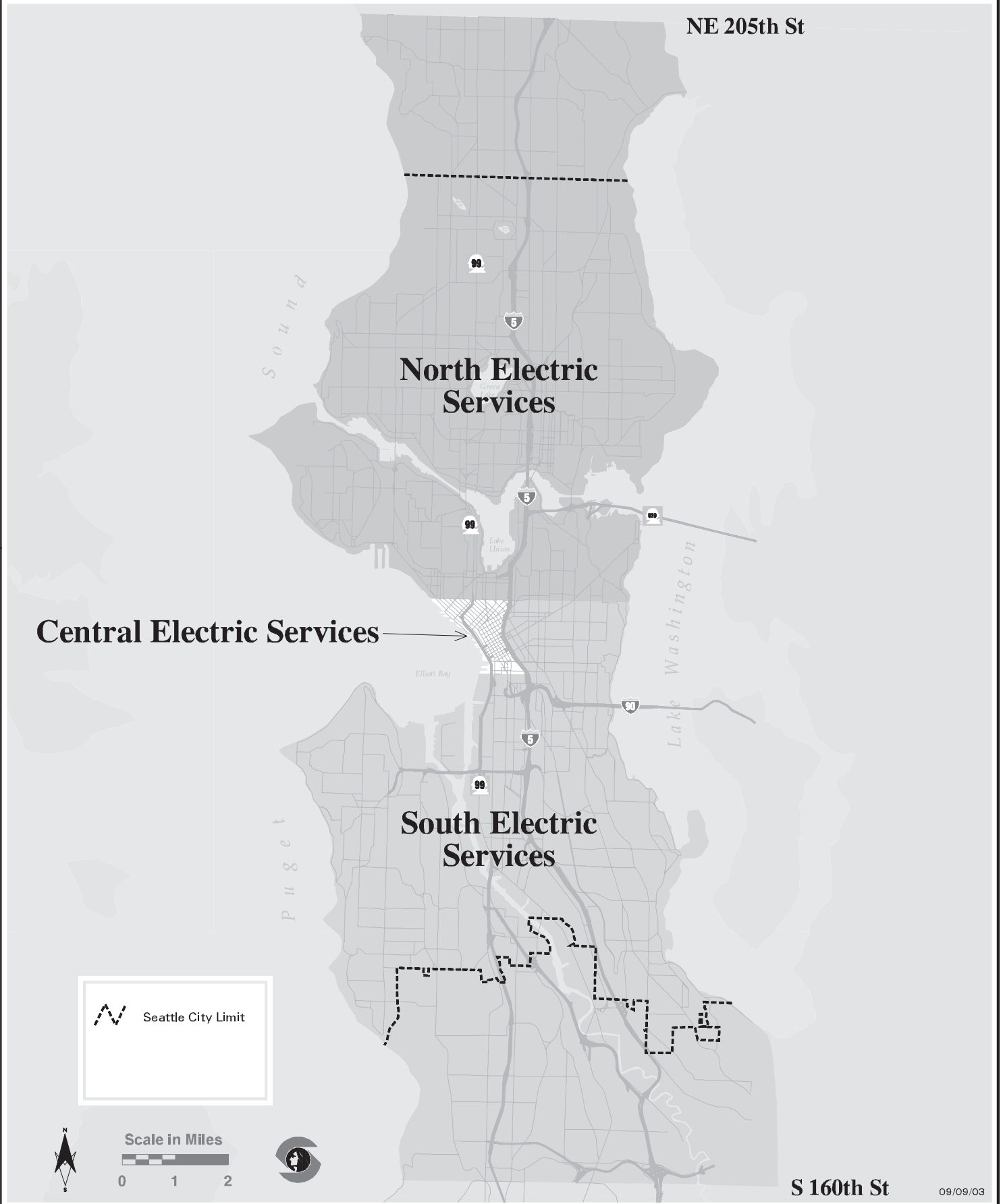


CITY LIGHT

Seattle City Light 2004-2009 Capital Improvement Project Area



Overview of Facilities and Programs

Seattle City Light (City Light) is a municipal electric utility, owned by the residents of Seattle and run by the City's elected officials. The utility serves a population of almost 700,000 people living in a 131 square mile area, including the City of Seattle and several adjoining jurisdictions. To serve these customers, Seattle owns, and City Light maintains and operates, a multi-billion-dollar physical plant. The physical plant includes:

- ◆ A distribution system with 14 major substations and more than 2,500 miles of overhead and underground cable;
- ◆ A generation system comprising seven major hydroelectric plants on the Skagit, Cedar, Tolt, and Pend Oreille Rivers, with a combined capacity of almost 2,000 megawatts;
- ◆ 650 miles of high-voltage transmission lines linking these plants to Seattle;
- ◆ A state-of-the-art System Control Center to coordinate these activities; and
- ◆ Billing and metering equipment to track almost 360,000 accounts.

City Light's Capital Improvement Program (CIP) is the vehicle for upgrading and expanding this infrastructure. Because this work is labor and cash intensive, and because it may have significant environmental effects, the CIP also funds a variety of safety and mitigation activities. The overriding goal of the CIP is to assure that the facilities required to serve City Light customers with low-cost, reliable power are in place when and where the power is requested.

City Light still is on track to fulfill the requirements of the financial recovery plan it developed to offset the effects of the Western Power Crisis in 2000 and 2001, in spite of subnormal water conditions in the 2002-2003 water year and retail sales that have lagged behind its forecast. To offset the impact of low water and lagging sales, the Department made significant reductions in its operating and maintenance (O&M) expenses and deferred portions of its CIP for 2003 and 2004. This mid-course correction should make it possible for the Department to pay off all of its short-term debt, and generate an operating cash balance of \$30 million by the third quarter of 2004. When that point is reached, the Department will conduct its first general rate review since 1999, using the new financial policies adopted by the City Council in December 2001.

City Light's 2004-2009 Adopted CIP reflects these reductions in planned spending for 2003 and 2004, which may result in the deferral of some projects until 2005 or beyond. The funds shown in this document are expressed as total project costs, including both direct costs and overheads. This makes the funds comparable to other City department funds and estimates the amounts to be capitalized upon completion of the project. The total project cost combines the direct project charges shown in the operating budget under CIP with the applicable intra-departmental expenses, commonly referred to as overhead costs or loadings. As is the case with direct cost, the project overhead costs are included in the operating budget, but overhead costs are not necessarily in the line of business where the direct cost of the project is incurred. City Light only applies overhead costs to the CIP project expenses as they occur.

Highlights

- ◆ In 2004, the \$88 million CIP for the Distribution Branch provides resources to connect new customers and perform major maintenance on the transmission and distribution system throughout the City Light service area. Work continues on rehabilitation of the downtown network and ensuring reliable service for all City Light customers. There are 48 capital projects that support Distribution infrastructure work. This program includes design and planning support for Sound Transit Light Rail system and the Seattle Monorail Project.

Seattle City Light

- ◆ Telecommunications projects include continued construction of the fiber optic network connecting substations and other City Light facilities; improvements to City Light's radio system to allow better communication between field crews and dispatch facilities; and replacing obsolete telephone switch equipment. Fiber ring construction extends the communications backbone system of command and control to the level of distribution feeders and ultimately down to individual distribution transformers and customer meters. Replacement of the obsolete analog microwave radio system that serves vital transmission, distribution and communication systems mandated by the Federal Energy Regulatory Commission and ensures the safety of field employees.
- ◆ The \$11.6 million CIP for the Finance and Administration Branch includes program expenditures for Information Technology and Facilities Management. The \$1.2 million budget for Facilities Management includes \$0.5 million for substation improvements. The \$10.4 million budget for the Information Technology program consists of seven continuing projects. City Light's largest information system, the Consolidated Customer Service System (CCSS) project, handles all City utility billing and customer records and replaces the City's two existing utility billing systems. Funding in 2004 is for system enhancements and upgrades. Seattle Public Utilities (SPU) is sharing the cost for this project.
- ◆ The \$1.0 million CIP in 2004 for the Executive Branch level comprises Environment & Safety program expenditures. These include capital portions of license-required mitigation expenses on the Skagit and Tolt Rivers and enable the City to meet its commitments for habitat protection and restoration for Chinook salmon under the Endangered Species Act (ESA). Skagit mitigation projects include creating interpretive displays for visitors to the Skagit and acquiring additional wildlife lands in the Skagit Basin. On the Tolt River, City Light continues to monitor, maintain and enhance salmon spawning habitat. ESA projects include acquiring and restoring critical Chinook habitat in the Skagit and Tolt basins.
- ◆ In 2004, the \$15.2 million CIP for the Generation Branch is allocated over some 80 active projects. Of these, 11 are multi-year projects continuing from 2003. Twenty-nine projects begin after 2004 and four others do not have budget authority in 2004. Nineteen projects from the previous biennium have been substantially completed. The Boundary Rehabilitation project, a major multi-year project, is one of the projects due for completion in 2004.

Project Selection Process

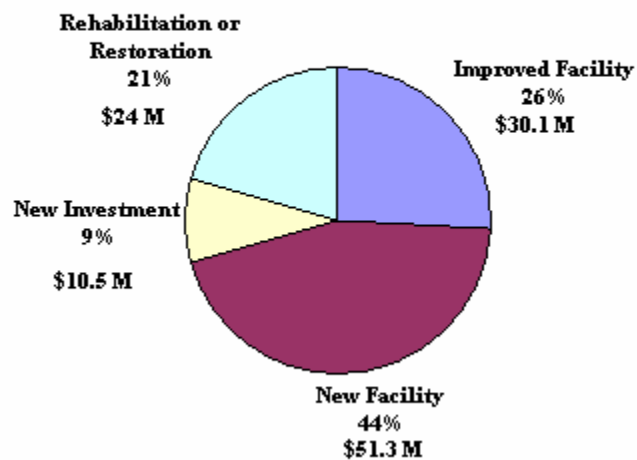
In making capital investments in its infrastructure, the City tries to balance three goals:

- Rehabilitation of existing facilities to avoid the higher costs of deferred maintenance;
- Improvement of existing facilities to meet growing demand, and
 - Development of new facilities to provide additional services.

City Light also has a fourth new investment goal, to maximize the productive use of technology.

The chart on the following page shows how City Light's 2004 Adopted CIP allocates funding to these types of projects:

Seattle City Light 2004 Adopted CIP by Project Type



The following narrative summarizes the selection process City Light uses to develop its CIP:

Project Identification: City Light staff throughout the Department identify potential projects using several criteria, including economics, environmental impact, reliability, customer service, regulations, and safety. Existing strategic plans are a primary source of capital projects. Staff working in the field also provide input based on their understanding of customer demands. A master list of projects is then developed in the capital budgeting system.

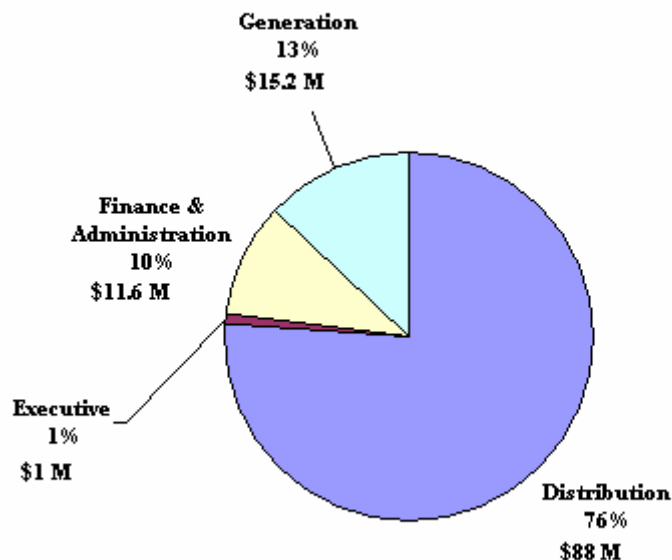
Project Selection: To refine the list of projects that meet the criteria listed above, City Light management and staff, with the help of the Department of Finance, evaluate projects further using the results of studies, load forecasts, and rate forecasting estimates. Following this review, City Light refines the list of potential projects to those that can be accomplished with available revenue.

Project Scheduling and Budgeting: After the project list is refined, City Light staff enter detailed information about the selected projects into the capital project scheduling system. The scheduling system tracks and refines labor hours and non-labor costs and allows staff to cross-check projects against Mayor and Council priorities.

CIP Budget Control Levels

City Light's Capital Improvement Program consists of the capital budgets of its branches and overhead costs associated with their projects. The chart on the following page shows the appropriation amounts for 2004 followed by brief descriptions of the branches with capital improvement programs. A detailed list of all projects in City Light's CIP follows this overview.

Seattle City Light 2004 Adopted CIP by Branch



Distribution: The CIP for this branch supports fundamental electric utility service. It covers City Light's design, construction, and major maintenance of the distribution system. This system includes 14 principal substations, 650 miles of transmission, 1,800 miles of overhead feeder circuits, 600 miles of underground feeder cables, 53,000 transformers, and 100,000 poles. The Distribution branch includes an array of projects spanning six major areas: Services, Capacity, Reliability, Interagency, Streetlights, and Ancillary.

Executive: The CIP for this branch includes projects to mitigate the environmental effects of City Light's hydroelectric projects, to meet the City's commitments to provide wildlife habitat protection and restoration, and to provide for utility-wide safety improvements. Projects include purchasing and setting aside critical habitat for wildlife in the Skagit and Nooksack river basins; constructing additional salmon spawning and rearing areas; habitat acquisition and restoration for threatened Chinook salmon.

Finance and Administration: The CIP for this branch consists of Facilities Management and Information Technology projects. Facilities Management includes projects to keep City Light's buildings and grounds functional, safe, and up-to-date. City Light owns 1.4 million square feet of building space in four counties with an aggregate value of approximately \$525 million. These include service centers, substations, switchgear buildings, training centers, communications buildings, office buildings, warehouses, construction and maintenance shops, garages, remote employee housing, and tourist facilities. The Information Technology category includes projects that provide modern and efficient information systems and related services to meet City Light's business objectives.

Generation: The CIP for this branch includes projects to improve and enhance Seattle's hydroelectric generating facilities. These facilities include seven major plants on the Skagit, Pend Oreille, Cedar, and Tolt Rivers, which, on average, supply 60% of Seattle's annual electrical power demands. The remainder comes from long-term contracts and spot market purchases.

Anticipated Operating Expenses Associated with Capital Facilities Projects

Operations and maintenance costs, where identified, are included in the Department's operating budget. In some projects City Light has identified operations and maintenance costs of zero, or has not calculated a number (N/C).

In these cases, the cost impacts of the project are either insignificant or are offset by cost savings realized by other projects.

City Council Changes to the CIP

In an effort to enhance oversight of Utility functions, City Council conditioned its appropriations to City Light CIP Budget Control Levels (BCLs) with a number of project-specific provisos:

- No more than \$463,000 appropriated for 2004 for City Light's Capital Improvement Program can be spent to pay for the Boundary Dam projects (Project IDs 6338, 6343, 6344, 6345, 6346, and 6347), until authorized by a future ordinance.
- None of the money appropriated for 2004 for City Light's Capital Improvement Program can be spent to pay for the Gorge Powerhouse project (Project ID 6370) until authorized by a future ordinance.
- None of the money appropriated for 2004 for City Light's Capital Improvement Program can be spent to pay for the Ross Powerhouse project (Project ID 6380) until authorized by a future ordinance.
- No more than \$516,000 appropriated for 2004 for City Light's Capital Improvement Program can be spent to pay for the Power Station Demand Drive Improvements project (Project ID = 7755), until authorized by a future ordinance.
- No more than \$410,000 appropriated for 2004 for City Light's Capital Improvement Program can be spent to pay for the Alaskan Way Viaduct project (Project ID 8307), until authorized by a future ordinance.
- No more than \$ 56,000 appropriated for 2004 for City Light's Capital Improvement Program can be spent to pay for the South Lake Union projects (Project IDs 8308 and 8309), until authorized by a future ordinance.
- No more than \$763,000 appropriated for 2004 for City Light's Capital Improvement Program can be spent for the Consolidated Customer Service System (Project ID 9910) until authorized by a future ordinance.
- No more than \$1,926,000 appropriated for 2004 for City Light's Capital Improvement Program can be spent to pay for the Information Technology Infrastructure project (Project ID 9915), until authorized by a future ordinance.

