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March 10, 2021

Executive Secretary
North Dakota Public Service Commission
State Capitol Building
600 E Boulevard Ave #408
Bismarck, ND 58505-0480

**RE: Application and Notice of Change in Natural Gas Rates
Case No. PU-20-379 – Sur-Surrebuttal Testimony**

Montana-Dakota Utilities Co. (Montana-Dakota) herewith electronically submits the Sur-Surrebuttal testimony of Mr. Ronald J. Amen.

Sincerely,

/s/ Travis R. Jacobson

Travis R. Jacobson
Director of Regulatory Affairs

Attachment
cc: Service List

MONTANA-DAKOTA UTILITIES CO.

Before the North Dakota Public Service Commission

Case No. PU-20-379

Sur-Surrebuttal Testimony

of

Ronald J. Amen

March 10, 2021

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I. INTRODUCTION AND SUMMARY

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

2 A. My name is Ronald J. Amen and my business address is 17806 NE 109th Court,
3 Redmond, Washington 98052.

4 **Q. On whose behalf are you appearing in this proceeding?**

5 A. I am appearing on behalf of Montana-Dakota Utilities Co. ("Montana-Dakota" or
6 the "Company").

7 **Q. Have you provided previous testimony in Case No. PU-20-379?**

8 A. Yes. I previously sponsored direct and rebuttal testimony in this proceeding.

9 **Q. Please summarize the purpose of your sur-surrebuttal testimony.**

10 A. I address the surrebuttal testimony of the Advocacy Staff of the North Dakota
11 Public Service Commission witness, James A Heidell. I will comment on Mr.
12 Heidell's recommendation for a throughput-based allocation factor for the
13 distribution mains constructed under the Company's Distribution Integrity
14 Management Program (DIMP) and System Safety and Integrity Program (SSIP).

15 **Q. Are you sponsoring any exhibits or attachments to your sur-surrebuttal
16 testimony?**

17 A. Yes. I am sponsoring Exhibit No. ____ (RJA – SSR-1), Response to Advisory Staff
18 Data Request No. 12.3, issued December 24, 2020.

II. THROUGHPUT ALLOCATION FACTOR FOR DISTRIBUTION MAINS

A. Montana-Dakota's Presentation in Direct and Rebuttal

Testimony

19 **Q. Please summarize the Company's classification and allocation of distribution
20 mains.**

1 A. The Company classified 30% of its investment in distribution mains as customer
2 related and 70% of the investment as demand related. The customer related
3 portion of the distribution mains investment was then allocated based on the
4 number of customers on Montana-Dakota's system. As discussed extensively in
5 my direct testimony, and again in Section II. C. of my rebuttal testimony, the
6 demand related investment was allocated to the customer classes based on their
7 respective contribution to peak day demand under system design weather
8 conditions, in other words, on a "design day" basis. None of the Company's
9 distribution main investments were classified as commodity, or throughput, related
10 because distribution mains investments are simply not a function of, nor do the
11 underlying cost components vary with, throughput. Instead, they are a function of
12 the number of customers on an LDC system and the design day demand of those
13 customers.

14 **Q. Please summarize the various factors that influence Montana Dakota's major**
15 **capital projects.**

16 A. Montana Dakota witness, Mr. Patrick Darras, provides a detailed discussion of the
17 major capital projects in his Direct Testimony and elaborates on the areas of risk
18 on the distribution system that are identified by the DIMP process, as well as by
19 the expertise of Company engineers and field management personnel, and the
20 development of safety related projects to remediate those risks in his rebuttal
21 testimony. The following is an excerpt:

22 "The prioritization and selection of the appropriate remediation
23 projects depends on the type of threat assessed, whether it is
24 current or potential, and the feasibility of the remedial action in
25 managing the relevant risk factors. Pipeline replacement is primarily
26 the most viable option to remediate risks related to material

1 deterioration, joint and weld failure, corrosion, natural forces, and
2 equipment malfunction. The SSIP process prioritizes for
3 replacement of early vintage steel and plastic pipelines prone to
4 bare or poor coating, industry documented Aldyl-a plastic defects,
5 unknown attributes, missing data, mechanical fittings, inside gas
6 meters, and non-reported third-party damages. The assessment of
7 these risk factors that determine the prioritization and replacement
8 of high-risk pipelines within the Company’s distribution system are
9 separate from the design standards and criteria, localized peak
10 capacity requirements of the distribution grid, customer density,
11 rural versus urban location, adjacent infrastructure, and other
12 factors that drive the specific pipeline construction costs.”¹
13 [emphasis added]

