

4
5 DIRECT TESTIMONY OF
6 GLENDA J. GIBSON
7 ON BEHALF OF NORTHWESTERN ENERGY
8

9 TABLE OF CONTENTS

10	<u>Description</u>	<u>Starting Page No.</u>
11	Witness Information	2
12	Purpose of Testimony	3
13	Embedded Cost of Service Studies	3
14	Property Taxes	7
15	PCCAM Base Update and Electric Supply Rates	8
16	Transmission Jurisdictional Cost of Service Study	9
17	Ancillary Services Jurisdictional Study	13
18	Marginal Cost of Service Study – Electric	16
19	Lead/Lag Studies	17
20	Conclusion	18
21	Verification	19

22

23

1 **Exhibits**

2	PCCAM Rates	Exhibit GJG-1
3	2024 Ancillary Study Rate Estimate	Exhibit GJG-2
4	Electric Lead/Lag Study	Exhibit GJG-3
5	Natural Gas Lead/Lag Study	Exhibit GJG-4

6
7

8 **Witness Information**

9 **Q. Please identify yourself, your employer, and your job title.**

10 **A.** My name is Glenda J. Gibson. I am NorthWestern Corporation d/b/a
11 NorthWestern Energy's ("NorthWestern") Manager of Regulatory Compliance.

12

13 **Q. Please provide a description of your relevant employment experience**
14 **and other professional qualifications.**

15 **A.** I joined NorthWestern as a Regulatory Affairs Consultant in October 2017 and
16 have been in my current position since October 2020. I am responsible for
17 supporting regulatory filings and proceedings. Prior to joining NorthWestern, I
18 served as Chief Financial Officer ("CFO") for the Anchorage Water and
19 Wastewater Utility ("AWWU"). As CFO for AWWU, I was responsible for all
20 accounting and regulatory functions and testified before the Regulatory
21 Commission of Alaska in rate proceedings. I am a Certified Public
22 Accountant and have over 35 years of experience in accounting, including
23 experience working in private enterprise, public accounting, and government.

1 I hold a Bachelor of Arts degree in Business Administration with an emphasis
2 in Accounting.

3

4

Purpose of Testimony

5 **Q. What is the purpose of your testimony in this proceeding?**

6 **A.** The purpose of my testimony is to:

- 7 • Present the results of NorthWestern’s Electric and Natural Gas Embedded
8 Cost of Service Studies,
- 9 • Describe how property taxes are treated in the cost of services studies
10 and rate design module,
- 11 • Present the updated Power Costs and Credits Adjustment Mechanism
12 (“PCCAM”) rates,
- 13 • Present the results of NorthWestern’s Electric Transmission Jurisdictional
14 Cost of Service Study,
- 15 • Discuss the Ancillary Services Jurisdictional Study,
- 16 • Present NorthWestern’s Electric Marginal Cost of Service Study, and
- 17 • Present NorthWestern’s Lead/Lag Study.

18

19

Embedded Cost of Service Studies

20 **Q. What is the purpose of a cost of service study?**

21 **A.** The cost of service study provides the foundation for assigning cost
22 responsibility to customer groups.

23

1 **Q. Please describe the process for developing a cost of service study.**

2 **A.** There are three necessary steps in the cost of service study. They are
3 functionalization, classification, and allocation.

4

5 **Functionalization:** The investment and operating costs of NorthWestern are
6 separated into specified functional categories set forth by the Federal Energy
7 Regulatory Commission (“FERC”) Uniform System of Accounts (“USOA”).
8 For this study, we utilized the following functional categories: Production,
9 Transmission, Distribution, Storage (natural gas only), and Customer.

10

11 For the most part, the unbundled costs of NorthWestern are already
12 somewhat functionalized based on recorded data. In fact, the FERC USOA,
13 which the Montana Public Service Commission (“Commission” or “MPSC”)
14 requires NorthWestern to follow, provides for the recording of a major portion
15 of costs by accounts defined and arranged by functional level.

