

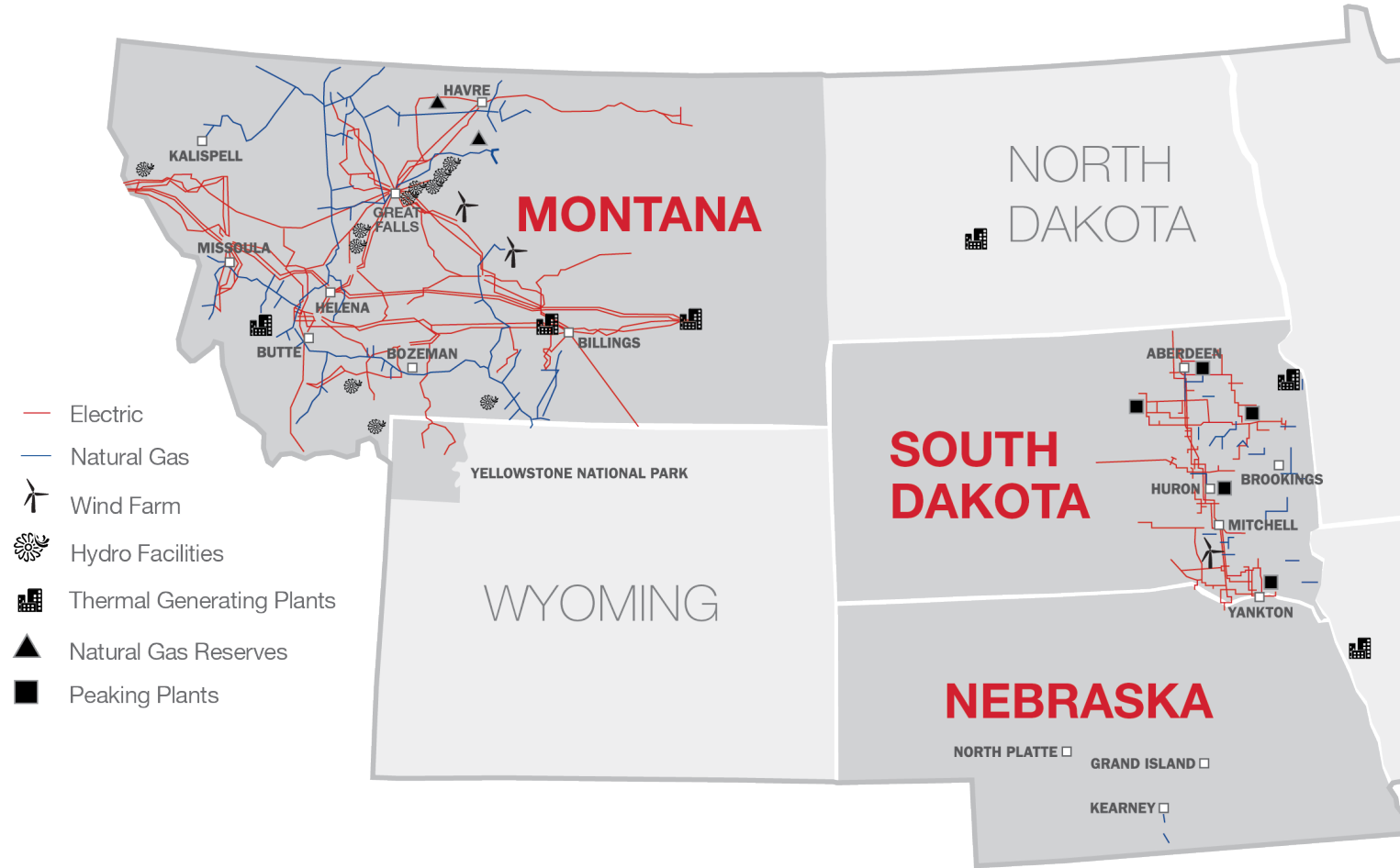


NorthWestern Energy - Electric Technical Advisory Committee



2025 Planning Cycle
Meeting 3 – 27 June 2024

About our company



About our company



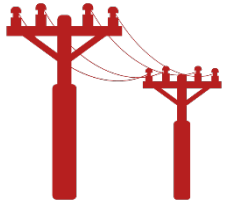
