



Department of Energy

Bonneville Power Administration
P.O. Box 3621
Portland, Oregon 97208-3621

PUBLIC AFFAIRS

April 27, 2009

In reply refer to: DK-7

Ms Grace Gilmore
Utility Appraiser - Large Customer Team
Montana Department of Revenue
PO Box 5805
Helena, Montana 59604-5805

RE: FOIA #09-032

Dear Ms. Gilmore:

This is your final response to your request for information from the Bonneville Power Administration (BPA) under the Freedom of Information Act (FOIA). BPA's costs of investment in 500 kV transmission facilities for the State of Montana, as of December 31, 2008, is as reported below.

Garrison-Taft No. 1 & 2, 500 kV transmission lines	\$179,859,325
Broadview-Garrison No. 1 & 2 500 kV transmission lines	97,581,338
Montana portion of the Dworshak-Taft 500 kV transmission line	1,977,361
Taft-Hot Springs 500 kV transmission line	10,230,848
Montana portion of the Taft-Bell 500 kV transmission line	2,070,035
Taft Substation	38,642,813
Garrison Substation	63,692,738
Hot Springs Substation	5,785,562
Total Investments	\$399,840,020

You will find enclosed a copy of the paper work related to the Montana 500 kV investment. A copy of the agreement between BPA and Montana Colstrip Owners (Montana Intertie Agreement), Contract No. DE-MS79-81BP90210 was provided in your response to FOIA request 07-008 dated January 25, 2007. Also provided is a copy of "Revision G" which was effective as of October 1, 2008.

If you are dissatisfied with this determination, you may make an appeal within thirty (30) days of receipt of this letter to the Director of Office of Hearings and Appeals, Department of Energy, 1000 Independence Avenue SW, Washington, DC 20585. Both the envelope and the letter must be clearly marked "Freedom of Information Act appeal." There is no charge for your request.

I appreciate the opportunity to assist you with this matter. If you have any questions or concerns about this letter, please contact Laura M. Atterbury, FOIA/Privacy Act Specialist, at 503-230-7305.

Sincerely,

/s/ Christina J. Brannon

Christina J. Brannon
Freedom of Information Act/Privacy Act Officer

Enclosures

Investment Summary
2007

GARRISON-TAFT NO. 1 #20000225 and GARRISON-TAFT NO. 2 #20000226

Profile ID	Garrison-Taft 1		Garrison-Taft 2		Total Investment for both lines
	Montana 500 kv	Montana 500 kv	Montana 500 kv	Total Investment for both lines	
3502	\$ 3,712,094	\$ 3,710,141	\$ 7,422,235		
3540	\$ 31,281,225	\$ 31,281,225	\$ 62,562,449		
3560	\$ 46,711,374	\$ 46,711,374	\$ 93,422,748		
3590	\$ 8,225,947	\$ 8,225,947	\$ 16,451,893		
Line Total	\$ 89,930,639	\$ 89,928,686	\$ 179,859,325		

All investment for the Garrison-Taft No 1 & No 2 double circuit transmission lines is in Montana

BROADVIEW-GARRISON NO. 1 #20000093 and BROADVIEW-GARRISON NO. 2 #20000094

Profile ID	Broadview-Garrison 1		Broadview-Garrison 2		Total Investment for both lines
	Montana 500 kv	Montana 500 kv	Montana 500 kv	Total Investment for both lines	
3501	\$ 835,607	\$ 835,607	\$ 1,671,214		
3502	\$ 819,451	\$ 819,449	\$ 1,638,900		
3540	\$ 20,684,299	\$ 20,684,297	\$ 41,368,596		
3560	\$ 23,256,324	\$ 22,965,722	\$ 46,222,045		
3590	\$ 3,340,292	\$ 3,340,291	\$ 6,680,583		
Line Total	\$ 48,935,972	\$ 48,645,366	\$ 97,581,338		

All investment for the Broadview-Garrison No 1 & No 2 double circuit transmission lines is in Montana

DWORSHAK-TAFT #20000185 and TAFT-HOT SPRINGS NO 1 LINE #20000562

Profile ID	Dworshak-Taft	Dworshak-Taft	Dworshak-Taft	Taft-Hot Springs	Total Investment for both lines
	500 kv Montana (8.5%)	500 kv Other States (91.5%)	500 kv Total	500 kv Montana	
3502	\$ 82,781	\$ 889,091	\$ 971,872	\$ 89,115	\$ 1,060,987
3540	\$ 744,963	\$ 8,001,094	\$ 8,746,056	\$ 5,136,573	\$ 13,882,629
3560	\$ 887,638	\$ 9,534,375	\$ 10,422,013	\$ 4,547,777	\$ 14,969,790
3590	\$ 261,979	\$ 1,126,476	\$ 1,388,455	\$ 457,382	\$ 1,845,837
Line Total	\$ 1,977,361	\$ 19,551,035	\$ 21,528,396	\$ 10,230,848	\$ 31,759,244

The Dworshak-Taft line is 90.4 miles with **7.7 miles in the State of Montana**. The remainder of the line is in Idaho.
The Taft-Hot Springs line is all in the State of Montana.

