

DEPARTMENT OF PUBLIC SERVICE REGULATION
BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MONTANA

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IN THE MATTER of the Montana) REGULATORY DIVISION
Public Service Commission's Review)
of Rates to Recover NorthWestern) DOCKET NO. D2017.5.39
Energy's Electricity Supply Costs)

Pre-Filed Direct Testimony

of

George L. Donkin

on Behalf

of

The Montana Consumer Counsel

November 27, 2017

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1 **I. QUALIFICATIONS OF WITNESS AND INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, OCCUPATION, AND BUSINESS**
3 **ADDRESS.**

4 A. My name is George L. Donkin. I am an economist employed by J.W. Wilson
5 & Associates, Inc. (JWWA). My business address is 1621 North Kent Street,
6 Arlington, VA, 22209.

7 **Q. ON WHOSE BEHALF ARE YOU APPEARING IN THIS**
8 **PROCEEDING?**

9 A. My appearance in this case is on behalf of the Montana Consumer Counsel
10 (MCC).

11 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL**
12 **BACKGROUND?**

13 A. I hold B.A. and M.A. degrees in economics from the University of Maryland,
14 where my major fields of study were economic theory, industrial
15 organization, and antitrust economics. I am a consulting economist
16 specializing in energy economics and public policy toward business. I have
17 more than forty-five years of experience in energy-related and public utility
18 work, both as a consultant and as a staff economist at the Federal Power

1 Commission, the predecessor of the Federal Energy Regulatory Commission
2 (FERC). Since 1974, I have been employed as a consulting economist
3 representing various clients, including federal agencies, state regulatory
4 commissions, state consumer advocates, public and private gas and electric
5 utility companies, industrial firms, natural gas producers, gas pipelines, gas
6 distribution companies, gas marketers, and non-profit organizations. My
7 professional work has pertained to a wide range of issues concerning the
8 natural gas and petroleum industries, the regulation of gas and electric
9 utilities, energy policy, antitrust issues, and economic research and analysis.
10 A special focus of my professional work has been the study of energy
11 markets generally, with a particular focus on the analysis of price formation
12 in both the regulated and unregulated sectors of the natural gas industry.

13 **Q. HAVE YOU PREVIOUSLY PRESENTED EXPERT TESTIMONY IN**
14 **PROCEEDINGS INVOLVING U.S. ENERGY INDUSTRY ISSUES?**

15 A. Yes. I have presented expert testimony addressing U.S. energy industry
16 issues in over two hundred proceedings before numerous state and federal
17 courts, before the FERC, and before various state public utility commissions.
18 I have also testified as a natural gas expert in arbitration proceedings in
19 Louisiana, New Mexico and Texas, before a Mediator in Ohio, and in Federal
20 tax and bankruptcy courts.

1 **Q. HAVE YOU PREVIOUSLY PRESENTED EXPERT TESTIMONY**
2 **BEFORE THE MONTANA PUBLIC SERVICE COMMISSION?**

3 A. Yes. I have presented expert testimony before this Commission in numerous
4 proceedings, many of which involved NorthWestern Energy (NorthWestern,
5 or the Company), or its predecessor, the Montana Power Company (MPC).

6 **Q. HAS ANY OF YOUR PREVIOUS EXPERT TESTIMONY BEFORE**
7 **THIS COMMISSION ADDRESSED NORTHWESTERN'S**
8 **ELECTRIC UTILITY OPERATIONS IN MONTANA?**

9 A. Yes. In Docket No. D2012.1.3, I presented expert testimony on behalf of the
10 MCC that addressed NorthWestern's Avoided Cost Tariff Schedule (QF-1)
11 Rate Filing. In Docket Nos. D2013.5.33 and D2014.5.46, I presented expert
12 testimony that addressed NorthWestern's electricity supply cost hedging
13 activities.

14 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS CASE?**

15 A. Following the passage of Montana House Bill 193 (HB 193), the
16 Commission issued a *Notice of Commission Action*, which required
17 NorthWestern to file a new, interim electric supply tracking mechanism.
18 NorthWestern filed its Application for a Power Costs and Credits Adjustment
19 Mechanism (PCCAM) on July 14, 2017. The MCC has asked me to review

1 the Company's PCCAM filing and responses to discovery requests in this
2 case, and to present the results of my review in the form of this Pre-Filed
3 Direct Testimony.

4 **Q. DID HOUSE BILL 193 REMOVE THE PRE-EXISTING**
5 **STATUTORY REQUIREMENT FOR MANDATORY TRACKING**
6 **OF ELECTRICITY SUPPLY COSTS INCURRED BY MONTANA**
7 **ELECTRIC UTILITIES?**

8 A. Yes, it did.

9 **Q. PLEASE SUMMARIZE YOUR RECOMMENDATIONS TO THE**
10 **COMMISSION REGARDING NORTHWESTERN'S PCCAM**
11 **PROPOSALS IN THIS CASE.**

12 A. NorthWestern is no longer required by statute to track electricity supply
13 costs. Accordingly, the Commission is now in a position if it so chooses to
14 terminate tracking of all NorthWestern's electricity supply costs, or in the
15 alternative to place limits on the types of electricity supply costs to be tracked
16 between NorthWestern's general rate proceedings. As is discussed in more
17 detail below:

18 • I recommend that the Commission consider terminating the tracking
19 of NorthWestern's electricity supply costs.

- 1 • If tracking of electricity supply costs is allowed to continue, I
2 recommend that certain categories of costs no longer be tracked.
- 3 • If tracking of electricity supply costs is allowed, I recommend that
4 the Commission consider certain drawbacks of NorthWestern’s
5 proposed 90/10 sharing mechanism for over or under recoveries of
6 actual electricity supply costs subject to tracking.

