

**BONNEVILLE POWER ADMINISTRATION
TRANSMISSION SERVICES CAPITAL SPENDING**

TRANSMISSION CAPITAL SPENDING ON REPLACEMENT PROGRAMS DIRECT COSTS			
	FY2005	FY2006	FY2007
Transmission Line Replacements	3,895,041	2,040,890	5,336,048
Wood Pole Replacements	9,192,121	7,962,612	8,006,529
NCI Replacements	115,066	58,985	141,873
Spacer Damper Replacements	1,900,278	9,404,180	6,658,091
Nonelectric Plant Replacements	3,492,220	4,575,687	1,202,504
Substation Replacements	9,429,580	6,291,103	18,674,257
Transformer Replacements	21,876	-	321,097
System Protection Replacements	4,934,808	6,882,464	4,058,610
Power System Control Replacements	3,930,168	5,159,237	1,621,831
Helicopters/Aircraft Replacement	-	-	8,070,421
Tools and Equipment	4,925,697	838,106	9,636,369
Misc. Facilities - From NWR	39,987	4,385,499	-
Total System Replacements	41,876,841	47,598,763	63,727,631

Financial Disclosure:

This information is being released externally by BPA on July 14, 2008 as an ad hoc report or analysis generated for a specific purpose. The information provided is based upon data found in Agency Financial Information but may not be found verbatim in an External Standard Financial Report or other Agency Financial Information release.

**BONNEVILLE POWER ADMINISTRATION
TRANSMISSION SERVICES ASSET PLANNING ESTIMATES (000'S)- DIRECT COSTS**

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
MAIN GRID									
Project Name									
McNary-John Day 500 kV Line	5,212.7	85,079.8	81,397.5	11,073.3	0.0	0.0	0.0	0.0	0.0
Line Relocations on Tribal Lands	3,648.9	3,722.2	3,798.5	3,875.7	3,951.6	4,029.1	4,108.1	4,188.6	4,270.7
Seattle Area 500/230 kV Bank	0.0	0.0	0.0	0.0	11,290.3	17,267.5	0.0	0.0	0.0
Chemawa 230/115 kV Bank	0.0	0.0	0.0	0.0	0.0	0.0	587.0	5,384.0	0.0
Olympia 230/115KV Bank #3	0.0	0.0	0.0	0.0	0.0	0.0	4,093.0	4,786.0	0.0
Olympic Peninsula Reinforcement	21,893.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Shelton-Fairmount 230 kV line #3	0.0	0.0	0.0	0.0	0.0	5,755.8	7,623.0	12,189.0	0.0
Wautoma-Ostrander tap (Station Z) to Big Eddy	2,085.1	5,317.5	26,047.2	32,112.6	22,580.7	0.0	0.0	0.0	0.0
North Cross Cascades Reinforcement (Phase I)	0.0	0.0	0.0	5,536.7	11,290.3	28,779.1	0.0	0.0	0.0
North Cross Cascades 500 kV Line (Phase II)	0.0	0.0	0.0	0.0	0.0	5,755.8	7,622.5	38,510.3	52,484.0
Allston 500 kV Shunt Capacitor	1,042.5	4,254.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
West of Cascades South Reinforcement	0.0	0.0	0.0	0.0	5,645.2	11,511.6	5,645.0	0.0	0.0
Keeler-Forest Grove 115 kV Line Upgrade	0.0	0.0	1,085.3	5,536.7	0.0	0.0	0.0	0.0	0.0
Happy Valley substation Development	0.0	0.0	0.0	5,536.7	5,645.2	0.0	0.0	0.0	0.0
Central Oregon 500/230 kV Tx	0.0	0.0	5,426.5	16,610.0	16,935.5	0.0	0.0	0.0	0.0
LaPine 230 kV Shunt Capacitor Addition	781.9	1,329.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Midway-Vantage 230 kV Line Upgrade	2,085.1	8,508.0	4,341.2	0.0	0.0	0.0	0.0	0.0	0.0
Vantage 230 kV bus sectionalizing breaker addition	2,085.1	2,127.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
White Bluffs 115 kV Bus Sectionalizing Breaker	1,042.5	1,063.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
I-5 Corridor Reinforcement	2,085.1	10,635.0	65,118.0	79,727.8	76,774.4	80,581.5	0.0	0.0	0.0
Redmond 230/115kV Bank #2	2,085.1	8,508.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Libby-Troy (FEC) 115kV Line Rebuild	15,638.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Clatsop 230/115KV Tx	0.0	0.0	2,170.6	5,536.7	0.0	0.0	0.0	0.0	0.0
Mid-Columbia Area Reinforcement	0.0	0.0	4,341.2	4,429.3	0.0	0.0	0.0	0.0	0.0
Tri-Cities Area Reinforcement	0.0	0.0	2,170.6	4,429.3	4,516.1	0.0	0.0	0.0	0.0
Network Open Season Additions	1,042.5	4,254.0	4,341.2	4,429.3	4,516.1	4,604.7	4,694.9	4,786.9	4,880.8
Other Associated Gen Integration	2,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0
NERC Criteria Compliance	5,000.0	9,000.0	9,000.0	9,000.0	9,000.0	9,000.0	9,000.0	9,000.0	9,000.0
Main Grid Reactive Facilities	2,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0
Various Additions	2,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0	4,000.0
Other Capital Items:									
Completion of Prior Yr Items	104.3	106.3	108.5	110.7	112.9	115.1	115.1	115.1	115.1
Cap-to-Exp Adjustments	(3,000.0)	(3,000.0)	(3,000.0)	(3,000.0)	(3,000.0)	(3,000.0)	(3,000.0)	(3,000.0)	(3,000.0)
Non-Wires Program	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0
Total Main Grid	71,832.4	155,904.7	221,346.3	199,944.7	184,258.4	179,400.2	55,488.6	90,959.9	82,750.6

