STATE OF NORTH DAKOTA

PUBLIC SERVICE COMMISSION

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. Ryan Edwardson, Kidder County, North Dakota Public Convenience & Necessity	**Case No. PU-08-345**
Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. Corey Fanta, Kidder County, North Dakota Public Convenience & Necessity	**Case No. PU-08-346**
Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. Mike Mittleider, Kidder County, North Dakota Public Convenience & Necessity	**Case No. PU-08-347**
Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. Chad Olson – Doco Subdivision - Kidder County, North Dakota Public Convenience & Necessity	**Case No. PU-08-693**

FINDINGS OF FACT, CONCLUSIONS OF LAW, AND ORDER

December 17, 2008

Appearances

Commissioners Susan E. Wefald, Tony Clark, and Kevin Cramer.

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

Thomas B. Bair, Bair, Bair & Garrity, LLP, P.O. Box 100, Mandan, North Dakota, 58554, appearing on behalf of KEM Electric Cooperative, Inc.

Illona Jeffcoat-Sacco, General Counsel, North Dakota Public Service Commission, State Capitol, Bismarck, North Dakota 58505, appearing on behalf of the Public Service Commission.

Al Wahl, Office of Administrative Hearings, 1707 North 9th Street, Bismarck, North Dakota 58501-1882, as Administrative Law Judge.

Preliminary Statement

On June 13, 2008, Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. (MDU) submitted requests to extend temporary electric service to the following customers:

> Ryan Edwardson of Steele, North Dakota, at a location in the SW ¼ of NW1/4, Section 17, Township 139N, Range 17W, Lot 2, Kidder County, North Dakota, Case No. PU-08-345; and
>
> Corey Fanta of Steele, North Dakota, at a location in the SE ¼ of NW ¼, Section 17, Township 139N, Range 17W, Lot 6, Kidder County, North Dakota, Case No. PU-08-346; and
>
> Mike Mittleider of Steele, North Dakota, at a location in the SW ¼ of NW ¼, Section 17, Township 139N, Range 17W, Lot 1, Kidder County, North Dakota, Case No. PU-08-347.

The applications noted the customers' properties were located in the Doco Subdivision near Steele, North Dakota.

On June 27, 2008, Commissioner Susan Wefald authorized the issuance of Temporary Authority Permits to MDU to serve the specified customer locations.

On July 2, 2008, MDU filed applications under North Dakota Century Code Chapter 49-03, for Certificates of Public Convenience and Necessity to extend service to the Edwardson, Fanta, and Mittleider locations. Submitted with the applications were statements from the customers Ryan Edwardson, Corey Fanta, and Mike Mittleider that they desired electric service at the requested locations to be provided by MDU.

On July 7, 2008, protests and requests for hearing on the applications were received from KEM Electric Cooperative, Inc. (KEM), Linton, North Dakota.

On July 16, 2008, the Commission issued a Notice of Hearing scheduling a public hearing to the held on Tuesday, September 16, 2008. 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 suppliers in the area unreasonably interfere with the service or system of the other?

On August 13, 2008, the Commission passed a Motion to hold a consolidated hearing on the matters of MDU's applications for Certificates of Public Convenience and Necessity to provide electric services at locations in Kidder County, North Dakota, in Case Nos. PU-08-345; PU-08-346; and PU-08-347.

On August 14, 2008, MDU submitted a request to extend temporary electric service to the following customer:

Chad Olson of Steele, North Dakota, at a location in the SW ¼ of NW ¼, Section 17, Township 139N, Range 17W, Lots 3-5 and 7-11, Doco Subdivision, Kidder County, North Dakota, Case No. PU-08-693.

On August 25, 2008, MDU filed an additional application under North Dakota Century Code Chapter 49-03 for a Certificate of Public Convenience and Necessity to extend electric service to Lots 3-5 and 7-11 in the Doco Subdivision, Case No. PU-08-693. The application included a statement from the customer, Chad Olson, that he desired electric service at the Doco Subdivision lots to be provided by MDU.