7 **II. SHOULD SUPPLY COST TRACKING BE TERMINATED?**

8 **Q. WHY SHOULD THE COMMISSION CONSIDER ELIMINATING**
9 **TRACKING OF NORTHWESTERN’S ELECTRICITY SUPPLY**
10 **COSTS?**

11 A. Tracking of electricity supply costs between general rate cases is a single-
12 issue ratemaking tool that takes place without a full review and evaluation of
13 all categories of NorthWestern’s costs and revenues. This violates the
14 matching principle of utility ratemaking, which holds that rates should be
15 based on all costs, revenues, and MWh quantities sold or transported over a
16 specific period of time. Tracking between general rate cases may also reduce
17 the incentive of utility management to obtain electricity supplies at the lowest
18 reasonable costs.

1 **Q. WHAT IS THE RATIONALE THAT IS OFTEN USED TO SUPPORT**
2 **THE TRACKING OF ELECTRICITY SUPPLY COSTS?**

3 A. In an effort to reduce the time and resource requirements of having complete
4 rate investigations, partial cost adjustment procedures, such as fuel and
5 purchased power cost trackers, have often been used for changing electricity
6 utility rates and revenues between complete general rate investigations. The
7 purpose of these adjustment procedures is to permit more prompt changes in
8 electric utility rate levels, so as to reflect changes in some of the utility's
9 larger and more volatile cost elements, without the necessity of conducting a
10 complete investigation of all of the utility's costs and revenues at present
11 rates. Support for electricity supply cost trackers has been based on the
12 assumption that the following conditions exist:

- 13 • The underlying costs are recurring;
- 14 • The underlying costs are largely beyond the control of utility
15 management;
- 16 • The underlying costs are large; and
- 17 • The underlying costs are highly volatile.

18 At page 3 of its June 20, 2017, Comments in this docket, MCC stated:

1 “All four of these elements should be met for any costs that are
2 tracked.” (and)

3 “To the extent that even one of these elements is not met, then
4 periodic, comprehensive rate cases provide a better and fairer way to
5 account for such costs.”

6 **Q. DO YOU AGREE WITH THOSE COMMENTS?**

7 A. Yes, I do.

8 **Q. ARE NORTHWESTERN’S ELECTRICITY SUPPLY COSTS AND
9 CREDITS LARGELY RECURRING?**

10 A. Yes.

11 **Q. ARE NORTHWESTERN’S ELECTRICITY SUPPLY COSTS
12 LARGELY BEYOND THE CONTROL OF COMPANY
13 MANAGEMENT?**

14 A. No. NorthWestern’s current electricity supply portfolio is largely a product
15 of numerous individual decisions made by Company management over time.
16 Due to these decisions, the majority of its electricity supply costs are under
17 the Company’s control and are known or can be estimated with a high level

1 of confidence. This is demonstrated by the supply data contained in
2 Exhibit__(GLD-1).

3 **Q. ARE INDIVIDUAL COMPONENTS OF NORTHWESTERN'S**
4 **ELECTRICITY SUPPLY COSTS LARGE RELATIVE TO ITS**
5 **TOTAL NET EARNINGS?**

6 **A.** Some are, and some are not. I consider a component of electricity supply
7 costs or credits to be large if it represents more than 5% of the utility's net
8 earnings. In 2016 NorthWestern reported jurisdictional net earnings of
9 \$165,672,619 to the Montana Commission. Six of the Company's twenty-
10 one proposed PCCAM cost and credit components have costs greater than
11 5.0% of 2016 net earnings (they range between 6.3% for net off-system
12 hedges, and 19.6% for QF Tier II Resources). The costs or credits of the other
13 fifteen components of NorthWestern's proposed PCCAM tracker portfolio
14 range between 0.01 percent and 4.9% of NorthWestern's 2016 net earnings.

15 **Q. ARE INDIVIDUAL COMPONENTS OF NORTHWESTERN'S**
16 **ELECTRICITY SUPPLY COSTS VOLATILE?**

17 **A.** As I discuss later, some are, and some are not.

1 **Q. PLEASE DESCRIBE EXHIBIT ___(GLD-1).**

2 A. Exhibit___(GLD-1) presents the MWh quantities, total costs (including fixed
3 revenue requirements for NorthWestern’s four rate based assets), and the
4 average cost per MWh, for each individual component of NorthWestern’s
5 proposed PCCAM supply portfolio in this case.

6 **Q. WHY HAVE YOU INCLUDED THE FIXED REVENUE**
7 **REQUIREMENTS FOR RATE BASED ASSETS IN THE COST DATA**
8 **THAT IS PRESENTED IN EXHIBIT ___(GLD-1)?**

9 A. The purpose of Exhibit___(GLD-1) is to demonstrate the relative importance
10 of supply sources subject to management control in NorthWestern’s total
11 supply portfolio. Accordingly, both total MWh quantities and total costs
12 should be included in the exhibit to inform the Commission of the impact on
13 total supply costs of the individual decisions that Company management has
14 made over time.

1 **Q. PLEASE DISCUSS THE EXTENT TO WHICH NORTHWESTERN'S**
2 **ELECTRICITY SUPPLY COSTS HAVE BEEN AFFECTED BY**
3 **COMPANY MANAGEMENT DECISIONS.**

4 A. Most of the individual supply sources and associated costs shown in
5 Exhibit___(GLD-1) are the result of Company management decisions. These
6 include the following:

- 7 • NorthWestern's management decisions to invest in four rate based
8 assets that together, represent 65.4% of its proposed total PCCAM
9 supply portfolio – 37.0% from the Hydros, 24.9% from Colstrip Unit
10 4 (CU4), 2.0% from Spion Kop, and 1.3% from the Dave Gates
11 Generating Station (DGGS). These four rate based assets account for
12 an even larger share - 70.1% - of NorthWestern's total power costs
13 (\$276.5 million), at an average cost of \$64.48 per MWh. See lines 1 -
14 19 of Exhibit___(GLD-1). Each of these four rate based assets supply
15 components represents the product of a decision made by Company
16 management.
- 17 • NorthWestern's off-system hedging transactions represent an
18 additional \$10.5 million of power supply costs (2.7% of
19 NorthWestern's total proposed power costs); again a product of

1 individual decisions made by Company management. See lines 21 –
2 23 of Exhibit___(GLD-1).

