

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

* * * * *

IN THE MATTER OF NorthWestern Energy's)	REGULATORY DIVISION
Application for Approval to Purchase and Operate)	
PPL Montana's Hydroelectric Facilities, for)	DOCKET NO. D2013.12.85
Approval of Inclusion of Generation Asset Cost)	
of Service in Electricity Supply Rates, for)	
Approval of Issuance of Securities to Complete the)	
Purchase, and for Related Relief)	

Direct Testimony

of

Albert E. Clark

on behalf of

The Montana Consumer Counsel

March 28, 2014

1 **INTRODUCTION**

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

5 A. My name is Albert E. Clark. I am an independent consultant in the field of
6 utility rates and regulation. My business address is 2871 S. Conway Road, #127,
7 Orlando, FL. 32812.

8
9 **QUALIFICATIONS**

10
11 **Q. PLEASE DESCRIBE YOUR EDUCATIONAL BACKGROUND.**

12 A. I received a Bachelor of Science degree in mathematics and secondary education
13 in 1966 from Towson State University, Baltimore, Maryland. In 1975 I received
14 a Certificate in Data Processing, Summa Cum Laude, from Anne Arundel
15 Community College, Arnold, Maryland, where I also completed selected courses
16 in accounting. I have studied at Rollins College, Winter Park, Florida, where I
17 took graduate level courses in management with a concentration in accounting. I
18 also hold a Master of Accounting degree from the George Washington
19 University, Washington, D.C.

1 **Q. PLEASE DESCRIBE YOUR PROFESSIONAL EXPERIENCE IN THE**
2 **FIELD OF PUBLIC UTILITY REGULATION.**

3 A. From 1972 through 1986 I worked for several consulting firms in the
4 Washington, D.C. area and in Orlando, Florida. During those engagements I
5 participated in numerous rate proceedings before federal and state regulatory
6 agencies. I proceeded from assisting senior consultants in the preparation of
7 analyses related to fully allocated cost of service and rate design studies to
8 providing expert testimony and analyses to clients in contested wholesale and
9 retail rate cases. These cases involved cost allocation, rate design and revenue
10 requirements analyses.

11 In 1986 I participated in the formation of another consulting firm where I
12 was a Principal and a Vice President until I resigned in mid-1997. At that firm
13 my primary efforts were in the areas of cost of service and revenue requirements
14 studies in wholesale and retail rate proceedings before federal and state
15 regulatory agencies. I also assisted various clients - principally wholesale
16 municipalities and cooperatives -- with negotiations for power supply and
17 transmission services. In 1997, I formed Clark Utility Consulting, Inc. and
18 performed similar types of services for clients as I had previously done. In
19 January 2000 I joined the firm of Fred Saffer & Associates in Orlando, Florida.

1 Since 2008 I have worked as an independent consultant.

2

3 **Q. WHAT TYPES OF CLIENTS HAVE YOU SERVED DURING YOUR**
4 **REGULATORY CONSULTING CAREER?**

5 A. During the course of my regulatory consulting career, I have been retained by
6 state regulatory commissions, state consumer protection agencies, Federal
7 agencies, municipalities, industrial corporations, trade associations, electric
8 cooperatives and municipally owned electric distribution systems.

9

10 **Q. HAVE YOU TESTIFIED PREVIOUSLY IN PUBLIC UTILITY RATE**
11 **PROCEEDINGS?**

12 A. Yes, I have provided expert testimony on over 115 occasions in 16 jurisdictions
13 in more than 85 separate proceedings. I have testified before this Commission in
14 most of the proceedings involving NorthWestern Energy's (and its predecessor
15 The Montana Power Company), electric and natural gas utilities since 1984.

16

1 **PRELIMINARY STATEMENT**

2
3 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS**
4 **PROCEEDING?**

5 A. I am testifying on behalf of the Montana Consumer Counsel (the “MCC”).
6

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

8 A. NorthWestern Energy (“NWE” or the “Company”) has requested preapproval of
9 the purchase and inclusion in rate base of the PPL hydroelectric facilities. If
10 preapproval is granted, NWE has proposed a related annual revenue requirement
11 of \$128,402,190. NWE asserts that the increase for a “typical” residential
12 customer is approximately 4.2%. The MCC has requested that I review the
13 Company’s filing and supporting documentation to determine if the Company’s
14 requested rate change is appropriate.

