# STATE OF NORTH DAKOTA

# PUBLIC SERVICE COMMISSION

**Montana-Dakota Utilities Co.** **Case No. PU-13-871**
**Menard, Inc.**
**Burleigh County, North Dakota**
**Public Convenience and Necessity**

## Montana-Dakota Utilities Co.'s PROPOSED FINDINGS OF FACT, CONCLUSIONS OF LAW AND ORDER

**_____, 2014**

## Appearances

Commissioners Brian P. Kalk, Randy Christmann and Julie Fedorchak.

Daniel S. Kuntz, Associate General Counsel, MDU Resources Group, Inc., P.O. Box 5650, Bismarck, ND 58506-5650, appearing on behalf of Montana-Dakota Utilities Co.

Matthew H. Olson, Pringle & Heringstad, P.C., 2525 Elk Dr., P.O. Box 1000, Minot, ND 58702-1000, appearing on behalf of Capital Electric Cooperative, Inc.

Ryan Norrell, Legal Counsel, North Dakota Public Service Commission, State Capitol, Bismarck, North Dakota 58505, appearing on behalf of the Public Service Commission.

Wade C. Mann, Office of Administrative Hearings, 2911 North 14th Street, Suite 303, Bismarck, ND 58503, appearing as Administrative Law Judge.

## Preliminary Statement

On November 25, 2013, Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. ("Montana-Dakota") submitted an application to extend electric service to Menard, Inc. at a location in Section 33, Township 139N, Range 77W, Burleigh County, North Dakota ("Menard Site").

The application noted the customer's property was located near McKenzie, North Dakota. Submitted with the application as Exhibit B was a statement from the customer stating it desired electric services at the requested location to be provided by Montana-Dakota.

On January 16, 2014, a protest and request for hearing on the application was received from Capital Electric Cooperative, Inc. ("Capital Electric"), Bismarck, North Dakota.

On March 4, 2014, the Commission issued a Notice of Hearing scheduling a public hearing to be held on Friday, May 2, 2014. The notice identified the following issues to be considered:

1. From whom do the customers prefer electric service?

2. What electric suppliers are operating in the general area?

3. What electric supply lines exist within at least a two-mile radius of the location to be served, and when were they constructed?

4. What customers are served by electric suppliers within at least a two-mile radius of the location to be served?

5. What are the differences, if any, between the electric suppliers available to serve the area with respect to reliability of service?

6. Which of the available electric suppliers will be able to serve the location in question more economically and still earn an adequate return on its investment?

7. Which supplier's extended electric service would best serve orderly and economic development of electric service in the general area?

8. Would approval of the applications result in wasteful duplication of investment or service?

9. Is it probable that the location in question will be included within the corporate limits of a municipality within the foreseeable future?

10. Will service by either of the electric supplier in the area unreasonably interfere with the service or system of the other?

On May 2, 2014, a public hearing on the application in Case No. PU-13-871 was held as scheduled. Following the hearing, Capital Electric submitted late filed exhibits G and I, as directed by the Administrative Law Judge.

Having heard and considered these matters, the Commission makes its:

## Findings of Fact

1. The Applicant, Montana-Dakota, is an investor owned electric utility providing electric service to customers in North Dakota under the regulatory jurisdiction of this Commission.

2. The Protestant, Capital Electric, is a rural electric cooperative providing electric service to its members in North Dakota.

***From whom does the customer prefer electric service?***

3. Montana-Dakota's application included an appearance form signed by the customer for the property for which Montana-Dakota seeks a certificate of public convenience and necessity to provide electric service in this proceeding. In the appearance form, the customer Menard, Inc. states it desires electric service from Montana-Dakota.