- 3 • Judith Gap represents 7.2% of NorthWestern’s total proposed power
4 supply resulting from a Company management decision to enter into
5 a purchased power agreement (PPA) with the owner of the Judith Gap
6 Wind Project. See line 25 of Exhibit___(GLD-1). Mr. Markovich’s
7 response to MCC-002b states that the Judith Gap supply is scheduled
8 to expire in 2026, and is subject to a fixed pricing structure.

- 9 • Basin Creek represents a natural gas generating plant in Butte that is
10 used to serve load and peak demand requirements under a PPA
11 entered into by Company management with Basin Creek Energy
12 Partners, LLC. Basin Creek represents only 1.2% of NorthWestern’s
13 total proposed MWh supply, but 2.1% of total power supply costs. See
14 line 26 of Exhibit___(GLD-1). Mr. Markovich’s response to MCC-
15 002b states that the Basin Creek supply is scheduled to expire in 2036,
16 and is subject to a fixed pricing structure.

17 Together, rate based assets, off-system hedges, Judith Gap, and Basin Creek
18 account for 73.6% of NorthWestern’s total proposed PCCAM MWh
19 quantities. Including the fixed revenues of rate based assets, these same

1 supply sources represent 76.1% of total projected electricity supply costs,
2 and the inclusion of each of these supply sources in NorthWestern's
3 electricity supply portfolio is the direct result of Company management
4 decisions.

5 **Q. ARE MANAGEMENT DECISIONS LARGELY RESPONSIBLE FOR**
6 **THE INCLUSION OF NORTHWESTERN'S QF TIER II AND QF-1**
7 **SUPPLIES IN ITS ELECTRICITY SUPPLY PORTFOLIO?**

8 A. No. The inclusion of QF supplies in NorthWestern's supply portfolio is the
9 result of federally mandated programs; moreover, the Company appears to
10 have little, if any, control over the prices and MWh quantities of its QF Tier
11 II resources. See Mr. Markovich's Pre-Filed Direct testimony at KJM-10 and
12 KJM-11, and his response to PSC-007. Mr. Markovich's response to MCC-
13 002b lists nine QF Tier II supply sources with expiration dates ranging
14 between October 1, 2019, and June 30, 2032; they all have a fixed pricing
15 structure.

1 **Q. DO QF SUPPLY SOURCES REPRESENT A SIGNIFICANT**
2 **PORTION OF NORTHWESTERN'S TOTAL ELECTRICITY**
3 **SUPPLY COSTS?**

4 A. Yes. QF Tier II represents 23.6% of NorthWestern's total electricity supply
5 costs. Similarly, QF-1 Tariff Contracts represent 16.6% of NorthWestern's
6 total PCCAM electricity supply costs. See lines 32 and 33 of
7 Exhibit__(GLD-1).

8 **Q. PLEASE REFER TO NORTHWESTERN'S PROPOSED PCCAM**
9 **MWH QUANTITIES AND COSTS FOR ON-SYSTEM MARKET**
10 **PURCHASES AND MARKET SALES AT LINES 35 – 37 OF**
11 **EXHIBIT__(GLD-1). ARE MANAGEMENT DECISIONS BY**
12 **NORTHWESTERN LARGELY RESPONSIBLE FOR THOSE MWH**
13 **QUANTITIES AND COSTS?**

14 A. Yes, but only indirectly. At KJM-7, lines 7 – 8, of his Pre-Filed Direct
15 Testimony, Mr. Markovich describes on-system market purchases as
16 “monthly, daily, and hourly purchases of energy on NorthWestern's
17 transmission system used to serve load.” At KJM-8, lines 12 – 13, of his Pre-
18 Filed Direct Testimony, Mr. Markovich describes on-system market sales as
19 MWh sales and revenue credits resulting from excess on-system supply.

1 These transactions appear to result from fluctuations in MWh supplies from
2 the Company's rate based assets and contracted supply sources. For example,
3 if run-of-river quantities are low, less Hydros MWh will be available, on-
4 system market/spot purchases are likely to increase, and on-system
5 market/spot sales may not take place. Similarly, if run-of-river quantities are
6 high, more Hydros MWh will be available, on-system market/spot purchases
7 may decrease, and on-system market/spot sales may increase. Accordingly,
8 run-of-river fluctuations can be a major determinant of the level of
9 NorthWestern's on-system market/spot purchases and sales, not Company
10 management decisions. This is also the case with respect to MWh
11 fluctuations in the Company's other rate based assets or contract supply
12 resources. Moreover, NorthWestern's market/spot purchases and sales are
13 made at prevailing market/index prices at the time when the transactions take
14 place, and Company management has no control over market/index prices in
15 competitive electricity supply markets. These factors suggest that
16 NorthWestern's management has little or no control over the MWh quantities
17 and costs of market/spot purchases and sales in its electricity supply
18 portfolio.

1 **Q. DO ON-SYSTEM MARKET PURCHASES REPRESENT A**
2 **SIGNIFICANT PORTION OF NORTHWESTERN'S PROPOSED**
3 **TOTAL ELECTRICITY SUPPLY MWH QUANTITIES AND**
4 **COSTS?**

5 A. Yes, but the quantities and costs are not nearly as large as they were in
6 previous years. For example, Mr. Markovich' PCCAM Exhibit___(KJM-1)
7 contains 730,215 MWh of on-system market purchases, at a total projected
8 cost of \$19,905,175. In tracker year 2015/16, NorthWestern's actual on-
9 system market purchases amounted to 1,556,045 MWh, at a total cost of
10 \$41,811,043, and in tracker year 2016/17, actual on-system market purchases
11 were 1,581,732 MWh, at a total cost of \$43,639,619.