16

17 **Classification:** Cost classification is the process of further categorizing the
18 functionalized costs according to characteristics of the utility service provided.
19 The three principal cost classifications are capacity-related (demand) costs,
20 energy-related (kilowatt-hour (“kWh”)) costs, and customer-related costs.
21 NorthWestern’s investment and expenses are classified based on the manner
22 in which the costs were incurred.

23

1 **Allocation:** Costs are then allocated to customer classes using class
2 allocation factors. The allocation factors attempt to spread costs among
3 customer classes based on their relative contribution to the cost causation.

4

5 **Q. Are there any changes to how NorthWestern handles cost of service**
6 **studies and rate design?**

7 **A.** Yes. Previously NorthWestern engaged an outside consultant for the
8 development of cost of service studies and rates in its rate review filings. In
9 this proceeding, the development of cost of service studies and rate design
10 were conducted by NorthWestern.

11

12 **Q. Please summarize the results of the Electric Embedded Cost of Service**
13 **studies.**

14 **A.** Table 1 below summarizes the electric class revenue requirement results and
15 required increases resulting from the allocated cost of service study. The full
16 electric allocated cost of service study model is provided in Excel format with
17 this filing as Statement L – Electric ACOS Model.

18

Table 1 – Electric Allocated Cost of Service Study Results

	Current Revenues (\$M)	% of Total Revenue	Updated Cost-Based (\$M)	% of Total Revenue	Required Revenue Increase	% Increase
Residential	\$ 293,366,699	47.1%	\$ 389,601,917	49.5%	\$ 96,235,218	32.8%
GS-1 Secondary	\$ 259,637,430	41.7%	\$ 309,141,655	39.3%	\$ 49,504,225	19.1%
GS-1 Primary	\$ 21,765,838	3.5%	\$ 28,189,754	3.6%	\$ 6,423,916	29.5%
GS-2 Substation	\$ 17,890,986	2.9%	\$ 22,798,496	2.9%	\$ 4,907,509	27.4%
GS-2 Transmission	\$ 6,099,830	1.0%	\$ 6,973,455	0.9%	\$ 873,625	14.3%
Irrigation	\$ 9,540,464	1.5%	\$ 13,215,443	1.7%	\$ 3,674,979	38.5%
Lighting	\$ 14,254,577	2.3%	\$ 16,548,682	2.1%	\$ 2,294,104	16.1%
Total	\$ 622,555,824	100.0%	\$ 786,469,401	100.0%	\$ 163,913,577	26.3%

1 **Q. Please summarize the results of the Natural Gas Embedded Cost of**
2 **Service studies.**

3 **A.** Table 2 below summarizes the natural gas class revenue requirement results
4 and required increases resulting from the allocated cost of service study. The
5 full natural gas allocated cost of service study model is provided in Excel
6 format with this filing as Statement L – Natural Gas ACOS Model.

7

Table 2 – Natural Gas Allocated Cost of Service Study Results

	Current Revenues (\$M)	% of Total Revenue	Updated Cost-Based (\$M)	% of Total Revenue	Required Revenue Increase	% Increase
Residential	\$ 90,314,686	53.1%	\$ 109,483,285	55.0%	\$ 19,168,600	21.2%
General Service	\$ 50,158,442	29.5%	\$ 53,771,517	27.0%	\$ 3,613,075	7.2%
Utilities	\$ 503,193	0.3%	\$ 776,544	0.4%	\$ 273,351	54.3%
DBU Transportation	\$ 3,006,550	1.8%	\$ 4,331,048	2.2%	\$ 1,324,498	44.1%
TBU Transportation	\$ 21,973,961	12.9%	\$ 25,973,395	13.1%	\$ 3,999,434	18.2%
Storage	\$ 4,083,971	2.4%	\$ 4,580,431	2.3%	\$ 496,460	12.2%
Total	\$ 170,040,803	100.0%	\$ 198,916,220	100.0%	\$ 28,875,417	17.0%