4. At the public hearing in this matter, a representative of customer, Steve Manor, DC Maintenance General Manager for Menard, Inc., testified that Menard, Inc. is developing a manufacturing and distribution center at the Menard Site and desires to receive electric service at the proposed facility from Montana-Dakota. The manufacturing and distribution center requires three phase electric service at each of several locations on the site and the anticipated total electric load at the site will be approximately 1.2 MW with estimated annual consumption of approximately 7 million Kwh. Menard will realize an annual savings of approximately $62,000 by receiving electric service from Montana-Dakota. Montana-Dakota also offers rate schedules for interruptible service and demand response programs which provide further opportunities for cost savings to Menard. Capital Electric does not currently offer demand control programs. The cost savings from lower electric rates helps insure the success of the distribution facility which will have approximately 250 employees. Cost savings at the facility also improves the price competiveness of products manufactured and distributed from the site which is a benefit to Menard and its customers. Quality of service and reliability of service are also important considerations to Menard, Inc. Montana-Dakota demonstrated that it can provide electric service to the Menard site without significant voltage drop which is important to the operation of the equipment at the Menard Site. Montana-Dakota's system has also historically operated at a very high level of reliability. Menard, Inc. prefers to receive its electric service from a provider whose rates and services are subject to regulatory oversight and approval by an independent agency with an opportunity for customer input.

5. The customer prefers electric service from Montana-Dakota.

***What electric suppliers are operating in the general area?***

6. Montana-Dakota and Capital Electric are electric suppliers operating in the general area of the Menard Site.

***What electric supply lines exist in at least a two mile radius of the location to be served and when were they constructed?***

7. Montana-Dakota owns and operates a 46 kV transmission line that originates at Bismarck and extends in an easterly direction along the north side of I-94 providing transmission service for a number of communities served by Montana-Dakota, including the community of McKenzie. The transmission line is a two-way or looped supply source for Montana-Dakota's substation located just north of McKenzie, which in turn supplies Montana-Dakota distribution system serving its customers in McKenzie and the surrounding area. Montana-Dakota has provided electricity to McKenzie since 1928. The transmission line west of the McKenzie substation was rebuilt in 1972, and the transmission line east of the McKenzie substation was rebuilt in 1975. The prior transmission line serving the community of McKenzie and the surrounding area was constructed in 1945. Montana-Dakota's distribution line for the community of McKenzie is a Delta three-phase line. The current distribution lines used to serve the community of McKenzie were primarily constructed in 1960, 1965, 1969, 1971 and 1979. The distribution system continues outside of McKenzie as a single phase line to serve customers south and west of McKenzie. (Exhibit MDU-1)

8. Central Power Cooperative operates a transmission line located on the south side of I-94 that connects substations at Menoken and Sterling. Capital Electric proposes to serve the Menard Site from the Menoken Substation which is located approximately 8 miles west of the Menard Site. Capital Electric has an underground three phase distribution line which runs along the south side of Interstate 94, and an underground single phase distribution line which runs south from Interstate 94 to the area of the Menard Site at which point it goes aboveground to serve customers in the area. The underground three phase line along Interstate 94 was built in 1976. The underground single phase line extending south from Interstate 94 was rebuilt in 2010. The previous distribution line was an aboveground distribution line built in 1948. (Exhibit B)

9. Montana-Dakota would serve the Menard Site by extending its existing three-phase line currently providing electric service to McKenzie a distance of approximately 1800 feet. Capital Electric would serve the Menard Site by converting about a mile of single phase line to three phase line between its existing three phase line and the Menard Site.

10. Both electric suppliers will be required to construct extensions to existing three phase electric supply lines to serve the Menard Site. Montana-Dakota's supply lines were constructed earlier than those of Capital Electric and the extension of its existing three phase system to serve the site is shorter than the proposed extension of Capital Electric's three phase system.

***What customers are served by electric suppliers within at least a two-mile radius of the location to be served?***

11. Montana-Dakota serves 29 customers within a two-mile radius of the Menard Site and 28 of those customers are located within a one-mile radius of the Menard Site. (Exhibit MDU-1, MDU-2)

12. Capital Electric serves 11 customers within a two-mile radius of the Menard Site and only 4 of those customers are located within a one-mile radius of the Menard Site. (Exhibit B)

13. Montana-Dakota has more customers located within a two-mile radius of the Menard Site and substantially more customers located within the one-mile proximity to the Menard Site.

