

**Docket Number:** EL16-013  
**Subject Matter:** First Data Request  
**Request to:** NorthWestern Energy  
**Request from:** South Dakota Public Utilities Commission Staff  
**Date of Request:** April 5, 2016  
**Responses Due:** April 12, 2016

- 1-1) Provide the distance that NorthWestern will have to build power lines in order to meet the needs of Dakota Plains's grain terminal. Provide a localized map of the area and all facilities as well as detail on if the lines will be above ground or below ground.

Customer-owned property is adjacent to a 35kV line owned by NorthWestern Energy. The line extension to serve the grain terminal will be approximately 3,300 feet. Power lines will be below ground feeding pad mount transformers.

See files 1-1 Dakota Plains Distribution and Transformer Layout and 1-1 Dakota Plains Property and Service Territory.

- 1-2) Provide a detailed description and breakdown of all costs of extending service to Dakota Plains, including but not limited to substations, lines, transformers, etc. and provide a description and workpapers showing how NorthWestern proposes to recover such costs.

See 1-2 CONFIDENTIAL Dakota Plain Work Plan.

- 1-3) Will the costs to build the necessary facilities be passed along in any way to any of the legacy customers or how will the NorthWestern charge Dakota Plains to ensure legacy customers will not be adversely affected?

The costs will not be passed along in any way to legacy customers. The margin from this project is sufficient to support the construction costs. In addition, NorthWestern is requiring a letter of credit from Dakota Plains to cover project construction costs, as well as take or pay volumes in order to ensure recovery of the costs of the project from this customer and not from legacy customers. See the confidential response to question 1-11 for additional support.

- 1-4) Provide the size and electrical detail of Dakota Plains's expected load.

The connected equipment load of the facility is 2.23 MW. See File 1-4 Dakota Plains Load Summary.xlsx

- 1-5) Explain in detail the adequacy of NorthWestern's power supply to serve this new large load customer. Describe NorthWestern's current capacity status and reserve margin and describe what effect the provision of service to this customer will have on the same. Provide NorthWestern's existing average system capacity cost. Explain at what point NorthWestern will have to add or purchase capacity to maintain an adequate reserve margin. Explain how such capacity would be acquired and what price might be expected for incremental capacity.

NorthWestern's South Dakota power supply includes about 201 MWs baseload (steam plants), 150 MWs internal generation (natural gas & oil mix) and about 125 MWs of wind. NorthWestern currently has 390 MW of owned and contracted capacity. NorthWestern's historical peak is 341 MWs.

NorthWestern has a capacity agreement with Missouri River Energy Services ("MRES") for 30 MWs in 2016 and 2017 and 35 MWs in 2018. The rate for this capacity was provided during EL14-106 as a confidential exhibit. NorthWestern also joined the Southwest Power Pool ("SPP") on October 1, 2015. There may be additional capacity resources available within the SPP footprint.

In addition, NorthWestern is exploring the possibility of building peaking additional peaking generation. An RFP was issued and NorthWestern received seven proposals for fulfillment of NorthWestern's reserve obligation. With the addition of new peaking generation, NorthWestern will be able to satisfy its capacity needs for the foreseeable future. The addition of 2 to 3 MW demand will have little effect on NorthWestern Energy's plans for future capacity.

- 1-6) Describe how providing service to this customer will serve to improve your electric system either locally or system wide including related economic factors.

Providing service to Dakota Plains will have a neutral impact on the existing electrical system from an operational perspective. The planned investment will be solely to serve the grain terminal. The benefit will be economic based on revenue growth.

All customers benefit any time a large load can be added when revenues from that load exceeds its fixed costs. The additional margin contributes to the maintenance of the system and lowers costs to the existing customer base. With additional margin and more customers with which to spread fixed costs, rate cases may be delayed or lowered in rate increase impact.

- 1-7) Provide CAIDI, SAIDI, and SAIFI indices reliability data for that portion of NorthWestern's South Dakota system nearest the proposed customer, if available, or in the alternative, for NorthWestern's South Dakota system for the last three years. Provide a report of outages that would have affected the proposed customer over the last three years.

There were three outages at this location. With the proposed build to this facility, only one of the Outages would have impacted this customer. The following files detail the Outages and show the requested reliability information for Yankton.

1-7 3 year Outage Report for Dakota Plains.

1-7 Yankton Reliability Indices CAIDI.

1-7 Yankton Reliability Indices SAIDI.

1-7 Yankton Reliability Indices SAIFI.

- 1-8) Describe in detail any other pertinent factors affecting your ability to furnish adequate electric service for this facility.

Customer property is immediately adjacent to an existing 35kV line owned, operated and maintained by NorthWestern Energy. Resulting line extension costs are minimal. In addition, the 35kV line from which the facility will be served is part of a looped system so it can be fed from two different sources. This provides greater reliability for the grain terminal.

NorthWestern is also aware that Yankton County is currently working through the design phase of road improvements along 437<sup>th</sup> Avenue / 307<sup>th</sup> Street /436<sup>th</sup> Avenue, which will be the designated truck route to the grain terminal. This road construction project will require relocation/rebuilding of NorthWestern's 35kV line from SD Highway 50 north to the project location. This work will need to be done whether or not NorthWestern Energy is the provider.

- 1-9) Confirm whether Dakota Plains and NorthWestern are looking for a service territory exchange or a service rights exception.

NorthWestern and Dakota Plains are seeking a service rights exception.

- 1-10) Which rate will Dakota Plains be taking service under?

Dakota Plains will be served under tariff rate 34.

- 1-11) Provide a chart similar to the one filed on 3/24/16 in EL16-003 showing the load requirements and load factor for Dakota Plains.

See file CONFIDENTIAL 1-11 Rates.

- 1-12) Provide the engineering specifications which show the capacity to be available at the terminal.

NorthWestern's line extension includes 3,300 feet of 4/0 AL 35kv URD cable, switch gear with communication, line protection and 2,600 kva of transformation capable of serving Dakota Plain's 2,230 kva of connected load.