1 **Q. Please describe how the resulting Embedded Cost of Service studies**
2 **flow through to rate design.**

3 **A.** The results of the Embedded Cost of Service studies are summarized on the
4 Rate Design Data Output tabs of both the electric and natural gas models
5 (Statement L Excel files). The data on these tabs is imported into the Rate
6 Design Modules and used as the starting point for rate calculations. The Rate
7 Design Modules also include moderation to the results of the embedded cost
8 of service studies. Moderation is presented in the Direct Testimony – Rate
9 Design Policy of Cynthia S. Fang. Proposed rates and bill impacts are
10 discussed in more detail in the Direct Testimony of Charles R. Lane. The
11 Rate Design Modules are provided with this filing as Statement M - Electric
12 Rate Design Module and Statement M - Natural Gas Rate Design Module.

13
14 **Property Taxes**

15 **Q. Please describe how flow-through property tax costs are treated in the**
16 **Cost of Service Studies and Rate Design Modules.**

17 **A.** Property taxes are separately identified in the cost of service studies and
18 Rate Design Data Output tabs of the models. Property taxes represent taxes
19 assessed on NorthWestern that are flowed through to the property tax portion
20 of NorthWestern's rates. Property taxes represent \$129,136,550 or 11.4% of
21 the overall electric revenue requirement and \$33,469,934 or 17.3% of the
22 overall natural gas revenue requirement, as discussed in the Direct
23 Testimony of Elaine A. Rich. The electric property taxes are offset by

1 \$15,952,738 of property taxes assigned to FERC customers, resulting in net
2 property taxes included in Montana rates of \$113,183,812.

3

4 The property tax costs flow through to the Rate Design Modules separate
5 from other base costs to allow the Rate Design Modules to calculate base
6 non-tax rates and base property tax rates separately. Property taxes
7 represent a flow-through cost, and the property tax rates are designed to
8 collect the test year property taxes. Ms. Fang's testimony discusses the
9 allocation of property taxes.

10

11 **PCCAM Base Update and Electric Supply Rates**

12 **Q. Please describe how costs that flow through the PCCAM are treated in**
13 **the COST model and Rate Design Module.**

14 **A.** The revenue requirement data used in the COST model excludes the PCCAM
15 Base. The proposed PCCAM Base is presented in the Direct Testimony of
16 Joseph M. Stimatz. The Rate Design Module does not calculate the PCCAM
17 rates, but includes the PCCAM rates for calculating estimated bills and bill
18 impacts.

19

20 **Q. What PCCAM Base rates does NorthWestern request in this docket?**

21 **A.** As explained by Mr. Stimatz, NorthWestern is requesting to update the
22 PCCAM Base to \$119,007,402 and requesting a bridge amount for
23 Yellowstone County Generating Station ("YCGS") of \$58,470,142. Ms. Fang

1 discusses the need for the YCGS bridge rate in her regulatory priorities
2 testimony.

3

4 **Q. How did you calculate the new rates for the PCCAM Base?**

5 **A.** The rate design methodology in my Exhibit GJG-1 is designed to collect the
6 PCCAM Base including \$24,192,691 of Base Power Costs & Credits,
7 \$94,814,711 of Base Qualifying Facility Costs, and the \$58,470,142 YCGS
8 Bridge Amount.

9

10 **Q. How did you calculate the bridge rates for YCGS?**

11 **A.** The bridge rates for YCGS were calculated using the same methodology
12 used for calculating the PCCAM Base rates.

13

14 **Transmission Jurisdictional Cost of Service Study**

15 **Q. Why did NorthWestern prepare a jurisdictional cost of service study for**
16 **this docket?**

17 **A.** In Order No. 7604v in Docket No. 2018.02.012, the Commission required
18 NorthWestern to include a jurisdictional cost of service study for its
19 transmission function in its next electric rate review application.
20 NorthWestern included a transmission jurisdictional cost of service study as
21 part of its 2022 Electric and Natural Gas General Rate Review filed in Docket
22 No. 2022.07.078. In the settlement approved in Final Order No. 7860y in that
23 docket (“2023 Settlement”), NorthWestern agreed to file a comprehensive

1 jurisdictional cost of service study of all costs associated with providing
2 wholesale services concurrently with its next electric rate review, including
3 information and analysis supporting ancillary services rates.