***What are the differences, if any, between the electric suppliers available to serve the area with respect to reliability of service?***

14. Montana-Dakota would serve the Menard Site by constructing an underground extension of approximately 1,800 feet between its current three-phase system and the Menard Site. The length of Montana-Dakota's radial distribution line between the McKenzie Substation and the community of McKenzie is approximately one mile and Montana-Dakota has experienced only one outage on its three phase system serving McKenzie since January 1, 2000; a rate of 0.070 outages per year. (Exhibit MDU-9)

15. Capital Electric would serve the Menard Site over approximately nine miles of distribution line from the Menoken Substation including an upgrade of approximately one mile of single phase line to three phase line. Capital Electric has experienced five outages in the last six years on its existing three phase line that would be used to serve the Menard Site; a rate of 0.833 outages per year. (Exhibit I) Capital Electric asserted it could improve the reliability of its three phase line between the Menoken and Sterling Substations to serve the Menard Site if Central Power Cooperative upgraded the Sterling Substation which does not currently have capacity to serve the planned load at the Menard Site. The costs of such an upgrade, however, were not included in Capital Electric's proposed costs to serve the Menard Site. Even with an upgrade of the Sterling Substation, the length of radial line between the Menard Site and Capital Electric's looped three phase line would be about one mile; approximately the same distance as Montana-Dakota's radial distribution line from its looped substation.

16. Montana-Dakota provided the results of a study showing that the voltage drop between the McKenzie substation and the primary side of the fifth building of the Menard Site with a total 1.1 MW Menard Site load would be less than 2.0 percent and well within ANSI standards. (Exhibit MDU-8) Capital Electric provided the results of a study showing a voltage drop of approximately 2.5 percent, however, the study was performed with a total Menard Site load of 1.0 MW measured at the entry point of the

Menard Site. (Exhibit G) It is not clear that Capital Electric could meet the ANSI voltage drop standard at the primary side of the last buildings on the Site with a total estimated Menard's 1.1 Mw load unless Capital Electric made modifications to its system.

17. The historic outage rate for Capital Electric's three phase line from which it proposes to serve the Menard Site is nearly twelve times greater than the historic outage rate for Montana-Dakota's three phase system from which it proposes to serve the Menard Site. Montana-Dakota's proposed service will be well within the voltage drop standards that are important to Menard's while it is unclear that Capital Electric's proposed service will meet the standard without system modification.

***Which of the available electric suppliers will be able to serve the location in question more economically and still earn adequate return on its investment?***

18. Montana-Dakota would serve the Menard Site by extending its existing three phase system at McKenzie and by converting that system and the McKenzie Substation from a Delta three phase to a Wye three phase system. (Exhibit MDU-3) The conversion of the McKenzie Substation will require replacement of existing transformers with a three-phase Wye transformer, voltage regulators, reclosure, and associated wiring. (Exhibit MDU-7) The transformer would be a used transformer from existing inventory. Conversion of the electric system within the community of McKenzie from Delta three-phase service to Wye three-phase service requires addition of a neutral wire to the existing system. This conversion will increase the capacity of the existing three phase system to also allow Montana-Dakota to serve any additional load requests in the McKenzie area. Montana-Dakota's estimated total cost to extend secondary service the Menard Site is $192,671, which includes the extension from the existing three phase system to the Menard Site ($32,619), upgrades to the McKenzie substation ($61,451), the conversion of the McKenzie Delta three phase system to a Wye three phase system ($32,562), and the installation of conductors and equipment within the Menard Site ($66,039). (Exhibit MDU-5, MDU-6, MDU-7) Montana-Dakota's annual revenue requirement associated with the total incremental investment associated with the proposed extension is $27,872. (Exhibit-10)

19. Capital Electric would extend service to the Menard Site by installing one mile of two new phases to its current single phase service between its existing three phase system and the Menard Site. Capital Electric's estimated cost to extend secondary service to the Menard Site is approximately $110,223, which includes the conversion of its single phase line to a three phase line ($44,527) and the installation of conductors and equipment within the Menard Site ($65,696). (Exhibit C, Exhibit D) Capital Electric did not provide a rate of return requirement for the cost of its proposed extension.