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Distribution										
800Mhz Radio Simulcast System - Seattle Area	9308	3,054	83	0	0	0	0	0	0	3,137
Alaskan Way Viaduct - City Light	8307	151	397	522	7,704	8,765	7,139	7,018	7,103	38,799
Broad St. Substation Networks	8203	5,891	4,756	4,707	4,620	4,722	4,846	4,984	5,052	39,578
Central Arterial Streetlights Major Maintenance	8212	808	1,263	742	776	794	815	838	850	6,886
Communications Improvements	9009	285	240	236	201	205	210	216	218	1,811
Distribution Area Communications Networks	9307	1,219	555	633	656	668	685	704	714	5,834
Downtown Substation - Preliminary Engineering	7754	35	24	1	3	3	3	3	3	75
Electrical Services Replacement	8997	0	0	0	0	0	0	0	271	271
First Hill Network	8301	64	1,868	1,070	1,096	1,121	1,150	1,183	1,200	8,752
Interbay Substation	7756	2,352	78	1	3	3	3	3	3	2,446
Maple Valley Sno-King 230 kV Line Restoration	7054	3,590	8	0	0	0	0	0	0	3,598
Massachusetts St. Substation Networks	8202	720	307	491	453	463	475	488	495	3,892
Meter Additions	8054	2,741	2,882	2,929	2,665	2,726	2,798	2,877	2,916	22,534
Metro Direct Current Cables	8144	28	5	6	5	6	6	6	6	68
Mobile Equipment	9101	618	1,280	737	1,026	1,055	1,082	1,111	1,125	8,034
Neighborhood Planning	8207	75	671	422	555	570	584	600	608	4,085
Neighborhood Undergrounding	8206	10	0	0	169	175	180	185	187	906
Network Additions and Services	8057	8,457	8,746	10,221	10,791	11,061	11,360	11,685	11,846	84,167
Network Hazeltine Upgrade	8129	540	392	301	314	322	331	340	345	2,885
Network Maintenance Hole and Vault Rebuild	8130	15,504	2,280	2,730	3,068	3,148	3,232	3,323	3,368	36,653
North 26kV Conversion	8124	60,814	1,030	999	1,520	1,563	1,604	1,648	1,670	70,848

**Amounts in thousands of dollars*

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Distribution										
North Arterial Streetlights Major Maintenance	8211	(3)	194	199	218	223	228	234	238	1,531
North Capacity Additions	8122	8,081	11,170	11,103	10,858	11,111	11,407	11,731	11,893	87,354
North New Street and Flood Lighting	8134	90	38	39	68	69	71	74	75	524
North Outage Replacements	8302	55	117	111	109	112	114	118	119	855
North Relocations	8304	2,888	2,238	1,271	1,565	1,601	1,643	1,689	1,712	14,607
North Residential Streetlight Improvements	8136	24	84	86	4	4	4	5	5	216
North Services - Overhead and Underground	8120	6,763	7,898	8,407	7,865	8,048	8,262	8,497	8,615	64,355
Power Stations Demand Driven Improvements	7755	235	1,355	1,391	1,118	1,142	1,174	1,208	1,225	8,848
Relaying Improvements	7753	149	1,074	1,007	976	1,000	1,027	1,058	1,072	7,363
Seattle Monorail Project - City Light	8306	50	345	460	2,155	2,213	870	1,227	1,245	8,565
Skagit Telephone System Upgrade	9311	15	673	136	0	0	0	0	0	824
Sound Transit Light Rail - City Light	8204	701	4,284	3,810	10,308	12,318	711	558	524	33,214
South 26kV Conversion	8125	51,508	1,093	992	1,175	1,206	1,239	1,276	1,294	59,783
South Arterial Streetlights Major Maintenance	8210	109	200	199	182	186	191	196	199	1,462
South Capacity Additions	8123	7,232	4,741	4,715	4,345	4,437	4,552	4,681	4,745	39,448
South Lake Union - Power Supply	8308	113	341	130	0	0	0	0	0	584
South Lake Union - Substation Development	8309	0	406	0	5,159	0	0	0	0	5,565
South New Street and Flood Lighting	8133	139	221	213	189	193	198	204	207	1,564
South Outage Replacements	8303	450	1,126	1,162	1,080	1,105	1,135	1,167	1,184	8,409
South Relocations	8305	3,056	9,592	10,522	9,756	9,984	10,252	10,545	10,691	74,398
South Residential Streetlight Improvements	8135	71	199	180	167	170	175	179	182	1,323

**Amounts in thousands of dollars*

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Distribution										
South Services - Overhead and Underground	8121	5,510	4,612	4,725	4,400	4,501	4,621	4,752	4,817	37,938
Special Work Equipment - Other Plant	9102	158	452	452	545	560	574	589	597	3,927
Special Work Equipment - Substation Plant	7902	50	151	60	85	87	89	92	94	708
Substation Capacity Additions	7751	2,215	1,392	784	725	743	763	785	796	8,203
Substation Equipment Improvements	7752	7,556	4,531	5,036	5,256	5,398	5,547	5,705	5,782	44,811
Substation Plant Improvements	7750	142	1,740	1,151	971	991	1,018	1,048	1,063	8,124
Transmission & Generation Radio Systems	9108	4,031	993	1,546	1,611	1,647	1,687	1,733	1,756	15,004
Transmission Capacity	7011	288	1,012	693	700	717	737	758	768	5,673
Transmission Inter-Agency	7105	138	201	171	172	176	181	186	188	1,413
Transmission Reliability	7104	6	233	117	122	125	129	132	134	998
Union St. Substation Networks	8201	2,044	333	351	302	304	310	319	323	4,286
Distribution Total		210,820	89,904	87,967	107,811	107,741	95,412	97,958	99,523	897,136
Executive										
Endangered Species Act Mitigation	6990	2,649	1,498	706	578	699	614	744	758	8,246
Newhalem Creek Mitigation	6175	1,023	0	0	60	9	0	0	0	1,092
Safety Modifications	9006	101	193	164	186	190	190	195	198	1,417
Skagit Licensing Mitigation	6991	32,907	179	31	489	427	555	454	459	35,501
South Fork Tolt River Mitigation	6046	536	618	97	79	81	83	85	88	1,667
Executive Total		37,216	2,488	998	1,392	1,406	1,442	1,478	1,503	47,923

**Amounts in thousands of dollars*

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Finance & Administration										
Consolidated Customer Service System	9910	48,984	3,631	3,203	0	0	0	0	0	55,818
Customer Data Services (CMart)	9926	5,797	1,492	1,392	0	0	0	0	0	8,681
Disaster Recovery/Business Continuity	9925	293	49	122	447	977	240	0	0	2,128
Distribution Automated Mapping System	9905	21,434	1,164	1,199	1,331	1,405	1,482	1,562	1,587	31,164
Drawing Conversions - Seattle City Light	9909	6,071	43	0	0	0	0	0	0	6,114
Facilities ADA and Regulatory Compliance	9151	8	0	0	90	93	95	97	100	483
Facilities Environmental Remediation	9152	642	67	0	150	156	160	164	167	1,506
Facility Security	9154	161	0	0	122	127	131	134	136	811
Information Technology Infrastructure	9915	19,385	2,677	2,171	3,354	4,096	4,501	4,897	4,980	46,061
Mechanical Improvements	9156	881	96	0	236	245	252	258	263	2,231
Miscellaneous Building Improvements	9007	279	150	249	485	497	0	0	0	1,660
North and South Service Center Improvements	9107	21,620	80	110	0	0	0	0	0	21,810
Office Furniture and Equipment Purchase	9103	4	0	296	0	0	0	0	0	300
Roof Replacements	9072	31	1,125	0	226	234	241	247	251	2,355
Seismic Mitigation	9134	4,567	0	0	120	125	128	131	133	5,204
Space Consolidation	9159	145	9	9	0	0	0	0	0	163
Substation Comprehensive Improvements	9161	122	367	488	0	0	0	0	0	977
Work Process Management System	9927	1,779	2,466	2,387	2,120	2,220	2,470	2,298	2,331	18,071
Finance & Administration Total		132,203	13,416	11,626	8,681	10,175	9,700	9,788	9,948	205,537

*Amounts in thousands of dollars

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Generation										
Boundary Dam - Elevator Improvements	6355	0	37	601	150	0	0	0	0	788
Boundary Dam - Emergency Lighting Improvements	6342	0	0	71	84	3	0	0	0	158
Boundary Dam - Forebay Recreation Area Improvements	6345	0	0	0	43	671	27	0	0	741
Boundary Dam - Network Control System & Control	6344	0	0	220	1,355	322	2	0	0	1,899
Boundary Dam - Powerhouse Elevator Improvements	6356	0	44	651	98	0	0	0	0	793
Boundary Dam - Rehabilitation	6186	46,717	9,277	1,593	0	0	0	0	0	57,587
Boundary Dam - Safety Improvements	6161	10,434	1,212	241	0	0	0	0	0	11,887
Boundary Dam - Service Area Improvements	6347	0	0	359	1,310	18	0	0	0	1,687
Boundary Dam - Sluice Maintenance Gate Overhaul	6348	0	1	129	0	0	0	0	0	130
Boundary Dam - Spillgate Hoist House Rehab & Oil Control	6349	0	0	582	0	0	0	0	0	582
Boundary Dam - Tailrace Recreation Area Improvement	6346	0	0	0	214	707	118	0	0	1,039
Boundary Dam - Transformer Bay Rockfall Mitigation	6357	0	169	207	145	0	0	0	0	521
Boundary Dam - Trashrake System	6338	0	59	69	1,434	19	0	0	0	1,581
Boundary Dam - Unit 51 Turbine Runner	6124	3,771	2,062	26	0	0	0	0	0	5,859
Boundary Dam - Unit 53 Turbine Runner	6126	4,952	273	0	0	0	0	0	0	5,225
Boundary Dam - Unit 55 Generator Rebuild	6303	0	0	0	0	0	6,386	773	94	7,253
Boundary Dam - Unit 56 Generator Rebuild	6354	0	0	0	0	0	0	0	6,690	6,690

**Amounts in thousands of dollars*

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Generation										
Boundary Dam - Units 51-54 Turbine Pit Cranes	6350	0	0	0	0	0	0	0	0	0
Boundary Dam - Units 51-56 Control Board Upgrade	6343	0	0	181	1,310	181	46	0	0	1,718
Boundary Dam - Units 51-56 Governor Controls Upgrade	6340	0	0	0	368	1,278	162	55	0	1,863
Boundary Dam - Units 51-56 Penstock Flow Monitoring	6383	0	0	181	0	0	0	0	0	181
Boundary Vista House Recreation Area Improvements	6384	0	0	128	13	0	0	0	0	141
Cedar Falls - Habitat Conservation Plan	6214	4,409	981	44	0	0	0	0	0	5,434
Cedar Falls - Intake Gate Replacement	6171	5,824	201	0	0	0	0	0	0	6,025
Cedar Falls - Rehab/Reline Penstocks	6358	0	0	0	0	565	3,768	3,903	70	8,306
Dam Safety Program	6389	0	118	83	132	137	139	142	145	896
Diablo Dam - Automate Spillgates	6359	0	0	0	82	587	0	0	0	669
Diablo Dam - Spillgate Control Improvements	6238	43	272	10	0	0	0	0	0	325
Diablo Powerhouse - Replace 5 kV Switchgear	6364	0	0	0	0	513	529	0	0	1,042
Diablo Powerhouse - Replace Control and Power	6363	0	0	0	0	0	363	375	0	738
Diablo Powerhouse - Replace Units 31-32 Governors	6366	0	0	0	0	0	0	265	274	539
Diablo Powerhouse - Upgrade Annunciator System	6367	0	0	0	343	0	0	0	0	343
Diablo Powerhouse DC Lighting Systems Upgrade	6365	0	0	119	217	0	0	0	0	336
Diablo Sewer System Improvement	6232	1	0	0	0	94	845	9	0	949

**Amounts in thousands of dollars*

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Generation										
Diablo Switchyard Resurfacing	6361	0	0	0	374	0	0	0	0	374
Diablo Water System Improvements	6304	0	45	204	24	0	0	0	0	273
Environmental Learning Center	6988	4,342	11,278	304	19	0	0	0	0	15,943
Fire Protection Systems Modification	6166	1,378	0	846	32	0	0	0	0	2,256
Generation - Civil-Mechanical Modification	6005	778	1,258	1,007	1,244	1,277	1,310	1,343	1,365	9,582
Generation - Electrical Enhancements	6087	143	858	938	907	928	950	975	992	6,691
Generation Replacement	6999	0	0	0	0	0	0	0	5,715	5,715
Gorge Dam - Spillgate Control Improvements	6222	90	150	35	0	0	0	0	0	275
Gorge Dam - Spillgate Rehabilitation	6221	0	0	0	0	0	1,461	46	0	1,507
Gorge Dam - Unit 24 Turbine-Runner Overhaul	6219	43	48	1,741	1,150	2,737	555	0	0	6,274
Gorge Powerhouse - 240 kV Oil-filled Circuit Breakers	6226	767	334	605	0	0	0	0	0	1,706
Gorge Powerhouse - AC/DC Distribution System	6207	291	236	26	0	0	0	0	0	553
Gorge Powerhouse - Control and Power Cabling Replacement	6328	0	0	0	0	194	201	306	0	701
Gorge Powerhouse - Generator Hall and High Room Lighting	6330	0	0	0	0	247	255	0	0	502
Gorge Powerhouse - Programmable Logic Controllers	6369	0	0	0	0	229	0	0	0	229
Gorge Powerhouse - Transformer Bank 10 Replacement	6224	24	0	345	19	0	0	0	0	388
Gorge Powerhouse - Transformer Bank 22 Replacement	6370	0	0	0	2,186	871	0	0	0	3,057

**Amounts in thousands of dollars*

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Generation										
Gorge Powerhouse - Transformer Bank 24 Replacement	6371	0	0	0	0	3,324	897	45	0	4,266
Gorge Switchyard - Resurfacing	6362	0	0	0	249	0	0	0	0	249
Ladder Creek Water System	6234	7	0	191	213	0	0	0	0	411
Newhalem Garage - Revisions	6231	0	0	0	171	261	0	0	0	432
Newhalem Powerhouse - Governor Replacement	6392	0	0	0	0	0	59	61	0	120
Newhalem Powerhouse - Station Battery & Charger Replacement	6301	0	154	0	0	0	0	0	0	154
Ross Dam - Abutment Rock Stabilization	6241	94	49	0	0	0	0	0	0	143
Ross Dam - AC/DC Distribution System Upgrade	6373	0	0	61	260	178	0	0	0	499
Ross Dam - Install Fiber Optic Cable Powerhouse to Dam	6372	0	0	0	242	0	0	0	0	242
Ross Powerhouse - Controller Upgrade	6376	0	0	59	355	104	0	0	0	518
Ross Powerhouse - Batteries Replacement	6375	0	148	102	34	0	0	0	0	284
Ross Powerhouse - Governors Replacement	6205	555	0	0	0	0	697	695	175	2,122
Ross Powerhouse - Replace Generator Breakers	6374	0	0	0	0	0	1,482	1,538	28	3,048
Ross Powerhouse - Replace Governor Oil Pumps	6377	0	0	0	77	193	0	0	0	270
Ross Powerhouse - Unit 41 Generator Rebuild	6382	0	0	0	0	0	0	5,205	1,357	6,562
Ross Powerhouse - Unit 42 Generator Rebuild	6379	0	4,608	1,057	0	0	0	0	0	5,665
Ross Powerhouse - Unit 43 Generator Rebuild	6380	0	0	0	4,849	1,261	0	0	0	6,110

**Amounts in thousands of dollars*

Project Summary

Program/Project	Project ID	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Generation										
Ross Powerhouse - Unit 44 Generator Rebuild	6381	0	0	0	0	4,966	1,292	0	0	6,258
Ross Powerhouse - Units 41-44 Scanners	6215	26	42	519	445	459	525	10	0	2,026
Skagit Security Systems	6388	0	644	504	0	0	0	0	0	1,148
Special Work Equipment - Generation Plant	6102	281	1,118	785	438	444	453	464	471	4,454
Tolt - Penstock Crossover Connection	6360	0	0	366	38	0	0	0	0	404
Generation Total		84,970	35,676	15,190	20,624	22,768	22,522	16,210	17,376	235,336
Department Total		465,209	141,484	115,781	138,508	142,090	129,076	125,434	128,350	1,385,932

**Amounts in thousands of dollars*

Fund Source Summary

Funding Source	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	465,209	141,484	115,781	138,508	142,090	129,076	125,434	128,350	1,385,932
Department Total	465,209	141,484	115,781	138,508	142,090	129,076	125,434	128,350	1,385,932

**Amounts in thousands of dollars*

City Light

800Mhz Radio Simulcast System - Seattle Area

Program: Distribution **Start Date:** 1st Quarter 2000
Type: Improved Facility **End Date:** 4th Quarter 2003
Project ID: 9308

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

City Light's existing 800MHZ radio system is unreliable and has a number of "dead" spots in the Rainer Valley, West Seattle, Madison Park, Richmond Beach and Lake City areas. Unreliability and dead spots present a safety hazard and impede efficiency. This project replaces the existing system with one that provides a coverage standard of 90% (the industry standard). The project includes finding repeater sites, purchasing equipment, and installing the simulcast system, which transmits from all transmitters at the same time.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	3,054	83	0	0	0	0	0	0	3,137
TOTAL FUNDS	3,054	83	0	0	0	0	0	0	3,137
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Alaskan Way Viaduct - City Light

Program: Distribution **Start Date:** 1st Quarter 2002
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2009
Project ID: 8307

Location: Various

This project designs and constructs relocations of City Light's extensive electrical distribution and transmission systems affected by Alaskan Way Viaduct construction. This project preserves the integrity of City Light's electrical system for all of its customers and, for public safety, maintains required electrical clearances during construction. The project's future (the extent and timing of City Light work on this project) is contingent on the way that it is included in the investment package to be developed by the Regional Transportation Investment District (RTID), and approval of the package by the Region's voters in an as yet unscheduled election in 2004.