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
AREA & CUSTOMER SERVICE									
Project Name									
South Oregon Coast (Bandon-Rogue 115)	0.0	0.0	0.0	0.0	1,129.0	8,058.1	24,313.0	0.0	0.0
Southern Oregon Coast (Rogue SVC)	4,170.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lower Valley Reinforcement (Hooper Springs)	4,170.2	22,333.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Drummond Shunt Cap	521.3	1,595.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Targhee Reinforcement	0.0	0.0	0.0	0.0	0.0	2,302.3	3,630.7	0.0	0.0
City of Centralia	5,212.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lebanon 115 kV Shunt Capacitor	521.3	2,658.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Lebanon 230/115 kV Transformer Addition	0.0	0.0	0.0	0.0	0.0	0.0	0.0	598.0	1,220.5
Area Service Reactive Additions	2,085.1	2,127.0	3,255.9	3,322.0	3,387.1	3,453.5	3,521.2	3,590.2	3,660.6
Customer Service Additions	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0	3,000.0
Total Area & Customer Srvc	19,680.7	31,714.4	6,255.9	6,322.0	7,516.1	16,814.0	34,464.9	7,188.2	7,881.1

UPGRADES & ADDITIONS

Project Name									
Security Enhancements	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
System Controls	7,297.8	7,444.5	7,597.1	7,751.3	7,903.2	8,058.1	8,216.1	8,377.1	8,541.3
Celio Upgrades - various	4,170.2	23,397.0	21,488.9	7,086.9	0.0	0.0	0.0	0.0	0.0
CC Systems	6,776.5	8,508.0	8,682.4	7,751.3	7,903.2	8,058.1	8,216.1	8,377.1	8,541.3
Fiber Optics (Incls Terminations)	10,425.4	12,762.0	15,194.2	22,146.6	14,677.5	16,116.3	16,432.2	16,754.2	17,082.6
VHF mobile radio system upgrade to P25	455.6	1,063.5	5,426.5	7,751.3	9,032.3	9,209.3	0.0	0.0	0.0
Albany-Eugene Rebuild	2,085.1	8,508.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Access Roads	15,638.1	10,635.0	10,853.0	11,073.3	11,290.3	11,511.6	11,737.3	11,967.3	12,201.9
Tucannon-Walla Walla 115 kV Line Rebuild	1,042.5	11,698.5	11,938.3	0.0	0.0	0.0	0.0	0.0	0.0
Misc Sub Additions	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0	5,000.0
Ponderosa Transformer Critical Spare	0.0	0.0	3,907.1	0.0	0.0	0.0	0.0	0.0	0.0
Monroe Transformer Critical Spare	0.0	0.0	3,907.1	0.0	0.0	0.0	0.0	0.0	0.0
Sickler Transformer Critical Spare	0.0	0.0	3,907.1	0.0	0.0	0.0	0.0	0.0	0.0
Hot Springs Transformer Critical Spare	0.0	0.0	3,907.1	0.0	0.0	0.0	0.0	0.0	0.0
Alvey Transformer Critical Spare	0.0	0.0	3,907.1	0.0	0.0	0.0	0.0	0.0	0.0
Palisades-Goshen 115kv - wood pole replacement	2,239.4	1,719.7	1,754.9	448.5	0.0	0.0	0.0	0.0	0.0
Albeni Falls-Sand Creek 115kv reconductor	2,212.3	372.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Milton Tap To Walla Walla-Pendleton #1- reconductor	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
LaGrande Substation - (2) 230kV breakers	85.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Columbia-Ellensburg Line Upgrade	2,452.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Upgrades & Additions	59,880.5	91,108.2	107,470.7	69,009.3	55,806.6	57,953.5	49,601.7	50,475.7	51,367.1