B. Surrebuttal Position of Advocacy Staff

14 **Q. Please summarize the position of the Advocacy Staff?**

15 A. Advocacy Staff witness, Hr. Heidell, stands by his recommendation that Montana-
16 Dakota apply a throughput allocation factor for the distribution mains
17 investments that are related to safety, instead of including these investments
18 as customer-related and demand-related in a cost of service study and
19 allocating the investment costs based on number of distribution customers and
20 design day, respectively. He states that while the Company presents
21 arguments as to why it should not be allocated on throughput it fails to establish
22 that the investments were made for either customers, or capacity. He claims
23 that the Company affirms that the investments were not made for either growth
24 in customers or demand.²

¹ Darras Rebuttal, 3:9 – 4:2.

² Heidell Surrebuttal, 3:48 – 56.

C. Montana-Dakota's Sur-surrebuttal Position

1 **Q. Do you accept any of the rationale espoused by Mr. Heidell with respect to**
2 **the allocation of capital expenditures related to Safety?**

3 A. No. The only conclusion by Mr. Heidell that I can support is that, "A fundamental
4 tenant of cost-of-service is that cost allocation should follow cost causation."³ His
5 recommended allocation of the capital investments under the DIMP and SSIP
6 programs does not follow cost causation. He continues to improperly conflate the
7 safety risk factors enumerated by Mr. Darras in his direct and rebuttal testimony,
8 and highlighted in the excerpt quoted earlier in this sur-surrebuttal testimony, with
9 cost causation principles underlying the engineering and construction of gas
10 distribution mains. When abandoning a high-risk distribution main and removing it
11 from service – regardless of the specific risk factors that led to the decision to
12 replace it – the cost causation factors that drive the design capacity and the length
13 of a new distribution main to take its place are unaltered; that is, the cumulative
14 peak demands (under design weather conditions) of the customers to be attached
15 and the customer density or distance to connect each of the them to be served by
16 that main.

17 **Q. Mr. Heidell attributes a statement from Company witness Mr. Darras, without**
18 **proper contextual attribution, that customer or peak day demand are not one**
19 **of the categories of risk used to identify necessary expenditures under the**
20 **DIMP program. Is this a valid distinction to claim that customer demand is not**
21 **a cost causation component?**

22 A. No. The Company has never stated nor implied that customer demand or system
23 peak demand are risk factors. Customers do not impose risks to pipeline safety,

³ Ibid.

1 unless they don't dial 811 before they dig on their property. The risk factors
2 discussed by Mr. Darras that determine the need to prioritize replacement of
3 certain high risk pipeline segments are separate and distinguishable from the costs
4 resulting from the design criteria used to build the replacement pipeline, as he so
5 stated in his rebuttal testimony. Exhibit No. ____ (RJA – SSR-1) provides a response
6 by Mr. Darras to an Advisory Staff data request illustrates this distinction:

7 “Safety is always a priority and, as such, safety related projects are
8 pursued and are not dependent necessarily on cost but more so on
9 risk. Cost may drive analyzing temporary alternatives; however, the
10 alternative would be dependent on the specific safety risk and type
11 of project.”

12 The level of a particular category of risk and the severity of the potential
13 consequences of not properly addressing the particular risk factor will determine
14 what action is required to reduce or eliminate the risk. However, the level of capital
15 investment that will be incurred under the DIMP or SSIP programs, when the
16 decision is made to eliminate the risk by abandoning a segment of high-risk
17 distribution main and replacing it with a new distribution main, will be determined
18 by the size and length of the new distribution main. The cost causation factors that
19 will influence the design capacity and construction cost of the new distribution main
20 are the maximum demands of the customers to be attached to the main and the
21 distance involved to connect them.

22 **Q. Mr. Heidell refers to the NARUC manual's⁴ premise that capital expenditures**
23 **for pipelines are a function of customers and demand, while stating that it**
24 **has been established by the Company that was not the cause of the**

⁴ *Gas Distribution Rate Design Manual*, National Association of Regulatory Utility Commissioners, June 1989.

1 investment. He states: “[I]n fact, the thirty-year old NARUC cost allocation
2 manual does not discuss how investments for safety should be allocated in a
3 cost-of-service study.”⁵ Do you think the NARUC cost allocation manual
4 should be revised?

5 A. No. I’ll leave that recommendation to Mr. Heidell’s judgement. Gas Utilities
6 maintained standards and criteria for the safe operation of their pipeline
7 infrastructure in 1989, the year the NARUC manual was published, as they do
8 today. The NARUC manual doesn’t offer an allocation method for “safety” because
9 it has no bearing on the underlying cost characteristics of the pipeline
10 infrastructure. Under Mr. Heidell’s perception of cost causation, taken perhaps to
11 an extreme, if a lightning strike damaged an above ground rectifier facility or
12 equipment at a pipeline regulator station, you might need a special “lightning strike”
13 allocation method for the replacement cost of the equipment or facilities.