During the 2004 budget process, the City Council adopted a proviso for this project that stipulated that no more than \$410,000 of the 2004 appropriation for the project can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	151	397	522	7,704	8,765	7,139	7,018	7,103	38,799
TOTAL FUNDS	151	397	522	7,704	8,765	7,139	7,018	7,103	38,799
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Elevator Improvements

Program: Generation **Start Date:** 3rd Quarter 2003
Type: Improved Facility **End Date:** 2nd Quarter 2005
Project ID: 6355
Location: 10382 Boundary Rd

This project provides funding for a purchase and install contract to repair and/or upgrade the elevator at the Boundary Dam. Upgrades improve the elevator's reliability, ability to transport maintenance materials, and access to various levels at the dam.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	37	601	150	0	0	0	0	788
TOTAL FUNDS	0	37	601	150	0	0	0	0	788
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Emergency Lighting Improvements

Program: Generation **Start Date:** 2nd Quarter 2004
Type: Rehabilitation or Restoration **End Date:** 1st Quarter 2006
Project ID: 6342
Location: 10382 Boundary Rd

This project assesses emergency lighting and cable/wiring conditions throughout the Boundary Dam facility and upgrades, replaces, or repairs lighting where necessary.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	71	84	3	0	0	0	158
TOTAL FUNDS	0	0	71	84	3	0	0	0	158
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Forebay Recreation Area Improvements

Program: Generation **Start Date:** 1st Quarter 2005
Type: Improved Facility **End Date:** 2nd Quarter 2007
Project ID: 6345
Location: 10382 Boundary Rd

When the Boundary Dam was constructed in the 1960s, the Federal Energy Regulatory Commission (FERC) licensed Generators 51, 52, 53 and 54. When Generators 55 and 56 were added to the plant in the 1980s, FERC amended the license. Although the amendment required that City Light add more recreational facilities, to date none have been added due to water and sewer issues. City Light plans to clarify with FERC whether or not further work is necessary in the Forebay Recreation Area prior to re-licensing negotiations. If work is required, this project implements the conceptual plan developed during the Boundary Rehabilitation Project.

During the 2004 budget process, the City Council grouped this project with several other Boundary Dam projects (6338, 6343, 6344, 6346, and 6347) and stipulated that no more than \$463,000 of the collective 2004 appropriations for these projects can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	43	671	27	0	0	741
TOTAL FUNDS	0	0	0	43	671	27	0	0	741
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Network Control System & Control

Program: Generation **Start Date:** 1st Quarter 2004
Type: Improved Facility **End Date:** 1st Quarter 2007
Project ID: 6344
Location: 10382 Boundary Rd

This project implements the conceptual design for a network-based control system at Boundary Dam. Security system improvements (installed separately) are designed to interface with this system.

During the 2004 budget process, the City Council grouped this project with several other Boundary Dam projects (6338, 6343, 6345, 6346, and 6347) and stipulated that no more than \$463,000 of the collective 2004 appropriations for these projects can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	220	1,355	322	2	0	0	1,899
TOTAL FUNDS	0	0	220	1,355	322	2	0	0	1,899
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Powerhouse Elevator Improvements

Program: Generation **Start Date:** 3rd Quarter 2003
Type: Improved Facility **End Date:** 2nd Quarter 2005
Project ID: 6356
Location: 10382 Boundary Rd

This project provides funding for a purchase and install contract for repairs to and/or upgrades of the powerhouse elevator to improve its functionality and/or restore its reliability.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	44	651	98	0	0	0	0	793
TOTAL FUNDS	0	44	651	98	0	0	0	0	793
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Rehabilitation

Program: Generation **Start Date:** 1st Quarter 1995
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2004
Project ID: 6186
Location: 10382 Boundary Rd

The Boundary Dam Rehabilitation project provides comprehensive programmatic rehabilitation of major equipment, auxiliary systems, support features, and recreational facilities at the Boundary Hydroelectric Facility. These measures improve plant reliability, increase its operating life, provide consistency with current industry practice and technology, and strategically position the facility for upcoming re-licensing negotiations with the Federal Energy Regulatory Commission (FERC).

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	46,717	9,277	1,593	0	0	0	0	0	57,587
TOTAL FUNDS	46,717	9,277	1,593	0	0	0	0	0	57,587
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Safety Improvements

Program: Generation **Start Date:** 1st Quarter 1991
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 6161
Location: 10382 Boundary Rd

The Boundary Dam Safety Improvements project implements corrective actions required by the Federal Energy Regulatory Commission (FERC) to reduce dam failure risk. This is part of a special dam safety review that began in 1990. Projects completed to date include installing a drainage system to reduce foundation water pressures, installing an anchoring system to strengthen the left spillway abutment rock, strengthening the dam elevator tower to resist earthquakes, and reviewing dam safety instrument data to make sure that the dam and foundation are stable. The work to be completed in 2003 and 2004 includes designing and installing an improved dam safety monitoring system.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	10,434	1,212	241	0	0	0	0	0	11,887
TOTAL FUNDS	10,434	1,212	241	0	0	0	0	0	11,887
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Service Area Improvements

Program: Generation **Start Date:** 1st Quarter 2004
Type: Improved Facility **End Date:** 1st Quarter 2006
Project ID: 6347
Location: 10382 Boundary Rd

This project implements the conceptual design for service area improvements and an inventory control system at the Boundary Dam. The service area is located at the northernmost area of the site, from the powerhouse access road to the Canadian Border, and contains facilities that support power generation operations. Facilities in the service area include the oil house, garage, shipping/receiving building, warehouse, and storage yards.

During the 2004 budget process, the City Council grouped this project with several other Boundary Dam projects (6338, 6343, 6344, 6345, and 6346) and stipulated that no more than \$463,000 of the collective 2004 appropriations for these projects can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	359	1,310	18	0	0	0	1,687
TOTAL FUNDS	0	0	359	1,310	18	0	0	0	1,687
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Sluice Maintenance Gate Overhaul

Program: Generation **Start Date:** 1st Quarter 2003
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2004
Project ID: 6348
Location: 10382 Boundary Rd

Overhaul of the sluice maintenance gate is recommended every 15 to 20 years. The gate is located underwater, so the extent of the work cannot be determined until it is floated ashore. This project designs a method for "floating" the maintenance gate to the shore, implements necessary repairs, and replaces or refurbishes worn hoist system components.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	1	129	0	0	0	0	0	130
TOTAL FUNDS	0	1	129	0	0	0	0	0	130
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Spillgate Hoist House Rehab & Oil Control

Program: Generation **Start Date:** 1st Quarter 2004
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2004
Project ID: 6349
Location: 10382 Boundary Rd

This project replaces the spillgate hoist houses to provide better weather protection, adequate lighting, and prevention of "critter" intrusions. It also includes designing and installing a method to contain oil spills. The spillgates at Boundary are approximately 40 feet wide and 45 feet high. There are two spillgates, one on either side of the dam. The gates are raised to let water pass through when there is more coming down the river than can be used for generation. The machinery that lifts the gates is contained in the spillgate hoist houses, which are small metal enclosures located on the dam, adjacent to each spillgate. To prevent oil used to lubricate the hoist gear box from ending up in the river, oil containment devices are designed and installed.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	582	0	0	0	0	0	582
TOTAL FUNDS	0	0	582	0	0	0	0	0	582
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Tailrace Recreation Area Improvement

Program: Generation **Start Date:** 1st Quarter 2005
Type: Improved Facility **End Date:** 4th Quarter 2007
Project ID: 6346
Location: 10382 Boundary Rd

When Boundary Dam was constructed in the 1960s, the FERC licensed Generators 51, 52, 53 and 54. When Generators 55 and 56 were added to the plant in the 1980s, FERC amended the license. Although the amendment required that City Light add more recreational facilities, none have been added due to water and sewer issues. City Light plans to clarify with FERC whether or not further work is necessary in the Tailrace Recreation Area prior to re-licensing negotiations. If work is required, this project implements the conceptual plan developed during the Boundary Rehabilitation Project.

During the 2004 budget process, the City Council grouped this project with several other Boundary Dam projects (6338, 6343, 6344, 6345, and 6347) and stipulated that no more than \$463,000 of the collective 2004 appropriations for these projects can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	214	707	118	0	0	1,039
TOTAL FUNDS	0	0	0	214	707	118	0	0	1,039
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Transformer Bay Rockfall Mitigation

Program: Generation **Start Date:** 1st Quarter 2003
Type: Improved Facility **End Date:** 3rd Quarter 2005
Project ID: 6357
Location: 10382 Boundary Rd

This project provides funding for a construction contract to perform rock drilling, as necessary, to run conductor cables from the top of the cliff over the transformer bay or directly into the transformer bays at the Boundary Dam, to avoid exposure to rocks falling from the rockface. If this solution is cost prohibitive, City Light intends to determine and implement an alternative mitigation method, such as using spare outriggers or transformers for emergency repairs.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	169	207	145	0	0	0	0	521
TOTAL FUNDS	0	169	207	145	0	0	0	0	521
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Trashrake System

Program: Generation **Start Date:** 1st Quarter 2003
Type: Improved Facility **End Date:** 1st Quarter 2006
Project ID: 6338
Location: 10382 Boundary Rd

The trashrack (a fixed element which keeps debris out of a generator) was installed when the Boundary Dam was built, to prevent debris from going into the penstocks. This project funds the addition of a trashrake to remove debris that accumulates in the trashrack. This project performs a thorough underwater inspection of the trashrack and repairs any damage found. It also designs and installs trashrake equipment to keep the racks clear of debris on a regular basis.

During the 2004 budget process, the City Council grouped this project with several other Boundary Dam projects (6343, 6344, 6345, 6346, and 6347) and stipulated that no more than \$463,000 of the collective 2004 appropriations for these projects can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	59	69	1,434	19	0	0	0	1,581
TOTAL FUNDS	0	59	69	1,434	19	0	0	0	1,581
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Unit 51 Turbine Runner

Program: Generation **Start Date:** 1st Quarter 1996
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2004
Project ID: 6124
Location: 10382 Boundary Rd

The Boundary Dam Unit 51 Turbine Runner overhaul refurbishes the dam's turbine to "as new" condition. This is accomplished by replacing or refurbishing worn turbine components and by installing a new turbine runner. The goals of the project are improved turbine efficiency, increased operational flexibility, and increased overall generating reliability. Major activities include the purchase of a new runner (same design as Units 52, 53 and 54); the purchase of additional turbine components such as self-lubricating bushings; disassembly of the turbine/generator; evaluation of the condition of parts; refurbishment, replacement, or modification of parts; and reassembly with the new, refurbished, or modified parts.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	3,771	2,062	26	0	0	0	0	0	5,859
TOTAL FUNDS	3,771	2,062	26	0	0	0	0	0	5,859
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Unit 53 Turbine Runner

Program: Generation **Start Date:** 1st Quarter 1996
Type: Rehabilitation or Restoration **End Date:** 1st Quarter 2003
Project ID: 6126
Location: 10382 Boundary Rd

The Boundary Dam Unit 53 Turbine Runner overhaul refurbishes the Dam's turbine to "as new" condition. This is accomplished by replacing or refurbishing worn turbine components and by installing a new turbine runner. The goals for this project are improved turbine efficiency, increased operational flexibility, and increased overall generating reliability. Major activities include the purchase of a new runner (same design as Units 51, 52 and 54); the purchase of additional turbine components such as self lubricating bushings; disassembly of the turbine/generator; evaluation of the condition of parts; refurbishment, replacement, or modification of parts; and reassembly with the new, refurbished, or modified parts.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	4,952	273	0	0	0	0	0	0	5,225
TOTAL FUNDS	4,952	273	0	0	0	0	0	0	5,225
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Unit 55 Generator Rebuild

Program: Generation **Start Date:** 1st Quarter 2007
Type: Rehabilitation or Restoration **End Date:** 1st Quarter 2009
Project ID: 6303
Location: 10382 Boundary Rd

This project is part of the Utility's Generator Rebuild Program. The program rebuilds ten generators (accounting for 70% of City Light's generating capability) by the end of 2013. This project repairs the stator of the Unit 55 Generator, which has been damaged by long-term exposure to excessive vibration inherent in the original generator design. (The stator is the stationary hollow cylinder in which the magnet rotates to generate electricity.) Although the vibration problem was resolved in the mid-1990s, the life of the stator was reduced by exposure to more than 15 years of severe vibration.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	6,386	773	94	7,253
TOTAL FUNDS	0	0	0	0	0	6,386	773	94	7,253
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Unit 56 Generator Rebuild

Program: Generation **Start Date:** 1st Quarter 2009
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2010
Project ID: 6354
Location: 10382 Boundary Rd

As part of a programmatic series of rehabilitation projects for 10 aging generators located at Ross, Diablo, and Boundary Powerhouses, this project issues a purchase and install contract for rewinding and refurbishment of the generator. A share of this project's expenditures are anticipated to occur after 2009.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	0	0	6,690	6,690
TOTAL FUNDS	0	0	0	0	0	0	0	6,690	6,690
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Units 51-54 Turbine Pit Cranes

Program: Generation **Start Date:** On hold
Type: Improved Facility **End Date:** On hold
Project ID: 6350
Location: 10382 Boundary Rd

This project installs monorail hoist systems in the Units 51-54 turbine pits. Units 55 and 56 currently have monorail hoists, which facilitate maintenance and assembly of wicket gate linkages and other components in the turbine pits. Plant personnel have found that the monorail hoist systems in Units 55 and 56 have reduced the difficulty of and time required for maintenance. Similar advantages are realized by installing monorail hoists in the other four turbine pits. This project has been deferred from 2003; the new schedule has not yet been determined.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	0	0	0	0
TOTAL FUNDS	0	0	0	0	0	0	0	0	0
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Units 51-56 Control Board Upgrade

Program: Generation **Start Date:** 1st Quarter 2004
Type: Improved Facility **End Date:** 3rd Quarter 2007
Project ID: 6343
Location: 10382 Boundary Rd

This project provides funding for a purchase and install contract with an electrical contractor or supplier for the upgrade and/or replacement of Unit 51-56 unit control boards, as necessary, to provide full interface with a new network-based control system. Located on the powerhouse floor at each turbine/generator unit, Unit Control Boards control the operation of the units.

