

August 10, 2021

**VIA ELECTRONIC MAIL AND
FEDERAL EXPRESS**

Mr. Steven M. Kahl
Executive Secretary
North Dakota Public Service Commission
State Capitol Building, Department 408
600 East Boulevard
Bismarck, ND 58505-0480

Re: REBUTTAL TESTIMONY

Northern States Power Company
Advance Prudence – Repowered Wind Portfolio
Case No. PU-20-425

Northern States Power Company
Advance Prudence – 120 MW Northern Wind Facility
Case No. PU-21-093

OAH File No. 20200420

Dear Mr. Kahl:

Northern States Power Company, doing business as Xcel Energy, respectfully submits the following Rebuttal Testimony in the above-noted consolidated Cases:

- Resource Planning – Ms. Farah L. Mandich

An original and ten copies of the public versions of Rebuttal Testimony are provided, including the following:

- Rebuttal testimony of Ms. Farah L. Mandich;
- Verification for the testimony of Ms. Farah L. Mandich
- CD containing the public version of the testimony and verification.

The Rebuttal Testimony of Farah Mandich contains trade secret information. This information is consistent with the type of information approved for protection in the Order Granting Trade Secret Protection issued January 19, 2021 in Case No. PU-20-425.

25 PU-21-93 Filed 08/10/2021 Pages: 27
Prefiled Rebuttal Testimony of Farah L. Mandich - redacted
Northern States Power Company
Zeviel Simpser

30 PU-20-425 Filed 08/10/2021 Pages: 27
Prefiled Rebuttal Testimony of Farah L. Mandich - redacted
Northern States Power Company
Zeviel Simpser



Mr. Steven M. Kahl
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In accordance with Section 69-02-09-02 of the North Dakota Administrative Code, a single copy of the trade secret pages of the testimony is provided in a sealed envelope marked **PROTECTED INFORMATION – PRIVATE**.

Please contact me at (612) 492-6129 or simpser.zev@dorsey.com or David Sederquist at (701) 241-8632 or dave.sederquist@xcelenergy.com if you have any questions regarding this filing.

Very truly yours,

DORSEY & WHITNEY LLP

A handwritten signature in blue ink, appearing to read 'Zev Simpser', written over a horizontal line.

ZEV SIMPSER

Enclosures

cc: (Via U.S. Mail/Certified Return Receipt Requested)
(Public Copies Only)
Administrative Law Judge Timothy J. Dawson
Jack Schuh
Adam Renfandt
Victor Schock
Brian Johnson
Mitch Armstrong
Jon Lengowski

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Rebuttal Testimony
Farah L. Mandich

**STATE OF NORTH DAKOTA
BEFORE THE
NORTH DAKOTA PUBLIC SERVICE COMMISSION**

In the Matter of the Application of Northern States Power Company
for an Advance Determination of Prudence for Repowered Wind Portfolio

and

In the Matter of the Application of Northern States Power Company
for an Advance Determination of Prudence for 120 MW Northern Wind Facility

Case Nos. PU-20-425 and PU-21-093
Exhibit___(FLM-2)

Resource Planning Rebuttal

August 10, 2021

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I. INTRODUCTION AND QUALIFICATIONS

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Q. PLEASE STATE YOUR NAME AND TITLE.

A. My name is Farah L. Mandich. I am a Resource Planning Specialist for Northern States Power Company-Minnesota (NSP or Xcel Energy or the Company).

Q. HAVE YOU PREVIOUSLY PROVIDED TESTIMONY IN THESE PROCEEDINGS?

A. Yes. I filed Direct Testimony supporting the Company's applications for advanced determinations of prudence in both of the consolidated cases. My testimony provided economic analyses of the repowerings and the proposed Northern Wind acquisition.

Q. WHAT IS THE PURPOSE OF YOUR REBUTTAL TESTIMONY?

A. I provide our response to the Direct Testimony of Charles E. Janecek filed on behalf of the Advocacy Staff of the North Dakota Public Service Commission (Advocacy Staff). In addition to responding to Mr. Janecek's testimony, my testimony also contain information regarding changes to the timing of two of the projects, Borders Wind and Pleasant Valley, and provides updated economic analyses of the proposed projects and the overall benefits we expect them to provide.