1 **Q. YOU HAVE DEMONSTRATED THAT A LARGE PORTION OF**
2 **NORTHWESTERN'S ELECTRICITY SUPPLY PORTFOLIO IS THE**
3 **RESULT OF COMPANY MANAGEMENT DECISIONS. DO YOU**
4 **THEREFORE HAVE A RECOMMENDATION TO THE**
5 **COMMISSION REGARDING THE TRACKING OF**
6 **NORTHWESTERN'S ELECTRICITY SUPPLY COSTS BETWEEN**
7 **GENERAL RATE CASES?**

8 A. Yes. As previously discussed, at least 76.1% of the Company's total
9 projected electricity supply costs are the direct result of supply acquisition
10 decisions made over time by Northwestern management. This is a clear
11 demonstration that NorthWestern's electricity supply costs have been under
12 the control of Company management. Moreover, many of the costs or credits
13 of individual components of NorthWestern's proposed PCCAM supply
14 portfolio are either not large, not volatile, or neither large or volatile. This
15 means that the conditions needed to support the tracking of these costs have
16 not been met, and the Commission should consider terminating
17 NorthWestern's electricity supply cost tracker.

1 **Q. YOU PREVIOUSLY DISCUSSED THE FACT THAT MORE THAN**
2 **HALF OF THE INDIVIDUAL COMPONENTS OF**
3 **NORTHWESTERN'S PROPOSED PCCAM PORTFOLIO ARE NOT**
4 **LARGE. ARE ALL OF THE INDIVIDUAL COMPONENTS OF**
5 **NORTHWESTERN'S PROPOSED PCCAM PORTFOLIO HIGHLY**
6 **VOLATILE?**

7 A. No. Several of the individual components of NorthWestern's PCCAM
8 supply portfolio do not appear to be very volatile.

9 **Q. PLEASE DEFINE THE TERM VOLATILE WITH RESPECT TO**
10 **ELECTRICITY SUPPLY COSTS OR PRICES.**

11 A. Electricity supply costs or prices are said to be volatile if they are subject to
12 large movements up or down that are difficult to predict with accuracy.

13 **Q. PLEASE IDENTIFY THE INDIVIDUAL COMPONENTS IN**
14 **NORTHWESTERN'S ELECTRICITY SUPPLY TRACKER THAT**
15 **DO NOT APPEAR TO BE VERY VOLATILE.**

16 A. Please refer to Exhibit___(GLD-2). This exhibit compares the costs and
17 credits components of NorthWestern's proposed PCCAM portfolio in this
18 case with their corresponding actual cost and credits amounts in tracker
19 periods 2014/15, 2015/16, and 2016/17. It also presents the three-year

1 average of actual costs and credits for each component of the Company's
2 proposed PCCAM supply portfolio in this case. Lines 1 – 6 of
3 Exhibit___(GLD-2) identify the individual cost and credit components of
4 NorthWestern's PCCAM supply portfolio that do not appear to be very
5 volatile.

6 **Q. WHY HAVE YOU SELECTED A THREE-YEAR PERIOD FOR**
7 **COMPARING CHANGES FROM YEAR TO YEAR IN THE LEVEL**
8 **OF ACTUAL COSTS OF NORTHWESTERN'S ELECTRICITY**
9 **SUPPLY PORTFOLIO?**

10 A. Going back in time beyond the 2014/15 tracker year would include years
11 when electricity supply market conditions and costs were significantly
12 different from more recent periods and the expected near term future
13 PCCAM period. For example, that would include tracker years prior to
14 NorthWestern's acquisition of the Hydros, when the supply portfolio
15 included large MWh quantities purchased under a PPA with PPL.

1 **Q. WHAT DO YOU CONCLUDE FROM THE PCCAM COST AND**
2 **CREDIT AMOUNTS THAT ARE SHOWN AT LINES 1 – 6 OF**
3 **EXHIBIT__(GLD-2)?**

4 A. The cost and credit amounts for the components shown there do not appear
5 to be very volatile. For example, the Company is proposing a PCCAM cost
6 for QF Tier II of \$32.5 million. Actual QF Tier II costs during the three prior
7 tracker periods ranged between \$32.7 million and \$33.4 million, and the
8 three-year actual average cost for QF Tier II was \$33 million, only 0.5%
9 greater than NorthWestern's proposed QF Tier II cost. See also
10 Exhibit__(GLD-3), which shows that QF Tier II MWh quantities and
11 average costs per MWh were quite stable from tracker year 2014/15 through
12 tracker year 2016/17, and also into NorthWestern's proposed PCCAM
13 forecast period.

14 **Q. DO NORTHWESTERN'S CU4 FUEL COSTS APPEAR TO BE VERY**
15 **VOLATILE?**

16 A. No. The Company is proposing a PCCAM cost for CU4 of \$21.0 million.
17 Actual CU4 costs during the three prior tracker periods ranged between \$19.3
18 million and \$21.9 million, and the three-year actual average cost for CU4
19 was \$20.6 million, only 1.9% less than NorthWestern's proposed CU4 cost.

1 See also Chapter 8 of NorthWestern’s *2015 Electricity Supply Resource*
2 *Procurement Plan*, at Page 8-12, where in discussing CU4 the Company
3 stated “Stable fuel pricing; low price volatility.” See also NorthWestern’s
4 response in this case to Data Request MCC-023d, where the Company states
5 “Although a portion of the (CU4) fuel costs varies with the amount of fuel
6 burned, a substantial portion of the (CU4) costs is a fixed charge.”