20. The estimated electric consumption for the Menard's Site is approximately 7,000,000 KWh per year at a minimum. The cost to serve the location includes consideration of not only the revenue requirement associated with the incremental investment to extend service but also the other costs of electric distribution, transmission and generation as reflected in the service providers rates for service. The

annual cost to provide secondary electric service to the Menard Site by Montana-Dakota under its current rates is $513,669.84. The annual cost to provide secondary electric service to the Menard Site by Capital Electric under its current rates is $575,883.84.

21. The annual cost to the customer for Capital Electric to provide secondary electric service to the Menard Site is approximately $62,214, or 11 percent, more than the annual cost under Montana-Dakota's rate schedule for secondary electric service to the Menard Site. Even if the annual revenue requirement associated with Montana-Dakota's incremental investment to serve the Menard Site is added to its annual charges to serve the location, the cost to service from Montana-Dakota is still less than the cost of service from Capital Electric even without giving consideration to the annual revenue requirement on Capital Electric's incremental investment to serve the Menard Site. After adjusting Montana-Dakota's estimated annual revenue from providing service to the Menard Site by: (1) $27,872 for the annual return requirement on its incremental investment to serve the location; and (2) $189,140 for the annual cost of fuel and purchased power to serve the location, there is net contribution to common system costs of $296,658 which provides a benefit to other customers. (Exhibit MDU-10) Capital Electric did not provide information or an analysis of the amount of revenue Capital Electric would require to derive an adequate return on its incremental investment to serve the Menard Site other than testimony that because Capital Electric's charges to the customer are higher than those of Montana-Dakota, its return on investment would be adequate. The consideration for the Commission, however, is not whether a provider can earn an adequate return because its charges are higher, but rather which provider can both serve the location more economically **and** still earn an adequate return on its investment.

22. Montana-Dakota will be able to serve the Menard's location more economically and still earn an adequate return on its investment.

***Which supplier's extended electric service would best service orderly and economic development of electric service in the general area?***

23. Montana-Dakota is the electric provider within the unincorporated town of McKenzie. Montana-Dakota and its predecessors have held a franchise from the McKenzie Township Board to provide electric service to McKenzie since 1928. (Exhibit MDU-11) Montana-Dakota and its predecessors have held a certificate of public convenience and necessity to serve McKenzie issued by the Board of Railroad Commissioners in 1928. (Exhibit MDU-11) The northwest corner of the Menard Site is immediately adjacent to the southeast corner of McKenzie. (Exhibit MDU-3) Montana-Dakota serves many more customers within both a two mile and a one mile radius of the Menard Site than does Capital Electric. Montana-Dakota's substation and distribution facility upgrades to serve the Menard Site will also result in an upgrade of the three phase system serving McKenzie and provide additional capacity on that system for new load that can be anticipated as a result of employment created at the Menard Site. Capital Electric's extension and upgrade of distribution facilities would

only provide extension of service to the Menard Site and would not serve development of electric service to other customers or the general area.

24. Menard, Inc. seeks utilization of demand control electric rates which provide additional opportunity for cost savings and improves the economic viability of its manufacturing and distribution center. Customer utilization of demand control rates also improves the system load factor of the electric provider to the benefit of its other customers and the public. Montana-Dakota offers interruptible rates and a demand response rate. Capital Electric does not currently offer demand control rates.

25. Montana-Dakota's lower cost of electric service to the Menard Site assists in the financial viability and success of the manufacturing and distribution center and the associated employment and economic development for the general area.