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1 **II. UPDATED SCHEDULE AND ECONOMIC ANALYSES**

2
3 Q. WHAT IS THE PURPOSE OF THIS PORTION OF YOUR TESTIMONY?

4 A. In this section of my testimony, I discuss a change in the timeline for the
5 Borders Wind and Pleasant Valley Wind repowering projects, and present
6 updated economic analyses of the projects.

7
8 Q. AS A REMINDER, PLEASE DESCRIBE THE PROJECTS THAT ARE THE SUBJECT OF
9 THESE CASES.

10 A. Case No. PU-20-425 involves the repowering of four Company-owned wind
11 generation facilities: 1) Border Winds, a 150 MW facility in Rolette County,
12 North Dakota, 2) Grand Meadows Wind, a 100.5 MW facility in Mower
13 County, Minnesota, 3) Nobles Wind, a 201 MW facility in Nobles County,
14 Minnesota, and 4) Pleasant Valley Wind, a 200 MW facility in Mower County,
15 Minnesota. The four individual projects, each of which are described in
16 Company Witness Christopher J. Shaw’s Direct Testimony in Case No. PU-
17 20-425, involve changes to existing turbines (and associated components) to
18 increase efficiency and electric production.

19
20 Case No. PU-21-093 involves the proposed acquisition of an expanded and
21 repowered 120 MW Northern Wind project. Currently, the project consists
22 of two separate projects located in Murray County, Minnesota, which together
23 total 100 MW and are the subject of two power purchase agreements (PPAs),
24 which are both due to expire in 2023. The current owner, ALLETE Clean
25 Energy, Inc. will repower the existing projects and carry out a 20 MW
26 greenfield expansion, and the Company will then acquire the overall project.

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1 This project is further described in Mr. Shaw’s Direct Testimony in Case No.
2 PU-21-093.

3

4 Q. WHAT IS THE CHANGE IN THE TIMELINE FOR THE BORDER WINDS AND
5 PLEASANT VALLEY WIND PROJECTS?

6 A. The timeline for those two re-powering projects have been pushed back so
7 that the scheduled Commercial Operation Date (COD) for those two
8 repowerings is now the fourth quarter of 2025.

9

10 Q. WHY DID THE COMPANY CHANGE THE SCHEDULE FOR THOSE TWO PROJECTS?

11 A. After conducting further analysis, the Company determined that it could
12 maximize customer benefit by taking advantage of additional Production Tax
13 Credits (PTCs) that would be available if the project COD was extended to
14 December 2025. In other words, an additional year of Production Tax Credits
15 (PTCs) could be captured from the existing projects’ eligibility; the existing
16 facilities are due to receive PTCs until December 2025.

17

18 Q. HAS THE COMPANY UPDATED ITS ECONOMIC ANALYSES OF THE
19 REPOWERED PROJECTS IN LIGHT OF THE CHANGED IN-SERVICE DATE OF
20 THE BORDER WINDS AND PLEASANT VALLEY PROJECTS?

21 A. Yes, given the change in the scheduled COD for the Border Winds and
22 Pleasant Valley projects and the passage of time since we submitted our initial
23 applications, we conducted new pro forma and Encompass analyses.

24

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1 Q. OTHER THAN CHANGING THE TIMELINE FOR TWO OF THE PROJECTS, DO
2 THESE ANALYSES DIFFER FROM THOSE PRESENTED IN THE COMPANY’S
3 APPLICATIONS?

4 A. For the pro forma analyses, the Company did not make any other changes.
5 Each Pleasant Valley and Border Winds analysis compares a “change case,”
6 where the projects are repowered, to a base case in which they are not
7 repowered. The revised analysis assesses the total PVRR benefit of the
8 Company repowering the projects with an in-service date of 2025 rather than
9 2024, as previously proposed. This analysis is intended to re-evaluate the full
10 benefit of repowering the two projects one year later than originally planned.
11 Because nothing else in the analysis has changed, we can compare the two
12 results to isolate the benefits of extending the in-service date.