15 The purpose of my testimony in this case is to present my conclusions
16 and recommendations to the Commission regarding NWE’s test year revenue
17 requirements. The numbers in my testimony and exhibit are what would result if
18 the purchase of the hydro properties is approved and my recommendations are
19 implemented. I will address all revenue requirement issues raised by the filing

1 **Q. MR. CLARK, ARE YOU RECOMMENDING TO THIS COMMISSION**
2 **THAT THE PURCHASE OF THE HYDRO ASSETS BE DISALLOWED?**

3 A. I am not recommending either that the preapproval of the purchase be allowed or
4 disallowed. I am recommending certain adjustments to the test year revenue
5 requirement that I believe are necessary and appropriate at this time if the
6 purchase is preapproved.

7

8 **Q. HAVE YOU PREPARED AN EXHIBIT TO SUPPORT YOUR**
9 **CONCLUSIONS AND RECOMMENDATIONS IN THIS PROCEEDING?**

10 A. Yes, in addition to my Direct Testimony I have prepared Exhibit No.____ (AEC-
11 1). Exhibit No.____ (AEC-1) is a twelve page exhibit that essentially replicates
12 Mr. DiFronzo's Exhibit____ (PJD-1). Exhibit____ (AEC-1) incorporates the
13 adjustments that should be made to the test year revenue requirement in the
14 event that the Commission approves the purchase of the hydro assets at a price
15 of \$900,000,000 and structured as proposed by the Company.

16

1 **ANALYSIS OF FILING**

2

3 **Q. WHAT IS THE TEST YEAR IN THIS CASE?**

4 **A.** The Company has proposed to use a test year of 2014. I accept the use of this
5 period, as adjusted, for the test year in this case. The Company's test year
6 revenue requirement is based entirely on the purchase price of the hydro assets
7 and estimated expenses associated with operating and maintaining them for the
8 first year of ownership.

9

10 **Q. WHAT CONCLUSIONS HAVE YOU REACHED REGARDING**
11 **NORTHWESTERN ENERGY'S REQUESTED ANNUAL REVENUE**
12 **REQUIREMENT IN THIS CASE?**

13 **A.** I first conclude that NWE's requested annual revenue requirement is excessive
14 and should not be allowed by this Commission. Second, and again assuming
15 that the Commission approves the purchase at \$900,000,000, I conclude that the
16 Company would be entitled to a revenue requirement that does not exceed
17 \$114,597,373 for the hydro facilities. These conclusions are based on my
18 analyses and the cost of capital recommendations of MCC witness Dr. Wilson. I
19 also conclude that an additional adjustment to rate base will be required when

1 the Kerr facility is sold to the tribes. Finally I conclude that that an additional
2 rate base adjustment should be seriously considered at this time to avoid
3 intergenerational rate payer inequity. This adjustment would lower my
4 recommended annual revenue requirement as noted later in my testimony.

5
6 **Q. LET US TURN TO YOUR EXHIBIT NO. ___ (AEC-1). WOULD YOU**
7 **PLEASE EXPLAIN THE FIRST ADJUSTMENT THAT YOU ARE**
8 **PROPOSING TO NORTHWESTERN ENERGY'S PRO FORMA**
9 **RESULTS OF OPERATIONS?**

10 A. Yes. The first adjustment that I am proposing is to the overall cost of capital
11 based upon Dr. Wilson's recommendations for capital structure and return on
12 equity capital. Dr. Wilson is proposing a cost of equity capital that does not
13 exceed 9.0% and a capital structure that consists of 45% equity and 55% debt
14 capital. I make the proposed changes to the capital structure, use the Company's
15 cost of debt capital (4.50%) and then substitute 9.0% in lieu of NWE's proposed
16 10.0% cost of equity. The resulting overall cost of capital is 6.53%. The change
17 is shown in Exhibit___ (AEC-1), page 5 of 12. The change flows through the
18 exhibit as constructed by Mr. DiFronzo. The annual revenue requirement impact
19 of making this change is approximately a \$9.4 million reduction to the annual

1 revenue requirement.

2
3 **Q. WHAT IS YOUR NEXT PROPOSED ADJUSTMENT TO THE**
4 **COMPANY'S PRO FORMA RESULTS OF OPERATIONS?**

5 A. My next proposed adjustment reduces the Company's pro forma depreciation
6 expense. The adjustment is based on a reduction in the depreciation rate from
7 the 2.5% proposed by the Company to 2.0% for the hydro generation assets.