On August 25, 2008, MDU filed a request that the Commission consider the application for Chad Olson, Case No. PU-08-693, at the time of the consolidated hearing previously noticed for September 16, 2008, for Case Nos. PU-08-345, PU-08-346, PU-08-347. On September 3, 2008, MDU notified the Commission it had no objection to hearing this matter in conjunction with the September 16, 2008 hearing.

On August 27, 2008, KEM filed its objection to MDU's application to provide service to Chad Olson to service Lots 3-5 and 7-11 in Doco Subdivision, Case No. PU-08-693, and requested the matter be set for hearing. On September 4, 2008, KEM notified the Commission it had no objection to hearing this matter in conjunction with the September 16, 2008 hearing.

On September 10, 2008 the Commission issued a Notice of Hearing for Case Nos. PU-08-345, PU-08-346, PU-08-347, and PU-08-693 to be held on September 16, 2008. The hearing was held as scheduled.

On September 18, 2008, MDU submitted amended exhibits and a late-filed exhibit as directed by the Administrative Law Judge. On September 25, 2008, KEM submitted a similar late-filed exhibit.

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

Findings of Fact

1. The Applicant, MDU, is an investor-owned electric utility providing electric service to customers in North Dakota under the regulatory jurisdiction of the Commission under Title 49 of the North Dakota Century Code.

2. The Protestant, KEM, is a rural electric cooperative organized under North Dakota Century Code Chapter 10-13 providing electric service to its members in North Dakota.

3. Doco Subdivision is located in the NW ¼ of Section 17, Township 139N, Range 17W, Kidder County, North Dakota, located adjacent to the northwest corporate boundaries of the city of Steele, North Dakota. The subdivision consists of 11 large residential lots. Ryan Edwardson is the owner of Lot 2. Corey Fanta is the owner of Lot 6. Mike Mittleider is the owner of Lot 1. Chad Olson is the current owner of the remaining eight lots (Lots 3-5, and Lots 8-11).

From whom do the customers prefer electric service?

4. Montana-Dakota Utilities submitted an executed Appearance by Customer for each of the customers of the locations for which MDU is requesting Certificates of Public Convenience and Necessity in these four cases. These locations include all of the lots located within the Doco Subdivision. Each of the customers, Ryan Edwardson, Corey Fanta, Mike Mittleider and Chad Olson, state that he desires electric service from MDU.

5. The Commission finds that the customers prefer electric service from MDU.

What electric suppliers are operating in the general area?

6. Montana-Dakota Utilities Co. and KEM are the only electric suppliers operating in the general area.

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 Utilities Co. owns and operates a 46 KV transmission line, which runs along the southeast corner of the Doco Subdivision. The transmission line originates at Bismarck, North Dakota, and runs easterly, providing transmission service for communities served by MDU, including Steele. The transmission line is the supply source for MDU's substation located in Steele, which in turn supplies MDU distribution facilities serving its customers in Steele and the surrounding area.

8. Montana-Dakota Utilities Co.'s distribution lines in Steele and surrounding area consist of both overhead and underground primary lines and secondary service lines. The voltage of MDU's distribution system is 4,160 volts. The distribution system and the substation were installed in 1946. In July, 2008, MDU upgraded the substation by adding an additional circuit. As a result, the distribution system served by the substation is on two separate circuits.

9. KEM Electric has a 41.6 KV transmission line that was constructed in 1968, located on the west side of 25th Avenue Southeast, bordering the western boundary of the Doco Subdivision. This transmission line interconnects with and is supplied from MDU's 46 KV transmission line at a point south of the Doco Subdivision. KEM Electric's transmission line extends north from this interconnection point to KEM's substation located north of Interstate 94. The substation was built in 1968, and serves KEM's customers in the Steele area. The substation was updated in 1998 to add a recloser.

10. KEM Electric's distribution facilities from this substation include a single-phase distribution line installed on their 41.6 KV transmission line. The single-phase distribution line is served from a new 15 KV underground cable extending from the substation east along the north side of Interstate 94. The distribution line was constructed in 1968, and extends approximately one mile south of the substation and from there approximately one and three-fourth miles west.

