

MONTANA-DAKOTA UTILITIES CO.

Before the South Dakota Public Utilities Commission

Docket No. NG-23-___

Direct Testimony

Of

Russel Nishikawa

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

2 A. My name is Russel Nishikawa, and my business address is 555 South
3 Cole Road, Boise, Idaho 83709.

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

5 A. I am the Manager of Engineering Services for Montana-Dakota Utilities
6 Co. ("Montana-Dakota" or "Company"), Great Plains Natural Gas Co. ("Great
7 Plains"), Cascade Natural Gas Corporation ("Cascade") and Intermountain Gas
8 Company ("Intermountain").

9 **Q. Please describe your duties and responsibilities with Montana-Dakota.**

10 A. I have managerial responsibility and oversight for the review, planning,
11 development and design of the Company's pipeline systems and technical
12 facilities.

13 **Q. Please outline your educational and professional background.**

14 A. I am a graduate of University of Idaho with a Bachelor of Science Degree
15 in Mechanical Engineering. I am a licensed professional engineer in the state of
16 Idaho.

1 I began my career in 2005 as a gas engineer with Intermountain Gas in
2 Boise, ID. I advanced through the Engineering Department until I was promoted
3 to my current managerial position in 2018.

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

5 A. The purpose of my testimony is to: (1) provide an overview of the
6 Company's project selection and budgeting process; and (2) describe and
7 provide an update on construction activities, schedule, and costs estimates for
8 the Town Border Station (TBS) projects located in North Spearfish and Rapid
9 City.

10 **OVERVIEW OF PROJECT SELECTION AND BUDGETING PROCESS**

11 **Q. What type of major capital projects does the Company typically perform?**

12 A. The bulk of Montana-Dakota's major capital projects are pipeline
13 replacement projects that have been identified for safety reasons and to reduce
14 risk on Montana-Dakota's system, and system reinforcements or system
15 expansions that have been identified as needed to ensure system reliability and
16 to accommodate growth on the Company's system. A reinforcement is an
17 upgrade to existing infrastructure or new system additions, which increases
18 system capacity, reliability and safety. An expansion is a new system addition to
19 accommodate an increase in demand. Collectively, these are known as
20 distribution system enhancements. Distribution system enhancements do not
21 reduce demand, nor do they create additional supply; instead, enhancements
22 can increase the overall capacity of a distribution pipeline system while utilizing
23 existing supply points.

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1 **Q. Please provide an overview of Montana-Dakota’s identification and selection**
2 **process for distribution enhancement projects.**

3 A. The Engineering Department works closely with Energy Services
4 Representatives and district management to ensure the system is safe and
5 reliable. As towns develop and add new homes and businesses, the need for
6 pipeline expansions and/or reinforcements increase. The system expansion
7 projects are historically driven by new city developments or new housing plats.
8 Before expansion projects can be constructed to serve these new customers, an
9 engineering analysis is performed. Using system modeling software to represent
10 cold weather scenarios, predictions can be made about the capacity of the system.
11 As new groups of customers seek natural gas service, the models provide
12 feedback on how best to serve them while maintaining reliable supply to our
13 existing customers.