4

5 In this filing, NorthWestern is presenting both a transmission jurisdictional
6 cost of service study and an ancillary services study. I discuss the ancillary
7 services study later in my testimony.

8

9 **Q. What is the objective of the transmission jurisdictional cost of service**
10 **study?**

11 **A.** The objective of the transmission jurisdictional cost of service study presented
12 in this filing is to present an allocation of the transmission costs included in
13 NorthWestern's proposed revenue requirement in this filing between
14 Montana-jurisdictional customers and FERC-jurisdictional customers.

15

16 **Q. Does NorthWestern's jurisdictional cost of service study use the same**
17 **cost and revenue inputs as the electric embedded cost of service study**
18 **presented in this filing?**

19 **A.** Yes. NorthWestern's jurisdictional cost of service study uses the same COST
20 model used for the electric embedded cost of service study. The new cost of
21 service study model provides the option to run the study on an embedded or
22 a jurisdictional basis, utilizing the same inputs. Running the model on a
23 jurisdictional basis produces results that allocate costs between the Montana

1 and FERC jurisdictions. Running the model on an embedded basis treats the
2 test year FERC revenues as an offset to the overall revenue requirement.

3

4 **Q. Generally, how are costs allocated between the Montana and FERC**
5 **jurisdictions?**

6 **A.** Generally, the study allocates transmission costs between the Montana and
7 FERC jurisdictions using 12-CP (or “12-coincident peak”) data.

8

9 **Q. Does NorthWestern use the 12-CP data to allocate costs between**
10 **Montana and FERC jurisdictional customers in other ratemaking**
11 **contexts?**

12 **A.** Yes. In Docket No. 2017.11.086, the Commission required NorthWestern to
13 use the 12-CP data to allocate property taxes between Montana and FERC
14 jurisdictional customers.

15

16 **Q. Are certain costs included in the transmission jurisdictional cost study**
17 **directly assigned to either Montana or FERC jurisdictional customers?**

18 **A.** Yes. Account 565 costs are split between those that are includable as
19 transmission costs in the FERC Formula Rate Template and those that are
20 not. The Account 565 costs that are allowed for inclusion as transmission
21 costs in the FERC Formula Rate Template are allocated between the FERC
22 and Montana jurisdictions using the 12-CP. Account 565 costs that are
23 excluded from transmission costs in the FERC Formula Rate Template are

1 directly assigned to the Montana jurisdiction. The Direct Testimony of
2 Michael R. Cashell discusses the Account 565 costs in more detail.

3

4 **Q. Are there any other cost adjustments in the FERC Formula Rate**
5 **Template reflected in the Jurisdictional Cost of Service Study?**

6 **A.** Yes. As discussed by Mr. Cashell, the FERC template includes a credit for
7 distribution underbuild attachments on transmission poles. This credit is
8 included in the jurisdictional cost of service study and allocated between
9 FERC and Montana jurisdictional customers.

10

11 **Q. Please describe any significant changes in methodology between this**
12 **study and the prior study provided in Docket No. 2022.07.078.**

13 **A.** There were no significant changes in methodology between the prior study
14 and the study presented in this filing. The primary change from the prior
15 study is the use of the COST model that provides a single electric cost of
16 service study model with the option to run the study on either an embedded
17 cost basis or a jurisdictional cost basis.