13
14 We approached the EnCompass analysis differently. As discussed in the
15 record, we have now consolidated the dockets for the initial wind repowering
16 portfolio and the Northern Wind project, and two of the originally proposed
17 PPAs are no longer moving forward at this time. To provide the Commission
18 an updated view of the benefits of the projects being considered here, we have
19 conducted supplemental EnCompass modeling that examines a base case in
20 which no projects are repowered, to a Change Case in which only projects that
21 continue to move forward – including Grand Meadow, Nobles, Pleasant
22 Valley, Border Winds, Ewington, and Northern Wind – are repowered,
23 incorporating the later in-service dates for the Pleasant Valley and Border
24 Winds projects. This analysis shows an updated and consolidated view of the
25 total repowering portfolio, incorporating potential impacts of changes to the
26 expansion plan or system dispatch resulting from the repowering portfolio.

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1 As noted previously, although it is included in our analysis, the Ewington
2 project is under 50 MW and thus we have not sought an ADP for that project.

3
4
5 **A. Pro Forma Analysis**

6 Q. WHAT CUSTOMER BENEFITS DID THE UPDATED PRO FORMA ANALYSIS USING
7 GENERIC WIND AS A REPLACEMENT RESOURCE INDICATE FOR THE PROJECTS
8 THAT ARE THE SUBJECT OF THIS CONSOLIDATED MATTER APPLICATION?

9 A. On an aggregate basis, this pro forma analysis showed \$224.6 million in
10 savings for the Company-owned projects and [TRADE SECRET DATA
11 BEGINS █████ TRADE SECRET DATA ENDS] million for the
12 Northern Wind facility, over the full lives of each project. The pro forma
13 analysis indicated that repowering of Border Winds would result in [TRADE
14 SECRET DATA BEGINS █████ TRADE SECRET DATA ENDS]
15 million in savings, the repowering of Pleasant Valley Wind would result in
16 [TRADE SECRET DATA BEGINS █████ TRADE SECRET DATA
17 ENDS] million in savings. The other projects were not changed. These
18 savings are on a present value of revenue requirements (PVRR) basis and –
19 per North Dakota law – do not include carbon dioxide costs, other
20 environmental externality values, or costs for potential future carbon
21 emissions regulations.

22
23 Q. WHAT CUSTOMER BENEFITS DID THE PRO FORMA ANALYSIS USING MARKET
24 ENERGY (RATHER THAN GENERIC WIND) AS A REPLACEMENT RESOURCE

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1 INDICATE FOR THE FOUR SELF-BUILD PROJECTS THAT ARE THE SUBJECT OF
2 THIS APPLICATION?

- 3 A. On an aggregate basis, this pro forma analysis showed \$150.3 million in
4 savings for the Company-owned projects and **[TRADE SECRET DATA**
5 **BEGINS [REDACTED] TRADE SECRET DATA ENDS]** million for Northern
6 Wind. The pro forma analysis indicated that repowering of Border Winds
7 would result in **[TRADE SECRET DATA BEGINS [REDACTED] TRADE**
8 **SECRET DATA ENDS]** million in savings, the repowering of Pleasant
9 Valley Wind would result in **[TRADE SECRET DATA BEGINS [REDACTED]**
10 **TRADE SECRET DATA ENDS]** million in savings. The other projects
11 were not changed. Again, these savings are on a present value of revenue
12 requirements (PVRR) basis and do not include carbon dioxide costs, other
13 environmental externality values, or costs for potential future carbon
14 emissions regulations. Table 1 below summarizes the results of our pro forma
15 analysis.

16

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1 **Table 1: Pro Forma Savings Resulting from Repowering Projects**