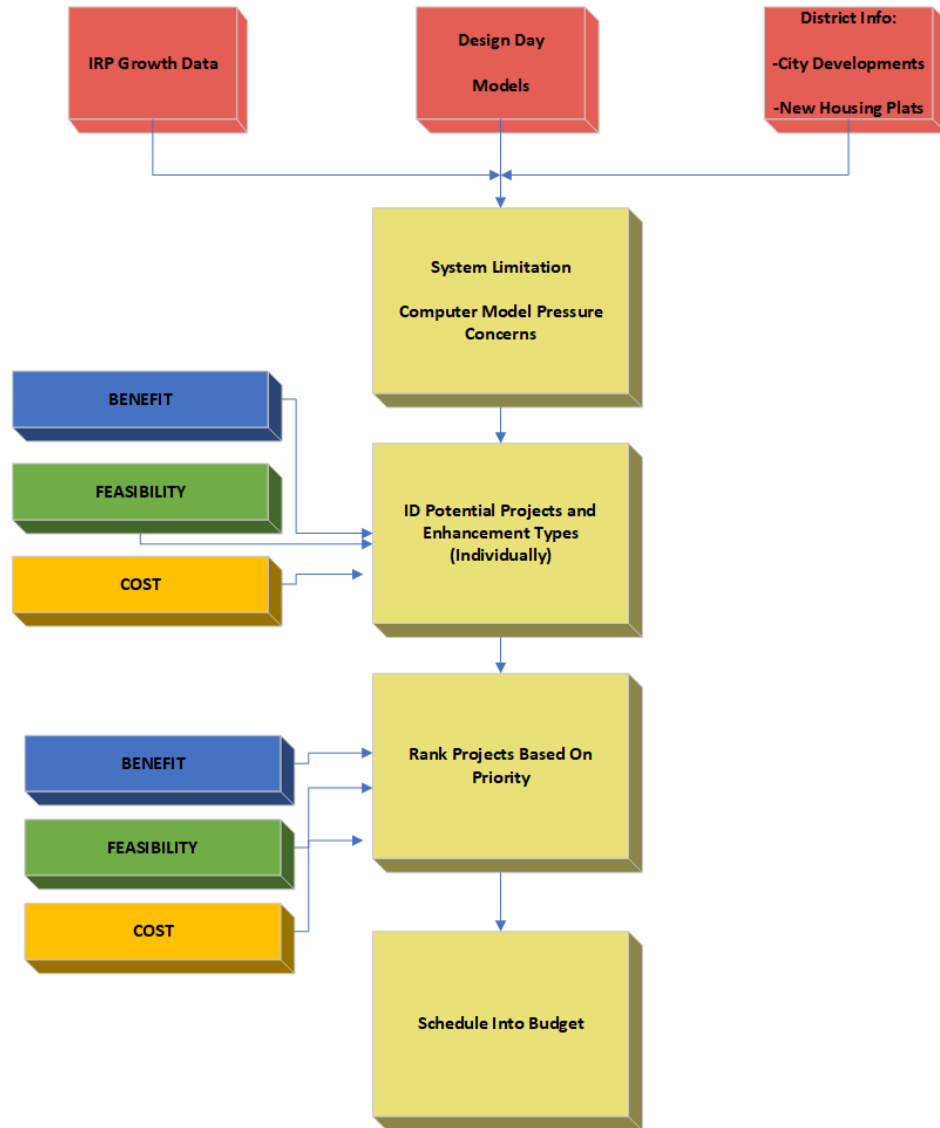
14 Another aspect of system planning involves city gate capacity analysis and
15 forecasting. Over time, each gate station will take on more demand and it is
16 Montana-Dakota’s objective to stay ahead of potential reliability issues by
17 predicting and identifying constraints on its system. Cold weather design day
18 modeling allows Montana-Dakota to forecast necessary gate upgrades. SCADA
19 communication technology utilized by Montana-Dakota allows verification of
20 models with real time and historic gate flow and pressure data.

21 Demand studies facilitate modeling multiple demand forecasting scenarios,
22 constraint identification, and corresponding optimized combinations of pipe
23 modification and pressure modification solutions to maintain adequate pressures
24 throughout the network. After developing a working demand study, the Company
25 analyzes every system at peak cold weather conditions to identify areas where

1 potential outages may occur. These constraint areas are then risk-ranked against
2 each other to ensure the highest risk areas are corrected first and others are
3 properly addressed in time. Within a given area, projects/reinforcements are
4 selected using the following criteria:

- 5 • The shortest segment(s) of pipe that improves the deficient area of the
6 distribution system;
- 7 • The segment of pipe with the most favorable construction conditions, such
8 as ease of access or rights-of-way, traffic issues, and minimal to no water,
9 railroad or major highway crossings, etc.;
- 10 • The segment of pipe that minimizes environmental concerns including
11 minimal to no wetland involvement, and the minimization of impacts to
12 local communities and neighborhoods;
- 13 • The segment of pipe that provides opportunity to add additional
14 customers; and
- 15 • Total construction costs including restoration.

16 Once a project/reinforcement is identified, the Design Engineer or Energy
17 Services Representative begins a more thorough investigation by surveying the
18 route and filing for permits. This process may uncover additional impacts such as
19 moratoriums on road excavation, underground hazards, discontent among
20 landowners, etc., resulting in another iteration of review for the
21 project/reinforcement selection criteria. Figure 1, below, provides a schematic
22 representation of the distribution project process flow.