14 **Q. What is your assessment of Mr. Heidell’s critique of the minimum system
15 analysis that was used to establish the customer classified cost of
16 distribution mains within the Cost of Service Study?**

17 A. Mr. Heidell’s critique suggests that he doesn’t understand the appropriate
18 methodology for the performance of a minimum system study for the historical
19 pipeline plant account records of Montana-Dakota’s gas distribution mains. He
20 attempts to compare over twenty-five years of vintage-year pipeline cost data,
21 involving all sizes, material types, and miles of distribution mains to a sampling of
22 recent pipeline projects under the DIMP program. He states, incorrectly, that the
23 historical footage of 2-inch PE (plastic) pipe was an “assumed” 55% of total system
24 footage from the historical plant account records and compares it to 72% of 2-inch

⁵ Heidell Surrebuttal, at 9:194 – 198.

1 PE pipeline installed under the DIMP program. He provides a similar comparison
2 of the cost per foot of the historical indexed value of the 2-inch PE to the DIMP
3 sample of 2-inch PE, as support for his conclusion that the minimum system study
4 is not reflective of the costs incurred in the DIMP program and therefore not
5 reflective of cost causation.⁶ The minimum system study was not intended to
6 replicate the current DIMP program cost of 2-inch PE mains; that is not its purpose
7 and the comparison is inappropriate. Over time, as the installed costs of the 2-inch
8 PE mains under the DIMP and SSIP programs are added to the plant account
9 records for distribution mains, the minimum system results in a future cost of
10 service study may be influenced. If Mr. Heidell had methodological issues with the
11 minimum system study, he should have performed one of his own. But of course,
12 he didn't perform a cost of service study either.

III. CONCLUDING REMARKS

13 **Q. Please summarize the findings and conclusions in your sur-surrebuttal**
14 **testimony.**

15 A. Mr. Heidell confuses the risk factors that determine the need to replace a specific
16 segment of pipeline for safety reasons, with the two key cost factors underlying the
17 actual design and construction of the replacement pipeline; that is, the capacity
18 cost required to serve the maximum peak demands previously connected to the
19 abandoned pipeline segment and the construction cost related to extending the
20 pipeline to reach all of those customers.

21 As I explained in my rebuttal testimony, current capacity conditions on any
22 specific pipeline segment that is evaluated for replacement are a key consideration

⁶ Ibid, 10:210 – 220.

1 in determining the size of the replacement pipeline, whether necessary to resolve
2 a current lack of adequate capacity on the pipeline segment targeted for
3 replacement or to improve the overall safety and reliability of the pipeline system
4 to meet the demands of the customers served by that system under peak weather
5 conditions. The design criteria used to engineer and construct a new pipeline
6 segment that replaces one that has been abandoned are no different than those
7 used when extending distribution mains beyond the current reach of the
8 distribution grid to serve the peak demands of new customers.

9 Mr. Heidell's recommendation to allocate safety related investments based
10 on projected throughput has absolutely no relationship to either the risk factors that
11 lead to the need for replacement of a pipeline segment or the cost causation
12 characteristics of the design and construction of the new distribution pipeline that
13 replaces the high-risk, abandoned pipeline. Mr. Heidell's choice of an unsupported
14 volumetric-based throughput allocation of the pipeline investments made under the
15 DIMP and SSIP programs on the basis of "serving the common good" is an intent
16 to shift cost responsibility from smaller, low load-factor customers (i.e., high peak
17 demand relative to low annual usage) to larger, high load-factor customers (i.e.,
18 low peak demand relative to high annual usage), to the benefit of his client's
19 constituents.

20 **Q. Does this conclude your sur-surrebuttal testimony?**

21 A. Yes.

**MONTANA-DAKOTA UTILITIES CO.
NORTH DAKOTA PUBLIC SERVICE COMMISSION
ADVOCACY STAFF DATA REQUEST SET 12
ISSUED DECEMBER 24, 2020
CASE NO. PU-20-379**

- 12.3.** Please provide instances where safety related capital projects have not been pursued due to the high cost per customer and explain the alternative solution used.

MDU Response:

Safety is always a priority and, as such, safety related projects are pursued and are not dependent necessarily on cost but more so on risk. Cost may drive analyzing temporary alternatives; however, the alternative would be dependent on the specific safety risk and type of project.