11. KEM Electric has several miles of other single-phase and three-phase overhead and underground distribution lines extending from the Steele substation to serve KEM's customers in the area.

12. The Commission finds that both electric suppliers have supply lines and transmission lines within a two-mile radius of Doco Subdivision. Montana-Dakota Utilities Co.'s distribution lines and substation were constructed in 1946. KEM's distribution facilities were constructed in 1968. The supply lines of both MDU and KEM are fed by the transmission line owned by MDU.

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

13. Montana-Dakota Utilities Co. serves 444 customers within a two-mile radius of the Doco Subdivision. All but one of these customers are located within a one-mile radius of the Doco Subdivision.

14. KEM Electric serves approximately 59 customers within a two-mile radius of the Doco Subdivision. Fifteen of these customers are within ¼ mile of the subdivision.

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

15. Each supplier would serve the subdivision from existing radial distribution lines.

16. Montana-Dakota Utilities Co. would serve the Doco Subdivision by installing two underground primary service lines extending from its existing three-phase line located east of Doco Subdivision. One radial extension along the north property line of the subdivision would serve the lots on the north side of Doco Subdivision, and one radial extension along the south property line of the subdivision would serve the lots on the south side of Doco.

17. KEM Electric would serve the Doco Subdivision by installing a looped underground primary distribution line along the entire north, east, and south outer property line of the subdivision. The loop would begin at KEM's existing radial distribution line near Lot 1 of the subdivision and would reconnect with the distribution line west of the Doco Subdivision, near Lot 11 of the subdivision. This looped service would occur only within the Doco Subdivision.

18. Montana-Dakota Utilities Co. would serve the Doco Subdivision from its 4.16 KV substation transformer located approximately 5500 feet from the subdivision, protected from electrical faults by fuses.

19. KEM Electric would serve the Doco Subdivision from its 12.5 KV substation transformer located approximately 1800 feet from the subdivision, protected from electrical faults by an automatic recloser.

20. The Commission finds that either supplier would be able to serve the Doco Subdivision with sufficient reliability. However, KEM's substation is located closer to the subdivision, which could provide somewhat increased reliability because there would be less line length upon which a fault could occur. In addition, some interruptions in service could effectively be reduced by the use of reclosers, which reclose and repair faults automatically without having to wait for manual repair. KEM's proposed looping of service could further protect the subdivision from outages only if a fault were to occur within the subdivision loop. A fault on either of MDU's two proposed lines could cause an outage to customers served from that line.

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?

21. Montana-Dakota Utilities Co. would serve the Doco Subdivision with two new underground primary service lines beginning at a new riser pole located east of the subdivision, and connected to MDU's three-phase service. From this riser pole, a 15 KV underground primary service cable would be installed approximately 840 feet in a southeasterly direction to a new 25 KVA padmount transformer located on the south boundary of the subdivision between Lots 6 and 7. Montana-Dakota Utilities Co. would bore below two roads between the existing three-phase service and the subdivision to install this line. When customers at Lots 6 and 7 are ready for electric service, MDU would install underground secondary service lines from this transformer to the customers' meter sockets. To serve Lots 8, 9, 10, and 11, a 15 KV underground primary service cable would be installed beginning at the padmount transformer installed between Lots 6 and 7, and extending west to a new 25 KVA padmount transformer installed on the south boundary of Doco Subdivision between Lots 9 and 10. When the customers of Lots 8 through 11 are ready for electric service, MDU would install underground secondary service lines from the transformer to each of the customers' meter sockets. To serve Lots 1 and 2, MDU would install a second 15 KV