TAFT-BELL LINE #20000561

Profile ID	500 kv		Total Investment
	Montana (2.4%)	Other States (97.6%)	
3501	\$ 3,288	\$ 134,527	\$ 137,815
3502	\$ 56,144	\$ 2,297,012	\$ 2,353,155
3540	\$ 743,356	\$ 30,412,959	\$ 31,156,315
3560	\$ 765,902	\$ 31,335,371	\$ 32,101,273
3590	\$ 501,346	\$ 20,511,582	\$ 21,012,928
Line Total	\$ 2,070,035	\$ 84,691,451	\$ 86,761,487

The TAFT-Bell line is 96.4 miles long with **2.3 miles in the State of Montana**. The remainder is in Idaho and Washington

Investment Summary
2007

TAFT SUBSTATION #10000789

\$ 38,642,813	500kv	100%
\$ 38,642,813 Total investment in 500 kv equipment		

Taft substation is a 500kV.GIS substation entirely enclosed in a building.
therefor all investment should be included.

GARRISON SUBSTATION #10000287

\$ 7,091,084	Land, buildings, site	0%
\$ 7,092,355	Less than 500 kV	0%
\$ 44,393,931	500 kV	100%
\$ 22,348,324	Voltage not indicated	86%
\$ 63,692,738 Total investment in 500kv equipment		

HOT SPRINGS SUBSTATION #10000364

\$ 2,205,859	Land, buildings, site	0%
\$ 4,810,989	Less than 500 kV	0%
\$ 4,096,009	500 kV	100%
\$ 3,674,027	voltage not indicated	46%
\$ 5,785,562 Total investment in 500kv equipment		

\$ 399,840,020 Total investment in Montana

OPERATION AND MAINTENANCE PROVISIONS AND CHARGES

This Revision G updates: 1) O&M charges pursuant to Bonneville's new O&M and ACR tables dated September 30, 2007; 2) the calculation on pages 2 through 4 to reflect new investment dollar amounts for capacitors and reactors (2005 through 2007); and 3) the company name change from Montana Power Company to NorthWestern Energy, which occurred in 2000.

1. BONNEVILLE SHALL:

- (a) Operate and maintain the series and shunt compensation facilities located at Garrison Substation, part of which are required by transmission facilities constructed by the Companies between Townsend and Broadview, in the same manner in which Bonneville operates and maintains similar facilities of the Government; and
 - (b) Operate and maintain all power system control facilities at Garrison, the maintenance for which is not provided for pursuant to another agreement, which are necessary to integrate the Companies' facilities with the Government's control system, and from time to time when Bonneville determines it is necessary, modify or replace the Government power system control facilities.
2. For routine replacement of minor components of any of the equipment described in Section 1(a) above and any part of Section 1(b) above, if any, which belongs to NorthWestern Energy or to the Companies collectively, Bonneville shall provide and install such replacement parts and NorthWestern Energy on behalf of the Companies pursuant to the Colstrip Project Transmission Agreement, shall compensate Bonneville for the Companies' pro rata share of replacement part costs. By mutual agreement of the parties, NorthWestern Energy may provide Bonneville, at the Companies' expense, replacement parts in lieu of such compensation. Such provision of replacement parts by NorthWestern Energy shall be subject to Bonneville's acceptance of such parts as equivalent to those that Bonneville installed or would have installed and shall be further subject to such parts being made available at a time and place acceptable to Bonneville.
3. In the event of a major failure of any of the equipment described in Section 1(a) above, the parties shall use every reasonable effort in good faith to negotiate and execute a mutually acceptable agreement providing for the replacement or repair of such equipment. The Companies shall pay their pro rata share of the cost of any such replacement or repair.
4. The Companies agree to pay their pro rata share of the cost of modifying or replacing any of the equipment described in Section 1(a) above if and when Bonneville requires such modification or replacement to make the operation of such equipment compatible with the operation of other Government equipment. Bonneville shall provide reasonable advance notice to the Companies consistent with

the availability of equipment and budgetary planning that such modification or replacement is required. Any such modification or replacement of equipment will be required only in keeping with prudent utility practice and (a) when Bonneville similarly replaces or modifies similar equipment owned by the Government at the same station; (b) as a part of a programmed project involving a significant portion of Bonneville's system; or (c) by mutual agreement of the parties.

5. For performing the duties in Sections 1(a) and 1(b) above, NorthWestern Energy, on behalf of the Companies, shall pay Bonneville each month in the term hereof, commencing on the Effective Date, the monthly charge (Monthly Line Compensation Charge) for the Companies determined in accordance with the method illustrated in Section 6 below. The Monthly Line Compensation Charge shall be updated utilizing those annual cost ratios derived from tables used to update O&M charges pursuant to Bonneville's Use-of-Facilities Transmission (UFT) Rate Schedule.