Project Name	Type	Revised Repower Savings (M) (generic wind replacement)	Revised Repower Savings (M) (market price replacement)	Original Repower Savings \$M (generic wind replacement)	Original Repower Savings \$M (market price replacement)
Border Winds	Self-build	[TRADE SECRET DATA BEGINS ██████████]	[TRADE SECRET DATA BEGINS ██████████]	[TRADE SECRET DATA BEGINS ██████████]	[TRADE SECRET DATA BEGINS ██████████]
Pleasant Valley	Self-build	██████████ [TRADE SECRET DATA ENDS]	██████████ [TRADE SECRET DATA ENDS]	██████████	██████████
Grand Meadow	Self-build	No change	No change	██████████	██████████
Nobles	Self-build	No change	No change	██████████ [TRADE SECRET DATA ENDS]	██████████ [TRADE SECRET DATA ENDS]
Total self-build		\$224.6	\$150.3	\$138.0	\$87.9
Northern Wind	Build-own-transfer (BOT)	No change	No change	[TRADE SECRET DATA BEGINS ██████████ [TRADE SECRET DATA ENDS]	[TRADE SECRET DATA BEGINS ██████████ [TRADE SECRET DATA ENDS]

2

3 Q. WHAT DOES THE TABLE SHOW?

4 A. The results of the pro forma analyses shown in the table above demonstrate
5 that each of the wind repowering projects that are the subject of this
6 consolidated case are expected to provide cost saving benefits to the

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1 Company's customers regardless of whether the existing resources are
2 assumed to be replaced at the end of their current lives with either generic
3 wind resources or market energy. The cost savings for customers served on
4 the entire NSP System are reflected on a PVRR basis over the projects' lives.
5 For comparative purposes, the table provides the results of the analyses
6 originally presented in my Direct Testimonies in both cases and the updated
7 figures. For the projects other than Border Winds and Pleasant Valley, the
8 results of the analyses are unchanged.

9
10 Importantly, these updated analyses show that the change in the timeline for
11 the Border Winds and Pleasant Valley projects significantly increased savings
12 associated with the repowering proposal. In fact, the timing change for those
13 two projects has more than doubled the expected savings on a PVRR basis.

14
15 **B. EnCompass Analysis**

16 Q. WHAT MODELLING INPUTS AND ASSUMPTIONS WERE USED IN THE
17 SUPPLEMENTAL ENCOMPASS MODELLING AND HOW DO THOSE COMPARE
18 WITH THE ASSUMPTIONS USED IN THE MODELLING DESCRIBED IN YOUR
19 DIRECT TESTIMONY?

20 A. We originally evaluated the economic impacts of the five projects that are the
21 subject of this consolidated case using base cases that were generally
22 consistent with the Company's Integrated Resource Plan Supplement, filed
23 with the Commission on June 30, 2020¹ with certain updates as discussed in
24 my Direct Testimony. For the Northern Wind project, we used a base case

¹ See Case No. PU-19-220. XCEL ENERGY 2020-2034 UPPER MIDWEST INTEGRATED RESOURCE PLAN SUPPLEMENT (June 30, 2020).

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1 that incorporated the previously proposed Company-owned repowering
2 projects, along with an additional PPA that is not subject to ADP
3 requirements, and showed the incremental impact of pursuing the Northern
4 Wind repowering.

5
6 For the analysis provided here, the Company has used the same base case as
7 in the original modeling – where none of the projects are repowered – to
8 compare to a Change Case in which only the proposed projects that continue
9 to move forward are repowered, and assumes a COD in 2025 for Border
10 Winds and Pleasant Valley. The Company’s full Upper Midwest system
11 resource portfolio is then re-optimized in order to evaluate whether moving
12 forward with the remaining repowered projects – with the updated COD dates
13 for Border Winds and Pleasant Valley – will provide benefits or result in
14 additional costs on a system-wide basis.

15
16 Q. WHAT WAS THE RESULT OF THE ENCOMPASS ANALYSIS?

17 A. The results of the EnCompass analysis shows that, on balance, the proposed
18 portfolio of repowered projects will result in net savings for our customers,
19 including under sensitivity analyses for high and low gas, coal, and market
20 prices. The results of the EnCompass analysis are set forth in Table 2 below.