underground primary service cable beginning from the new riser pole and extending around the east and north boundaries of the subdivision to a new 25 KVA padmount transformer that would be installed on the north boundary of Doco Subdivision between Lots 1 and 2. Montana-Dakota would again bore below two roads between the existing three-phase service and the subdivision. When customers at Lots 1 and 2 are ready for service, MDU would extend underground secondary service lines from the transformer to the customers' meter sockets. When installing the primary cable to Lots 1 and 2, MDU would include a coil loop on the north boundary of the subdivision between Lots 4 and 5. When the customers at Lots 3, 4, and 5 are ready for service, a padmount transformer would be installed at the location of the primary coiled cable loop, and underground secondary service lines would be extended from the transformer to the customers' meter sockets. The electric service lines installed to serve the subdivision would be installed in a joint trench with MDU's natural gas facilities. Montana-Dakota Utilities Co. states this would reduce trenching and boring costs by approximately 50 percent.

22. KEM Electric would extend service to the Doco Subdivision by installing a new cable riser on its existing transmission pole located approximately 133 feet west of the northwest property pin of the subdivision. KEM would then install approximately 737 feet of 15 KV underground cable from the riser pole to a new 25 KVA padmount transformer installed on the north lot line between Lots 1 and 2. KEM Electric would install two 200-amp meter pedestals with double-throw disconnect switches at this transformer location The customers of Lots 1 and 2 would be responsible to install secondary wire from their meter pedestals to their service panels. To serve Lots 6 and 7, KEM would install cable from the transformer serving Lots 1 and 2 to a new 15 KVA padmount transformer in the southeast corner of Lot 6. Customers in Lots 6 and 7 would be served from 200-amp meter pedestals with double-throw disconnect switches at the transformer. KEM would continue the primary 15 KV underground cable from the 15 KVA transformer in Lot 6 to the southwest approximately 284 feet, and then straight west approximately 1942 feet to a new riser pole. This would provide a looped primary distribution system within the subdivision. KEM Electric would serve Lots 3 through 5 with a 25 KVA transformer installed near the north lot line of Lots 3 and 4. It would install three 200-amp meter pedestals with double-throw disconnect switches near the transformer, one for each lot as it is developed. The customers would be required to install secondary service lines between the meter pedestals and their electric service panels. Lots 8 through 11 would be served from a 37.5 KVA transformer located on the south boundary of the subdivision between Lots 9 and 10. Four 200-amp meter pedestals and double-throw disconnect switches would be located near the transformer, one for each lot as it is developed. The customers would be required to install secondary service lines between the pedestals and their electric service panels.

23. Montana-Dakota Utilities Co.'s estimated total cost to serve the Doco Subdivision is $36,305.16, including all road borings and secondary service lines to each customer. KEM Electric's estimated cost to serve the subdivision is $46,230.30. KEM Electric's estimated cost does not include the cost of boring the road between its existing distribution line and the subdivision. At the hearing, KEM agreed that the road would

need to be bored. The net difference to KEM's cost estimate is an additional $1,200.00. Customers would be responsible for installing secondary service lines between KEM's meter pedestals and their service panels. The estimated cost of the secondary service lines, which would be borne by each customer under KEM's proposal, would be approximately $622 per line. Adding these additional costs for boring and secondary service lines increases KEM's total cost estimate to $54,272.30.

24. At the hearing, MDU and KEM agreed that electric energy consumption for each customer in the subdivision would average approximately 14,300 KWh per year. The annual cost of electric energy from MDU to each customer under MDU's current rates for this level of consumption would be $1,019.64. The annual cost of electric energy from KEM to each customer under KEM's current rates for this level of consumption would be $1,460.71. The estimated average annual charge to customers of the Doco Subdivision for the assumed level of electric energy consumption under KEM's proposal is $441.07, or 43 percent, more than the estimated annual cost for the same level of electric energy consumption from MDU.

25. The cost for KEM to extend electric facilities to supply the Doco Subdivision, including the additional net increase for the cost of the road borings, is approximately $11,225.00, or 31 percent, more than the cost for MDU to extend its facilities, not including the additional costs that would be borne by each customer for secondary service lines.