During the 2004 budget process, the City Council grouped this project with several other Boundary Dam projects (6338, 6344, 6345, 6346, and 6347) and stipulated that no more than \$463,000 of the collective 2004 appropriations for these projects can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	181	1,310	181	46	0	0	1,718
TOTAL FUNDS	0	0	181	1,310	181	46	0	0	1,718
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Dam - Units 51-56 Governor Controls Upgrade

Program: Generation **Start Date:** 1st Quarter 2005
Type: Improved Facility **End Date:** 3rd Quarter 2008
Project ID: 6340
Location: 10382 Boundary Rd

This project provides funding for a purchase and install contract with an electrical contractor or supplier to upgrade and/or replace Units 51-56 governor controls. This work maintains reliability and availability, and interfaces with a new network-based control system.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	368	1,278	162	55	0	1,863
TOTAL FUNDS	0	0	0	368	1,278	162	55	0	1,863
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Boundary Dam - Units 51-56 Penstock Flow Monitoring

Program: Generation **Start Date:** 1st Quarter 2004
Type: Improved Facility **End Date:** 2nd Quarter 2004
Project ID: 6383
Location: 10382 Boundary Rd

This project installs a permanent means of monitoring water flow in the turbines, either by installing acoustic flow meters or by providing accurate calibration and appropriate instrumentation to support the use of the existing differential pressure monitoring method.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	181	0	0	0	0	0	181
TOTAL FUNDS	0	0	181	0	0	0	0	0	181
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Boundary Vista House Recreation Area Improvements

Program: Generation **Start Date:** 1st Quarter 2004
Type: Improved Facility **End Date:** 1st Quarter 2005
Project ID: 6384
Location: 10382 Boundary Rd

City Light plans to clarify with Federal Energy Regulatory Commission (FERC) whether or not further work is necessary in the Vista House Recreation Area prior to re-licensing negotiations. If work is required, this project implements the conceptual plan developed during the Boundary Rehabilitation Project. If the work is not required, City Light intends to reprioritize its work plan and reallocate the funds to similar projects.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	128	13	0	0	0	0	141
TOTAL FUNDS	0	0	128	13	0	0	0	0	141
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Broad St. Substation Networks

Program: Distribution **Start Date:** 1st Quarter 1999
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8203

Location: 6th AV N

Neighborhood District: Downtown **Neighborhood Plan:** Not in a Neighborhood Plan

The Broad St. Substation Networks project provides added capacity and improved electrical system reliability to City Light customers in the Broad St. Substation service area. The project ensures that existing customers have reliable electric service and new customers can be connected to the system. Work may include installing new civil facilities (vaults and conduits), reconductoring and relocating primary feeders, upgrading network transformers, adding and separating secondary bus ties, installing fire wrap on cables, transferring load between networks (cuts and taps), installing real time ampacity equipment, installing primary switches for load transfer or sectionalizing, installing or replacing network protectors, installing fire protection systems, and rebalancing feeders.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	5,891	4,756	4,707	4,620	4,722	4,846	4,984	5,052	39,578
TOTAL FUNDS	5,891	4,756	4,707	4,620	4,722	4,846	4,984	5,052	39,578
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Cedar Falls - Habitat Conservation Plan

Program: Generation **Start Date:** 1st Quarter 2000
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 6214

Location: 19901 Cedar Falls Rd SE

The Cedar Falls Habitat Conservation Plan project implements environmental mitigation measures for the Cedar Falls Hydroelectric Project. This action is required to meet City Light's contribution to the Cedar River Habitat Conservation Plan. City Light's efforts combine with mitigation and enhancement projects funded by Seattle Public Utilities.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	4,409	981	44	0	0	0	0	0	5,434
TOTAL FUNDS	4,409	981	44	0	0	0	0	0	5,434
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Cedar Falls - Intake Gate Replacement

Program: Generation **Start Date:** 1st Quarter 1993
Type: New Facility **End Date:** 4th Quarter 2003
Project ID: 6171
Location: 19901 Cedar Falls Rd SE

The Cedar Falls Intake Gate Replacement project provides a new intake gate at the Cedar Falls Masonry Dam. The project's major activities (installing and testing the intake gate) occurred in 1999-2000. A Dam Failure Emergency Warning System remains to be installed in 2003.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	5,824	201	0	0	0	0	0	0	6,025
TOTAL FUNDS	5,824	201	0	0	0	0	0	0	6,025
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Cedar Falls - Rehab/Reline Penstocks

Program: Generation **Start Date:** 1st Quarter 2006
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2009
Project ID: 6358
Location: 19901 Cedar Falls Rd SE

This project repairs the two penstocks at Cedar Falls. A penstock is a conduit or pipeline through which water travels to run the turbines and generate power. The project includes relining the upper portions of the penstocks, performing a seismic upgrade of penstock bridges, repairing sagging or broken penstock support saddles, and touching up exterior paint.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	565	3,768	3,903	70	8,306
TOTAL FUNDS	0	0	0	0	565	3,768	3,903	70	8,306
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

Central Arterial Streetlights Major Maintenance

Program: Distribution **Start Date:** 1st Quarter 2000
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8212

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Central Arterial Streetlights Major Maintenance project provides necessary capital improvements and replacements to the City of Seattle's arterial streetlights in the downtown streetlight system in order to maintain right-of-way illumination in street rights-of-way. The City transferred ownership of 18,600 arterial streetlights to City Light at the end of 1999. Of those 18,600 streetlights, 5,000-6,000 lights are on poles installed exclusively for streetlighting. Many of these are fed underground. Projects include streetlight pole and foundation work and installation of streetlights.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	808	1,263	742	776	794	815	838	850	6,886
TOTAL FUNDS	808	1,263	742	776	794	815	838	850	6,886
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Communications Improvements

Program: Distribution **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 9009

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Communications Improvements project provides for unforeseen emergency work on City Light's communications systems. This ongoing program provides funding to replace critical communications components required due to failure, changing regulatory requirements, or requirements for upgrades.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	285	240	236	201	205	210	216	218	1,811
TOTAL FUNDS	285	240	236	201	205	210	216	218	1,811
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Consolidated Customer Service System

Program: Finance & Administration **Start Date:** 1st Quarter 1995
Type: New Investment **End Date:** 4th Quarter 2004
Project ID: 9910

Location: 700 5TH AV

Neighborhood District: Downtown **Neighborhood Plan:** Not in a Neighborhood Plan

The Consolidated Customer Service System (CCSS) is a single customer information system supporting both City Light and Seattle Public Utilities' billing and customer support functions. The system was built using the Banner commercial software package, with some custom modifications.

Plans for CCSS include the system's first major upgrade to a new version of the Banner product. The newer version of Banner offers improvements that directly address the challenges the City has faced using CCSS in its first year. These improvements include better tools for performing billing adjustments, better account processes, easier navigation within the system, improved displays of account information, and enhanced management reporting. In addition, this version is built with newer database and hardware components that are better supported by their respective vendors, Oracle and IBM. City Light is negotiating with the vendor to include many of the City's modifications as part of the baseline product in this upgrade release. This avoids both programming and future operations costs.

During the 2004 budget process, the City Council adopted a proviso for this project that stipulated no more than \$763,000 of the project's 2004 appropriation can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	48,984	3,631	3,203	0	0	0	0	0	55,818
TOTAL FUNDS	48,984	3,631	3,203	0	0	0	0	0	55,818
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Customer Data Services (CMart)

Program: Finance & Administration **Start Date:** 1st Quarter 2001
Type: New Investment **End Date:** 4th Quarter 2004
Project ID: 9926

Location: 700 5th Avenue

Neighborhood District: Downtown **Neighborhood Plan:** Not in a Neighborhood Plan

The Customer Data Services (CMart) project provides a data repository to support query, ad hoc reporting, and data extract demands of City Light staff. The system provides premise, meter, consumption, billing, technical metering, and meter reading data by extracting and centralizing data from various systems including the Consolidated Customer Service System (CCSS), Itron, City Light Advanced Meter System (CLAMS), and the Industrial and Commercial Subsidiary Billing (ICSB). This allows City Light staff to quickly respond to customer inquiries, identify future marketing areas, and resolve customer billing and service issues in a proactive and timely manner by providing high level summary reporting as well as more detailed reports.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	5,797	1,492	1,392	0	0	0	0	0	8,681
TOTAL FUNDS	5,797	1,492	1,392	0	0	0	0	0	8,681
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

Dam Safety Program

Program: Generation **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 6389
Location: Various

This ongoing program provides capital improvements to upgrade the safety requirements of all of the dams in the City Light system as required by the Federal Energy Regulatory Commission (FERC).

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	118	83	132	137	139	142	145	896
TOTAL FUNDS	0	118	83	132	137	139	142	145	896
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Diablo Dam - Automate Spillgates

Program: Generation **Start Date:** 1st Quarter 2005
Type: Improved Facility **End Date:** 4th Quarter 2006
Project ID: 6359
Location: Milepost 126 State Highway 20

This project installs automatic hoists for Gates 17, 18, and 19 at Diablo Dam, similar to those for Gates 1, 2, and 3. The project also includes purchase of a second mule hoist, a portable winch that is manually moved from gate to gate and used for raising and lowering the spillway gates.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	82	587	0	0	0	669
TOTAL FUNDS	0	0	0	82	587	0	0	0	669
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Diablo Dam - Spillgate Control Improvements

Program: Generation **Start Date:** 1st Quarter 2001
Type: Rehabilitation or Restoration **End Date:** 1st Quarter 2004
Project ID: 6238
Location: Milepost 126 State Highway 20

The Diablo Dam Spillgate Control Improvements project replaces the motor starters and controls for the three Diablo Dam motorized spillgates. This project includes gate-status and opening-height transducers and analog data transponders. Safety disconnect switches and motor-current limiters also are installed.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	43	272	10	0	0	0	0	0	325
TOTAL FUNDS	43	272	10	0	0	0	0	0	325
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Diablo Powerhouse - Replace 5 kV Switchgear

Program: Generation **Start Date:** 1st Quarter 2006
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2007
Project ID: 6364
Location: Milepost 126 State Highway 20

This project replaces the existing 5 kilovolt (kV) switchgear in the Diablo Powerhouse with a new 5 kV switchgear system. This project enhances switching capability, provides protective relaying, and replaces aging high-voltage circuit breakers.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	513	529	0	0	1,042
TOTAL FUNDS	0	0	0	0	513	529	0	0	1,042
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Diablo Powerhouse - Replace Control and Power

Program: Generation **Start Date:** 1st Quarter 2007
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2008
Project ID: 6363
Location: Milepost 126 State Highway 20

This project replaces aging control and power cables in the Diablo Powerhouse.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	363	375	0	738
TOTAL FUNDS	0	0	0	0	0	363	375	0	738
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Diablo Powerhouse - Replace Units 31-32 Governors

Program: Generation **Start Date:** 1st Quarter 2008
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2009
Project ID: 6366
Location: Milepost 126 State Highway 20

This project replaces the governors on Generator Units 31 and 32. The governor is the part of the turbine/generator that controls the amount of water going through the turbine, and thereby controls the amount of power generated.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	0	265	274	539
TOTAL FUNDS	0	0	0	0	0	0	265	274	539
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Diablo Powerhouse - Upgrade Annunciator System

Program: Generation **Start Date:** 1st Quarter 2005
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2005
Project ID: 6367
Location: Milepost 126 State Highway 20

This project replaces and upgrades the annunciator system at Diablo Powerhouse. The annunciator system monitors various portions of the generating system.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	343	0	0	0	0	343
TOTAL FUNDS	0	0	0	343	0	0	0	0	343
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Diablo Powerhouse DC Lighting Systems Upgrade

Program: Generation **Start Date:** 1st Quarter 2004
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2005
Project ID: 6365
Location: Milepost 126 State Highway 20

This project replaces out-of-date AC/DC lighting systems at Diablo Powerhouse with more energy-efficient systems.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	119	217	0	0	0	0	336
TOTAL FUNDS	0	0	119	217	0	0	0	0	336
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Diablo Sewer System Improvement

Program: Generation **Start Date:** 1st Quarter 2000
Type: Rehabilitation or Restoration **End Date:** 1st Quarter 2008
Project ID: 6232
Location: Milepost 126 State Highway 20

The Diablo Sewer System Improvement project repairs numerous sewer pipe breaks, leaks, and sags in the combined Diablo sewer/drainage collection system. This project eliminates overloads in the sewage treatment plant, pollution of Skagit River, and contamination of soil.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	1	0	0	0	94	845	9	0	949
TOTAL FUNDS	1	0	0	0	94	845	9	0	949
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Diablo Switchyard Resurfacing

Program: Generation **Start Date:** 1st Quarter 2005
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2005
Project ID: 6361
Location: 502 Diablo St

This project resurfaces the Diablo Switchyard.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	374	0	0	0	0	374
TOTAL FUNDS	0	0	0	374	0	0	0	0	374
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Diablo Water System Improvements

Program: Generation **Start Date:** 1st Quarter 2003
Type: Improved Facility **End Date:** 2nd Quarter 2005
Project ID: 6304
Location: Milepost 126 State Highway 20

This project improves provision of water supply for the town of Diablo. Four subprojects provide a booster pump, backflow protection, a new well, and an upgraded tailrace pipe.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	45	204	24	0	0	0	0	273
TOTAL FUNDS	0	45	204	24	0	0	0	0	273
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Disaster Recovery/Business Continuity

Program: Finance & Administration **Start Date:** 1st Quarter 2001
Type: New Investment **End Date:** 4th Quarter 2007
Project ID: 9925
Location: 700 5TH AV

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Disaster Recovery/Business Continuity Planning project minimizes damage to City Light, its employees, and customers, in the event of a disaster. This project involves acquiring and utilizing software, hardware and services to analyze risks; developing recovery and continuity mechanisms and infrastructure; and exercising disaster test scenarios.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	293	49	122	447	977	240	0	0	2,128
TOTAL FUNDS	293	49	122	447	977	240	0	0	2,128
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Distribution Area Communications Networks

Program: Distribution **Start Date:** 1st Quarter 1999
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 9307

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

This project provides fiber rings to City Light facilities to create a secure digital communications network for Distribution system operations and control. The fiber infrastructure provides a secure path for power distribution system control and dispatch, Energy Management System data, and other City Light communications that support Substation Automation, Distribution Automation, Distributed Generation, and automated meter reading.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	1,219	555	633	656	668	685	704	714	5,834
TOTAL FUNDS	1,219	555	633	656	668	685	704	714	5,834
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Distribution Automated Mapping System

Program: Finance & Administration **Start Date:** 2nd Quarter 1992
Type: New Investment **End Date:** 4th Quarter 2009
Project ID: 9905

Location: 700 5TH AV

Neighborhood District: Downtown **Neighborhood Plan:** Not in a Neighborhood Plan

The Distribution Automated Mapping System project provides electronic geographic mapping data to model City Light's distribution system. This application provides timely and accurate information about City Light's distribution system to help facilitate the uninterrupted delivery of power to customers. The system supports automated mapping and analytical tools for system maintenance and operation. Integration work with the utilities work management, facilities management, and the customer information system is planned. Funding allows the project to leverage its initial investment by using the Geographical Information System (GIS) for service and operational purposes. A technology refresh of the system is planned to ensure continued system stability.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	21,434	1,164	1,199	1,331	1,405	1,482	1,562	1,587	31,164
TOTAL FUNDS	21,434	1,164	1,199	1,331	1,405	1,482	1,562	1,587	31,164
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Downtown Substation - Preliminary Engineering

Program: Distribution **Start Date:** 1st Quarter 2002
Type: New Facility **End Date:** 4th Quarter 2009
Project ID: 7754

Location: Citywide

Neighborhood District: Downtown **Neighborhood Plan:** Not in a Neighborhood Plan

