	9.4	1.7

1 This estimate does not include any reduction in costs that may arise from
 2 NorthWestern having access to the SPP market for spot purchases and
 3 sales. As NorthWestern has continued to work through the SPP process,
 4 additional expenses have increased this estimate.

5
 6 As shown, network transmission charges, net of the credit/distribution to
 7 NorthWestern for its higher-voltage transmission, are estimated to
 8 increase by \$600,000 in SPP in 2016. This includes the impact of
 9 Schedule 11 transmission expansion charges in SPP as transmission
 10 expansion costs under the status quo are recovered through network
 11 transmission charges. The RTO administrative charges in SPP are
 12 projected to be \$0.9 million in 2016. The increase in FERC annual
 13 charges in SPP is projected to be \$0.1 million in 2016. The internal labor
 14 and equipment costs that NorthWestern was expected to incur in
 15 transitioning to SPP were estimated to average \$0.1 million per year in the
 16 cost-benefit study. Since the time of the study, additional staffing and
 17 contract needs have been identified which have increased the additional
 18 estimated yearly cost to \$0.8 million. The total estimate increase at this
 19 time ranges in cost from \$2.4 million to \$3 million in 2016.

	Status	Join	
	Quo	SPP	Increase
Network Transmission	7.7	8.3	0.6
RTO Administration Costs		0.9	0.9
FERC Annual Charges		0.1	0.1
Internal Staffing/Equipment		0.8	0.8
Total	7.7	10.1	2.4

1 **Q. How will the costs be recovered?**

2 **A.** Any energy-related costs will be recovered through the fuel tracker. All
3 other schedule costs will be passed through the transmission tracker,
4 similar to the manner in which WAPA costs are recovered today. The
5 ongoing O&M costs have been included as a normalizing adjustment in
6 Schedule H-6.

7

8 **Q. How will the revenues be credited?**

9 **A.** Any energy-related revenues will be credited through the fuel tracker. All
10 other schedule revenues will be passed through the transmission tracker,
11 similar to the manner in which WAPA revenues are passed through today.

12

13 WAPA Transmission Costs

14 **Q. Will there still be transmission charges from WAPA?**

15 **A.** Yes, NorthWestern will still have several shared facilities agreements with
16 WAPA. In these agreements WAPA will provide maintenance services for
17 the shared facilities. NorthWestern will also contract with WAPA to
18 provide operations of the 115 kV transmission systems in accordance with
19 NERC requirements. Although these agreements will need to be
20 restructured, they will be similar in scope and cost to what they are today
21 and will be recovered in the same manner.

22

1 **Q.** Does this conclude your testimony?

2 **A.** Yes, it does.