26. The Commission recognizes that KEM's cost to extend service to the subdivision would be greater than MDU's cost due, at least in part, to design differences in the proposals. KEM Electric's proposal includes a looped distribution system with double-throw disconnect switches, which would require more labor and materials to install. In addition, KEM proposes to use lower-loss transformers, which increases costs.

27. Montana-Dakota Utilities Co.'s net margins when service is provided to all lots in the subdivision are expected to be $2,046.00 per year. KEM Electric's expected net margins when service is provided to all lots in the subdivision would be $2,684.00 per year.

28. The Commission finds that MDU and KEM can each extend electric service to the Doco Subdivision and receive an adequate return on each company's respective investments, but MDU would serve the location more economically.

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

29. Montana-Dakota Utilities Co. would serve the Doco Subdivision from its 4.16 KV substation transformer located approximately 5500 feet from the subdivision. KEM proposes to serve the subdivision from its 12.5 KV substation transformer located approximately 1800 feet from the subdivision. The supply lines of both suppliers are

served by MDU's transmission line. The voltage of the distribution facilities of either supplier is sufficient to serve residential loads in the Doco Subdivision.

30. A primary consideration of economic development in these cases is whether a supplier's cost to provide service to a customer exceeds the cost to extend service to that same customer from a second supplier. Montana-Dakota Utilities Co. would extend service to the Doco Subdivision for significantly less than the cost for KEM to extend service to the same subdivision. Estimated costs to the customers for electric energy consumption from MDU are significantly lower than the estimated costs to the same customers for energy from KEM.

31. The Commission finds that extension of service by either supplier would serve orderly and economic development of electric service in the general area, but MDU would extend service to the Doco Subdivision at a lower cost; therefore, extension of service by MDU would best serve orderly and economic development of electric service in the general area.

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

32. Both suppliers have made investments to construct, maintain, and upgrade facilities and systems in the area.

33. Montana Dakota Utilities Co.'s 46 KV transmission line originates in Bismarck and extends easterly, providing service to the city of Steele. Montana-Dakota Utilities Co.'s distribution system and substation were installed in 1946, and serve customers in the city of Steele. Montana-Dakota Utilities Co. upgraded the substation in July, 2008 by adding an additional circuit.

34. KEM Electric's 41.6 KV transmission line was constructed in 1968 and is supplied from MDU's 46 KV transmission line. KEM Electric's substation north of Interstate 94 was also constructed in 1968, and serves KEM's customers in the Steele area. KEM Electric upgraded the substation in 1998 to add a recloser.

35. One factor considered in determining wasteful duplication of investment or service is whether, in order to serve the customer in question, one supplier's extension of facilities must cross the facilities of another supplier. Neither supplier's extension of facilities would need to cross or otherwise duplicate the facilities of the other in order to extend service to the Doco Subdivision.

36. Another factor to be considered in determining whether wasteful duplication of investment or service occurs is whether construction of facilities to extend service to a customer by one supplier exceeds the cost to extend service to that same customer by a second supplier. Montana-Dakota Utilities Co.'s cost to extend service to the Doco Subdivision and its customers is lower than the cost for KEM to extend service to the Subdivision and its customers.

37. The Commission finds that approval of the applications 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?

38. There is no evidence of any plans by the City of Steele to annex the Doco Subdivision.

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

39. The Commission finds that extension of service by either supplier would not unreasonably interfere with the service or system of the other.

40. The Commission finds MDU's application should be approved because MDU would extend sufficiently reliable service more economically and at lower costs to customers, extension of service by MDU would best serve orderly and economic development of electric service in the general area, and all of the customers within the subdivision prefer electric service from MDU.

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 under North Dakota Century Code Chapter 49-03.

2. Public convenience and necessity require the granting of a Certificate of Public Convenience and Necessity to the applicant MDU in each of these proceedings.

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

Order

The Commission Orders:

Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. is issued Certificate of Public Convenience No. 5387, authorizing the provision of electric distribution service to locations in the SW ¼ of the NW ¼, Section 17, Township 139N, Range 17W, Lots 1-11, Doco Subdivision, Kidder County, North Dakota.