775,300

Customers



1,573

Employees



337

communities in Montana
and South Dakota with
electric service



202

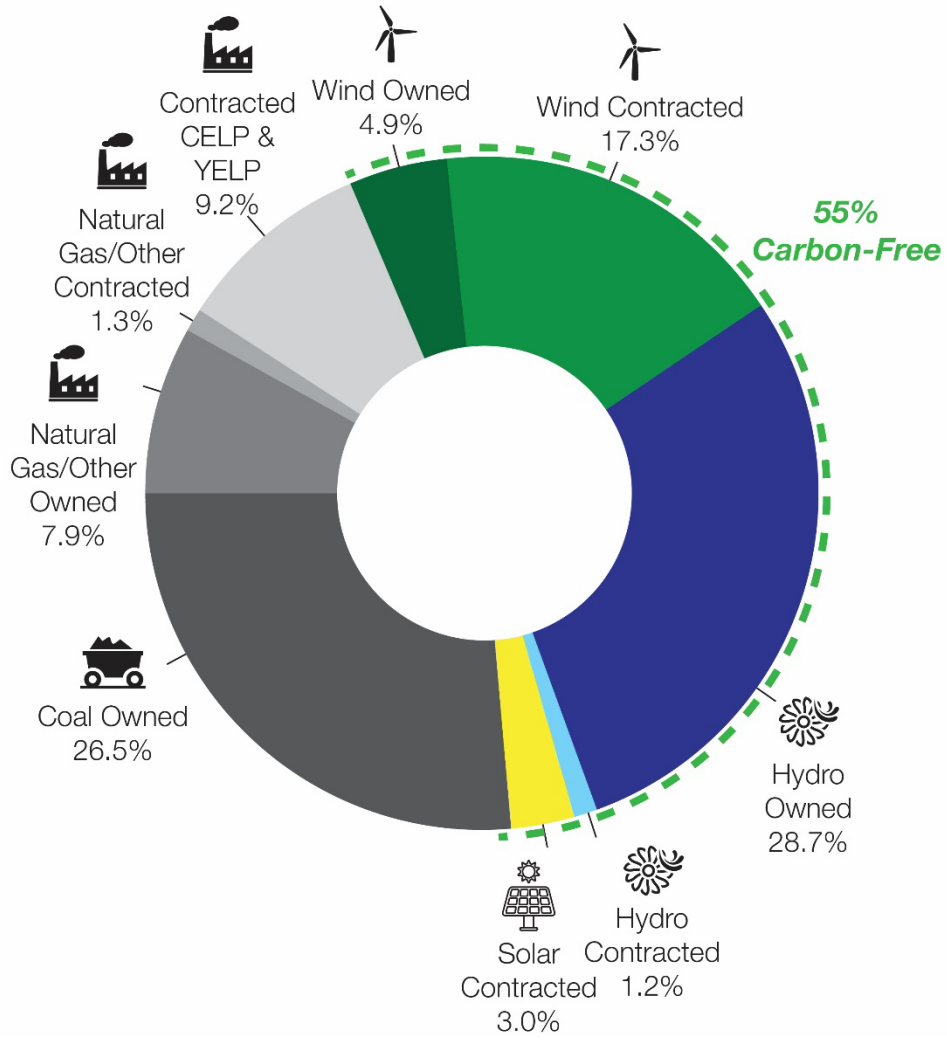
communities in Montana,
South Dakota and
Nebraska with gas service