7 **Q. DO NORTHWESTERN’S SPION KOP REVENUE CREDITS**
8 **APPEAR TO BE VERY VOLATILE?**

9 A. No. The Company is proposing a PCCAM credit for Spion Kop of \$3.2
10 million. Actual Spion Kop credits during the three prior tracker periods
11 ranged between \$3.0 million and \$3.7 million, and the three-year average
12 actual credit for Spion Kop was \$3.3 million. That is only 3.1% greater than
13 NorthWestern’s proposed Spion Kop credit. See also Exhibit ___ (GLD-3), at
14 lines 9 – 11. It also should be noted that NorthWestern’s proposed PCCAM
15 Spion Kop credits are not large – only 1.9% of the Company’s 2016 Montana
16 net earnings of \$165,672,619.

1 **Q. DO NORTHWESTERN'S WIND OTHER COSTS APPEAR TO BE**
2 **VERY VOLATILE?**

3 A. No. The Company is proposing a PCCAM cost for Wind Other of \$1.7
4 million. Actual Wind Other costs during the three prior tracker periods
5 ranged between \$1.7 million and \$1.8 million, and the three-year actual
6 average cost for Wind Other was \$1.7 million, nearly identical to
7 NorthWestern's proposed Wind Other cost. NorthWestern's proposed
8 PCCAM costs for Wind Other is also not large – only 1.0% of the Company's
9 2016 Montana net earnings.

10 **Q. DO NORTHWESTERN'S BASIN CREEK FIXED COSTS APPEAR**
11 **TO BE VERY VOLATILE?**

12 A. No. In tracker years 2015/16 and 2016/17, NorthWestern's Basin Creek
13 fixed costs were \$5,893,528, and \$6,120,983, for a two-year average cost of
14 \$6,007,255; nearly the same as NorthWestern's proposed PCCAM Basin
15 Creek Fixed cost of \$6,003,296. Although Basin Creek Fixed cost in the
16 2014/15 tracker year was significantly lower than it was in 2015/16 and
17 2016/17, that appears to be due to lower Basin Creek Variable MWh
18 quantities. See Exhibit___(GLD-3), at line 14.

1 **Q. DO NORTHWESTERN'S BASIN CREEK VARIABLE COSTS**
2 **APPEAR TO BE VERY VOLATILE?**

3 A. No. In tracker years 2015/16 AND 2016/17, Basin Creek Variable costs were
4 \$2,344,272 and \$2,324,020, respectively. The significantly lower Basin
5 Creek Variable cost figure for tracker year 2014/15 appears to be due to much
6 lower Basin Creek MWh quantities purchased. See also Exhibit ___(GLD-3),
7 at lines 13 - 15.

8 **Q. PLEASE ASSUME THAT THE COMMISSION CHOOSES TO**
9 **TERMINATE TRACKING OF NORTHWESTERN'S ELECTRICITY**
10 **SUPPLY COSTS AND CREDITS. HOW SHOULD THAT DECISION**
11 **BE IMPLEMENTED?**

12 A. If the Commission chooses to totally eliminate the tracking of
13 NorthWestern's electricity supply costs and credits in this case, it would be
14 reasonable to implement that decision in the Company's next general rate
15 proceeding. At that time all the Company's power supply costs and credits
16 would be reviewed, and all legitimate power supply costs could be approved
17 and built into base rates.

1 **Q. HOW SHOULD NORTHWESTERN'S ELECTRICITY SUPPLY**
2 **COSTS AND CREDITS BE TREATED BETWEEN NOW AND WHEN**
3 **A DECISION TO TERMINATE TRACKING IS IMPLEMENTED?**

4 A. NorthWestern's existing electricity supply cost tracker should be retained
5 until its elimination is implemented in the Company's next general rate case.

6 **III. IF TRACKING CONTINUES**

7 **Q. HOW SHOULD THE COMPANY'S DSM PROGRAM COSTS,**
8 **ADMINISTRATIVE COSTS, AND MPSC AND MCC TAXES BE**
9 **TREATED IF THE COMMISSION CHOOSES NOT TO**
10 **TERMINATE NORTHWESTERN'S ELECTRICITY SUPPLY COST**
11 **TRACKER?**

12 A. NorthWestern proposes to track DSM program costs separately from
13 PCCAM costs and credits in the Company's next general rate case, when the
14 Company plans to remove them from the Base PCC costs identified in this
15 case. See Mr. Markovich's Pre-Filed Direct Testimony, at KJM-12, lines 8 –
16 13, and Mr. Schwartzenberger's Pre-Filed Direct Testimony, at JS-13, lines
17 7 – 11. In my judgement, NorthWestern's Administrative costs should not be
18 tracked at all.

1 **Q. PLEASE ASSUME THAT THE COMMISSION CHOOSES NOT TO**
2 **TERMINATE NORTHWESTERN'S ELECTRICITY SUPPLY COST**
3 **TRACKER. SHOULD SOME INDIVIDUAL COMPONENTS OF THE**
4 **COMPANY'S ELECTRICITY SUPPLY PORTFOLIO BE**
5 **REMOVED FROM ITS PCCAM TRACKER?**

6 A. Yes. I recommend that if tracking of NorthWestern's electricity supply costs
7 is allowed to continue, the nine components of the Company's supply
8 portfolio that are listed at lines 1 – 9 of Exhibit__(GLD-2) should be
9 excluded from tracking. The costs or credits of each component shown there
10 have been incurred as a result of management decisions, some of them are
11 not large, and they are not highly volatile. In the case of DSM program costs,
12 MPSC taxes, and MCC taxes, they will be separately tracked, and in the case
13 of Administrative Costs, they should not be tracked at all

14 **Q. PLEASE FOCUS ON LINE 11 OF EXHIBIT__(GLD-2). WHAT DO**
15 **YOU CONCLUDE FROM THE NET COST FIGURES SHOWN**
16 **THERE?**