1 **Q. Please provide an overview of Montana-Dakota’s capital budgeting process.**

2 A. Capital additions and changes are planned through the annual budgeting
 3 process using PowerPlan (“PP”), an accounting software application. The budget
 4 process begins with an individual (originator) creating specific funding projects in
 5 PP for all new projects to be included in the five-year capital budget. Originators
 6 are generally managers at the district level or engineering staff at the Company
 7 level. Sources of information for capital projects include the DIMP, TIMP, state and
 8 local government agencies, and internal Montana-Dakota personnel. Funding

1 projects are used to hold the capital budget estimates and will be linked to the
2 capital work orders to be created when actual costs commence. A Fixed Asset
3 Financial Analyst reviews the funding projects for proper setup. If the project is not
4 considered a capital expenditure as it was submitted, it is rejected and sent back
5 to the originator for revision, cancelled, or it is moved to Operations and
6 Maintenance (“O&M”) expense. After the review has been completed, the Fixed
7 Asset Financial Analyst will add appropriate overheads. Blanket funding projects
8 are used year after year to budget for high volume mass property work orders
9 typically under \$150,000 each.

10 Once all the funding projects have been updated with expenditures, various
11 Company operating managers generate reports to show estimated expenditures
12 and justification for each project. The managers perform the review of funding
13 projects and see that any necessary changes are made to the estimate and that
14 the project is supported. Reports are then generated by the budgeting personnel
15 for review and approval by the Directors and Vice Presidents of the Utility Group.
16 Any final budget changes are made, and the budgets are then presented to the
17 Utility Group’s President for review and approval. The final Utility Group budget is
18 then presented to the MDU Resources CEO for review and approval. If the budget
19 is approved by the MDU Resources CEO, the final review and approval occurs
20 with the Board of Directors. At each stage of the review and approval process a
21 project (or projects) can be challenged for appropriateness and removed from the
22 capital budget or moved to another year within the five-year budget. The addition
23 or removal of projects can also be impacted by other factors such as available
24 capital and/or borrowing capacity, upon appropriate review to verify continued
25 reliable and safe service.

1 After final approval, an approved budget version is created in PP, locked
2 for entry and the funding projects and estimated amounts in the approved budget
3 version are copied back to the working budget version. Project managers are
4 notified that the budget has been approved and the funding projects are open for
5 work order creation. Projects are monitored and updated throughout the year as
6 part of the review process and to insure, as best as possible, that projects are
7 completed on time and within the approved budget.

8 **Q. Have there been any changes to these processes since the Company's last**
9 **rate case?**

10 A. Yes. Beginning in January 2019, the Company's parent, MDU Resources
11 has moved toward a "one utility" model. As a result, the engineering department
12 was reorganized, and more consistent tasks and processes were defined. Within
13 this effort there is a new internal requirement to develop a more robust analysis for
14 any project with a cost estimate over \$1 million dollars. As part of that analysis the
15 Company develops documentation supporting the project, including a substantial
16 executive summary, Synergi model snapshots, alternatives considered, and timing
17 and justification. The Engineering Managers and Directors collaboratively review
18 all projects and determine which are the most important from a risk standpoint and
19 what the timing of the projects should be to best mitigate risks.

20 **Q. For work that will be performed in 2023, how does the Company develop**
21 **budgeted amounts?**

22 A. The Company's capital budgets were developed in June 2022, and the
23 Company expects that its actual investment should not differ materially from the
24 budgeted amounts for the projects that are not yet complete. Currently, Montana-
25 Dakota is not aware of any immediate impacts to the construction schedules for its

1 capital projects. The Company will provide updates regarding changes to
2 budgeted amounts or actual investments, and any relevant changes in schedule,
3 through discovery (as requested).

4 **MAJOR CAPITAL PROJECTS**

5 **Q. Would you please describe the North Spearfish and Rapid City TBS**
6 **Projects?**

7 A. Yes. The following pages contain a description of each project, including
8 the need for each project.

9 **Q. How will the Company's customers benefit from the projects?**

10 A. The benefits of the projects are increased distribution system capacity and
11 reliability, allowing the Company to provide consistent service to our current and
12 future customers.