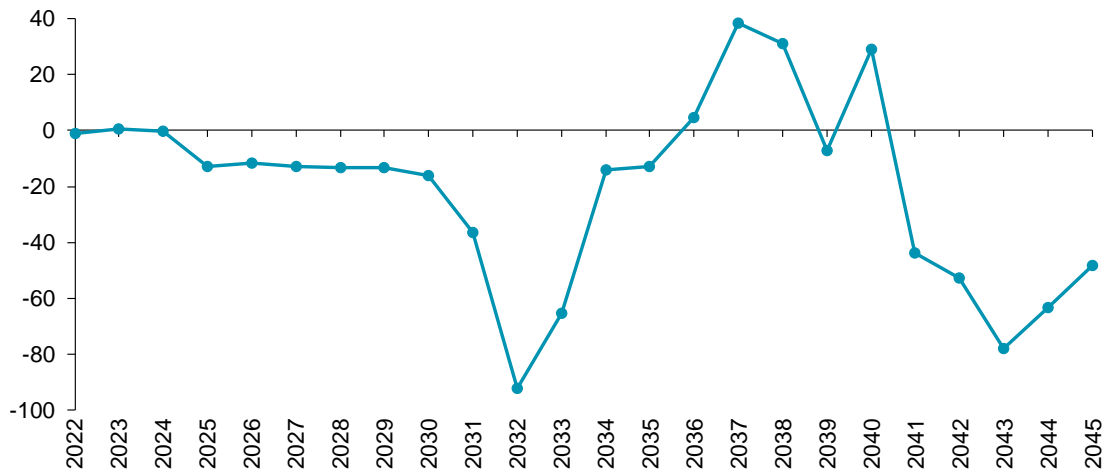
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1 the analysis period. The figures below represent the primary PVRR case, with
2 base assumptions for fuel prices.

3 **Figure 1: Annual Costs/(Savings) Resulting from the Updated Wind**
4 **Repower Portfolio Case, as Compared to the Base Case**

Updated annual cost/(savings) of the Wind Repowering Portfolio, relative to the Base Case
\$ millions (nominal)



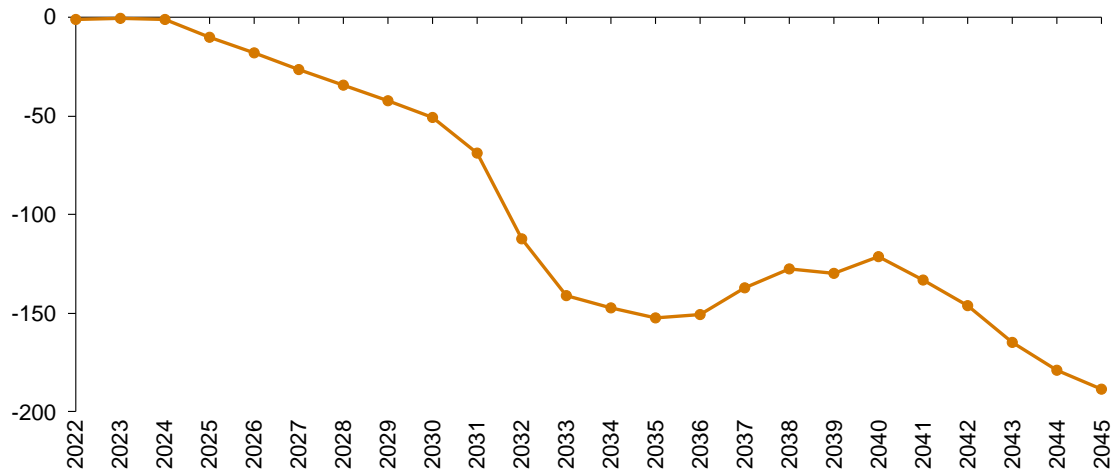
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1 **Figure 2: Annual Cumulative Net Present Value Costs/(Savings)**
2 **Resulting from the Wind Repower Portfolio Case, as Compared to**
3 **the Base Case**

Updated cumulative cost/(savings) of the Wind Repowering Portfolio, relative to the Base Case
\$ millions, PVRR



4
5
6
7 Q. WHAT DO YOU CONCLUDE FROM THIS ANALYSIS?