About our company

NORTHWESTERN ENERGY 2023 ELECTRIC GENERATION PORTFOLIO

BASED ON MWH OF OWNED AND LONG-TERM CONTRACTED RESOURCES





SPP Presentation

2025 MT IRP Workplan (Draft)

Meeting	Date	Time	Topics
1	December 5, 2023	0930-1130	<ul style="list-style-type: none"> • Introductions • Overview • Expectations
2	March 27, 2024	0930-1130	<ul style="list-style-type: none"> • IRP Workplan Development • ETAC Timeline • Stakeholder Engagement Plan • PowerSimm Modeling and ETAC
3	June 27, 2024	0930-1200	<ul style="list-style-type: none"> • Review Final IRP Workplan • Stakeholder Engagement #1 Discussion • DSM/Demand Response
**	August 15, 2024	TBD	<ul style="list-style-type: none"> • What is an IRP? • Energy vs. Capacity • Pros vs. Cons of different resource types • Sources of Generation (owned, contracted, QF, Market)
4	September 18, 2024	0900-1200	<ul style="list-style-type: none"> • PowerSimm Education • Price Forecasting • Draft Plan Outline Discussion
5	December 18, 2024	0900-1200	<ul style="list-style-type: none"> • Modeling Inputs <ul style="list-style-type: none"> ◦ Load Forecasting ◦ New Resource Cost Modeling • Modeling Scenarios • PowerSimm Access
**	January 21, 2025	TBD	<ul style="list-style-type: none"> • Modeling Inputs <ul style="list-style-type: none"> ◦ Load Forecasting ◦ New Resource Cost Modeling • Modeling Constraints • Modeling Outputs • Table of Contents/ Rough Outline of Draft Plan
6	March 26, 2025	0900-1200	<ul style="list-style-type: none"> • Modeling Outputs • Draft Plan
**	May 20, 2025	TBD	<ul style="list-style-type: none"> • Review of modeling outputs • Draft Plan Presentation
7	June 25, 2025	0900-1200	<ul style="list-style-type: none"> • Final Modeling Scenarios • Plan Check-In
8	September 3, 2025	0900-1200	<ul style="list-style-type: none"> • Final modeling results • Final Plan Review
**	September 10, 2025	TBD	<ul style="list-style-type: none"> • PRESENTATION ONLY • Final modeling results • Final draft of plan presentation
*	December 19, 2025	N/A	<ul style="list-style-type: none"> • MT IRP 2025 Filing with MPSC

Stakeholder Engagement

- Meeting will be August 15 at 3 PM
 - Held at Butte GO with a zoom option
 - Plan to begin noticing public in July
- Topic ideas for the first workshop
 - What is an IRP?
 - Energy vs. Capacity
 - Pros vs. Cons of different resource types
 - Sources of Generation (owned, contracted, QF, Market)
 - Potential Presenter(s) Ideas?

Scenario Analysis

- 2023 IRP Scenarios Modeled

Table 8-5. Scenarios Modeled in the Planning Process

No.	Scenario	Description
1	Base Case	NorthWestern's current portfolio including the Colstrip 222 MW acquisition beginning Jan 1, 2026.
2	Colstrip Retirement in 2030	Colstrip 222 MW acquisition occurs in 2026 and then Colstrip retires in 2030. The model indicates replacement resources.
3	Colstrip Retirement in 2035	Colstrip 222 MW acquisition occurs in 2026 and then Colstrip retires in 2035. The model indicates replacement resources.
4	Colstrip Retirement in 2025 with renewable replacements	Colstrip retires in 2025. The model can only select wind, solar, and energy storage for future procurements. The scenario was provided by the Joint Environmental Group ³⁶ in comments for ETAC.
5	Colstrip Retirement in 2035 with SMR replacement	Colstrip 222 MW acquisition occurs in 2026 and then Colstrip retires in 2035. A 320 MW SMR replaces Colstrip.

Scenario Analysis

- 2023 IRP Sensitivities Modeled

Table 8-6. Sensitivities Used in the Modeling Process

No.	Sensitivities	Description
1	High Load	NorthWestern's load grows at twice the expected rate
2	High Gas Prices	Natural gas prices are double the current forecast
3	High Gas and Power Prices	Power prices increase with natural gas prices
4	Carbon Cost	Carbon prices in California are assumed to be applied to NorthWestern's carbon-emitting resources

NorthWestern's load forecast and the high load sensitivity are shown together in Figure 8-8. Annual load growth in the Base Case is roughly 0.3% until 2035 when load growth becomes 0.88%. In the high load sensitivity, annual growth for load and demand doubles compared to the base case. The result is an additional 125 MW and 800,000 MWh of load in 2042 compared with the Base Case.

- Additional Scenario Ideas for 2025 IRP?

Demand Side Management

- Separate stakeholder process regarding DSM
 - Refer any questions regarding the process to Cyndee Fang
 - Cyndee.Fang@northwestern.com
- DSM program is managed by the Energy Efficiency/DSM Group
 - Program and study questions can be directed to Danie Williams
 - Danie.Williams@northwestern.com
- Filing with more info on DSM process can be found on Reddi
 - Link
https://reddi.mt.gov/prweb/PRAuth/app/reddi_/69MPqGeS_UTZWHGFH6YedHAuE3yJxEsf*/!STANDARD
 - Docket no. 2022.07.078
 - Stakeholder compliance filing



**Next Meeting: 18 September
2024**



Questions?