17 A. That line represents the sum of lines 1 – 9 of Exhibit__(GLD-2).
18 NorthWestern's proposed PCCAM net costs and credits for the nine supply
19 components shown at lines 1 – 9 amount to \$67.4 million. Actual total costs

1 and credits for these same nine supply components in the three prior tracker
2 years ranged between \$66.1 million and \$66.6 million, with a three-year
3 average of \$66.3 million, which is only \$1.1 million less than
4 NorthWestern's proposed total PCCAM net cost figure for these nine
5 components of \$67.4 million. This represents a clear demonstration that in
6 the aggregate the total net supply costs of these nine supply components are
7 not very volatile. I therefore recommend that if the Commission chooses to
8 allow some level of tracking of NorthWestern's PCCAM electricity supply
9 costs and credits between rate cases, the nine supply components listed at
10 lines 1 – 9 of Exhibit___(GLD-2) should be removed from that tracking
11 process. That would represent an estimated total net PCCAM cost of
12 \$71,647,953, which represents 51.5% of NorthWestern's proposed PCCAM
13 costs and credits of \$139,038,879.

14 **Q. DOES IT THEREFORE FOLLOW THAT IF THE COMMISSION**
15 **CHOOSES TO ALLOW SOME LEVEL OF TRACKING OF**
16 **NORTHWESTERN'S PCCAM ELECTRICITY SUPPLY COSTS**
17 **AND CREDITS, TRACKING SHOULD BE LIMITED TO THE**
18 **COMPONENTS LISTED AT LINES 13-24 OF EXHIBIT___(GLD-2)?**

19 A. Yes, it does.

1 **Q. IF NORTHWESTERN'S SUPPLY COST TRACKER IS NOT**
2 **TERMINATED SHOULD THE COMMISSION APPROVE THE**
3 **COMPANY'S REQUEST TO REPLACE MONTHLY RATE**
4 **ADJUSTMENTS WITH ANNUAL PCCAM ADJUSTMENTS?**

5 A. Yes.

6 **IV. 90/10 TRACKER SHARING**

7 **Q. WHAT ARE THE MAIN OBJECTIVES COMMISSIONS SEEK TO**
8 **REALIZE THROUGH ELECTRICITY OR NATURAL GAS**
9 **TRACKER SHARING MECHANISMS?**

10 A. There are one or two main objectives that Commissions typically seek to
11 achieve when they approve electricity or natural gas tracker sharing
12 mechanisms. One objective is to produce some level of risk sharing for over
13 or under recoveries of supply costs for both utilities and their ratepayers.
14 With a sharing mechanism a portion of over recoveries of tracked supply
15 costs is retained for utility shareholders and not refunded to ratepayers.
16 Similarly, a portion of under recoveries of tracked supply costs is absorbed
17 by utility shareholders and not flowed through to ratepayers. Thus, the risks
18 of over or under recovery of actual electric or natural gas supply costs is

1 spread to both the utility and its ratepayers under supply tracker sharing
2 mechanisms similar to NorthWestern's 90/10 proposal in this case.

3 **Q. WHAT IS THE OTHER MAIN OBJECTIVE COMMISSIONS**
4 **SOMETIMES SEEK TO ACHIEVE WHEN THEY APPROVE**
5 **ELECTRICITY OR NATURAL GAS SUPPLY COST TRACKER**
6 **SHARING MECHANISMS?**

7 A. Most traditional electric or gas trackers provide utilities with a virtual
8 guarantee of recovery of their prudently incurred electricity or natural gas
9 supply costs. It can therefore be argued that automatic, full tracker recovery
10 of actual electricity or natural gas supply costs reduces utility management
11 incentives to obtain electricity or natural gas supplies at the lowest reasonable
12 costs. Therefore another primary purpose of sharing mechanisms applicable
13 to electricity or natural gas supply cost trackers is to provide utilities with a
14 greater incentive to obtain reliable electricity or natural gas supplies at the
15 lowest reasonable costs. It is expected that sharing mechanisms like that
16 proposed in this case by Northwestern will provide utility management with
17 the opportunity to retain a portion of actual supply costs if they do a good job
18 for their ratepayers, and to under recover a portion of their actual supply costs
19 if they do not. Of course, an incentive is only useful if the utility has enough
20 control over costs to be able to reduce them in response to the incentive.

1 **Q. IS THERE A WAY FOR NORTHWESTERN TO BENEFIT FROM**
2 **90/10 REVENUE SHARING AT THE EXPENSE OF RATEPAYERS?**

3 A. Yes. NorthWestern will benefit from 90/10 sharing if its forecast period
4 PCCAM costs exceed actual PCCAM adjustment period costs.

5 **Q. WHAT DOES THIS FACT SUGGEST?**

6 A. Given that NorthWestern would benefit at the expense of ratepayers if
7 forecasted costs exceed actual costs, the Company has an incentive to
8 overestimate forecast period costs and to underestimate forecast period
9 credits, and a disincentive to underestimate forecast period costs, and to
10 overestimate forecast period credits.

11 **Q. WHAT IS YOUR OVERALL CONCLUSION REGARDING**
12 **NORTHWESTERN'S PROPOSED 90/10 SHARING OF OVER AND**
13 **UNDER RECOVERIES OF PCCAM TRACKER COSTS?**

14 A. There is a logical inconsistency between implementing a 90/10 sharing
15 mechanism for tracker costs in an effort to produce incentives for Company
16 management to obtain power supplies at reasonable costs, if there is very
17 little potential for Company management to do so. As discussed above, most
18 costs are under the control of Company management, accordingly a large
19 portion of NorthWestern's PCCAM costs should not be tracked. If the

1 Commission nevertheless determines that certain costs should be tracked
2 because they are not under management's control, it also should be
3 recognized that the ability to respond to the incentive created by a 90/10
4 sharing mechanism is limited for that very reason. The Commission should
5 consider this logical inconsistency – including whether costs are beyond
6 management's control and whether they should be tracked at all – before
7 approving any sharing mechanism.