8
9 **Q. WHY ARE YOU PROPOSING TO REDUCE THE DEPRECIATION**
10 **RATE FOR THE HYDRO GENERATION ASSETS FROM 2.5% TO**
11 **2.0%?**

12 A. There are two reasons. The first is a review of the 1995 depreciation study
13 referenced by Mr. Kliever in his direct testimony at page 9, lines 17 and 18.
14 The end result of that study was a proposed overall weighted depreciation rate
15 for the hydro generating assets then owned by The Montana Power Company of
16 1.94%. The proposed accrual rate results from a formula of $(1.0 - \text{reserve ratio} -$
17 $\text{net salvage rate}) / \text{remaining life}$. For the hydro generating facilities the reserve
18 ratio was 39.5%, the net salvage factor was -4.7% and the remaining life was
19 33.61 years. Applying the formula to the total hydro generation assets results in

1 the 1.94% proposed accrual rate. My proposed 2.0% depreciation rate is close to
2 that proposed by The Montana Power Company in 1995. To my knowledge, the
3 1995 study is the last such study performed by a regulated entity for these assets.

4 The second reason for this proposal is based upon a review of NWE's
5 response to Data Request No. MCC-053. The response was provided by NWE
6 witness, Mr. William Rhoads. The last paragraph of the response states:

7 The original generating equipment at the
8 projects has operated 50 years or longer
9 with adequate maintenance and repairs.

10 The upgraded system generally described
11 above will also operate at least this long
12 with normal inspection and maintenance.

13 I will assume that NWE will provide the normal inspection and maintenance
14 cited in Mr. Rhoads' response. Therefore, the use of a fifty year life and the
15 resulting 2.0% depreciation rate is reasonable for use in setting the first year
16 annual revenue requirement. This issue can be revisited at such time as the
17 Company completes and files a comprehensive depreciation rate study with the
18 Commission that will be subject to critical review.

1 **Q. DID YOU ALSO CHANGE THE AMORTIZATION PERIOD FOR THE**
2 **ACQUISITION ADJUSTMENT?**

3 A. Yes, I did. Since the Company has proposed a forty year life for the hydro
4 generation assets and a forty year amortization period for the acquisition
5 adjustment, I have used a fifty year amortization period for the acquisition
6 adjustment that is consistent with the proposed life of the hydro generation
7 assets.

8 The changes to the depreciation rate for the hydro generation assets and
9 the change to the amortization period for the acquisition adjustment both are
10 shown in Exhibit___ (AEC-1), page 9 of 12. The changes flow through the
11 exhibit as constructed by Mr. DiFronzo.

12
13 **Q. WHAT IS THE REVENUE REQUIREMENT IMPACT OF THE**
14 **ADJUSTMENTS THAT YOU HAVE PROPOSED ABOVE?**

15 A. As can be seen in Exhibit___ (AEC-1), page 1, line 47, the Total Revenue
16 Requirement is \$114,597,373.

17

1 **Q. IS THERE AN ADDITIONAL ADJUSTMENT THAT YOU ARE**
2 **PROPOSING TO THE TEST YEAR REVENUE REQUIREMENT?**

3 A. No. I do, however, propose another adjustment that should be made upon the
4 presumed sale of the Kerr facilities in 2015. As a general proposition, I do not
5 believe that acquisition adjustments should normally be included in a regulated
6 rate base. NWE has proposed that the unamortized balance of the acquisition
7 adjustment be included in rate base. Thus, the Company is requesting a return of
8 the capital (the amortization expense) and a return on the capital through the rate
9 base inclusion of the unamortized balance. In this case the acquisition
10 adjustment is originally calculated at \$257,598,753 (Direct Testimony of
11 Kendall Kliever, page 7, lines 10 – 12). The acquisition adjustment that is
12 included in the test year revenue requirement, however, is \$346,921,775. The
13 difference is the inclusion of \$89,323,022 related to the anticipated loss that the
14 Company will realize at the time the presumed sale of the Kerr facility is
15 completed in 2015. The loss is measured by the difference between the fixed
16 sale price of \$30,000,000 and the calculated original cost of the facility of
17 \$119,323,022. The issue is whether ratepayers should be responsible for a
18 continuing obligation to pay a return of and a return on the loss associated with a
19 facility that is no longer owned by the Company and is no longer providing used

1 and useful utility service and that is no longer regulated by this Commission. As
2 Mr. Kliewer notes on page five of his direct testimony the hydros were removed
3 from public service when they were sold by the Montana Power Company 15
4 years ago and likewise Kerr will be removed from public service when NWE
5 sells it to the tribes.

6
7 **Q. WHAT DO YOU RECOMMEND THAT THE COMMISSION DO WITH**
8 **REGARD TO THE PORTION OF THE ACQUISITION ADJUSTMENT**
9 **RELATED TO THE KERR FACILITY?**

10 A. I recommend that upon the sale of the Kerr facility \$89,323,022 less the amount
11 amortized at the time of the sale be removed from the acquisition adjustment that
12 is included in rate base. My proposed adjustment would continue to allow the
13 return of the capital to the Company but would protect rate payers from paying a
14 return on the loss.