The Downtown Substation - Preliminary Engineering project researches property acquisition options and performs preliminary engineering to determine timing of construction of a new substation. A new substation ensures that adequate capacity to serve Downtown and First Hill customers is maintained.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	35	24	1	3	3	3	3	3	75
TOTAL FUNDS	35	24	1	3	3	3	3	3	75
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Drawing Conversions - Seattle City Light

Program: Finance & Administration **Start Date:** 1st Quarter 1995
Type: New Investment **End Date:** 2nd Quarter 2003
Project ID: 9909

Location: 700 5th Avenue

Neighborhood District: Downtown **Neighborhood Plan:** Not in a Neighborhood Plan

The Drawing Conversions project converts City Light's paper engineering drawings to electronic computer format. Computer technology updates and maintains drawings to provide engineers and field crews with more accurate documents. The multi-year proposal directly supports the generation system rehabilitation projects, the recommendations from the CIP Review performed by R.W. Beck, and the Information Technology Strategic Plan. An upgrade of the drawing and document management occurred in 2002. The remaining items for this CIP are closeout tasks associated with the organization, business processes, and production use of engineering drawings for Power Stations and Generation.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	6,071	43	0	0	0	0	0	0	6,114
TOTAL FUNDS	6,071	43	0	0	0	0	0	0	6,114
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Electrical Services Replacement

Program: Distribution **Start Date:** 1st Quarter 2009
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2009
Project ID: 8997

Location: Various

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

This project plans for future years' Distribution System capital project budgets. The intent is to assist the rates staff in making projections for future revenue requirements and to allow future rate planning.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	0	0	271	271
TOTAL FUNDS	0	0	0	0	0	0	0	271	271
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Endangered Species Act Mitigation

Program: Executive **Start Date:** 1st Quarter 2000
Type: New Facility **End Date:** 4th Quarter 2009
Project ID: 6990

Location: Various

The purpose of the Endangered Species Act (ESA) Mitigation project is to provide habitat protection and restoration benefits to Chinook salmon so that the City meets its ESA commitments under the Early Action Proposal (EAP) adopted by City Council in March 1999. The EAP includes habitat acquisition and protection in the four Puget Sound watersheds where the City has primary operational interests (Skagit, Snohomish, Cedar/Lake Washington, and the Green/Duwamish) and a research and monitoring program.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	2,649	1,498	706	578	699	614	744	758	8,246
TOTAL FUNDS	2,649	1,498	706	578	699	614	744	758	8,246
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Environmental Learning Center

Program: Generation **Start Date:** 1st Quarter 2001
Type: New Facility **End Date:** 1st Quarter 2005
Project ID: 6988
Location: Milepost 128 State Highway 20

The North Cascades Environmental Learning Center (NCELC) is one of several environmental mitigation projects that City Light is required by the Federal Energy Regulatory Commission (FERC) to provide for 30 more years of continued Skagit River Hydroelectric Project operation. This project constructs 16 new one-story, wood-frame buildings and remodels one existing building (for a total of approximately 33,400 square feet). The project includes a new commercial kitchen; a new propane fuel system; the removal of old kitchen equipment in the dining hall and some fire hydrants; a parking area and access roads; shoreline restoration; landscaping and revegetation, including pathways, planting and seeding, rock retaining walls, irrigation and exterior lighting; a new floating dock; a new amphitheater; modifying the water supply system, including installing a new water tank, well pump, and chlorination system; modifying the sanitary sewer system; trenching and conduit for new underground utilities; conduit for data communications; new signage; an entry gate structure and outdoor seating areas; and fire sprinkler system. The Memorandum of Agreement between the City of Seattle (City Light), the US Department of the Interior National Park Service (North Cascades National Park), and the North Cascades Institute provides that the National Park Service is responsible for the sewer and water system and City Light is responsible for other construction costs, plus certain operation and maintenance costs.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	4,342	11,278	304	19	0	0	0	0	15,943
TOTAL FUNDS	4,342	11,278	304	19	0	0	0	0	15,943
<i>O&M Costs (Savings)</i>			49	50	52	53	54	54	

Facilities ADA and Regulatory Compliance

Program: Finance & Administration **Start Date:** 1st Quarter 1998
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 9151
Location: Various

The Facilities ADA and Regulatory Compliance project provides barrier-free, code-compliant facilities for employees and customers to preserve and reinforce City Light's leadership position on environmental and accessibility initiatives. Many of the public facilities at the Skagit Hydroelectric Site support recreational activities within the National Park and also serve the Skagit Tours program. All of these public areas are subject to the regulations outlined in the Americans with Disabilities Act (ADA). Many modifications have already been made by the Skagit Facilities staff, with special focus on tourist facilities. Continued efforts to achieve equal access require modification to building entrances and ramps, dining accommodations, restrooms, and parking.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	8	0	0	90	93	95	97	100	483
TOTAL FUNDS	8	0	0	90	93	95	97	100	483
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Facilities Environmental Remediation

Program: Finance & Administration **Start Date:** 1st Quarter 1997
Type: Improved Facility **End Date:** 3rd Quarter 2009
Project ID: 9152
Location: Various

The Facilities Environmental Remediation project prevents air and water pollution at City Light facilities and improves hazardous material handling. This project implements cost-appropriate solutions for environmental problems, when identified, and provides facilities to meet environmental and remediation concerns. Typical projects include providing ventilation for painting and sandblasting operations and providing storage for toxic materials.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	642	67	0	150	156	160	164	167	1,506
TOTAL FUNDS	642	67	0	150	156	160	164	167	1,506
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Facility Security

Program: Finance & Administration **Start Date:** 1st Quarter 1998
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 9154
Location: Various

The Facility Security project provides personal safety and protection for buildings and equipment at locations such as service centers, substations, and power generation sites. These improvements provide a safe workplace for employees and protect assets to assure uninterrupted power delivery to City Light's customers. This project involves designing and installing effective intrusion alarm systems and implementing procedures to improve security at powerhouses. The program of improvements is based on a security study performed in 1998. Intrusion deterrent hardware may include improved doors and locks to prevent access, motion detectors to reduce false alarms, and audio/light devices activated upon intrusion. Central station monitoring is included.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	161	0	0	122	127	131	134	136	811
TOTAL FUNDS	161	0	0	122	127	131	134	136	811
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Fire Protection Systems Modification

Program: Generation **Start Date:** 1st Quarter 1993
Type: Improved Facility **End Date:** 1st Quarter 2005
Project ID: 6166
Location: Various

The Fire Protection Systems Modification project procures and installs a refrigerated carbon dioxide storage tank, operating at 300 pounds per square inch. This system protects generators, oil rooms, and the station service room at Ross and Diablo dams. An advanced smoke detection system for early warning is installed for the control, relay, and communications rooms.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	1,378	0	846	32	0	0	0	0	2,256
TOTAL FUNDS	1,378	0	846	32	0	0	0	0	2,256
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

First Hill Network

Program: Distribution **Start Date:** 1st Quarter 2002
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8301
Location: 1100 MADISON ST

Neighborhood District: Downtown **Neighborhood Plan:** Not in a Neighborhood Plan

The First Hill Network project provides added capacity and improved electrical system reliability to City Light customers in the First Hill service area. Existing customers have reliable electric service and new customers are connected to the system. Work includes installation of new civil facilities (vaults and conduits) and reconductoring and relocation of primary feeders. Other work includes installation of fire wrap on cables, replacement of non-submersible network protectors, and rebalancing network feeders (cuts and taps). Future work includes upgrades to network transformers, additions and separations of secondary bus ties, installation of bus tie switches, replacement of failed cables, and related work.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	64	1,868	1,070	1,096	1,121	1,150	1,183	1,200	8,752
TOTAL FUNDS	64	1,868	1,070	1,096	1,121	1,150	1,183	1,200	8,752
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

Generation - Civil-Mechanical Modification

Program: Generation **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 6005
Location: Various

The purpose of the Generation - Civil-Mechanical Modification project is to provide a financial placeholder for unscheduled capital work. This project covers miscellaneous and small unscheduled improvements.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	778	1,258	1,007	1,244	1,277	1,310	1,343	1,365	9,582
TOTAL FUNDS	778	1,258	1,007	1,244	1,277	1,310	1,343	1,365	9,582
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Generation - Electrical Enhancements

Program: Generation **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 6087
Location: Various

The purpose of the Generation Electrical Enhancements project is to provide a financial placeholder for unscheduled capital projects. This project covers miscellaneous and small unscheduled improvements.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	143	858	938	907	928	950	975	992	6,691
TOTAL FUNDS	143	858	938	907	928	950	975	992	6,691
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Generation Replacement

Program: Generation **Start Date:** 1st Quarter 2009
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2009
Project ID: 6999
Location: Citywide

This project provides long-term planning funds for as yet unidentified capital replacements in City Light's Generation plant. This financial capacity allows the utility's rates staff to make projections of future revenue requirements and allow for future rate planning.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	0	0	5,715	5,715
TOTAL FUNDS	0	0	0	0	0	0	0	5,715	5,715
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Gorge Dam - Spillgate Control Improvements

Program: Generation **Start Date:** 1st Quarter 2001
Type: Improved Facility **End Date:** 2nd Quarter 2004
Project ID: 6222
Location: Milepost 121 State Highway 20

The Gorge Dam Spillgate Control Improvements project replaces the motor starters and controls for the two Gorge Dam spillgates. Included for replacement are the gate-status and opening-height transducers and related telecommunications equipment.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	90	150	35	0	0	0	0	0	275
TOTAL FUNDS	90	150	35	0	0	0	0	0	275
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Dam - Spillgate Rehabilitation

Program: Generation **Start Date:** 1st Quarter 2002
Type: Rehabilitation or Restoration **End Date:** 1st Quarter 2008
Project ID: 6221
Location: Milepost 121 State Highway 20

The Gorge Dam Spillgate Rehabilitation project provides inspection and repairs to two dam spillgates to prevent loss of structural integrity. The Gorge Dam contains two 47- by 50-foot vertical-lift spillgates which regulate the river flow during floods and increase the capability to generate electricity during normal flows. The project replaces deteriorated bolts, a condition observed in 1997 during seal-replacement work on gate #1. The same condition is assumed to exist on gate #2.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	1,461	46	0	1,507
TOTAL FUNDS	0	0	0	0	0	1,461	46	0	1,507
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Dam - Unit 24 Turbine-Runner Overhaul

Program: Generation **Start Date:** 1st Quarter 1999
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2007
Project ID: 6219
Location: Milepost 121 State Highway 20

The Gorge Dam - Unit 24 Turbine-Runner Overhaul project refurbishes the turbine to "as-new" condition. Work includes replacing or refurbishing worn turbine components and installing a new turbine runner. This project is part of the programmatic turbine rehabilitation program to overhaul and upgrade City Light's aging hydroelectric turbines. Along with the runner replacement, new seal rings, self-lubricating bushings, and wicket-gate refurbishment are provided.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	43	48	1,741	1,150	2,737	555	0	0	6,274
TOTAL FUNDS	43	48	1,741	1,150	2,737	555	0	0	6,274
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

Gorge Powerhouse - 240 kV Oil-filled Circuit Breakers

Program: Generation **Start Date:** 1st Quarter 1999
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 6226
Location: Milepost 121 State Highway 20

The Gorge Powerhouse - 240 kV Oil-filled Circuit Breakers (OCB) project replaces out-of-date circuit breakers at the Gorge Powerhouse with SF-6 gas circuit breakers. The project replaces the four oil-filled circuit breakers at the Gorge Switchyard.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	767	334	605	0	0	0	0	0	1,706
TOTAL FUNDS	767	334	605	0	0	0	0	0	1,706
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Powerhouse - AC/DC Distribution System

Program: Generation **Start Date:** 1st Quarter 2000
Type: Rehabilitation or Restoration **End Date:** 2nd Quarter 2004
Project ID: 6207
Location: Milepost 121 State Highway 20

The Gorge Powerhouse AC/DC Distribution System project replaces DC distribution panels, unitizes DC control and alarm circuits to individual generators, provides AC station service grounding, and replaces AC distribution panels and branch circuits in Gorge Powerhouse to improve efficiency and reliability.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	291	236	26	0	0	0	0	0	553
TOTAL FUNDS	291	236	26	0	0	0	0	0	553
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Powerhouse - Control and Power Cabling Replacement

Program: Generation **Start Date:** 1st Quarter 2006
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2008
Project ID: 6328
Location: Milepost 121 State Highway 20

This project replaces deteriorating control and power cabling within the Gorge Powerhouse. Work reduces troubleshooting time spent tracing ground faults, eases installation of future projects, and increases generator availability.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	194	201	306	0	701
TOTAL FUNDS	0	0	0	0	194	201	306	0	701
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Gorge Powerhouse - Generator Hall and High Room Lighting

Program: Generation **Start Date:** 1st Quarter 2006
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2007
Project ID: 6330
Location: Milepost 121 State Highway 20

This project replaces the lighting fixtures and wiring in the main generator hall and high room at the Gorge Powerhouse.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	247	255	0	0	502
TOTAL FUNDS	0	0	0	0	247	255	0	0	502
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Powerhouse - Programmable Logic Controllers

Program: Generation **Start Date:** 1st Quarter 2006
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2006
Project ID: 6369
Location: Milepost 121 State Highway 20

This project replaces the relays at the Gorge Powerhouse with programmable-logic controllers (PLCs). The relays to be replaced are part of the Gorge Powerhouse annunciator system. PLCs are the current electrical devices used in place of the old relay system. This project is part of the comprehensive Skagit Relay Improvement effort that is providing modern protective relaying for the Ross, Gorge, Diablo, and Newhalem Powerhouses.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	229	0	0	0	229
TOTAL FUNDS	0	0	0	0	229	0	0	0	229
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Powerhouse - Transformer Bank 10 Replacement

Program: Generation **Start Date:** 3rd Quarter 2000
Type: Rehabilitation or Restoration **End Date:** 1st Quarter 2005
Project ID: 6224
Location: Milepost 121 State Highway 20

The Gorge Powerhouse Transformer Bank 10 Replacement project removes the oil transformer and its conductors and provides a dry transformer and conductors to the Gorge Powerhouse to ensure reliability and prevent environmental exposure hazard.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	24	0	345	19	0	0	0	0	388
TOTAL FUNDS	24	0	345	19	0	0	0	0	388
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

Gorge Powerhouse - Transformer Bank 22 Replacement

Program: Generation **Start Date:** 1st Quarter 2005
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2006
Project ID: 6370
Location: Milepost 121 State Highway 20

This project replaces Transformer Bank 22 at the Gorge Powerhouse with a new bank of transformers; the existing transformers are near the end of their useful life. City Council adopted a proviso for this project that stipulated that none of the project's 2004 appropriation amount be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	2,186	871	0	0	0	3,057
TOTAL FUNDS	0	0	0	2,186	871	0	0	0	3,057
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Powerhouse - Transformer Bank 24 Replacement

Program: Generation **Start Date:** 1st Quarter 2006
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2008
Project ID: 6371
Location: Milepost 121 State Highway 20

This project replaces Transformer Bank 24 and purchases a spare transformer for the Diablo and Gorge Powerhouses. The spare transformer can be used to minimize loss of generation in the event of an unexpected failure of one of the existing transformers.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	3,324	897	45	0	4,266
TOTAL FUNDS	0	0	0	0	3,324	897	45	0	4,266
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Gorge Switchyard - Resurfacing

Program: Generation **Start Date:** 1st Quarter 2005
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2005
Project ID: 6362
Location: Milepost 121 State Highway 20

This project resurfaces the Gorge Switchyard.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	249	0	0	0	0	249
TOTAL FUNDS	0	0	0	249	0	0	0	0	249
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Information Technology Infrastructure

Program: Finance & Administration **Start Date:** Ongoing
Type: New Investment **End Date:** Ongoing
Project ID: 9915

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Information Technology Infrastructure project replaces aging and obsolete hardware and software that supports City Light's information technology infrastructure and operating environment. Infrastructure is upgraded to address an ever-increasing and sophisticated application base, network load, and new office automation technologies. This project is necessary to maintain a stable computing environment allowing employees to accomplish work requiring automated technology without interruption or loss of productivity. Components purchased and maintained include servers, network and data communications equipment, high speed laser printers and application/OS software. These components are required to meet basic business requirements for City Light's information technologies.