8 **Q. PLEASE ASSUME THAT THE COMMISSION CHOOSES TO ADOPT**
9 **THE COMPANY'S 90/10 TRACKING PROPOSAL. HOW SHOULD**
10 **90/10 TRACKER SHARING BE IMPLEMENTED?**

11 A. If tracking of electricity supply costs is allowed and the Commission chooses
12 to accept NorthWestern's proposed 90/10 sharing mechanism, I recommend
13 that 90/10 sharing be limited to the components of the Company's electricity
14 supply portfolio listed at lines 13-24 of Exhibit___(GLD-2).

1 **Q. PLEASE ASSUME THAT THE COMMISSION CHOOSES TO ADOPT**
2 **THE COMPANY'S 90/10 TRACKING PROPOSAL. HOW SHOULD**
3 **REVENUE CREDITS BE TRACKED FOR THE HYDROS?**

4 A. As it did in the 2015-2016 tracking period, NorthWestern should separately
5 track hydro revenue credits. This will create greater transparency and be
6 consistent with what the Commission approved when it granted preapproval.

7 **Q. DOES THIS CONCLUDE YOUR PRE-FILED DIRECT TESTIMONY**
8 **IN THIS CASE?**

9 A. Yes, it does.

Exhibit No._(GLD-1)

D2017.5.39

NorthWestern's Total PCCAM Power Costs Plus Rate Base Assets Fixed Revenues

Line No.	Description	(MWh)	MWh Percent	\$ Amount	(\$/MWh)	\$ Percent
1	Hydro RB Fixed Revenue	2,434,855		\$ 142,894,207	\$ 58.69	36.2%
2	Hydro RB Generation			\$ (341,990)	\$ (0.14)	-0.1%
3	Total Hydro Rate Base Assets	2,434,855	37.0%	\$ 142,552,217	\$ 58.55	36.1%
4						
5	CU4 RB Fixed Revenue	1,638,120		\$ 72,745,544	\$ 44.41	18.4%
6	CU4 RB Generation Variable			\$ 21,026,321		5.3%
7	Total CU4 Rate Base Asset	1,638,120	24.9%	\$ 93,771,865	\$ 57.24	23.8%
8						
9	Spion Kop RB Fixed Revenue	131,723		\$ 11,424,816	\$ 86.73	2.9%
10	Spion Kop RB Generation			\$ (3,161,350)		-0.8%
11	Total Spion Kop Rate Base Asset	131,723	2.0%	\$ 8,263,466	\$ 62.73	2.1%
12						
13	DGGS RB Fixed Revenue	82,797		\$ 28,234,531	\$ 341.01	7.2%
14	DGGS Variable Costs			\$ 8,138,991		2.1%
15	DGGS Transmission Service			\$ (1,429,916)		-0.4%
16	DGGS 27 aMW Revenue Credit			\$ (3,053,043)		-0.8%
17	Total DGGS Rate Base Asset	82,797	1.3%	\$ 31,890,563	\$ 385.17	8.1%
18						
19	Total Rate Base Assets	4,287,495	65.2%	\$ 276,478,111	\$ 64.48	70.1%
20						
21	Off System Fixed Price Hedges	390,625	5.9%	\$ 20,629,791	\$ 52.81	
22	Off System Market Price Sales	(390,625)	-5.9%	\$ (10,141,579)	\$ 25.96	
23	Net Off System Hedges	-		\$ 10,488,213		2.7%
24						
25	Judith Gap Energy	474,611	7.2%	\$ 15,377,399	\$ 32.40	3.9%
26	Basin Creek Variable	78,866	1.2%	\$ 2,348,535	\$ 106.18	0.6%
27	Basin Creek Fixed	-	-	\$ 6,003,296		1.5%
28	Other Non-QF	77,462	1.2%	\$ 3,709,957	\$ 47.89	0.9%
29	NWE Transmission Costs	-	-	\$ 973,991		0.2%
30	Wind Other Cost	-	-	\$ 1,730,400		0.4%
31	Operating Reserves	-	-	\$ 22,496		0.0%
32	QF Tier II Contract	807,337	12.3%	\$ 32,527,608	\$ 40.29	8.2%
33	QF-1 Tariff Contracts	391,603	6.0%	\$ 22,818,407	\$ 58.27	5.8%
34	On System Market Purchases	730,215	11.1%	\$ 19,905,174	\$ 27.26	5.0%
35	On System Market Sales	(267,327)	-4.1%	\$ (4,961,726)	\$ 18.56	-1.3%
36	MPSC - MCC Taxes	-	-	\$ 651,178		0.2%
37	Administrative Costs	-	-	\$ 381,600		0.1%
38	DSM Program Costs	-	-	\$ 5,883,338		1.5%
39	Subtotal Lines 25 - 44	2,292,768	34.8%	\$ 107,371,653		27.2%
40						
41	Total Power Costs	6,580,263	100.0%	394,337,977		100.0%

Exhibit No._(GLD-2)

D2017.5.39

**NorthWestern's Proposed PCCAM Tracker Costs Compared With
Actual Costs In 2014/15, 2015/16 And 2016/17 Tracker Periods**