15
16 **Q. MR. CLARK, DO YOU HAVE ANY ADDITIONAL CONCERNS ABOUT**
17 **THE LEVEL OF THE ANNUAL REVENUE REQUIREMENT THAT**
18 **THE COMPANY HAS PROPOSED IN THIS CASE?**

19 A. Yes, I do. I would note that the concern that I have also relates to the maximum

1 annual revenue requirement that I am recommending in the case as well. My
2 concern is over the depreciation expense reflected in the annual revenue
3 requirement. Typically when one views utility assets the assumption is that they
4 decline in value over time as they are used to provide utility service. At the end
5 of their presumed service life there is a residual value that should reflect either
6 positive or negative salvage which has been reflected in the annual depreciation
7 rates over time. Thus, in the regulatory arena, the ratepayers return the capital
8 expended by the utility on these assets over the useful life of the assets. In the
9 particular case of these hydro facilities, the Company is projecting that these
10 assets will appreciate in value. These appreciated values are a part of the
11 justification that the Company employs for the purchase of these assets at a cost
12 of \$900,000,000. Therefore the Company is attempting to charge current
13 ratepayers for a depreciating asset while at the same time using the same assets
14 at an appreciated value to generate a positive result when comparing the
15 purchase of these assets as compared to other alternatives.

16 This can be seen in Exhibit___ (JMS-1). In that analysis by Mr. Stimatz
17 the assets (less Kerr) have a residual value of \$1,073,389,520 in 2033. Kerr is
18 removed in 2015 at a cost of \$25,000,000. A calculation of the residual value
19 divided by the purchase price less Kerr (in this case \$875,000,000) results in a

1 growth in value of approximately 23% over the 20 year period.

2 Another illustration of this phenomenon is shown in the file named
3 Portfolio Comparison Chart – Supplemental Testimony that was included on a
4 CD that accompanied the Supplemental Testimony NWE filed February 14,
5 2014. There, the estimated value of the assets after a 30 year period is
6 \$1,678,861,122. The net present value of this amount using the Company's
7 requested overall rate of return is \$212,063,298. If we compare the value after
8 thirty years to the purchase price less Kerr (assuming \$30,000,000 for Kerr), we
9 see assets that are assumed to increase in value approximately 93% over the 30
10 year time frame.

11 Thus, NWE is proposing that appreciating assets be depreciated for
12 revenue requirement purposes. This situation creates intergenerational inequity
13 among ratepayers since current ratepayers are paying too much and future
14 ratepayers would pay too little.

15
16 **Q. IS THERE A WAY TO EASE OR ELIMINATE THIS**
17 **INTERGENERATIONAL INEQUITY?**

18 A. Yes, I believe there is. I have calculated the net present value of the future value
19 of the assets in the same manner as the Company did in the above cited Portfolio

1 Comparison Chart. I use a fifty year period to match my proposed 50 year
2 period for the depreciation of the assets. I then discount that value back to
3 present dollars under two scenarios – (1) using the Company’s requested overall
4 rate of return of 7.14% (the same as used in the Chart) and (2) using the overall
5 rate of return proposed by MCC witness Dr. Wilson of 6.53%. If current rate
6 base is reduced by the net present value amount and that rate base deduction is
7 reduced pro rata over the same time period as the hydro facilities are
8 depreciated, the intergenerational inequity between present and future ratepayers
9 is at least ameliorated. Additionally, the appropriate depreciation rate(s) for the
10 hydro facilities can then be formally addressed in a future rate case when the
11 Company completes and files a depreciation rate study that can be fully
12 critiqued. Assuming a discount rate equal to the overall rate of return
13 recommended by Dr. Wilson, the required rate base deduction would be
14 \$104,042,315 in this test year. This reduction to the Company’s proposed rate
15 base would result in an annual revenue requirement of \$105,171,964 which is
16 \$9,425,409 lower than that shown in Exhibit___ (AEC-1).

17

1 **CONCLUSIONS AND RECOMMENDATIONS**

2

3 **Q. WOULD YOU PROVIDE THE COMMISSION WITH YOUR**
4 **CONCLUSIONS AND RECOMMENDATIONS CONCERNING THE**
5 **ALLOWABLE REVENUE CHANGE BASED ON YOUR ANALYSES?**