During the 2004 budget process, the City Council adopted a proviso that stipulated that no more than \$1,926,000 of the 2004 appropriation for this project can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	19,385	2,677	2,171	3,354	4,096	4,501	4,897	4,980	46,061
TOTAL FUNDS	19,385	2,677	2,171	3,354	4,096	4,501	4,897	4,980	46,061
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Interbay Substation

Program: Distribution **Start Date:** 4th Quarter 2000
Type: New Facility **End Date:** 4th Quarter 2009
Project ID: 7756

Location: 3240 17TH AV W

Neighborhood District: Magnolia/Queen Anne **Neighborhood Plan:** Not in a Neighborhood Plan

This project plans, designs, and constructs a 26-kV substation in the Interbay area. Land was acquired in 2001 and design work was underway in 2003. Additional funding is to be sought for building the substation.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	2,352	78	1	3	3	3	3	3	2,446
TOTAL FUNDS	2,352	78	1	3	3	3	3	3	2,446
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Ladder Creek Water System

Program: Generation **Start Date:** 3rd Quarter 2001
Type: Rehabilitation or Restoration **End Date:** 3rd Quarter 2005
Project ID: 6234
Location: Milepost 126 State Highway 20

The Ladder Creek Water System project provides an assured supply of irrigation water to Ladder Creek Gardens behind Gorge Powerhouse to provide the historic gardens with sufficient water.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	7	0	191	213	0	0	0	0	411
TOTAL FUNDS	7	0	191	213	0	0	0	0	411
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Maple Valley Sno-King 230 kV Line Restoration

Program: Distribution **Start Date:** 1st Quarter 1998
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2003
Project ID: 7054
Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

This project restores the Maple Valley to Sno-King 230 kV transmission line consistent with ratings assumed by the Western Systems Coordinating Council (WSCC). Work includes vegetation clearing along right-of-way and line work, including replacement of a tower with a pole, and raising certain conductors to obtain necessary line clearance heights.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	3,590	8	0	0	0	0	0	0	3,598
TOTAL FUNDS	3,590	8	0	0	0	0	0	0	3,598
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Massachusetts St. Substation Networks

Program: Distribution **Start Date:** 1st Quarter 1999
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8202

Location: 1555 UTAH AV S

Neighborhood District: Greater Duwamish **Neighborhood Plan:** Not in a Neighborhood Plan

The Massachusetts St. Substation Networks project adds capacity and improves reliability of the electrical system for City Light customers in the Massachusetts St. Substation service area. Existing customers continue to have reliable electric service and new customers are connected to the system. Work may include installation of new civil facilities (vaults and conduits), reconductoring and relocation of primary feeders, upgrading network transformers, additions and separations to secondary bus ties, installation of fire wrap on cables, transferring load between networks (cuts and taps), installation of real time ampacity equipment, installation of primary switches for load transfer or sectionalizing, installation or replacement of network protectors, installation of fire protection systems, and rebalancing feeders.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	720	307	491	453	463	475	488	495	3,892
TOTAL FUNDS	720	307	491	453	463	475	488	495	3,892
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Mechanical Improvements

Program: Finance & Administration **Start Date:** 1st Quarter 1997
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 9156

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Mechanical Improvements project provides funding for design, materials, and construction for a variety of heating, ventilation, and air conditioning improvement and replacement projects. This is an essential part of maintaining City Light facilities. Examples of projects include installing heat pumps to increase cooling in computer server rooms when equipment additions increase heat loads.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	881	96	0	236	245	252	258	263	2,231
TOTAL FUNDS	881	96	0	236	245	252	258	263	2,231
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Meter Additions

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8054

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the Meter Additions project is to provide new or replacement meters to enable City Light to generate customer bills. There are three types of work in this project: New Services, installation of approximately 5,000 meters annually for new or upgraded commercial and residential customer electrical services; Obsolete Meter Exchanges, which is an exchange of approximately 12,500 (out of 370,000 in the distribution system) obsolete meters annually; and New Technology and Automated Metering Options, pilot projects to demonstrate new metering devices and systems, including study of micro-turbines, fuel cells, and solar cells to determine the impact on the distribution system and the requirements for net metering.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	2,741	2,882	2,929	2,665	2,726	2,798	2,877	2,916	22,534
TOTAL FUNDS	2,741	2,882	2,929	2,665	2,726	2,798	2,877	2,916	22,534
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Metro Direct Current Cables

Program: Distribution **Start Date:** 1st Quarter 1996
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8144

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Metro Direct Current Cables project relocates King County Metro DC cables out of City Light maintenance holes and vaults. This improves network reliability by separating and isolating the two electric systems, which have uncoordinated protection schemes. King County has already relocated some cables at their own expense.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	28	5	6	5	6	6	6	6	68
TOTAL FUNDS	28	5	6	5	6	6	6	6	68
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Miscellaneous Building Improvements

Program: Finance & Administration **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 9007

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Miscellaneous Building Improvements project provides funds for design, materials, and construction of a variety of small projects that are not large enough to merit separate capital projects. The project also provides funds for urgent, unscheduled improvements associated with City Light's general plant. Typical projects include plumbing, air quality improvements, remodeling and demolition.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	279	150	249	485	497	0	0	0	1,660
TOTAL FUNDS	279	150	249	485	497	0	0	0	1,660
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Mobile Equipment

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 9101

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Mobile Equipment project provides funds to replace and expand, when required, City Light's heavy duty mobile equipment fleet. It also funds gradual replacement of light duty vehicles that were previously leased from the Fleets & Facilities Department and are now owned by City Light.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	618	1,280	737	1,026	1,055	1,082	1,111	1,125	8,034
TOTAL FUNDS	618	1,280	737	1,026	1,055	1,082	1,111	1,125	8,034
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Neighborhood Planning

Program: Distribution **Start Date:** 1st Quarter 1999
Type: New Facility **End Date:** Ongoing
Project ID: 8207

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

This project implements pedestrian and safety lighting projects that are neighborhood plan priorities. The Department of Neighborhoods, with City Light's technical assistance, coordinates outreach activities with the community to set these priorities.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	75	671	422	555	570	584	600	608	4,085
TOTAL FUNDS	75	671	422	555	570	584	600	608	4,085
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Neighborhood Undergrounding

Program: Distribution **Start Date:** 1st Quarter 1999
Type: New Facility **End Date:** Ongoing
Project ID: 8206

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

During the 2000 budget process, the City Council adopted a Statement of Legislative Intent directing City Light not to expend or divert any funds from this project until the Council has established clear policies and guidelines for responding to neighborhood plan requests for undergrounding utilities, and has by Resolution, restored City Light's authority to use these funds. This prohibition is intended to apply whether the undergrounding is on residential streets or on arterial streets.

It is not the intent of this legislation to hinder the legitimate use of utility funds to assist neighborhoods with planning and feasibility assessment, or the implementation of non-undergrounding projects already approved; that activity is funded separately in City Light's CIP as project #8207 Neighborhood Planning.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	10	0	0	169	175	180	185	187	906
TOTAL FUNDS	10	0	0	169	175	180	185	187	906
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Network Additions and Services

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8057

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the Network Additions and Services project is to provide electrical service connections and related improvements in response to requests for service from customers in the Downtown, First Hill and University network areas. Capacity additions associated with service connections are included in this project. This project also includes replacement of failed network transformers, network protectors, and specialty transformers; short-duration system improvements identified during operations; and retrofitting in-building vaults in the First Hill network with fire detection systems. This program fluctuates with land use development. Approximately 20 properties are projected to receive service in the 2003-2004 budget cycle, including condominiums, office buildings, hotels, and apartment buildings.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	8,457	8,746	10,221	10,791	11,061	11,360	11,685	11,846	84,167
TOTAL FUNDS	8,457	8,746	10,221	10,791	11,061	11,360	11,685	11,846	84,167
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Network Hazeltine Upgrade

Program: Distribution **Start Date:** 1st Quarter 1995
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8129

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Network Hazeltine Upgrade project installs upgraded equipment in the existing network transformer monitoring system to better monitor the network vaults and transformers and take advantage of new capabilities in this system to maintain network reliability. A Nextgen unit is installed for new transformers and out-of-date Hazeltine units are replaced to continue real time monitoring of the system.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	540	392	301	314	322	331	340	345	2,885
TOTAL FUNDS	540	392	301	314	322	331	340	345	2,885
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Network Maintenance Hole and Vault Rebuild

Program: Distribution **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8130

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the Network Maintenance Hole and Vault Rebuild project is to repair or replace damaged or degraded maintenance holes and vaults to prevent future unsafe working conditions and avoid public hazards. Field surveys of Network vaults and maintenance holes are performed in the downtown and First Hill areas, and repairs are designed and completed for facilities requiring capital replacement. Repairs are prioritized by the results of the field surveys, in coordination with other City projects. In 2003, three manholes and three manhole roofs were rebuilt. In 2004, five manholes and four manhole roofs are rebuilt, and facility civil surveys are completed.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	15,504	2,280	2,730	3,068	3,148	3,232	3,323	3,368	36,653
TOTAL FUNDS	15,504	2,280	2,730	3,068	3,148	3,232	3,323	3,368	36,653
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Newhalem Creek Mitigation

Program: Executive **Start Date:** 1st Quarter 1997
Type: Improved Facility **End Date:** 1st Quarter 2006
Project ID: 6175
Location: 500 Newhalem St

The Newhalem Creek Mitigation project provides environmental mitigation to the natural environment allowing City Light to fulfill its federal license requirements and minimize adverse project impacts. This project covers environmental mitigation, enhancement and rehabilitation projects required by the February 1997 Federal Energy Regulatory Commission license for City Light's Newhalem Creek Hydroelectric Project. This project provides for the implementation of the following seven license-required capital improvement projects: constructing a tailrace fish barrier; modifying the intake system to provide for higher instream flows; reimbursing the North Cascades National Park Service for constructing a recreation trail; modifying the service road bridge to provide a trail crossing; modifying the Newhalem Powerhouse viewing platform; installing interpretive markers; and improving the Trail of the Cedars. The first six projects are complete; the seventh is scheduled to begin in 2005.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	1,023	0	0	60	9	0	0	0	1,092
TOTAL FUNDS	1,023	0	0	60	9	0	0	0	1,092
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Newhalem Garage - Revisions

Program: Generation **Start Date:** 1st Quarter 2005
Type: Improved Facility **End Date:** 2nd Quarter 2006
Project ID: 6231
Location: 500 Newhalem St

The Newhalem Garage Revisions project modifies the existing garage arrangement and design in order to adapt them to current use requirements. These requirements include increasing size, installing concrete floors, and adding 115V interior lighting and outlets. In addition, access to the garages is changed, adapting to the new landscape improvements built in 2000, consistent with the Master Landscape Plan required by City Light's Federal Energy Regulatory Commission license.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	171	261	0	0	0	432
TOTAL FUNDS	0	0	0	171	261	0	0	0	432
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Newhalem Powerhouse - Governor Replacement

Program: Generation **Start Date:** 1st Quarter 2007
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2008
Project ID: 6392
Location: 500 Newhalem St

This project replaces the Newhalem Powerhouse governor, which is the part of the turbine/generator that controls the amount of water going through the turbine, and thereby controls the amount of power generated.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	59	61	0	120
TOTAL FUNDS	0	0	0	0	0	59	61	0	120
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Newhalem Powerhouse - Station Battery & Charger Replacement

Program: Generation **Start Date:** 1st Quarter 2003
Type: Rehabilitation or Restoration **End Date:** 3rd Quarter 2003
Project ID: 6301
Location: 500 Newhalem St

The Newhalem Station Battery and Charger Replacement project replaces the 130-volt DC station battery and charger at Newhalem Powerhouse.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	154	0	0	0	0	0	0	154
TOTAL FUNDS	0	154	0	0	0	0	0	0	154
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

North 26kV Conversion

Program: Distribution **Start Date:** 1st Quarter 1981
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8124
Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The North 26kV (kilovolt) Conversion project replaces all old 4kV electrical equipment remaining in the distribution system with new more efficient and reliable 26kV electrical equipment.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	60,814	1,030	999	1,520	1,563	1,604	1,648	1,670	70,848
TOTAL FUNDS	60,814	1,030	999	1,520	1,563	1,604	1,648	1,670	70,848
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

North and South Service Center Improvements

Program: Finance & Administration **Start Date:** 1st Quarter 1991
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 9107
Location: Various

The North and South Service Center Improvements project provides efficient, well-designed work areas in service centers to provide City Light personnel with optimal locations, thereby providing responsive, integrated services to ratepayers in each distribution area. Major facility improvements are requested by branch customers and screened by a comprehensive facilities planning process. Construction takes place without interrupting business activities on site. The completed South Service Center Addition/Remodel subproject consisted of a new two-story office addition plus remodeled space at the north end of building A. Reconfiguring the main North Service Center building to consolidate all off-site office functions has also been completed. This work follows remodeling of the warehouse and construction of locker rooms in 1998.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	21,620	80	110	0	0	0	0	0	21,810
TOTAL FUNDS	21,620	80	110	0	0	0	0	0	21,810
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

North Arterial Streetlights Major Maintenance

Program: Distribution **Start Date:** 1st Quarter 2000
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8211
Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The North Arterial Streetlights Major Maintenance project provides capital improvements and replacements to the City of Seattle's arterial streetlights in the northern half of the service area to provide proper light on street rights-of-way. The City transferred ownership of 18,600 arterial streetlights to City Light at the end of 1999. Of those 18,600 streetlights, 5,000-6,000 lights are on poles installed exclusively for streetlighting. Many of these are fed from underground.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	(3)	194	199	218	223	228	234	238	1,531
TOTAL FUNDS	(3)	194	199	218	223	228	234	238	1,531
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

North Capacity Additions

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8122

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the North Capacity Additions project is to provide electrical lines from substations to customers' property lines so that City Light has sufficient capacity to serve its customers and maintain reliability. This project builds new and replaces old line segments, replaces rotten and damaged poles, and adds or renovates underground facilities to the distribution system in the northern half of the service area. Some subprojects are paid for by City Light customers.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	8,081	11,170	11,103	10,858	11,111	11,407	11,731	11,893	87,354
TOTAL FUNDS	8,081	11,170	11,103	10,858	11,111	11,407	11,731	11,893	87,354
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

North New Street and Flood Lighting

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8134

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

Seattle City Light's north service area includes Shoreline, Lake Forest Park, and unincorporated areas of King County. These areas have no provision for publicly funded street lighting. As a result, the customers in these areas that desire additional streetlighting must pay for it as individuals or small neighborhood groups. The North New Street and Flood Lighting project provides requesting customers in City Light's north service area with rental streetlights and floodlights attached to City Light poles. This service is provided to customers pursuant to City Light Rate Ordinance #116619.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	90	38	39	68	69	71	74	75	524
TOTAL FUNDS	90	38	39	68	69	71	74	75	524
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

North Outage Replacements

Program: Distribution **Start Date:** 1st Quarter 2001
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8302

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The North Outage Replacements project supports the capitalized portion of work resulting from unplanned outages, to ensure customers' electric power is restored as quickly as possible. This project covers outage replacement work in the northern half of the service area. Unplanned outages result from events such as storms, accidents, and equipment failures.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	55	117	111	109	112	114	118	119	855
TOTAL FUNDS	55	117	111	109	112	114	118	119	855
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

North Relocations

Program: Distribution **Start Date:** 1st Quarter 2002
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8304

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The North Relocations project relocates electrical lines from substations to customers' property lines to ensure City Light has sufficient capacity to serve its customers and maintain reliability. This project builds new and replaces old line segments, installs and replaces poles, and adds or renovates underground facilities to the distribution system in the northern half of the service area, as necessary, to relocate distribution systems for transportation projects, street vacations, and large industrial, commercial, and residential developments. Some of the subprojects are paid for by City Light customers.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	2,888	2,238	1,271	1,565	1,601	1,643	1,689	1,712	14,607
TOTAL FUNDS	2,888	2,238	1,271	1,565	1,601	1,643	1,689	1,712	14,607
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

North Residential Streetlight Improvements

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8136

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The North Residential Streetlight Improvements project improves public safety by installing additional residential streetlights, initially prioritizing high crime and low income locations, within the north service territory and within the Seattle city limits. The additional lights double the light levels to comply with the standard currently recommended by the Illumination Engineering Society and the American National Standards Institute. The annual scope of this program is planned with input from community and neighborhood groups.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	24	84	86	4	4	4	5	5	216
TOTAL FUNDS	24	84	86	4	4	4	5	5	216
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

North Services - Overhead and Underground

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8120

Location: 1300 N 97TH ST

Neighborhood District: Northwest **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the North Services - Overhead and Underground project is to provide electrical power from the street right-of-way to the customer in response to customer requests for power. The number of requests fluctuates with land use development and customer demand. The scope of this project is to design, install, and energize new or enlarged electrical services to serve the electrical demands of the industrial, commercial, and residential customers in the northern half of the service area. This includes labor and/or materials to remove the old services, renovate the existing services, and install the new services. Requests for voluntary underground projects are also accomplished in this project.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	6,763	7,898	8,407	7,865	8,048	8,262	8,497	8,615	64,355
TOTAL FUNDS	6,763	7,898	8,407	7,865	8,048	8,262	8,497	8,615	64,355
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Office Furniture and Equipment Purchase

Program: Finance & Administration **Start Date:** 1st Quarter 1997
Type: New Facility **End Date:** 4th Quarter 2004
Project ID: 9103

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Office Furniture and Equipment Purchase project purchases office furniture and equipment costing more than \$5,000 for all City Light branches. Capital furniture purchases are reserved for major relocation/remodeling projects involving systems and conference/training room furniture, seating, and ergonomic items to support specific personnel requirements. In 2004, City Light intends to purchase automated envelope insertion equipment to process customer billing for City Light and other departments.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	4	0	296	0	0	0	0	0	300
TOTAL FUNDS	4	0	296	0	0	0	0	0	300
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Power Stations Demand Driven Improvements

Program: Distribution **Start Date:** 1st Quarter 2002
Type: Improved Facility **End Date:** Ongoing
Project ID: 7755

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the Power Stations Demand Driven Improvements project is to provide bulk power to the City's service area as demand for electrical services changes and grows.