Line No.	Portfolio Component	NorthWestern's Proposed PCCAM Costs	2016/17 Actual Costs	2015/16 Actual Costs	2014/15 Actual Costs	Average Of Last Three Years Actual Costs
1	QF Tier II Resources	\$ 32,527,608	\$ 32,700,429	\$ 32,796,158	\$ 33,375,410	\$ 32,957,332
2	CU4 Variable Costs	\$ 21,026,321	\$ 19,347,923	\$ 20,500,907	\$ 21,879,764	\$ 20,576,198
3	Spion Kop Credits	\$ (3,161,350)	\$ (3,071,700)	\$ (3,671,312)	\$ (3,036,000)	\$ (3,259,671)
4	Basin Creek Fixed	\$ 6,003,296	\$ 5,893,528	\$ 6,120,983	\$ 5,154,595	\$ 5,723,035
5	Basin Creek Variable	\$ 2,348,535	\$ 2,324,020	\$ 2,344,272	\$ 1,797,577	\$ 2,155,290
6	Wind Other	\$ 1,730,400	\$ 1,706,423	\$ 1,779,708	\$ 1,744,541	\$ 1,743,557
7	DSM Program Costs	\$ 5,883,338	\$ 6,524,542	\$ 6,051,538	\$ 5,414,378	\$ 5,996,819
8	MPSC - MCC Taxes	\$ 651,178	\$ 560,532	\$ 405,202	\$ 732,948	\$ 566,227
9	Administrative Costs	\$ 381,600	\$ 113,913	\$ 226,200	\$ (848,813)	\$ (169,567)
10						
11	Subtotal Lines 1 - 9	\$ 67,390,926	\$ 66,099,610	\$ 66,553,656	\$ 66,214,400	\$ 66,289,222
12						
13	QF-1 Resources	\$ 22,818,407	\$ 14,160,761	\$ 11,523,949	\$ 11,514,418	\$ 12,399,709
14	Hydros Credits	\$ (341,990)	\$ (398,398)	\$ (10,348,357)	\$ -	\$ (3,582,252)
15	DGGS Variable Costs	\$ 8,138,991	\$ 7,983,153	\$ 10,763,070	\$ 16,945,089	\$ 11,897,104
16	DGGS Transmission Service	\$ (1,429,916)	\$ (1,428,033)	\$ (1,999,000)	\$ (3,158,518)	\$ (2,195,184)
17	DGGS 27 aMW Revenue Credit	\$ (3,053,043)	\$ (1,958,451)	\$ (3,320,851)	\$ (5,042,558)	\$ (3,440,620)
18	NWE Transmission Costs	\$ 973,991	\$ 1,022,907	\$ 779,396	\$ 2,422,859	\$ 1,408,387
19	Operating Reserves	\$ 22,496	\$ 22,496	\$ 217,590	\$ (1,322,375)	\$ (360,763)
20	Judith Gap	\$ 15,377,399	\$ 13,662,888	\$ 14,824,480	\$ 13,649,093	\$ 14,045,487
21	Other Non-QF	\$ 3,709,957	\$ 2,120,067	\$ 1,773,207	\$ 2,766,629	\$ 2,219,968
22	Net Off System Hedges	\$ 10,488,212	\$ 24,609,409	\$ 27,270,820	\$ 26,443,651	\$ 26,107,960
23	On System Market Purchases	\$ 19,905,175	\$ 43,639,619	\$ 41,811,043	\$ 61,328,305	\$ 48,926,322
24	On System Market Sales	\$ (4,961,726)	\$ (9,159,123)	\$ -	\$ (822,665)	\$ (3,327,263)
25						
26	Subtotal Lines 13- 24	\$ 71,647,953	\$ 94,277,295	\$ 93,295,347	\$ 124,723,928	\$ 104,098,857
27						
28	Total Net Costs	\$ 139,038,879	\$ 160,376,905	\$ 159,849,003	\$ 190,938,328	\$ 170,388,079

Exhibit No._(GLD-3)

D2017.5.39

**NorthWestern's Proposed PCCAM Tracker Costs Compared With
Actual Costs In Three Recent Tracker Years Showing
Costs, MWh And \$/MWh For Resources With MWh That Should Not To Be Tracked**

Line No.	Description	NorthWestern's				Average Of Last
		Proposed PCCAM Costs	2016/17 Actual Costs	2015/16 Actual Costs	2014/15 Actual Costs	Three Years Actual Costs
1	QF Tier II Resources \$	\$ 32,527,608	\$ 32,700,429	\$ 32,796,158	\$ 33,375,410	\$ 32,957,332
2	QF Tier II Resources MWh	807,337	821,539	852,427	850,862	841,609
3	QF Tier II Resources \$/MWh	\$ 40.29	\$ 39.80	\$ 38.47	\$ 39.23	\$ 39.16
4						
5	CU4 Variable Costs \$	\$ 21,026,321	\$ 19,347,923	\$ 20,500,907	\$ 21,879,764	\$ 20,576,198
6	CU4 Variable Costs MWh	1,638,120	1,234,029	1,393,588	1,602,637	1,410,085
7	CU4 Variable Costs \$/MWh	\$ 12.84	\$ 15.68	\$ 14.71	\$ 13.65	\$ 14.59
8						
9	Spion Kop Credits	\$ (3,161,350)	\$ (3,071,700)	\$ (3,671,312)	\$ (3,036,000)	\$ (3,259,671)
10	Spion Kop Credits	131,723	131,579	131,159	128,993	130,577
11	Spion Kop Credits	\$ (24.00)	\$ (23.34)	\$ (27.99)	\$ (23.54)	\$ (24.96)
12						
13	Basin Creek Variable \$	\$ 2,348,535	\$ 2,324,020	\$ 2,344,272	\$ 1,797,577	\$ 2,155,290
14	Basin Creek Variable MWh	78,866	83,731	83,084	38,102	68,306
15	Basin Creek Variable \$/MWh	\$ 29.78	\$ 27.76	\$ 28.22	\$ 47.18	\$ 31.55
16						
17	Total \$	\$ 50,392,555	\$ 48,976,629	\$ 49,625,725	\$ 52,219,150	\$ 50,273,835
18	Total MWh	\$ 2,577,180	\$ 2,187,147	\$ 2,377,174	\$ 2,582,492	\$ 2,382,271
19	\$/MWh	\$ 19.55	\$ 22.39	\$ 20.88	\$ 20.22	\$ 21.10