6 **A.** Yes, I will. Under the assumption that the Commission approves the purchase of
7 the hydro facilities at a cost of \$900,000,000, I conclude that the Company's
8 requested annual revenue requirement associated with the hydro facilities of
9 \$128,402,190 for the electric supply rates is excessive and I recommend that the
10 Commission reject the Company's request for that level of revenue requirement.
11 Given the overall rate of return recommended by Dr. Wilson of 6.53%, I further
12 conclude that the Company is entitled to an annual revenue requirement of
13 \$114,597,183. Therefore, I recommend that the Commission order a revenue
14 requirement for the hydro facilities of no more than \$114,597,373 for the electric
15 supply rates (see Exhibit No.____ (AEC-1), page 1 of 12). These conclusions and
16 recommendations are based on my analysis of the Company's filing and
17 supporting data and information; and upon the use of the cost of capital and
18 capital structure recommendations of MCC witness Dr. John Wilson. The above
19 recommended maximum annual revenue requirement also assumes a full

1 inclusion of the unamortized balance of the acquisition adjustment in rate base.
2 This includes the portion that represents the loss on the prospective sale of the
3 Kerr facility for the first year after the purchase while Kerr is dedicated to public
4 service. Additionally, I recommend that upon the presumed sale of the Kerr
5 facility, the remaining amount of the acquisition adjustment that is related to that
6 facility be removed from rate base in setting prospective rates. Finally, I
7 recommend that the Commission strongly consider a reduction to rate base that
8 would recognize the appreciating nature of the acquired hydro facilities and
9 eliminate or at least greatly ease intergenerational ratepayer inequity. Such a
10 reduction to rate base of \$104,042,315 would reduce the required test period
11 revenue requirement from the above stated amount of \$114,597,373 to
12 \$105,171,964 – a further reduction of \$9,425,409 from the amount proposed by
13 the Company.

14
15 **Q. DOES THIS CONCLUDE YOUR TESTIMONY AT THIS TIME?**

16 **A.** Yes, it does.

Exhibit AEC-1

D2013.12.85

A	B	C	D	E	F
1			Docket No. D2013.12.85		
2			Exhibit (AEC-1)		
3			Page 1 of 12		
4	NorthWestern Energy				
5	PPLM Hydro Assets Purchase				
6	Docket D2013.12.85				
7	Revenue Requirement Analysis				
8					
9					
10			2014		
11	<u>Description</u>		<u>Year End</u>		<u>13-Month Ave</u>
12	Electric Utility Plant in Service				
13	Electric Plant		\$ 553,078,225		\$ 553,078,225
14	Acquisition Adjustment		346,921,775		346,921,775
15	Total Electric Plant		\$ 900,000,000		\$ 900,000,000
16					
17	Less:				
18	Accumulated Depreciation		17,318,699		8,659,349
19	Total Net Plant		\$ 882,681,301		\$ 891,340,651
20					
21	Less: Customer Contributed Capital				
22	Deferred Income Taxes				
23	Accelerated Tax Depreciation Deferred Tax Liability		\$ 5,296,176		\$ 2,648,088
24	NOL Deferred Tax Liability		\$ 16,016,193		\$ 8,008,096
25	Total Customer Contributed Capital		\$ 21,312,369		\$ 10,656,184
26					
27	Plus: Working Capital				
28	Gross Cash Requirements		\$ (10,529,898)		\$ (10,529,898)
29					
30	Total Year End Rate Base		\$ 850,839,034		\$ 870,154,568
31					
32	Rate of Return				6.53%
33					
34	Authorized Return (Avg. Rate Base * Rate of Return)				\$ 56,821,093
35					
36	Cost of Service:				
37	Operation & Maintenance Expense		\$ 41,816,411		
38	Administrative and General Expense		5,807,975		
39	Depreciation		17,318,699		
40	Property & Other Taxes		14,983,335		
41	MPSC & MCC Revenue Tax	0.53%	607,366		
42	Revenue Credits		(43,311,313)		
43	Deferred Income Taxes		21,312,369		
44	Current Income Taxes		(758,561)		
45	Total Cost of Service				\$ 57,776,279
46					
47	Total Revenue Requirement				\$ 114,597,373
48					
49					
50					
51					
52					