18

19 **Q. What is the result of NorthWestern's transmission jurisdictional cost of**
20 **service study?**

21 **A.** The jurisdictional cost study results in proposed revenues from FERC
22 customers of \$79,663,591. This is comparable to the three-year average

1 FERC Revenue Credit of \$74,513,759 included in NorthWestern's revenue
2 requirement.

3

4 **Q. How does this result compare to the jurisdictional cost of service study**
5 **presented in Docket No. 2022.07.078?**

6 **A.** The 2022 jurisdictional cost of service study resulted in proposed revenues
7 from FERC customers which were less than the three-year average revenue
8 credit.

9

10 **Q. What is NorthWestern recommending in this filing?**

11 **A.** NorthWestern recommends continuing use of the FERC revenue credit as
12 discussed by Mr. Cashell.

13

14 **Ancillary Services Jurisdictional Study**

15 **Q. Did NorthWestern prepare a jurisdictional study for ancillary services?**

16 **A.** Yes. In paragraph 6 of the 2023 Settlement, NorthWestern agreed to provide
17 a comprehensive jurisdictional study of all costs associated with providing
18 wholesale service concurrently with its next electric rate review.

19 NorthWestern agreed to provide supporting workpapers and inputs (including
20 variability analysis used to estimate units most likely), the outputs used to set
21 current FERC-regulated rates, and refreshed outputs based on updated data.

22

1 **Q. Who is presenting the ancillary services study in this docket?**

2 **A.** The Direct Testimony of Eugene L. Shlatz discusses the load variability and
3 flex reserves analysis portion of the ancillary study. Mr. Stimatz discusses
4 the units most likely analysis portion of the ancillary study in his direct
5 testimony. I present estimated FERC rates and an estimated revenue credit
6 using the updated analyses from Mr. Stimatz.

7
8 **Q. How did you calculate the estimated FERC rates?**

9 **A.** I used the currently posted FERC formula rate 2024 projection template and
10 updated the ancillary rates inputs using the results of Mr. Stimatz's units most
11 likely analysis. In addition to updating the contribution ratios and required
12 capacity values from Mr. Stimatz, I updated the costs to include YCGS. I
13 used the revenue requirement presented by Ms. Rich to input the costs for
14 YCGS.

15
16 **Q. Please summarize the results of the estimated rates calculation.**

17 **A.** Table 3 below presents estimated rates resulting from the updated analysis
18 and addition of YCGS to the FERC template. The rate calculations are
19 provided in Exhibit GJG-2.

20

Table 3 – Ancillary Rates Estimates

	2024 Current Rate	Ancillary Study Estimated Rate	\$ Change	% Change
Schedule 3/3A (\$/MW/hr):				
Load	\$ 0.22	\$ 0.11	\$ (0.11)	-50.0%
Non-VER	\$ 0.09	\$ 0.22	\$ 0.13	144.4%
VER	\$ 0.63	\$ 1.28	\$ 0.65	103.2%
Schedule 5 (\$/kW/mo)	\$ 12.687	\$ 16.148	\$ 3.461	27.3%
Schedule 6 (\$/kW/mo)	\$ 12.119	\$ 15.581	\$ 3.462	28.6%
Schedule 11 (\$/MW/hr)	\$ 1.01	\$ 1.07	\$ 0.06	5.9%

- 1 **Q. Please summarize the results of the estimated rates calculation.**
- 2 **A.** Table 4 below presents estimated revenues resulting from the updated
- 3 analysis and addition of YCGS to the FERC template compared to the three-
- 4 year average revenue credit included in the revenue requirement.

Table 4 – Ancillary Revenue Estimate

Schedule	Quantity	Estimated Rates	Estimated Revenue
Schedule 3A Non VER PTP	1,767,287	\$ 0.22	\$ 388,803
Schedule 3 Non VER NITS	1,383,560	\$ 0.16	\$ 221,370
Schedule 3A VER	24,886	\$ 1.28	\$ 31,854
Schedule 3 Load	4,292,632,350	\$ 0.11	\$ 472,190
Schedule 5	225,887	\$ 16.148	\$ 1,823,810
Schedule 6	225,887	\$ 15.581	\$ 1,759,771
Schedule 11	24,886	\$ 1.07	\$ 26,628
Total			\$ 4,724,425
3-Yr Average Revenue Credit			\$ 3,872,842
Difference			\$ 851,583

1 The rates and revenues presented in Tables 3 and 4 are intended to provide
2 the information agreed to in the 2023 Settlement. As discussed in Mr.
3 Stimatz’s testimony, NorthWestern does not intend to initiate a FERC rate
4 review at this time and the rates and revenues that would result from a FERC
5 rate review could differ from the information presented in this filing.