PUBLIC SERVICE COMMISSION

Tony Clark **Commissioner**	**Susan E. Wefald** **President**	**Kevin Cramer** **Commissioner**

PUBLIC SERVICE COMMISSION

STATE OF NORTH DAKOTA

Certificate of Public Convenience and Necessity

Certificate Number 5387

This is to certify that public convenience and necessity require, and permission is granted, for Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc., to serve Doco Subdivision, located in the SW 1/4 of the NW 1/4 of Section 17, Township 139N, Range 17W, Kidder County, North Dakota.

This certificate is issued in accordance with the Order of this Commission dated December 17, 2008, in Case Nos. PU-08-345, PU-08-346, PU-08-347, and PU-08-693, and is subject to the conditions and limitations noted in the Order.

This certificate is conditioned upon Montana-Dakota Utilities Co., a Division of MDU Resources Group, Inc. securing the franchise or other authority of the proper municipal or other public authority for the exercise of these rights and privileges.

Bismarck, North Dakota, December 17, 2008.

ATTEST: ***PUBLIC SERVICE COMMISSION***

Executive Director ***Commissioner***

MEMORANDUM

To: Commissioners Wefald, Clark and Cramer

Fr: Jerry Lein and Janet Marquart

Da: December 17, 2008

Re: MDU Line Extension Policy Compliance
Case Nos. PU-08-345, 346, 347 and PU-08-693: Doco Subdivision PC&N.

During its November 24th working session, the Commission requested staff to investigate whether MDU complied with its electric line extension policy when determining that no customer contribution to costs would be needed for extending electric service to customers in the Doco Subdivision being developed near Steele, ND.

Paragraph 1 of MDU"s existing tariff rate schedule entitled Electric Extension Policy Rate 112 provides:

1. *A permanent extension may be constructed without a contribution if the estimated project construction cost is equal to or less than two times the estimated annual revenue (2 to 1 ratio).*

Paragraph 3 defines project construction cost:

3. *Project construction cost shall include all cost of the electric extension and overhead cost less the cost of customers' transformer(s), service line, and meter…*

On September 19, 2008, following the September 16th hearing, MDU filed Amended Exhibits 8, 9 and 11 to correct calculation errors in the original exhibits introduced at the hearing to show MDU's costs of extending service. Based on data from those amended exhibits, the attached work papers show that MDU's estimated extension costs net of transformer, service line, and meter costs are less than twice the annual revenue expected from the subdivision:

	Total Project Cost	Transformers Services, Meters	Contribution Per Rate 112
COST TO SERVE LOT 6	$7,806.28		
INCREMENTAL COST TO SERVE LOT 7	695.90		
INCREMENTAL COST TO SERVE LOT 8, 9, 10 & 11	8,238.74		
COST TO SERVE LOT 1	15,136.59		
INCREMENTAL COST TO SERVE LOT 2	695.90		
INCREMENTAL COST TO SERVE LOT 3, 4 & 5	3,631.75		
Total Cost of Project 1/	**$36,205.16**	$15,129.43	$21,075.73
Estimated Revenues			$11,216.00
Maximum Allowable Investment per Rate 112			$22,432.00
Contribution Required			($1,356.27)

Therefore, staff concludes that MDU has complied with its line extension policy.

Att. (Workpapers)

