



MEMORANDUM

EUGENE WATER & ELECTRIC BOARD
ELECTRIC SERVICES DIVISION

Rely on us.

TO: Commissioners Farmer, Brown, Cassidy, Cunningham and Ernst
FROM: Dean Ahlsten
DATE: July 14, 2009
RE: 2010-2014 Electric Capital Improvement Plan

Issue Statement

Staff is performing its annual update of the Electric Division 5-year Capital Improvement Plan (CIP). At the July 21 Financial/Budget Workshop, I intend to present an overview of the 2010-2014 CIP for Board review and discussion.¹ Staff will be requesting formal approval of the CIP at the September 15 Board meeting.

Background

At its May 5, 2009 meeting, in accordance with financial policy EL-1, the Board approved Budget Amendments 3 and 4 and a modification to the 2009-13 CIP (Attachment A). Subsequently, Program Managers reviewed current and emerging capital requirements and revised the 5-year Plan accordingly.

At its July 24, 2007 financial retreat the Board instructed staff to manage the CIP in order to maintain \$10 million in reserve throughout the course of the 5-year Plan. Performance against this target is shown in the proposed Summary of Expenditures & Funds (Attachment B).

Discussion

A number of factors have combined to negatively impact capital reserves.

- 1) Economic Conditions:
 - Projected interest earnings on reserves have been reduced (\$500,000).
 - The reduction in residential and commercial development during the 2009-2011 timeframe has resulted in loss of customer contributions to capital (\$4

¹ This memorandum includes the following attachments

1. Attachment A. Revised 2009-2013 CIP Summary of Expenditures & Funds (Approved May 5, 2009)
2. Attachment B. 2010-2014 CIP Summary of Expenditures & Funds (Proposed)
3. Attachment C. 2010-2014 CIP Allocation of Expenditures by Work Category

million). **These contributions fund one line crew on average.** These crew resources are being diverted to compliance work in lieu of new construction.

- 2) Renewable Resource Acquisitions: Integration of the Seneca Sustainable, LLC co-generation facility accelerated the construction of a one-mile segment of the planned Lane-Irvington 115 kV transmission line (\$750,000)
- 3) Aging Infrastructure: EWEB experienced the failure of a 20 MVA substation power transformer in March 2009. Furthermore, recent results of annual oil testing performed on EWEB transformers indicate that six other units are showing signs of internal heating/deterioration. One of the six appears to be approaching imminent failure and it has been scheduled for removal and replacement. The remaining five transformers are on a “watch list” and may deteriorate to the point of replacement within the next 5 years. Two 33 MVA transformers (for Bethel & Seneca Substation) have been programmed into the CIP (\$1.9 million).
- 4) EWEB Bridge Replacements: EWEB’s Hurd Bridge, on the Leaburg Canal, is approaching a point of deterioration at which point it will require de-rating. It has been scheduled for replacement in 2012 (\$1 million).
- 5) Regulatory Compliance Impacts: NERC Standards require that provisions be made for continued system operations in the event the primary control center is not functional (T&D dispatch and power trading operations). A backup control center, assumed to be located at the Roosevelt Operations Center, has been added in 2013. The majority of the work is associated with reconfiguration of the fiber backbone (\$1.5 million).
- 6) Meter replacements: In conjunction with the deferral of the Advanced Metering Infrastructure (AMI) project, funding was added for replacement/upkeep of existing commercial metering plant (\$875,000).

Other additions were made for emergent priorities, and numerous projects were deferred in kind. However, the overall net effect of the revisions to the CIP is a drawdown on reserves by approximately \$3 million. On a planning basis, staff anticipates a 2009 year-end capital cash reserve balance of \$9.9 million, which includes carryover of unspent funds and interest earnings.

Rate funding for capital has been fixed at \$15.7 million per year, for the past five years, following the 5.7% rate increase for capital in 2004. Beginning in 2011, the \$15.7 million escalates by 3% per year. However, given the mounting backlog of renewal/replacement work driven by aging system infrastructure and increasing compliance obligations, staff proposes to reassess capital funding levels over the next year to determine if they are adequate.

Proposed 5-year capital expenditures are summarized below according to “Work Category” types. The percentages reflect expenses in each category as a percentage of total capital funds available. Attachment C provides a greater detail of expenditures by category.

<u>Work Category</u>	<u>5-Year Expenditures</u>	<u>% of Total Funds</u>
Customer / New Load	\$ 17,647,000	6.6%
Renewal / Replacements	\$ 42,179,650	15.8%
Enhancements / Existing Facilities	\$ 21,855,776	8.2%
Enhancements / New Growth	\$ 9,332,570	3.5%
Regulatory / Agency Required	\$131,747,188	49.3%
Efficiency Improvements	\$ 4,354,425	1.6%
Roosevelt Building Project	\$ 40,305,000	15.1%

Recommendation & Requested Action

The CIP is being presented for information and discussion. No action is being requested. Based on Board feedback, staff will finalize the CIP and seek approval at the September 15 Board meeting, after which the CIP will be utilized to develop the 2010 capital budget.