	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017
SYSTEM REPLACEMENTS									
Project Name									
Transmission Line Replcmts	1,563.8	5,317.5	5,426.5	5,536.7	5,645.2	5,755.8	5,868.6	5,983.7	6,100.9
Wood Pole Replacement	6,255.3	6,381.0	6,511.8	6,644.0	6,774.2	6,907.0	7,042.4	7,180.4	7,321.1
NCI Replacements	312.8	319.0	325.6	332.2	338.7	345.3	352.1	359.0	366.1
Spacer Damper Replacements	10,425.4	10,635.0	10,853.0	11,073.3	11,290.3	11,511.6	11,737.3	11,967.3	12,201.9
Nonelectric Plant Replacements	270.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Substation Replacements	9,382.9	14,357.2	14,651.5	14,949.0	15,242.0	15,540.7	15,845.3	16,155.9	16,472.5
Transformer Replacements	0.0	0.0	35,163.7	4,429.3	24,838.8	5,525.6	5,633.9	5,744.3	5,856.9
System Protection Replacements	7,297.8	7,444.5	7,597.1	7,751.3	7,903.2	8,058.1	8,216.1	8,377.1	8,541.3
Power System Cntrl Replacements	8,340.3	10,635.0	16,279.5	16,610.0	16,935.5	17,267.5	17,605.9	17,951.0	18,302.0
Helicopters	8,340.3	4,254.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Aircraft Replacement	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tools and Equipment	7,000.0	7,000.0	7,000.0	7,000.0	7,000.0	7,000.0	7,000.0	7,000.0	7,000.0
Big Eddy - Transformer Replcmts (3)	9,382.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Tacoma - Transformer Replcmt	104.3	4,466.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Bellingham Transformer Replacement	2,085.1	2,127.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Celilo DC Bushing Replcmts	2,116.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Celilo Control Replacements	1,042.5	4,041.3	16,279.5	16,610.0	225.8	0.0	0.0	0.0	0.0
Celilo Transformer Replacement	6,791.1	1,732.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Malin Shunt Reactor Replacement	834.0	212.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Ashe Substation - Replace 230kV PCB	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Sacajawea Transformer Replacement	10,842.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Misc. Facilities - From NWR	10,329.9	55,570.5	18,335.0	18,399.7	18,465.7	18,533.0	0.0	0.0	0.0
Total System Replacements	102,717.3	134,493.8	138,423.2	109,335.4	114,659.5	96,444.7	79,301.6	80,718.7	82,162.7
SUB TOTAL TBL CAPITAL (DIRECT)	254,110.8	413,221.2	473,496.2	384,611.4	362,240.6	350,612.4	218,856.8	229,342.5	224,161.5

Note: FY 2008 Start of Year Budget for Transmission direct capital spending is \$236.9M.

Financial Disclosure:

FY 2009 - FY2017 information is provided July 2008 and cannot be found in BPA-approved Agency Financial information, but was provided for discussion or exploratory purposes only as projections of program activity levels, etc. This information is a derived estimate for presentation purposes and cannot be found in BPA-approved Agency Financial Information but is provided for discussion or exploratory purposes only.