8 A. I conclude that the Wind Repower Portfolio will provide material cost savings
9 to the NSP System, including under the high and low-cost sensitivity
10 scenarios. Significant cost savings are now expected to begin as soon as 2025
11 on an annual basis. In our previous analyses for both the initial portfolio and
12 the Northern Wind repowering, the portfolio resulted in some near-term costs
13 in the mid-2020s before accruing savings throughout the remaining analysis
14 period. As with the pro forma analyses, the Encompass modelling shows that
15 the delay in the Border Winds and Pleasant Valley projects has substantially
16 increased the projected customer savings and eliminated cost increases in the

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1 mid-2020s, relative to the base case. Thus, the extended COD for those two
2 projects results in additional benefits and is beneficial for customers.

3 Q. IS THE COMPANY CONSIDERING ADDITIONAL CHANGES TO IMPROVE THE
4 ECONOMICS OF THESE PROJECTS?

5 A. Although we do not have any specific proposals at this time, the Company is
6 always looking to improve the economics of projects for our customers.
7 Should there be a material update, we will inform the Commission.

8
9 **III. RESPONSE TO MR. JANECEK**

10
11 Q. WHAT IS THE PURPOSE OF THIS SECTION OF YOUR TESTIMONY?

12 A. In this portion of my testimony, I respond to specific arguments and points
13 made by Mr. Janecek in his Direct Testimony.

14
15 Q. CAN YOU SUMMARIZE MR. JANECEK'S RECOMMENDATIONS?

16 A. In his Direct Testimony, Mr. Janecek recommended that the Commission
17 approve ADPs for the Grand Meadows and Nobles repowering projects, but
18 not for Border Winds, Pleasant Valley, and Northern Wind projects. In
19 addition to disagreeing with his conclusions regarding Border Winds, Pleasant
20 Valley, and Northern Wind, I also disagree with certain of the points and
21 arguments he made in reaching those conclusions, which I will describe
22 further below. As an initial matter, I disagree with Mr. Janecek's discussion
23 of the Company's purpose in seeking to repower these wind projects.

24
25 Q. HOW DO YOU DISAGREE WITH MR. JANECEK'S DISCUSSION OF THE PURPOSE
26 OF THESE REPOWERING PROJECTS?

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1 A. In his Direct Testimony, Mr. Janecek discusses the projects in terms of the
2 Company making a “bet” on the MISO markets. Essentially, he is analyzing
3 the Company as if it were the equivalent of an independent power producer.
4 While I understand that is one analytical framework that can be appropriate
5 in considering these projects, I disagree with him in two key respects. As an
6 initial matter, Mr. Janecek is incorrect insofar as he is making a claim about
7 the Company’s actual motivations. As Mr. Christopher Shaw previously
8 explained in his Direct Testimony, the Company began considering the
9 possibility of repowering projects in response to a request from the Minnesota
10 Public Utilities Commission to consider projects that might help stimulate the
11 economy in light of the COVID-19 pandemic and its economic impacts. The
12 Company moved forward with those that would have positive economic
13 impacts for customers and would create construction jobs in North Dakota
14 and Minnesota. To the extent Mr. Janecek is making an argument about the
15 Company’s motivation and purpose, he is mistaken.

16
17 Perhaps more importantly, while Mr. Janecek offers an interesting perspective,
18 I do not believe that it ultimately makes sense to decide the prudence of these
19 projects by treating Xcel Energy as a merchant generator. In actuality, the
20 Company is a vertically integrated utility and the prudence of the projects
21 should be determined in light of their revenue requirement impact. While the
22 projects were not brought forward to meet a capacity or energy need, once
23 the Company determined that repowering these projects could achieve
24 substantial benefits, relative to a case in which we do not repower, over their
25 life while satisfying a system state policy interest in economic development

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1 during the COVID-19 pandemic, it made sense to move forward with the
2 projects.

3
4 Q. MR. JANECEK SUGGESTS THAT THE PROJECTED BENEFITS FROM THREE OF THE
5 PROJECTS RELY TOO HEAVILY ON SAVINGS OCCURRING AFTER 2040, WHAT IS
6 YOUR RESPONSE TO THIS ARGUMENT?