Montana-Dakota Utilities Co.
Cost Estimates for DOCO Subdivision

COST TO SERVE LOT 6

Riser		
BRACKET CABLE	$30.16	
ARRESTER DISTRIB CLASS 3KV	29.70	
BRACKET CONDUIT SINGLE	28.40	
CAP POLYPROPYLENE WILDLIFE	3.88	
CONDUCTOR CU BARE SD 2 7STR	10.40	
CONDUIT SCH 80 3 INCH PVC	29.10	
CROSSARM 3 1/2 X 4 1/2 X 8FT	15.91	
CUTOUT FUSED OPEN 15KV 100A	55.25	
HOSE INSULATED SPLIT	15.18	
HOSE INSULATED SPLIT	2.77	
TERMINATOR CABLE JCN 15KV 1/0	46.86	
Subtotal	$267.61	
Transformer		
25KVA Padmount Transformer	$1,230.00	
BASE TRANS BOX PAD 25KVA & UP	164.17	
CLAMP GRD ROD 5/8 TO #8-1/0 CU	1.09	
ELBOW LOADBREAK 1/0 ALUM 15KV	26.41	
ELBOW ARRESTER 1/0	77.01	
ROD GROUND 5/8 X 10FT CW	12.87	
Subtotal	$1,511.55	$1,511.55
Primary Cable		
Cable 880' @ $1.92/Ft.	$1,689.60	
Conduit 2" HDPE 206' @ $1.51/Ft.	311.06	
Trenching 365' @ $1.00/Ft.	365.00	
Trenching 250' @ $0.50/Ft.	125.00	
Road Bore 225' @ $8/Ft.	1,800.00	
Subtotal	$4,290.66	
Labor (With Loading)		
Foreman $45.95/Hr. x 8 Hr.	$367.60	
Two Linemen $42.06/Hr. x 8 Hr.	672.96	
Subtotal	$1,040.56	
Meter	$73.00	$73.00
Cost Of URD Service - Material &Trenching = $1.77/Ft.		
Average Service Length 300' x $1.77/Ft.	$531.00	
Labor (With Loading)		
Foreman $45.95/Hr. x 2 Hr.	91.90	
Subtotal	$622.90	$622.90
Total Cost For Material And Labor 1/	**$7,606.28**	

1/ Not including engineering, overheads and internal equipment services.

Montana-Dakota Utilities Co.
Cost Estimates for DOCO Subdivision

INCREMENTAL COST TO SERVE LOT 7

Cost Of URD Service - Material &Trenching = $1.77/Ft.		
Average Service Length 300' x $1.77/Ft.	$531.00	
Labor (With Loading)		
Foreman $45.95/Hr. x 2 Hr.	91.90	
Subtotal	$622.90	$622.90
Meter	$73.00	$73.00
Total Cost For Material And Labor 1/	**$695.90**	

1/ Not including engineering, overheads and internal equipment services.

Montana-Dakota Utilities Co.
Cost Estimates for DOCO Subdivision
INCREMENTAL COST TO SERVE LOT 8, 9, 10 & 11

Transformer		
25KVA Padmount Transformer	$1,230.00	
BASE TRANS BOX PAD 25KVA & UP	164.17	
CLAMP GRD ROD 5/8 TO #8-1/0 CU	1.09	
ELBOW LOADBREAK 1/0 ALUM 15KV (2)	52.82	
ELBOW ARRESTER 1/0	77.01	
ROD GROUND 5/8 X 10FT CW	12.87	
Foreman $45.95/Hr. x 6 Hr.	275.70	
Two Linemen $42.06/Hr. x 6 Hr.	504.72	
Subtotal	$2,318.38	$2,318.38
Primary Cable		
Cable 940' @ $1.92/Ft.	$1,804.80	
Trenching 920' @ $1.00/Ft.	920.00	
Subtotal	$2,724.80	
Cost Of URD Service - Material &Trenching = $1.77/Ft.		
Average Service Length 300' x $1.77/Ft.	$531.00	
Labor (With Loading)		
Foreman $45.95/Hr. x 2 Hr.	91.90	
	$622.90	
	x 2	
Subtotal	$1,245.80	$1,245.80
Cost Of URD Service - Material &Trenching = $2.38/Ft.		
Average Service Length 300' x $2.38/Ft.	$714.00	
Labor (With Loading)		
Foreman $45.95/Hr. x 2.5 Hr.	114.88	
	$828.88	
	x 2	
Subtotal	$1,657.76	$1,657.76
Meter	$73.00	
	x 4	
	$292.00	$292.00
Total Cost For Material And Labor 1/	**$8,238.74**	

1/ Not including engineering, overheads and internal equipment services.