26. Service by Montana-Dakota to the Menard Site is a natural extension of the existing electric service it has provided the community of McKenzie since 1928. Service by Montana-Dakota would benefit not only development of the Menard Site but orderly and economic development of the McKenzie area.

27. Montana-Dakota's extension of service to the Menard Site best serves orderly and economic development of electric service in the general area.

***Would approval of the application result in wasteful duplication of investment or service?***

28. Neither Capital Electric nor Montana-Dakota can serve the Menard Site with its current facilities. Any perceived duplication resulting from extensions and upgrades of existing facilities by either provider is necessary to serve the Menard Site. Although Capital Electric asserted that a duplication of facilities would occur because Montana-Dakota's line extension would cross Capital Electric's single phase line located west of the Menard's Site, it acknowledge that Capital Electric's three phase line that feeds this single phase line already crosses Montana-Dakota's three phase line system serving McKenzie. Capital Electric's single phase line in the vicinity of the Menard Site is not capable of serving and is not proposed for use to serve the Menard Site. Capital Electric also asserted that upgrade of the McKenzie Substation to serve the Menard Site was a wasteful duplication of the Menoken Substation investment; however, it inconsistently maintained that a similar upgrade of the Sterling Substation to improve reliability to serve the Menard Site would not be a wasteful duplication of investment.

29. Approval of Montana-Dakota's application to serve the Menard Site would not result in wasteful duplication of investment or service.

***Is it probable that the location will be included within the corporate limits of a municipality in the foreseeable future?***

30. The community of McKenzie is unincorporated. There is no evidence of any plans to incorporate the community of McKenzie.

***Will service by either of the electric suppliers in the area unreasonably interfere with the service or system of the other?***

31. The extension of service by either supplier would not interfere physically or operationally with the service or system of the other supplier. Capital Electric's overhead single phase line would be crossed by Montana-Dakota's underground three phase line serving the Menard Site; however, Montana-Dakota's underground three phase line would not interfere physically or operationally with service provided by Capital Electric by its single phase overhead line.

32. Capital Electric's system was built for the purpose to serve rural areas for which central station power was not otherwise available (See N.D.C.C. Section 10-13-01). The Territorial Integrity Act, however, does not grant rural electric cooperatives a preference to provide electric service in rural areas but rather simply requires a public utility to obtain a certificate of public convenience and necessity before it extends facilities in a rural area. Capital Electric v. Public Service Commission, 534 N.W.2d 587,590 (N.D. 1995). Although there are no plans to annex the Menard Site to the unincorporated town of McKenzie, the Menard Site is a logical growth extension of a developed area served by Montana-Dakota and its predecessors since 1928. Capital Electric has not installed or upgraded facilities to specifically serve the Menard Site.

33. The extension of service by Montana-Dakota to the Menard Site would not unreasonably interfere with the service or system of Capital Electric, whereas the extension of service by Capital Electric to the Menards Site would unreasonably interfere with the economic expansion of Montana-Dakota's electric service and system serving the community of McKenzie.

From the foregoing Findings of Fact, the Commission makes its:

## Conclusions of Law

1. The Commission has jurisdiction over the parties and the subject matter of this proceeding.

2. Public convenience and necessity require the granting of a Certificate of Public Convenience and Necessity to the applicant in this proceeding.

From the foregoing Findings of Fact and Conclusions of Law, the Commission issues its:

**Order**

The Commission Orders:

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. is issued Certificate of Public Convenience and Necessity No. _____, authorizing the provision of electric distribution service to the location north of the BNSF railroad tracks in the NE 1/4 Section 33, Township 139N, Range 77W, Burleigh County, North Dakota.
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**PUBLIC SERVICE COMMISSION**

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| **Randy Christmann**<br>**Commissioner** | **Brian P. Kalk**<br>**Chair** | **Julie Fedorchak**<br>**Commissioner** |