7 A. Simply put, that conclusion does not fit with the results of our modelling. In
8 the modeling presented in my Direct Testimony, our analysis shows that the
9 initial portfolio of projects generally achieves sustained cost savings by 2028,
10 and is expected to accumulative substantial savings over the full analysis
11 period (relative to a case in which they are not repowered). While it is the case
12 that some projects were included in that analysis that ultimately did not move
13 forward – and the Northern Wind project was not included in our initial
14 analysis – we reanalyzed the portfolio in the updated analysis provided above.
15 This current portfolio, along with extending the COD of Border Winds and
16 Pleasant Valley, achieves more savings in an earlier timeframe than even the
17 initial analyses showed. The pro forma results also support this conclusion,
18 meaning that – in comparison with continuing the existing projects and
19 replacing them with generic wind or market energy after their end of lives –
20 each repowering project is expected to result in PVRR benefits for customers,
21 including in the near term. In other words, the extended COD for Pleasant
22 Valley and Border Winds increases the portfolio level savings, relative to our
23 initial analyses, and these savings also begin accruing earlier in the lives of
24 those two projects.

25

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1 When viewed on a present value of revenue requirements basis, which is
2 appropriate for a vertically integrated utility making a long term investment,
3 Mr. Janecek’s arguments are not supported.

4
5 Q. WHAT ARE YOUR RESPONSES TO MR. JANECEK’S CRITIQUES OF THE
6 ENCOMPASS MODELLING?

7 A. I disagree with him on various specific points that I will further discuss below,
8 but from a broader view it is important to understand that various modelling
9 approaches have their advantages and disadvantages. In Direct Testimony
10 and above in Section II, I presented both pro forma analyses and Encompass
11 modelling results. These can be understood as two views of the same
12 question, with a pro forma analysis focused just on the specific and concrete
13 savings from each project in isolation (i.e. repowering the project as compared
14 to not repowering it), and the Encompass modelling considering the impacts
15 of the projects on a broader portfolio point of view, incorporating potential
16 impacts on the rest of the Company’s system. Both these analyses necessarily
17 require various key input assumptions – such as natural gas and electricity
18 market prices – which Mr. Janecek noted he believed were within the range of
19 reasonableness. They also both require some simplifying assumptions – such
20 as those characterizing the Company’s place within the broader MISO market
21 or what type of replacement energy the “no repowering” baseline should
22 consider.

23
24 Mr. Janecek’s modelling – relying on examining merchant margins – is another
25 method of analysis that requires simplifying assumptions and does not fully
26 consider the realities of the Company’s system. For example, one argument

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1 he notes in reference to EnCompass outputs' validity is that he does not
2 believe the addition of our wind resources would result in changes to how the
3 Company's other plants dispatch in the market. Whether this is true is
4 debatable; however, Mr. Janecek's merchant analysis does not adequately
5 consider the impacts of how the incremental generation from these projects
6 may affect net purchases the Company makes in the MISO market, which is
7 something the EnCompass model does consider.

8
9 Although, as I explain above, this merchant view is not aligned to our
10 regulatory model, even his analysis shows the portfolio results in overall
11 savings relative to a case where the projects are not repowered. As noted
12 above, certain of Mr. Janacek's points can be placed in context as a response
13 to the need to include various assumptions and simplifications regarding how
14 our resources participate in the MISO market when modelling with a
15 portfolio-wide approach; however, the Company is not relying solely on
16 Encompass, nor is it running Encompass using only one set of assumptions.
17 We also run Encompass using low and high-cost sensitivities for coal, gas, and
18 market prices. Used in that way, Encompass is an appropriate tool to use in
19 considering the prudence of the projects.

20
21 Q. IS MR. JANECEK CORRECT IN STATING THAT THE COMPANY'S ENCOMPASS
22 MODELLING TREATS THE NSP SYSTEM AS A CLOSED SYSTEM?

23 A. No, that is not correct. As Mr. Janecek himself later notes, there is an option
24 for the model to select market purchases for energy rather than building new
25 resources and the model also includes the capability for the Company to sell
26 into the broader market. Like any model, including Mr. Janecek's analysis, our

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1 Encompass model uses various assumptions to simulate the impacts of the
2 proposed repowered projects on our system. It does not, therefore, fully
3 represent the complexity of the interactions between Xcel Energy’s portfolio
4 and the broader MISO market, but it is not accurate to state that it treats our
5 Company as a closed system or an island.