During the 2004 budget process, the City Council adopted a proviso that stipulated that no more than \$516,000 of the 2004 appropriation for this project can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	235	1,355	1,391	1,118	1,142	1,174	1,208	1,225	8,848
TOTAL FUNDS	235	1,355	1,391	1,118	1,142	1,174	1,208	1,225	8,848
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Relaying Improvements

Program: Distribution **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 7753

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

Relaying is a key element in controlling and maintaining a safe and reliable electrical system. The Relaying Improvements project improves general metering, control, and relaying between substations and the transmission and distribution systems. Maintaining and improving system reliability are emphasized.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	149	1,074	1,007	976	1,000	1,027	1,058	1,072	7,363
TOTAL FUNDS	149	1,074	1,007	976	1,000	1,027	1,058	1,072	7,363
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Roof Replacements

Program: Finance & Administration **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 9072

Location: 500 Newhalem St

The Roof Replacements project replaces roofing and weatherproofing systems on all City Light structures. Current roofing systems utilize a foam thermal barrier to improve thermal protection. The result is decreased energy consumption for heating, thus conforming to the LEED silver standard. Replacement and maintenance schedules, based on historic records and periodic inspections, keep weather barriers in good condition and minimize costly structural damage and disruption of business operations. Work on the Ross Powerhouse roof, funded by this project in 2003, continues in 2004.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	31	1,125	0	226	234	241	247	251	2,355
TOTAL FUNDS	31	1,125	0	226	234	241	247	251	2,355
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Dam - Abutment Rock Stabilization

Program: Generation **Start Date:** 3rd Quarter 2001
Type: Rehabilitation or Restoration **End Date:** 3rd Quarter 2003
Project ID: 6241

Location: Milepost 128 State Highway 20

The Ross Dam Abutment Rock Stabilization project constructs a wire fence to prevent minor rockfall from the promontory above the right abutment of Ross Dam from reaching the dam.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	94	49	0	0	0	0	0	0	143
TOTAL FUNDS	94	49	0	0	0	0	0	0	143
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

Ross Dam - AC/DC Distribution System Upgrade

Program: Generation **Start Date:** 3rd Quarter 2004
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2006
Project ID: 6373
Location: Milepost 128 State Highway 20

This project replaces the aging AC electrical distribution system at Ross Dam with a new AC electrical distribution system.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	61	260	178	0	0	0	499
TOTAL FUNDS	0	0	61	260	178	0	0	0	499
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Dam - Install Fiber Optic Cable Powerhouse to Dam

Program: Generation **Start Date:** 1st Quarter 2005
Type: Improved Facility **End Date:** 4th Quarter 2005
Project ID: 6372
Location: Milepost 128 State Highway 20

This project installs a fiberoptic link from Ross Powerhouse to Ross Dam. This link provides capacity for communication equipment, dam monitoring, and control of gates, valves, and electrical systems.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	242	0	0	0	0	242
TOTAL FUNDS	0	0	0	242	0	0	0	0	242
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Powerhouse - Controller Upgrade

Program: Generation **Start Date:** 3rd Quarter 2004
Type: Improved Facility **End Date:** 3rd Quarter 2006
Project ID: 6376
Location: Milepost 128 State Highway 20

This project replaces some of the existing programmable-logic controllers at Ross Powerhouse with a more advanced type.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	59	355	104	0	0	0	518
TOTAL FUNDS	0	0	59	355	104	0	0	0	518
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Ross Powerhouse - Batteries Replacement

Program: Generation **Start Date:** 1st Quarter 2003
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2005
Project ID: 6375
Location: Milepost 128 State Highway 20

This project replaces Ross Powerhouse communication and station batteries.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	148	102	34	0	0	0	0	284
TOTAL FUNDS	0	148	102	34	0	0	0	0	284
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Powerhouse - Governors Replacement

Program: Generation **Start Date:** 1st Quarter 1998
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 6205
Location: Milepost 128 State Highway 20

The Ross Powerhouse Governors Replacement project provides improved automatic signal processing and information management to Powerhouse operators and the Power Management Branch to reduce downtime and maximize power generation. The new digital technology also provides networking compatibility to support future information management objectives. The generator control upgrade work is scheduled for 2007. Small amounts were spent from this project from 1999 to 2001 to replace the annunciators.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	555	0	0	0	0	697	695	175	2,122
TOTAL FUNDS	555	0	0	0	0	697	695	175	2,122
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Powerhouse - Replace Generator Breakers

Program: Generation **Start Date:** 1st Quarter 2007
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2009
Project ID: 6374
Location: Milepost 128 State Highway 20

This project replaces the breakers for Generators 41, 42, 43, and 44 at the Ross Powerhouse.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	1,482	1,538	28	3,048
TOTAL FUNDS	0	0	0	0	0	1,482	1,538	28	3,048
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

Ross Powerhouse - Replace Governor Oil Pumps

Program: Generation **Start Date:** 1st Quarter 2005
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2006
Project ID: 6377
Location: Milepost 128 State Highway 20

This project replaces the governor oil pump systems on all four Ross Powerhouse generator units. Included are two pumps with motors, valves, switches, and control circuits for each unit.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	77	193	0	0	0	270
TOTAL FUNDS	0	0	0	77	193	0	0	0	270
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Powerhouse - Unit 41 Generator Rebuild

Program: Generation **Start Date:** 1st Quarter 2008
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2009
Project ID: 6382
Location: Milepost 128 State Highway 20

This project is part of the Utility's Generator Rebuild Program. The program rebuilds 10 generators (accounting for 70% of City Light's generating capability) by the end of 2013. This project rebuilds Generator 41 at Ross Powerhouse.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	0	0	5,205	1,357	6,562
TOTAL FUNDS	0	0	0	0	0	0	5,205	1,357	6,562
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Powerhouse - Unit 42 Generator Rebuild

Program: Generation **Start Date:** 1st Quarter 2003
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2004
Project ID: 6379
Location: Milepost 128 State Highway 20

This project is part of the Utility's Generator Rebuild Program. The program rebuilds 10 generators (accounting for 70% of City Light's generating capability) by the end of 2013. This project rebuilds Generator 42 at Ross Powerhouse.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	4,608	1,057	0	0	0	0	0	5,665
TOTAL FUNDS	0	4,608	1,057	0	0	0	0	0	5,665
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Ross Powerhouse - Unit 43 Generator Rebuild

Program: Generation **Start Date:** 1st Quarter 2005
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2006
Project ID: 6380
Location: Milepost 128 State Highway 20

This project is part of the Utility's Generator Rebuild Program. The program rebuilds 10 generators (accounting for 70% of City Light's generating capability) by the end of 2013. This project rebuilds Generator 43 at Ross Powerhouse. City Council adopted a proviso for this project that stipulated that none of the money appropriated for 2004 for the projects can be spent until authorized by a future ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	4,849	1,261	0	0	0	6,110
TOTAL FUNDS	0	0	0	4,849	1,261	0	0	0	6,110
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Powerhouse - Unit 44 Generator Rebuild

Program: Generation **Start Date:** 1st Quarter 2006
Type: Rehabilitation or Restoration **End Date:** 4th Quarter 2007
Project ID: 6381
Location: Milepost 128 State Highway 20

This project is part of the Utility's Generator Rebuild Program. The program rebuilds 10 generators (accounting for 70% of City Light's generating capability) by the end of 2013. This project rebuilds Generator 44 at Ross Powerhouse.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	0	0	4,966	1,292	0	0	6,258
TOTAL FUNDS	0	0	0	0	4,966	1,292	0	0	6,258
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Ross Powerhouse - Units 41-44 Scanners

Program: Generation **Start Date:** 2nd Quarter 2000
Type: Improved Facility **End Date:** 2nd Quarter 2008
Project ID: 6215
Location: Milepost 128 State Highway 20

The Ross Powerhouse - Generator Rewind Program provides electronic scanners for generator Units 41-44 at Ross Powerhouse to obtain more accurate data about generator condition, thereby enabling a more timely determination of when to proceed with rewind projects. One scanner is installed each year between 2004 and 2007.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	26	42	519	445	459	525	10	0	2,026
TOTAL FUNDS	26	42	519	445	459	525	10	0	2,026
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Safety Modifications

Program: Executive **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 9006

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Safety Modifications project provides a financial placeholder for unscheduled safety projects. Unscheduled work typically involves small safety improvements costing less than \$50,000.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	101	193	164	186	190	190	195	198	1,417
TOTAL FUNDS	101	193	164	186	190	190	195	198	1,417
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Seattle Monorail Project - City Light

Program: Distribution **Start Date:** 1st Quarter 2002
Type: New Facility **End Date:** 4th Quarter 2009
Project ID: 8306

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Seattle Monorail Project (SMP) is planning an initial 14-mile monorail route between Ballard and West Seattle that would travel through downtown Seattle. A preferred alignment and financing plan were approved by Seattle voters in November 2002. This project designs relocations of City Light's electrical distribution and transmission systems affected by monorail construction. Electrical service connection planning and design are also included in budgeted work. This project budget does not include funding for any City Light construction-related costs.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	50	345	460	2,155	2,213	870	1,227	1,245	8,565
TOTAL FUNDS	50	345	460	2,155	2,213	870	1,227	1,245	8,565
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Seismic Mitigation

Program: Finance & Administration
Type: Improved Facility
Project ID: 9134

Start Date: 1st Quarter 1997
End Date: 4th Quarter 2009

Location: Various

The Seismic Mitigation project provides seismic structural upgrades to buildings. Facility seismic improvements protect City Light's assets, employees, customers, visitors, equipment, and materials. The scope of improvements is linked to the business conducted at designated sites and requirements during emergency conditions. Examples of seismic projects include seismic bracing to correct significant deficiencies identified in a structural survey (E Pine); designing and constructing previously identified seismic upgrades concurrent with the North Service Center remodel project; and seismically upgrading storage areas at the South Service Center while increasing storage density and reducing overall space requirements.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	4,567	0	0	120	125	128	131	133	5,204
TOTAL FUNDS	4,567	0	0	120	125	128	131	133	5,204
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Skagit Licensing Mitigation

Program: Executive
Type: Improved Facility
Project ID: 6991

Start Date: 1st Quarter 1991
End Date: 4th Quarter 2009

Location: 500 Newhalem St

The purpose of the Skagit Licensing Mitigation project is to provide environmental mitigation to the natural environment and the general public to fulfill City Light's federal license requirements and minimize adverse project impacts. Projects include purchasing wildlife lands and creating interior and exterior interpretive displays for visitors to the Skagit. Operations and maintenance costs cover monitoring this undeveloped land to ensure trees are not cut down, boundaries are respected, and illegal dumping does not occur.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	32,907	179	31	489	427	555	454	459	35,501
TOTAL FUNDS	32,907	179	31	489	427	555	454	459	35,501
<i>O&M Costs (Savings)</i>			35	35	35	35	35	35	

*Amounts in thousands of dollars

Skagit Security Systems

Program: Generation **Start Date:** 1st Quarter 2003
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 6388
Location: 500 Newhalem St

This project provides security systems at Skagit camps and generating facilities. Project elements include installation of automated gates, surveillance, and detection system.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	644	504	0	0	0	0	0	1,148
TOTAL FUNDS	0	644	504	0	0	0	0	0	1,148
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Skagit Telephone System Upgrade

Program: Distribution **Start Date:** 3rd Quarter 2001
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 9311
Location: 500 Newhalem St

The purpose of the Skagit Telephone System Upgrade project is to replace existing analog telephone switches at Diablo with two new digital switches and related equipment. The new switches provide additional capacity for Diablo, including the Federal Energy Regulatory Commission-mandated North Cascades Environmental Learning Center. The new switches utilize the fiber now being installed between Bothell and the Skagit. In 2004 the project is completed and closed out.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	15	673	136	0	0	0	0	0	824
TOTAL FUNDS	15	673	136	0	0	0	0	0	824
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Sound Transit Light Rail - City Light

Program: Distribution **Start Date:** 3rd Quarter 1998
Type: New Facility **End Date:** Ongoing
Project ID: 8204

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

This project provides services necessary to design and build the Sound Transit's light rail project, including relocation of City Light's electrical distribution and transmission systems affected by Sound Transit's construction, service connections to power Sound Transit's stations, and additional capacity for those services. Sound Transit proposes to construct and operate this electrical light rail transit system, which includes more than 14 miles of alignment. The first phase of Sound Transit's project constructs a light rail segment from the Convention Place Station to S 154 St. near Seattle/Tacoma Airport. The City of Seattle has an ongoing agreement for reimbursement from Sound Transit. During construction, Sound Transit is responsible for preserving the integrity of the electrical system for all customers and maintaining required electrical clearances necessary for public safety. City Light, through its CIP, supports these efforts. Sound Transit's schedule indicates that project work continues beyond 2009. See also Sound Transit projects in the Drainage and Wastewater, Water, and SDOT CIPs.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	701	4,284	3,810	10,308	12,318	711	558	524	33,214
TOTAL FUNDS	701	4,284	3,810	10,308	12,318	711	558	524	33,214
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

South 26kV Conversion

Program: Distribution **Start Date:** 1st Quarter 1981
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8125

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The South 26kV Conversion project replaces all old 4kV electrical equipment remaining in the electrical distribution system with new efficient and reliable 26kV distribution equipment.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	51,508	1,093	992	1,175	1,206	1,239	1,276	1,294	59,783
TOTAL FUNDS	51,508	1,093	992	1,175	1,206	1,239	1,276	1,294	59,783
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

South Arterial Streetlights Major Maintenance

Program: Distribution **Start Date:** 1st Quarter 2000
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8210

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The South Arterial Streetlights Major Maintenance project provides necessary capital improvements and replacements to the City of Seattle's arterial streetlights in the southern half of the service area to provide proper light for street rights-of-way. The City transferred ownership of 18,600 Arterial Streetlights to City Light at the end of 1999. Of those 18,600 streetlights, 5,000-6,000 lights are on poles installed exclusively for streetlighting. Many of these lights are fed from underground.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	109	200	199	182	186	191	196	199	1,462
TOTAL FUNDS	109	200	199	182	186	191	196	199	1,462
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

South Capacity Additions

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8123

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The South Capacity Additions project provides electrical lines from the substations to the customers' property lines to ensure City Light has sufficient capacity to serve customers and maintain reliability. This project builds new and replaces old line segments, replaces rotten and damaged poles, and adds or renovates underground facilities to the distribution system in the southern half of the service area. Some of the subprojects are paid for by customers.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	7,232	4,741	4,715	4,345	4,437	4,552	4,681	4,745	39,448
TOTAL FUNDS	7,232	4,741	4,715	4,345	4,437	4,552	4,681	4,745	39,448
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

South Fork Tolt River Mitigation

Program: Executive **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 6046
Location: South Fork Tolt River

The purpose of the South Fork Tolt River Mitigation project is to provide environmental mitigation to the natural environment and the general public to fulfill City Light's federal license requirements and minimize adverse project impacts. The South Fork Tolt River Hydroelectric Project uses the hydroelectric potential of the existing SPU Tolt River municipal/industrial water supply system located northeast of Carnation, Washington. The Federal Energy Regulatory Commission (FERC) license and 1988 Settlement Agreement stipulate mitigation and enhancement requirements for City Light's operation of the South Fork Tolt Hydroelectric Project. These include responsibilities in the areas of recreation, water quality, wetlands, and fisheries resources.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	536	618	97	79	81	83	85	88	1,667
TOTAL FUNDS	536	618	97	79	81	83	85	88	1,667
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

South Lake Union - Power Supply

Program: Distribution **Start Date:** 1st Quarter 2002
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 8308
Location: Various
Neighborhood District: Lake Union **Neighborhood Plan:** South Lake Union

This project develops a strategy to supply power from outlying substations prior to tapping power from a newly built South Lake Union Substation. A surge of development in the South Lake Union area has caused increased power demands that must be met before a new substation is built.