Please contact me by phone at 341-1830 or e-mail at dean.ahlsten@eweb.org if you would like to discuss any of this material.

Attachments

c: Randy Berggren
Jim Wiley
Jim Origliosso
Patty Boyle

ATTACHMENT A

Approved 2009 - 2013 Electric Capital Plan						
(Approved May 5, 2009)						
	2009	2010	2011	2012	2013	2009-2013
I. Program Estimates						
Hydro Relicensing	2,251,358	6,775,000	6,775,000	54,200,000	33,877,000	103,878,358
Generation	4,398,035	1,591,832	1,236,382	893,768	1,722,902	9,842,918
Substation Reliability	4,746,347	5,229,896	2,106,494	3,008,835	2,411,601	17,503,173
Distribution Reliability	9,115,509	24,970,624	20,770,800	20,481,074	13,018,338	88,356,345
Configuration Management	185,605	250,000	250,000	250,000	250,000	1,185,605
Power Management	24,568,279	15,000	15,000	10,000	10,000	24,618,279
Facilities Capital Improvements	27,500	50,000	15,000	15,000	40,000	147,500
Roosevelt Building Project	3,307,556	1,674,591	1,389,350	2,130,520	2,415,300	10,917,317
Information Resource Management	32,875,794	38,185,000	2,120,000	-	-	73,180,794
DSM & Retail Services	2,819,220	1,283,910	1,224,303	1,045,709	1,009,296	7,382,438
Telecommunications Infrastructure	544,267	150,000	175,000	-	-	869,267
Total Expenditures	84,839,470	80,175,854	36,077,329	82,034,905	54,754,436	337,881,994
II. Capital Fund Sources						
Electric Rates	15,020,000	15,700,000	16,171,000	16,656,130	17,155,814	80,702,944
Capital Reserve Balance	16,800,000	8,764,196	9,028,501	9,384,112	10,361,244	16,800,000
Customer Contributions	3,233,037	6,340,298	1,386,940	2,290,907	2,859,634	16,110,816
Steam Utility Payment	270,000	270,000	270,000	270,000	270,000	1,350,000
Carmen Smith Relicensing bonds	2,251,358	6,775,000	6,775,000	54,200,000	33,877,000	103,878,358
Telecommunications bonds	135,000	-	-	-	-	135,000
Automated Meter Reading bonds	-	12,919,861	9,430,000	9,300,000	-	31,649,861
Roosevelt Project Bonds	32,875,794	38,185,000	2,120,000	-	-	73,180,794
	22,763,477	-	-	-	-	22,763,477
Interest Earnings on Reserve Fund	255,000	250,000	280,000	295,000	350,000	1,430,000
Total Funds	93,603,666	89,204,355	45,461,441	92,396,149	64,873,692	348,001,250
Cumulative Reserve Balance YE	8,764,196	9,028,501	9,384,112	10,361,244	10,119,256	10,119,256

ATTACHMENT B

Proposed 2010 - 2014 Electric Capital Plan						
	2010	2011	2012	2013	2014	2010-2014
I. Program Estimates						
Hydro Relicensing	6,775,000	3,370,000	36,020,000	46,480,000	31,270,000	123,915,000
Generation	1,289,620	1,380,474	1,230,000	800,000	2,042,902	6,742,996
Substation Reliability	3,402,703	6,169,829	3,194,275	3,271,845	4,069,413	20,108,065
Distribution Reliability	13,207,799	9,926,998	11,241,926	12,409,816	11,360,129	58,146,668
Configuration Management	75,000	125,000	125,000	125,000	-	450,000
Power Management	15,000	15,000	10,000	10,000	10,000	60,000
DSM & Retail Services	50,000	15,000	15,000	40,000	94,000	214,000
Facilities Capital Improvements	2,643,791	2,411,150	2,092,100	2,182,800	1,916,700	11,246,541
Roosevelt Building Project	38,185,000	2,120,000	-	-	-	40,305,000
Information Resource Management	1,359,100	1,217,501	911,036	987,945	953,934	5,429,516
Telecommunications Infrastructure	150,000	175,000	-	-	500,000	825,000
Total Expenditures	67,153,013	26,925,952	54,839,337	66,307,405	52,217,078	267,971,785
II. Capital Fund Sources						
	-	-	-	-	-	0
Electric Rates (note 1)	15,700,000	16,171,000	16,656,130	17,155,814	17,670,488	83,353,432
Capital Reserve Balance (note 2)	9,878,480	8,035,861	6,796,099	7,393,799	7,626,842	9,878,480
Customer Contributions (note 3)	4,280,394	3,605,190	2,290,907	2,359,634	2,430,423	14,966,548
Steam Utility Payment	270,000	270,000	270,000	270,000	270,000	1,080,000
Carmen Smith Relicensing Dedicated Funds (note 4)	6,775,000	3,370,000	36,020,000	46,480,000	31,270,000	123,915,000
Telecommunications bonds	-	-	-	-	-	-
Roosevelt Project Bonds (series 2006, 2007)	38,185,000	2,120,000	-	-	-	40,305,000
Harvest Wind Project Bonds	-	-	-	-	-	-
Interest Earnings on Reserve Fund	100,000	150,000	200,000	275,000	350,000	1,075,000
Total Funds	75,188,874	33,722,051	62,233,136	73,934,247	59,347,753	274,573,461
Cumulative Reserve Balance YE	8,035,861	6,796,099	7,393,799	7,626,842	7,130,675	7,130,675