6

7 **Q. What is NorthWestern recommending in this filing regarding ancillary
8 services revenues?**

9 **A.** NorthWestern recommends continuing use of the FERC revenue credit, as
10 noted by Mr. Cashell. The ancillary services analysis was updated and
11 provided in this filing in compliance with the 2023 Settlement. The estimates
12 provided in Tables 3 and 4 do not represent actual rates and are provided for
13 information purposes only. As noted above, NorthWestern does not intend to
14 initiate a FERC rate review to update ancillary services rates, and the results
15 of any future FERC rate review could differ from the estimates provided.

16

17 **Marginal Cost of Service Study – Electric**

18 **Q. Have you prepared an electric marginal cost of service study (“MCOS”)¹
19 for in this filing?**

20 **A.** Yes. The electric marginal cost of service study is presented in Statement L –
21 Electric MCOS Model in compliance with ARM 38.5.176. NorthWestern is not

¹ On June 25, 2024, the Commission granted a waiver of the administrative rule requiring NorthWestern to prepare and file an MCOS for natural gas in this docket. See Doc. 3.

1 proposing to use the results of the marginal cost study in setting rates in this
2 docket.

3

4

Lead/Lag Studies

5 **Q. Has NorthWestern prepared lead/lag studies for this filing?**

6 **A.** Yes. I present lead/lag studies for both the electric utility and the natural gas
7 utility. NorthWestern engaged MCR Performance Solutions, LLC (“MCR”) to
8 develop an in-house model for preparing the lead/lag studies. These studies
9 were prepared under my direction with the assistance of MCR.

10

11 **Q. Please describe the lead/lag studies presented in this filing.**

12 **A.** The lead/lag studies account for (1) the timing differences between when
13 service is provided to customers and when revenues are received and (2) the
14 timing differences between when NorthWestern receives services from vendors
15 and when it pays for these services. The studies compute both a revenue lag
16 and an expense lag. The difference between the computed revenue lag and
17 the computed expense lag is the number of days used to calculate Cash
18 Working Capital as presented in the Direct Testimony of Jeffrey B. Berzina.

19

20 The lead/lag studies presented as Exhibits GJG-3 and GJG-4 calculate the net
21 lag days for operating expenses and the net lag days for interest expense.

22

1 **Q. Are there any significant changes in methodology between the previous**
2 **lead/lag studies and the studies prepared for this filing?**

3 **A.** No, the studies were prepared using the same methodology as was used by
4 NorthWestern in prior rate reviews.

5
6 **Q. Please summarize the results of the lead/lag studies.**

7 **A.** Table 5 below summarizes the results of the lead/lag studies.

Table 5 – Lead/Lag Studies

	Net Lag Days for Operating Expenses	Net Lag Days for Interest Expense
Electric	-46.79	-54.79
Natural Gas	-39.58	-49.93

8 **Conclusion**

9 **Q. Please summarize your testimony.**

10 **A.** My testimony provides an overview of the embedded cost of service studies
11 and summarizes the results of the studies. In addition, I present the results of
12 the jurisdictional cost studies and recommend continued use of the revenue
13 crediting methodology for purposes of setting Montana jurisdictional rates. I
14 also present the results of the lead/lag studies performed for this docket.

15

16 **Q. Does this conclude your direct testimony?**

17 **A.** Yes.

1

2

Verification

This Direct Testimony of Glenda J. Gibson is true and accurate to the best of my knowledge, information, and belief.

/s/ Glenda J. Gibson

Glenda J. Gibson