6. CALCULATION OF MONTHLY LINE COMPENSATION CHARGE

Given:

Garrison-Townsend Distance	= 91.7 miles
Townsend-Broadview Distance	= <u>133.0</u> miles
Total	= 224.7 miles

Series capacitors required at Garrison: 2 - 474,000 kVAr units (one for each line)

Shunt reactors required at Garrison: 2 - 225,000 kVAr units (one for each line)

Since all series capacitors for the Garrison-Broadview line are located at Garrison, the responsibility for the costs of such equipment shall be prorated based on line mileage.

$$\text{Townsend-Broadview share} = \frac{133.0}{224.7} = 59.19\%$$

The shunt reactors at Garrison are one-half of the total required for the Garrison-Broadview line; the other one-half being located at Broadview. It is deemed that the reactors at Garrison serve one-half of the line ($224.7 \div 2 = 112.35$ miles) of which 91.7 miles belong to the Government and 20.65 miles belong to the Companies. Prorating based on line mileage, the:

$$\text{Townsend - Broadview share} = \frac{20.65}{112.35} = 18.38\%$$

Section 6 (continued on next page)

6. CALCULATION OF MONTHLY LINE COMPENSATION CHARGE (continued)

Facilities	Investment	Annual Cost		Annual Cost with O&M	Annual Cost Without O&M	O&M	Total Annual Cost ²
		Ratio with O&M ¹	Ratio without O&M				
Series Capacitors	\$4,447,525 ³	12.37%	n/a	\$550,159	n/a	n/a	\$550,159
Shunt Reactors	\$1,029,545 ³	12.37%	n/a	\$127,355	n/a	n/a	\$127,355
Access Road & Bridge	\$ 179,925	n/a	0.0780 ⁴	n/a	\$14,034	\$2,339 ⁵	\$ 16,373
				\$677,514	\$14,034	\$2,339	\$693,887

Monthly Line Compensation Charge: \$693,887/year ÷ 12 = \$57,824/month

Proration of Monthly Line compensation Charge between the Companies and Bonneville: See Section d of Revision E to Exhibit D for Calculation of Capacity Requirements (CR):
Proration of Monthly Line Compensation Charge between the Companies and Bonneville:

	<u>CR (kW)</u>	<u>Monthly Line Compensation Charge</u>
Companies	1,730,000	\$52,238
Bonneville	<u>185,000</u>	<u>5,586</u>
	<u>1,915,000</u>	<u>\$57,824</u>

¹ Column 12 (which includes O&M) from ACR table dated September 30, 2007, for Garrison Substation (Type H5 substation). The typical Annual cost method subtracts column 8 from column 12, which does not capture O&M costs. Yet because there is no separate dollar amounts in the O&M tables, rather than subtracting column 8 (percent of total O&M of annual cost ratio) from column 12 (total including general plant), O&M costs are captured using the total cost (just column 12.)

² Actual costs of operating and maintaining any facilities described in Section 1(b) above which are not owned by the Government shall be separately identified, added to the Total Annual Cost, and billed to NorthWestern Energy.

	Total Investment	Townsend-Broadview Shares, Exhibit G	Townsend-Garrison Shares, Exhibit D-Term. Fac.
East Capacitors	\$7,513,981	\$4,447,525	\$3,066,456
East Reactors	\$5,601,443	\$1,029,545	\$4,571,894
Access Road & Bridge	\$ 979,120	\$ 179,925	\$ 799,195
Series Capacitors Investment x Townsend-Broadview's Shares = \$7,513,981 x 0.5919= \$4,447,525 (see page 2 of this Section 6: CALCULATION OF MONTHLY LINE COMPENSATION CHARGE - 59.19%).			
Shunt Reactor Investment x Townsend-Broadview's Shares = \$5,601,443 x 0.1838 = \$1,029,545 (see page 2 of this Section 6: CALCULATION OF MONTHLY LINE COMPENSATION CHARGE - 18.38%)			

Revision G
Exhibit G, Page 4 of 4
Contract No. DE-MS79-81BP90210
Colstrip Project
Effective at 0000 hours on October 1, 2008

Footnotes (continued)

- ¹ (a) Annual cost Ratios of 0.0780 is derived from the following table. (See footnote 5, Revision E to Exhibit D as otherwise updated or revised.)
- | | |
|--------------------|--|
| Total I&A | 0.06500 |
| Plus General Plant | + 0.01300 (0.01300 is fixed by the contract, see Amendment No. 1 section 1(o)) |
| | 0.07800 |
- (b) Annual cost Ratios shall be revised annually to reflect actual costs. Such annual revisions shall be made effective as of each October 1 for the Fiscal Year beginning on such October 1. The O&M costs shall be calculated on Bonneville's average system costs, not equipment-specific costs.
- ; \$179,925 x 0.01300 = \$2,339