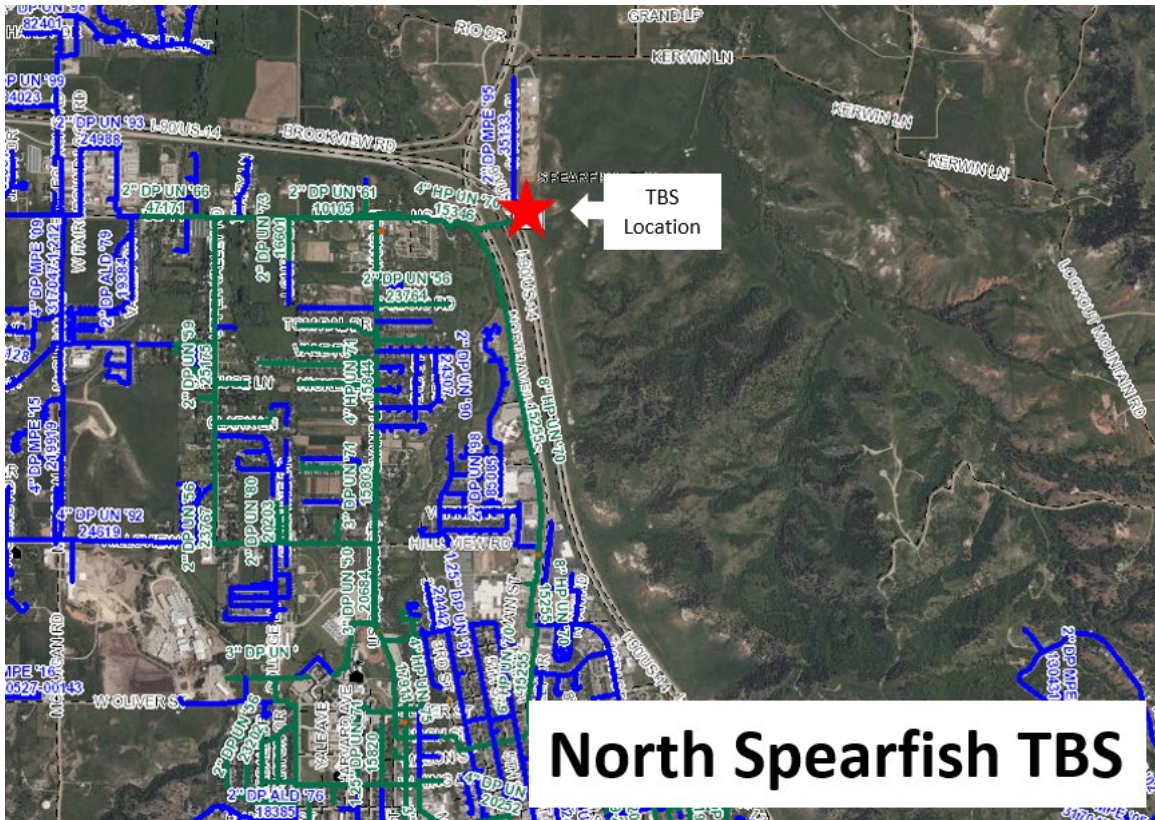
13 **Q. Did the Company consider alternative ways or timeframes to meet the need**
14 **for these projects?**

15 A. No alternatives were identified. The North Spearfish and Rapid City TBS
16 are a key supply into their respective distribution systems and are necessary to
17 provide reliable service.

18 **North Spearfish TBS Project**

19 **Q. Please describe the North Spearfish TBS Project.**

20 A. The North Spearfish TBS project increased available flow capacity through
21 WBI infrastructure and involved the Company installation of new pressure
22 regulation facilities and communication systems.



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2 **Q. Why did the Company undertake the North Spearfish TBS Project?**

3 A. The North Spearfish TBS project was constructed to increase deliverability
 4 capacity from WBI, the interstate pipeline supplier. WBI's current Spearfish
 5 delivery capacity was undersized for expected demand.