Montana-Dakota Utilities Co.
Cost Estimates for DOCO Subdivision
COST TO SERVE LOT 1

Riser		
BRACKET CABLE	$30.16	
ARRESTER DISTRIB CLASS 3KV	29.70	
BRACKET CONDUIT SINGLE	28.40	
CAP POLYPROPYLENE WILDLIFE	3.88	
CONDUCTOR CU BARE SD 2 7STR	10.40	
CONDUIT SCH 80 3 INCH PVC	29.10	
CROSSARM 3 1/2 X 4 1/2 X 8FT	15.91	
CUTOUT FUSED OPEN 15KV 100A	55.25	
HOSE INSULATED SPLIT	15.18	
HOSE INSULATED SPLIT	2.77	
TERMINATOR CABLE JCN 15KV 1/0	46.86	
Subtotal	$267.61	
Transformer		
25KVA Padmount Transformer	$1,230.00	
BASE TRANS BOX PAD 25KVA & UP (2)	328.34	
CLAMP GRD ROD 5/8 TO #8-1/0 CU	1.09	
ELBOW LOADBREAK 1/0 ALUM 15KV	26.41	
ELBOW ARRESTER 1/0	77.01	
ROD GROUND 5/8 X 10FT CW (2)	25.74	
Subtotal	$1,688.59	$1,688.59
Primary Cable		
Cable 2,469' @ $1.92/Ft.	$4,740.48	
Conduit 2" HDPE 206' @ $1.51/Ft.	311.06	
Trenching 1,954' @ $1.00/Ft.	1,954.00	
Trenching 250' @ $0.50/Ft.	125.00	
Road Bore 225' @ $8/Ft.	1,800.00	
Subtotal	$8,930.54	
Labor (With Loading)		
Foreman $45.95/Hr. x 27 Hr.	$1,240.65	
Two Linemen $42.06/Hr. x 27.5 Hr.	2,313.30	
Subtotal	$3,553.95	
Meter	$73.00	$73.00
Cost Of URD Service - Material &Trenching = $1.77/Ft.		
Average Service Length 300' x $1.77/Ft.	$531.00	
Labor (With Loading)		
Foreman $45.95/Hr. x 2 Hr.	91.90	
Subtotal	$622.90	$622.90
Total Cost For Material And Labor 1/	**$15,136.59**	

INCREMENTAL COST TO SERVE LOT 2

Cost Of URD Service - Material &Trenching = $1.77/Ft.		
Average Service Length 300' x $1.77/Ft.	$531.00	
Labor (With Loading)		
Foreman $45.95/Hr. x 2 Hr.	91.90	
Subtotal	$622.90	$622.90
Meter	$73.00	$73.00
Total Cost For Material And Labor 1/	**$695.90**	

1/ Not including engineering, overheads and internal equipment services.

Montana-Dakota Utilities Co.
Cost Estimates for DOCO Subdivision
INCREMENTAL COST TO SERVE LOT 3, 4 & 5

Transformer		
25KVA Padmount Transformer	$1,230.00	
CLAMP GRD ROD 5/8 TO #8-1/0 CU	1.09	
ELBOW LOADBREAK 1/0 ALUM 15KV (2)	52.82	
Foreman $45.95/Hr. x 2 Hr.	91.90	
Two Linemen $42.06/Hr. x 2 Hr.	168.24	
Subtotal	$1,544.05	$1,544.05
Cost Of URD Service - Material &Trenching = $1.77/Ft.		
Average Service Length 300' x $1.77/Ft.	$531.00	
Labor (With Loading)		
Foreman $45.95/Hr. x 2 Hr.	91.90	
	$622.90	
	x 3	
Subtotal	$1,868.70	$1,868.70
Meter	$73.00	
	x 3	
Subtotal	$219.00	$219.00
Total Cost For Material And Labor 1/	**$3,631.75**	

1/ Not including engineering, overheads and internal equipment services.