6
7 Q. WHAT IS YOUR RESPONSE TO MR. JANECEK’S CONTENTIONS REGARDING THE
8 MANNER IN WHICH THE COMPANY MODELS THE REPOWERING PROJECTS
9 USING ENCOMPASS?

10 A. It is true that the Encompass model does not select repowered projects in an
11 optimization, but that is because there is no “generic repowering” option for
12 the model to choose. Such projects are site-specific and attempting to model
13 them as generic resource options would not be appropriate. To overcome
14 this, the Company models a base case without the proposed projects and a
15 change case that does include them, and examines the differences between the
16 cases to indicate whether the projects may result in system benefits. In
17 combination with the low and high-price sensitivities in EnCompass, and the
18 pro forma analyses that examine each individual project, our analysis methods
19 are appropriate to understand the potential costs and benefits of the proposed
20 projects.

21
22 Q. DO YOU HAVE ANY OTHER RESPONSES TO MR. JANECEK’S CONCERNS
23 REGARDING THE ENCOMPASS MODELLING?

24 A. The other point I would make is that the Company’s pro forma analyses also
25 show substantial (and increased) savings for customers resulting from the
26 repowering projects. The pro forma analyses show benefits based on a

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1 comparison of each repowered project with a baseline in which the existing,
2 un-repowered project remains in the Company’s portfolio until the end of its
3 expected life and is then replaced by a generic resource. The cost of the
4 replacement resource is a significant assumption in pro forma modelling;
5 however, not only did the Company perform our analyses using both generic
6 wind and market replacement costs, but Mr. Janecek confirmed that he
7 believes our market price forecasts are reasonable.

8 Q. HAS MR. JANECEK GIVEN SUFFICIENT WEIGHT TO THE BENEFITS BORDER
9 WINDS WILL PROVIDE TO NORTH DAKOTA?

10 A. To his credit, Mr. Janecek does discuss those benefits, but I do not believe he
11 gives sufficient consideration to the fact that Border Winds is a project located
12 in North Dakota that will benefit the state. I am not a lawyer, but my
13 understanding is that Section 49-05-16(7) of the North Dakota Century Code
14 states that “There is a rebuttable presumption that a resource addition located
15 in the state is prudent.” Moreover, Section 49-05-16(1)(d) provides that for
16 facilities located in North Dakota, the Commission “shall consider the
17 benefits of having the resource addition located in this state.” Given that even
18 his own analysis suggests that repowering the Border Winds project will result
19 in customer savings (albeit over the long run) the Company’s analyses show
20 substantial savings beginning sooner, and the economic benefits to North
21 Dakota from the repowering of Border Winds, I do not believe Mr. Janecek
22 has successfully met the burden of proving that the project is not prudent.

IV. CONCLUSION

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26 Q. PLEASE SUMMARIZE YOUR TESTIMONY.

PUBLIC DOCUMENT
NOT-PUBLIC AND TRADE SECRET DATA EXCISED

1 A. Both our Encompass modelling and our pro forma analyses show that the
2 repowered wind projects will result in significant savings for North Dakota
3 customers. In light of that, the Commission should approve all the
4 repowering projects, and not just the two recommended by Mr. Janecek. Our
5 analyses do not support Mr. Janecek's claims regarding the timing of the
6 projected savings. Moreover, while it is appropriate to discuss the limitations
7 and assumptions associated with portfolio modelling and use other modelling
8 as a check, the Company's use of Encompass is appropriate, and the benefits
9 of the projects are also supported by the pro forma analyses. The Company
10 has, and is pursuing an opportunity to capture significantly increased benefits
11 for Pleasant Valley and Border Winds by extending the repowering date by
12 one year. Also, the Border Winds project should be approved because it is
13 located in North Dakota and will provide economic benefits to the state, and
14 Mr. Janecek has not rebutted the presumption that it is prudent.

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16 Q. DOES THIS CONCLUDE YOUR REBUTTAL TESTIMONY?

17 A. Yes, it does.

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Franklin Inga

Franklin Inga

Subscribed and sworn before me this 10th day of August, 2021.

Molly Christine Cameron

Notary Public
Hennepin County, Minnesota