- Notes:
- 1) Beginning in 2011 electric rate funding for capital increases at the rate of depreciation on plant in service (3% per year)
 - 2) Figures reflect beginning of year balances.
 - 3) Includes customer reimbursements for residential/commercial customer work, fiber optic customer work, and the University Substation project.
 - 4) \$1.5M per year funded from rates up to acquisition of a license. Annual expenditures in excess of \$1.5M funded from interest on C/S deferred reserve and then from the \$20M reserve equity when interest earnings are fully expended.
 - 5) This project is currently funded from Operating Reserves. Reserves will be reimbursed upon issue of project bonds. then from the \$20M reserve equity when interest earnings are fully expended.

ATTACHMENT C

2010 - 2014 "Capital Work Categories"

2010-14categoryanalysis

Programs	2010-2014 Budget	Capital Work Categories						
		Customer / New Load	Renewal / Replace	Enhancement / Existing Facilities	Enhancement / New Growth	Regulatory / Agency Required	Efficiency Improvements	Roosevelt Project
Hydro Relicensing / Compliance	\$123,915,000	\$0	\$0	\$0	\$0	\$123,915,000	\$0	\$0
Generation	\$6,742,996	\$0	\$2,843,311	\$2,267,953	\$0	\$1,631,732	\$0	\$0
Substation Reliability	\$20,108,065	\$4,267,973	\$8,240,245	\$3,582,179	\$3,056,762	\$694,888	\$266,018	\$0
Distribution Reliability	\$58,146,668	\$13,054,202	\$18,016,095	\$15,489,345	\$5,900,808	\$4,771,218	\$915,000	\$0
Configuration Management	\$450,000	\$0	\$0	\$0	\$0	\$0	\$450,000	\$0
Power Management Capital	\$60,000	\$0	\$0	\$0	\$0	\$60,000	\$0	\$0
DSM & Retail Services	\$214,000	\$0	\$0	\$0	\$0	\$0	\$214,000	\$0
Facilities Capital Improvements	\$11,246,541	\$0	\$10,293,191	\$258,000	\$0	\$674,350	\$0	\$40,305,000
Information Resource Mgmt	5,429,516	\$0	\$2,786,808	\$133,300	\$0	\$0	\$2,509,408	\$0
Telecommunications	825,000	\$325,000	\$0	\$125,000	\$375,000	\$0	\$0	\$0
Totals	\$267,442,785	\$17,647,175 6.6%	\$42,179,650 15.8%	\$21,855,776 8.2%	\$9,332,570 3.5%	\$131,747,188 49.3%	\$4,354,425 1.6%	\$40,305,000 15.1%

All Sources of Funds	
Rates	83,353,432
Starting Capital Reserve Balance	9,878,480
Customer Contributions	14,966,548
Steam System Payments	1,080,000
Relicensing Dedicated Funds	123,915,000
Telecom Bonds	-
AMR Bonds	-
Roosevelt Project Bonds	40,305,000
Harvest Wind Project Bonds	-
Interest Earnings on Reserves	1,075,000
Total	274,573,461
Pro Forma Surplus/Deficit (2010-14)	7,130,675

Definitions of "Capital Work Categories"	
<i>Customer / New Load.</i>	New electric plant and modifications and replacement of existing electric plant required to directly serve new load additions.
<i>Renewals / Replacements.</i>	Replacement of obsolete or aged plant that is not capable of reliable operation consistent with performance standards.
<i>Enhancements (new growth).</i>	Additions, modifications, replacements of plant needed for new load additions and to obtain/maintain performance standards.
<i>Enhancements (existing plant).</i>	Additions, modifications, replacements of plant for benefit of existing customers to obtain/maintain performance standards.
<i>Agency Required.</i>	Additions, modifications, replacements of electric plant needed to comply with code or agency license/permit requirements.
<i>Efficiency Improvements.</i>	Additions, modifications, replacements of electric plant that increases output or results in reductions in operating costs.