6 **Q. What work has been performed in prior phases of the project?**

7 A. The North Spearfish TBS Project is a one-year project started and completed
 8 in 2023, there were no prior phases.

9 **Q. What is the timing of the North Spearfish TBS Project?**

10 A. The project was started in spring of 2023 and is scheduled for completion by
 11 the end of 2023.

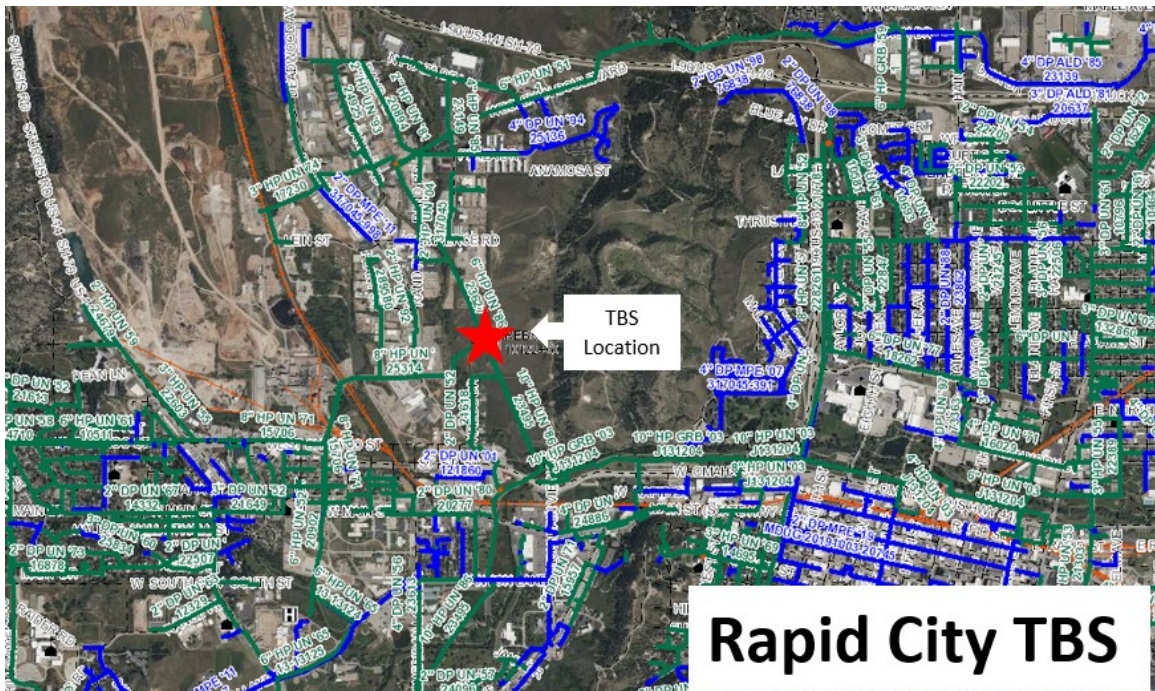
12 **Q. What were the capital cost estimates of the project?**

13 A. The current capital cost is \$1,072,109 as shown on Rule 20:10:13:56,

2 **Rapid City TBS Upgrade**

3 **Q. Please describe the Rapid City TBS Upgrade project.**

4 A. The Rapid City TBS Upgrade project increases available flow capacity
5 through WBI infrastructure and involved the Company installation of new pressure
6 regulation facilities and communication systems.



7 **Q. Why did the Company undertake the Rapid City TBS Upgrade?**

8 A. The Rapid City TBS Upgrade project was constructed to increase
9 deliverability capacity from WBI. WBI's current Rapid City delivery capacity was
10 undersized for forecasted demand, and timing aligned with WBI's Line 15
11 Expansion Project.

12 **Q. What work has been performed in prior phases of the project?**

13 A. The Rapid City TBS Upgrade project was a one-year project started and

1 completed in 2023, there were no prior phases.

2 **Q. What is the timing of the Rapid City TBS Upgrade?**

3 A. The project was started in spring of 2023 and is scheduled for completion by
4 the end of 2023.

5 **Q. What were the capital cost estimates of the project?**

6 A. The current capital cost is \$1,432,790 and is shown on Rule 20:10:13:56,
7 Statement D, Schedule D-2 page 3 as FP-323145.

8 **Q. Does this complete your direct testimony?**

9 A. Yes, it does.