	A	B	C	D	E	F
53				Docket No. D2013.12.85		
54				Exhibit__(AEC-1)		
55				Page 2 of 12		
56		Statement - J				
57		<u>Income Tax Computation:</u>		<u>Rate</u>		
58		Revenues		\$	114,597,373	
59		Operation & Maintenance Expense			41,816,411	
60		Administrative and General Expense			5,807,975	
61		Property & Other Taxes			14,983,335	
62		MPSC & MCC Revenue Tax			607,366	
63		Revenue Credits			(43,311,313)	
64		Tax Depreciation (Ref. Exhibit__(PJD-1), Page 10)			32,450,630	
65		Montana Corporate Income Tax			2,744,762	
66		Interest Expense (Based on Avg. Rate Base)	2.48%		21,579,833	
67		Federal Taxable Income		\$	37,918,374	
68						
69		Federal Income Tax @ 35%	35.00%		13,271,431	
70		Federal NOL Dfd for Credit Against Current Tax Expense			(13,271,431)	
71		Federal Current Tax Expense before Tax Credits		\$	-	
72		Production Tax Credit (Ref. Exhibit__(PJD-1), Page 11)			(758,561)	
73		Federal Current Tax Expense With Production Tax Credit		\$	(758,561)	
74						
75		Federal Taxable Income		\$	37,918,374	
76		Montana Corporate Income Tax			2,744,762	
77		Montana Corporate Taxable		\$	40,663,136	
78						
79		Montana Corporate Income Tax @ 6.75%	6.75%		2,744,762	
80		Montana NOL Dfd for Credit Against Current Tax Expense			(2,744,762)	
81		Montana Current Tax Expense		\$	-	
82						
83		Total Current Income Tax Expense		\$	(758,561)	
84						
85		<u>Deferred Income Tax Computation:</u>		<u>Rate</u>		
86		<u>Accelerated Tax Depreciation</u>				
87		Tax Depreciation		\$	32,450,630	
88		Less Book Depreciation			(17,318,699)	
89		Net Deferred Taxable Income		\$	15,131,931	
90		Federal Income Tax Rate			35%	
91		Federal Deferred Income Tax Expense-Accelerated Tax Deprec		\$	5,296,176	
92						
93		<u>Net Operating Loss ("NOL")</u>				
94		Federal Taxable Income offset by NOL		\$	37,918,374	
95		Federal Income Tax Rate			35%	
96		Federal Deferred Income Tax Expense-NOL		\$	13,271,431	
97						
98		Montana Taxable Income offset by NOL		\$	40,663,136	
99		Montana Income Tax Rate			6.75%	
100		Montana Deferred Income Tax Expense-NOL		\$	2,744,762	
101						
102		Total Deferred Income Tax Expense - NOL		\$	16,016,193	
103						
104		Total Deferred Income Tax Expense-Accel Deprec & NOL		\$	21,312,369	

	A	B	C	D	E	F	G	H
1						Docket No. D2013.12.85		
2						Exhibit (AEC-1)		
3						Page 4 of 12		
4	NorthWestern Energy							
5	PPLM Hydro Assets Purchase							
6	Docket D2013.12.85							
7								
8	Calculation of Working Capital							
9								
10	Statement - E							
11								
12								
13					12-Month Ended	¹ Net Lag		Cash
14	Line No.				Expenses	Days		Working Capital
15	1	Operation & Maintenance Expense			\$ 41,816,411			
16	2	Administrative and General Expense			5,807,975			
17	3	Property & Other Taxes			14,983,335			
18	4	Montana Corporate Income Taxes			0			
19	5	Federal Income Taxes			0			
20	6	Subtotal			\$ 62,607,721	-43.21		\$ (7,411,725)
21	7							
22	8							
23	9	13-Month Ave. Rate Base without Working Capital	\$	880,684,466				
24	10							
25	11	² Weighted Cost of Debt		2.48%				
26	12							
27	13	Interest Expense in Return			\$ 21,840,975	-52.11		-3,118,173
28	14							
29	15	Total Cash Working Capital						\$ (10,529,898)
30								
31								
32								
33								
34		¹ Net Lag Days from Management Application Corp. 2008 Lead/Lag Update						
35		Per MPSC Final Order No. 7046h Docket No. D2009.9.129						
36								
37		² Weighted Cost of Debt based on proposed capital structure in this filing.						