During the 2004 budget process, the City Council adopted a proviso that grouped this project with Project 8309 and stipulated that no more than \$56,000 of the collective 2004 appropriations for the projects can be spent until authorized by ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	113	341	130	0	0	0	0	0	584
TOTAL FUNDS	113	341	130	0	0	0	0	0	584
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

City Light

South Lake Union - Substation Development

Program: Distribution **Start Date:** 3rd Quarter 2003
Type: New Facility **End Date:** 4th Quarter 2005
Project ID: 8309

Location: 802 ROY ST

Neighborhood District: Lake Union

Neighborhood Plan: South Lake Union

This project supports temporary acquisition of property at 802 Roy St., in order to assure access to a site should development of a South Lake Union Substation be authorized. A surge of development in the South Lake Union area has caused increased power demands that must be met by increasing distribution capacity.

During the 2004 budget process, the City Council adopted a proviso that grouped this project with Project 8308 and stipulated that no more than \$56,000 of the collective 2004 appropriations for the projects can be spent until authorized by ordinance.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	406	0	5,159	0	0	0	0	5,565
TOTAL FUNDS	0	406	0	5,159	0	0	0	0	5,565
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

South New Street and Flood Lighting

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8133

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

Seattle City Light's service area includes cities and areas of unincorporated King County south of the Seattle city limit. Some of these areas have no provision for publicly funded street lighting. As a result, the customers in these areas that desire additional streetlighting must pay for it as individuals or small neighborhood groups. The South New Street and Flood Lighting project provides requesting customers with rental streetlights and floodlights attached to City Light poles. This service is provided to customers pursuant to City Light Rate Ordinance #116619.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	139	221	213	189	193	198	204	207	1,564
TOTAL FUNDS	139	221	213	189	193	198	204	207	1,564
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

South Outage Replacements

Program: Distribution **Start Date:** 1st Quarter 2001
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8303

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The South Outage Replacements project supports the capitalized portion of work resulting from unplanned outages to ensure electric power is restored as quickly as possible. This project covers outage replacement work in the southern half of the service area. Unplanned outages result from events such as storms, accidents, and equipment failures. Pole and transformer replacements required to restore power are among the elements capitalized during such repairs.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	450	1,126	1,162	1,080	1,105	1,135	1,167	1,184	8,409
TOTAL FUNDS	450	1,126	1,162	1,080	1,105	1,135	1,167	1,184	8,409
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

South Relocations

Program: Distribution **Start Date:** 1st Quarter 2002
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 8305

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The South Relocations project relocates electrical lines from the substations to customers' property lines to ensure sufficient capacity to serve City Light customers and maintain reliability. This project builds new and replaces old line segments, installs and replaces poles, and adds or renovates underground facilities to the distribution system in the southern half of the service area as necessary to relocate distribution systems for transportation projects, street vacations, and large industrial, commercial, and residential developments. Some of the subprojects are paid for by customers.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	3,056	9,592	10,522	9,756	9,984	10,252	10,545	10,691	74,398
TOTAL FUNDS	3,056	9,592	10,522	9,756	9,984	10,252	10,545	10,691	74,398
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

South Residential Streetlight Improvements

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8135

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The South Residential Streetlight Improvements project improves public safety by installing additional residential streetlights, initially prioritizing high crime and low income locations, within the south service territory and within the Seattle city limits. The additional lights double the light levels to comply with the standard currently recommended by the Illumination Engineering Society and the American National Standards Institute. The annual scope of this program is planned with input from community and neighborhood groups.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	71	199	180	167	170	175	179	182	1,323
TOTAL FUNDS	71	199	180	167	170	175	179	182	1,323
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

South Services - Overhead and Underground

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 8121

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The South Services - Overhead and Underground project provides electrical power from the street right-of-way to the customer in response to power requests. The number of requests fluctuates with land use development and customer demand. The scope of this project is to design, install, and energize new or enlarged electrical services to serve the electrical demands of the industrial, commercial, and residential customers in the southern half of the service area. This includes labor and/or materials to remove the old services, renovate the existing services, and install the new services. Requests for voluntary underground projects also are accomplished in this project.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	5,510	4,612	4,725	4,400	4,501	4,621	4,752	4,817	37,938
TOTAL FUNDS	5,510	4,612	4,725	4,400	4,501	4,621	4,752	4,817	37,938
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Space Consolidation

Program: Finance & Administration
Type: Improved Facility
Project ID: 9159

Start Date: 1st Quarter 2000
End Date: 4th Quarter 2004

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Space Consolidation project improves space efficiency in City Light facilities. This includes capital improvements in existing buildings and sites, to better use available assets, providing space for functions now residing in leased space and co-locating activities to improve customer service. Examples of planned projects include additional storage racks and material handling equipment for the North Service Center warehouse in order to accommodate material stored in a nearby building scheduled for demolition, and additional shelving, cabinets, and related equipment for the North Service Center tool room to increase capacity and operational efficiency. A mezzanine structure is also considered to better utilize the available upper level space.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	145	9	9	0	0	0	0	0	163
TOTAL FUNDS	145	9	9	0	0	0	0	0	163
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Special Work Equipment - Generation Plant

Program: Generation
Type: New Facility
Project ID: 6102

Start Date: Ongoing
End Date: Ongoing

Location: Various

The purpose of the Special Work Equipment - Generation Plant project is to provide special work equipment, machinery, and tools to be used for the workload activities or operations of the Generation Branch. This ongoing project provides for purchase of tools and equipment required for operations at the Skagit, Boundary, Tolt, and Cedar Falls facilities. City Light bases its purchases on a five-year plan, updated for technological improvements.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	281	1,118	785	438	444	453	464	471	4,454
TOTAL FUNDS	281	1,118	785	438	444	453	464	471	4,454
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Special Work Equipment - Other Plant

Program: Distribution **Start Date:** Ongoing
Type: Rehabilitation or Restoration **End Date:** Ongoing
Project ID: 9102

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the Tool and Work Equipment - Other Plant project is to provide new tools and work equipment to replace old or broken tools or work equipment to ensure field crews and other employees may accomplish their work assignments. This ongoing procurement project provides capitalized tools and work equipment required by all individual City Light units, except those required at the generation plants or substations (which have their own capital projects for special work equipment).

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	158	452	452	545	560	574	589	597	3,927
TOTAL FUNDS	158	452	452	545	560	574	589	597	3,927
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Special Work Equipment - Substation Plant

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 7902

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Special Work Equipment - Substation Plant project provides funding to purchase tools and special work equipment that can be capitalized. New equipment allows crews to accomplish their work in a safe, timely, and efficient manner. This project is ongoing and provides essential tools to accomplish high voltage electrical and crafts work. The project covers equipment costing more than \$5,000 per unit.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	50	151	60	85	87	89	92	94	708
TOTAL FUNDS	50	151	60	85	87	89	92	94	708
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Substation Capacity Additions

Program: Distribution **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 7751

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Substation Capacity Additions project adds new infrastructure to existing substations and systems. This work differs from Project 7752 (Substation Equipment Improvements) in that it adds capacity to existing substations to meet increasing load demands. Transmission of power from the substations to the distribution system is safer, more reliable, and more efficient. Subprojects include, but are not limited to, adding transformers and related equipment, reconfiguring and extending get-aways to the distribution grid, and building ring buses.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	2,215	1,392	784	725	743	763	785	796	8,203
TOTAL FUNDS	2,215	1,392	784	725	743	763	785	796	8,203
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Substation Comprehensive Improvements

Program: Finance & Administration **Start Date:** 1st Quarter 2001
Type: Improved Facility **End Date:** 4th Quarter 2004
Project ID: 9161

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Substation Comprehensive Improvements project improves substations to provide adequate facilities for assigned personnel and makes necessary upgrades to ensure the integrity of the facility. Each substation is upgraded in a prioritized sequence and all identified projects completed under one contract while minimizing disruption to operations. These improvements are identified in City Light's Comprehensive Facilities Plan. Included are items necessary to support assigned personnel such as lunch and locker room facilities required by union contracts, work areas for crew chiefs, ventilation and heating systems, and correction of water, sewer, security, and other significant building-related concerns.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	122	367	488	0	0	0	0	0	977
TOTAL FUNDS	122	367	488	0	0	0	0	0	977
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Substation Equipment Improvements

Program: Distribution **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 7752

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

Substation Equipment Improvements add, replace, and upgrade substation equipment to maintain or improve system reliability, comply with high voltage and environmental regulations, and ensure safe work sites. The subprojects cover the substation electrical and control equipment; facilities improvement projects are funded through the Substation Plant Equipment project (7750) below.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	7,556	4,531	5,036	5,256	5,398	5,547	5,705	5,782	44,811
TOTAL FUNDS	7,556	4,531	5,036	5,256	5,398	5,547	5,705	5,782	44,811
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Substation Plant Improvements

Program: Distribution **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 7750

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Substation Plant Improvements project upgrades and improves substation buildings, their facilities and systems, and related structures. The capital work maintains and improves system reliability, provides for regulatory compliance, and ensures the safety of the work sites. It includes making environmental improvements as well as removing and replacing outdated utilities and structures.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	142	1,740	1,151	971	991	1,018	1,048	1,063	8,124
TOTAL FUNDS	142	1,740	1,151	971	991	1,018	1,048	1,063	8,124
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Tolt - Penstock Crossover Connection

Program: Generation **Start Date:** 1st Quarter 2004
Type: New Facility **End Date:** 2nd Quarter 2005
Project ID: 6360

Location: South Fork Tolt River

This project connects the Seattle Public Utilities and City Light penstocks by installing 40 feet of pipe with two valves. Equipment lifetime should be 30 years or greater.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	0	0	366	38	0	0	0	0	404
TOTAL FUNDS	0	0	366	38	0	0	0	0	404
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Transmission & Generation Radio Systems

Program: Distribution **Start Date:** 1st Quarter 1998
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 9108

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The Transmission & Generation Radio Systems project builds or replaces communications infrastructure consisting of fiber optic cable, digital microwave or conventional radio systems. This project supports the Federal Energy Regulatory Commission-mandated vital communications systems which provide City Light's utility command and control through Supervisory Control and Data Acquisition (SCADA), radios, and the Energy Management System, and ensure safety of field employees.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	4,031	993	1,546	1,611	1,647	1,687	1,733	1,756	15,004
TOTAL FUNDS	4,031	993	1,546	1,611	1,647	1,687	1,733	1,756	15,004
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Transmission Capacity

Program: Distribution **Start Date:** Ongoing
Type: New Facility **End Date:** Ongoing
Project ID: 7011

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

Transmission Capacity projects create capacity to meet customer load demands. These projects include: Reconductoring Maple Valley-Massachusetts and Talbot-South transmission lines, Downtown Transmission, Aerial Survey, Interbay Transmission, and South Lake Union Transmission.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	288	1,012	693	700	717	737	758	768	5,673
TOTAL FUNDS	288	1,012	693	700	717	737	758	768	5,673
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Transmission Inter-Agency

Program: Distribution **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 7105

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

The purpose of the Transmission Inter-Agency project is to provide demand-driven transmission improvements to City Light's transmission system, including reimbursable transmission work and relocations of transmission equipment to meet customer, other utility, agency, and regulatory requirements. Current projects include: Sound Transit at the E3 Busway and at S 212th, Amtrak relocation, and Lake Youngs Substation get-aways.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	138	201	171	172	176	181	186	188	1,413
TOTAL FUNDS	138	201	171	172	176	181	186	188	1,413
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Transmission Reliability

Program: Distribution **Start Date:** Ongoing
Type: Improved Facility **End Date:** Ongoing
Project ID: 7104

Location: Citywide

Neighborhood District: In more than one district **Neighborhood Plan:** Not in a Neighborhood Plan

This project includes all engineering and construction to improve or maintain the reliability of the overhead or underground transmission system. Reliability projects may include line rebuilds, new lines to enhance reliability of a substation, new line configuration to improve operation, and relocations required to maintain the transmission system. Current projects include relocating conductors near Third Ave. S and S Massachusetts St. to accommodate construction of an Amtrak facility.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	6	233	117	122	125	129	132	134	998
TOTAL FUNDS	6	233	117	122	125	129	132	134	998
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

Union St. Substation Networks

Program: Distribution **Start Date:** 1st Quarter 1999
Type: Improved Facility **End Date:** 4th Quarter 2009
Project ID: 8201

Location: 1312 WESTERN AV

Neighborhood District: Downtown

Neighborhood Plan: Not in a Neighborhood Plan

The Union St. Substation Networks project adds capacity and improves reliability of the electrical system to the Seattle City Light customers in the Union St. Substation service area. Work may include installation of new civil facilities (vaults and conduits), reconductoring and relocation of primary feeders, upgrading network transformers, additions and separations to secondary bus ties, installation of fire wrap on cables, transferring load between networks (cuts and taps), installation of real time ampacity equipment, installation of primary switches for load transfer or sectionalizing, installation or replacement of network protectors, installation of fire protection systems, and rebalancing feeders. Project elements include reconductoring one feeder mainstem, replacing one failed primary cable, one rebalance reconfiguration, replacing one non-submersible network protector, and firewrapping a few primary cables.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	2,044	333	351	302	304	310	319	323	4,286
TOTAL FUNDS	2,044	333	351	302	304	310	319	323	4,286
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

Work Process Management System

Program: Finance & Administration **Start Date:** 1st Quarter 2001
Type: New Investment **End Date:** 4th Quarter 2009
Project ID: 9927

Location: Various

City Light uses many existing applications to perform asset management and work order management functions. In addition, an inventory management system, Passport, was implemented in 2000. A variety of tools estimate project budgets and schedules. An enterprise work management system interfaces with these applications or incorporates many of their functions, and is used by City Light personnel to identify, plan, schedule, track, and document field work across City Light. Implementation of this system enables work planners and schedulers to match job requirements with available resources to ensure the use of automated cost estimation results in more efficient engineering design, more accurate planning of materials and labor, and significant reductions in warehoused inventories.

	LTD	2003	2004	2005	2006	2007	2008	2009	Total
Seattle City Light Fund	1,779	2,466	2,387	2,120	2,220	2,470	2,298	2,331	18,071
TOTAL FUNDS	1,779	2,466	2,387	2,120	2,220	2,470	2,298	2,331	18,071
<i>O&M Costs (Savings)</i>			N/C	N/C	N/C	N/C	N/C	N/C	

*Amounts in thousands of dollars