	A	B	C	D
1				Docket No. D2013.12.85
2				Exhibit (AEC-1)
3				Page 6 of 12
4	NorthWestern Energy			
5	PPLM Hydro Assets Purchase			
6	Docket D2013.12.85			
7	Annual Operations and Maintenance (O&M) Expenditures			
8				
9	Statement G			
10				
11				
12	Account Number & Title			
13	Hydro Power Generation-Operation			
14	535	Supervision & Engineering	\$ 8,295,450	
15	536	Water for Power	-	
16	537	Hydraulic Expenses	621,368	
17	538	Electric Expenses	1,781,736	
18	539	Miscellaneous Hydraulic Power	2,880,114	
19	540	Rents	21,121,451	
20	Total Operation-Hydro Power Gen.		\$ 34,700,119	
21	Hydro Power Generation-Maintenance			
22	541	Supervision & Engineering	\$ 13,353	
23	542	Structures	1,919,858	
24	543	Reservoirs, Dams & Waterways	979,156	
25	544	Electric Plant	1,857,386	
26	545	Miscellaneous Hydro Plant	2,193,214	
27	546	General Operations Supervision & Engineering	153,324	
28	Total Maintenance-Hydro Power Gen.		\$ 7,116,292	
29	Other Power Supply Expenses			
30	555	Purchased Power	\$ -	
31	Total Other Power Supply Expenses		\$ -	
32	Administrative & General-Operation			
33	920	Admin. & General Salaries	\$ 2,915,464	
34	921	Office Supplies & Expenses	776,215	
35	922	Admin. Expenses Transferred-Cr	-	
36	923	Outside Services Employed	668,315	
37	924	Property Insurance	95,278	
38	925	Injuries & Damages	574,442	
39	926	Employee Pensions & Benefits	220,495	
40	927	Franchise Requirements	-	
41	928	Regulatory Commission Expenses	116,082	
42	929	Duplicate Charges-Cr	-	
43	930	Miscellaneous General Expenses	253,730	
44	931	Rents	187,955	
45	Total Operation-Admin. General		\$ 5,807,975	
46	Admin. & General-Maintenance			
47	935	General Plant	\$ -	
48	Total Maintenance-Admin. General		\$ -	
49	Total Admin. & General Expenses		\$ 5,807,975	
50	Total Oper. & Maint. Expenses		\$ 47,624,386	

	A	B	C	D	E	F	G	H	I	J	K	L
1										Docket No. D2013.12.85		
2										Exhibit (AEC-1)		
3										Page 9 of 12		
4	NorthWestern Energy											
5	PPLM Hydro Assets Purchase											
6	Docket D2013.12.85											
7	Plant Balance and Annual Book Depreciation											
8												
9	Statement - I											
10												
11				Plant Balance		Less Kerr		Depreciation Base				
12				12/31/2013		12/31/2013		12/31/2013		Accrual %		2014 Accrual
13	E303	Intangible Plant		\$ 63,853,971		\$ 63,853,971		\$ -		0.0000		\$ -
14												
15		Total Intangible		\$ 63,853,971		\$ 63,853,971		\$ -				\$ -
16												
17	E330.1	Land		\$ 5,938,196		\$ 1,301,968		\$ 4,636,228		0.0000		\$ -
18	E330.2	Land Rights		10,939		0		10,939		0.0000		0
19	E331.1	Structures - Generation		147,361,016		3,222,213		144,138,803		0.0200		2,882,776
20	E331.3	Structures - Recreation		639,650		195,082		444,568		0.0200		8,891
21	E332.1	Dams - Generation		157,879,816		9,775,970		148,103,846		0.0200		2,962,077
22	E332.2	Dams - Recreation		39,987		1,259		38,728		0.0200		775
23	E333	Turbines & Generators		129,895,054		16,199,824		113,695,230		0.0200		2,273,905
24	E334	Accessory Equipment		77,919,494		1,697,700		76,221,794		0.0200		1,524,436
25	E335.1	Misc - Generation		48,696,519		20,773,252		27,923,267		0.0200		558,465
26	E335.3	Misc - Recreation		63,033		10,362		52,671		0.0200		1,053
27	E336	Roads & Trails		3,152,861		803,636		2,349,225		0.0200		46,985
28												
29		Total Hydro Generation		\$ 571,596,565		\$ 53,981,266		\$ 517,615,299				\$ 10,259,363
30												
31	E350.1	Land		\$ 1,130		\$ -		\$ 1,130		0.0000		\$ -
32	E350.2	Land Rights		512		0		512		0.0171		9
33	E352	Structures		4,765		0		4,765		0.0202		96
34	E353	Substation Equipment		6,409,221		1,487,785		4,921,436		0.0220		108,272
35	E354.1	Towers		1,629		0		1,629		0.0253		41
36	E355	Poles		204,184		0		204,184		0.0455		9,290
37	E355.2	Clearing Land		3,535		0		3,535		0.0216		76
38	E356	Conductor		165,754		0		165,754		0.0188		3,116
39	E362	Substation Equipment		65,849		0		65,849		0.0231		1,521
40	E389.6	Land		1,055		0		1,055		0.0000		0
41	E397.2	Communication		93,077		0		93,077		0.0667		6,208
42												
43		Total Transmission		\$ 6,950,711		\$ 1,487,785		\$ 5,462,926				\$ 120,901
44												
45		Total Intangible, Hydro & Transmission		\$ 642,401,247		\$ 119,323,022		\$ 523,078,225				\$ 10,380,263
46												
47		Acquisition Adjustment		\$ 257,598,753		\$ (89,323,022)		\$ 346,921,775		50 Years		\$ 6,938,436
48												
49		Grand Total		\$ 900,000,000		\$ 30,000,000		\$ 870,000,000				\$ 17,318,699
50												
51	Note - Hydro accounts depreciated over 50 years = 2.0 % rate - Transmission accrual rates are from the 2012 Montana Depreciation Study											

	A	B	C	D	E	F	G
1							Docket No. D2013.12.85
2							Exhibit (AEC-1)
3							Page 10 of 12
4		NorthWestern Energy					
5		PPLM Hydro Assets Purchase					
6		Docket D2013.12.85					
7		Tax Depreciation Summary					
8							
9		Statement - J					
10							Tax Depreciation
11							Method - MACRS
12		<u>Description</u>	<u>Plant Balance</u>	<u>Tax</u>		<u>Year</u>	<u>Rate</u>
13	E330.1	Land	\$ 4,636,228	\$ -		1	3.750%
14	E330.2	Land Rights	10,939	-		2	7.219%
15	E331.1	Structures - Generation	144,138,803	5,405,205		3	6.677%
16	E331.3	Structures - Recreation	444,568	16,671		4	6.177%
17	E332.1	Dams - Generation	148,103,846	5,553,894		5	5.713%
18	E332.2	Dams - Recreation	38,728	1,452		6	5.285%
19	E333	Turbines & Generators	113,695,230	4,263,571		7	4.888%
20	E334	Accessory Equipment	76,221,794	2,858,317		8	4.522%
21	E335.1	Misc - Generation	27,923,267	1,047,123		9	4.462%
22	E335.3	Misc - Recreation	52,671	1,975		10	4.461%
23	E336	Roads & Trails	2,349,225	88,096		11	4.462%
24						12	4.461%
25		Total Hydro Generation	\$ 517,615,299	\$ 19,236,305		13	4.462%
26						14	4.461%
27	E350.1	Land	\$ 1,130	\$ -		15	4.462%
28	E350.2	Land Rights	512	-		16	4.461%
29	E352	Structures	4,765	179		17	4.462%
30	E353	Substation Equipment	4,921,436	184,554		18	4.461%
31	E354.1	Towers	1,629	61		19	4.462%
32	E355	Poles	204,184	7,657		20	4.461%
33	E355.2	Clearing Land	3,535	133		21	2.231%
34	E356	Conductor	165,754	6,216			
35	E362	Substation Equipment	65,849	2,469			
36	E389.6	Land	1,055	-			
37	E397.2	Communication	93,077	3,490			
38							
39		Total Transmission	\$ 5,462,926	\$ 204,759			
40							
41		Total Hydro & Transmission	\$ 523,078,225	\$ 19,441,064			
42							
43		Acquisition Adjustment	\$ 346,921,775	\$ 13,009,567			
44							
45		Total	\$ 870,000,000	\$ 32,450,630			
46							
47							

	A	B	C	D	E	F	G	H	
1						Docket No. D2013.12.85			
2						Exhibit (AEC-1)			
3						Page 12 of 12			
4	NorthWestern Energy								
5	PPLM Hydro Assets Purchase								
6	Property & Taxes Other than Income								
7									
8	Statement K								
9									
10		<u>Description</u>		<u>Rate</u>					
11									
12		<u>Montana Property Tax:</u>							
13		Total Plant Value			\$ 900,000,000				
14		Estimated Cost to Market Factor			53.1351%				
15		Taxable Base			\$ 478,215,499				
16		Taxable		6%	\$ 28,692,930				
17		Estimated Mill Levy			0.489679				
18		Total Property Tax			\$ 14,050,317				
19									
20									
21									
22		<u>Electrical Energy License Tax (EELT):</u>							
23		Net Generation MWH			3,507,627				
24		EELT Tax Rate (Per MWh)			\$ 0.20				
25		EELT Total			\$ 701,525				
26									
27									
28									
29		<u>Wholesale Energy Tax (WET):</u>							
30		<u>Distribution Service Provider Delivered in State</u>							
31		Kerr	(MWh)		1,013,811				
32		All other Hydro			2,493,816				
33		Total Production			3,507,627				
34									
35		Total Electricity Produced in MT Delivered in MT			1,883,120				
36		Excess Generation From Hydro Facilities Del Out of State			1,624,507				
37		¹ Reduce for losses (.05%)			81,225				
38		Taxable Base	(MWh)		1,543,282				
39		Tax Rate (Per MWh)			\$ 0.15				
40		WET Total			\$ 231,492				
41									
42									
43		Total Property & Other Taxes			\$ 14,983,335				
44									
45									
46		¹ Per MCA 15-72-104 (b) The amount of kilowatt hours subject to tax must be reduced by 5% to compensate for transmission line losses.							