Exhibit No.:	
Issue:	Dismantlement Costs
Witness:	Christopher “Chris” Robert Rogers
Type of Exhibit:	Direct Testimony
Sponsoring Party:	KCP&L Greater Missouri Operations Company
Case No.:	ER-2016-0156
Date Testimony Prepared:	February 23, 2016

MISSOURI PUBLIC SERVICE COMMISSION

CASE NO.: ER-2016-0156

DIRECT TESTIMONY

OF

CHRISTOPHER “CHRIS” ROBERT ROGERS

ON BEHALF OF

KCP&L GREATER MISSOURI OPERATIONS COMPANY

Kansas City, Missouri
February 2016

DIRECT TESTIMONY

OF

CHRISTOPHER "CHRIS" ROBERT ROGERS

Case No. ER-2016-0156

Q: Please state your name and business address.

A: My name is Christopher "Chris" Robert Rogers and my business address is Sega, Inc., 16041 Foster Street, Overland Park, Kansas 66085.

Q: On whose behalf are you testifying?

A: I am testifying on behalf of KCP&L Greater Missouri Operations Company ("GMO" or the "Company").

Q: What is the purpose of your testimony?

A: The purpose of my testimony is to present and support the report attached to my testimony as Schedule CRR-2 which separately addresses the near-term costs of retirement and the potential future costs for dismantlement of GMO's fossil-fueled electric generating units. All costs are presented in 2015 dollars as if incurred over night. No timeline for retirement or dismantlement was considered in this study. As further described later, certain activities are required by permit or regulation to be performed upon retirement of a unit and their resulting costs would be incurred immediately at retirement.

Q: Please describe your educational background, professional training and experience.

A: Since graduating from Kansas State University with a Bachelor of Science in Mechanical Engineering, I have practiced engineering, principally in the power industry, for more than 40 years. During the first decade of my career, I performed design, construction

contracting, scheduling, and resident construction management services for new coal-fired electric generating stations with a nationally-recognized architect/engineer firm in Kansas City. During this interval I also completed a Master of Science in Civil Engineering specializing in construction management from the University of Missouri-Columbia.

From 1983 through 1986 I served as the Manager of Generating Facilities on the staff of the Missouri Public Service Commission ("Commission" or "MPSC") and participated in several major rate cases, including the AmerenUE Callaway Nuclear Plant and KCP&L Wolf Creek Nuclear Plant rate cases before the MPSC. Later while employed as a consultant, I provided testimony on behalf of Aquila, Inc. in the South Harper Generating Facility certification case before the MPSC. I have also testified before the Hawaii Public Utilities Commission on behalf of the Hawaii State Consumer Advocate.

I am currently an employee-owner and Vice President of Sega, Inc., ("Sega") an engineering and technical services firm located in Overland Park, Kansas. Among other duties, I provide consulting and project management services for Sega's electric power generating clients. Since joining Sega in 1994, I have worked on many projects for KCP&L and our other electric utility clients. Sega has provided engineering services for numerous plant betterment and new capacity projects for KCP&L's generation stations.

In 2012, I provided pre-filed testimony in support of KCP&L before the Kansas Corporation Commission in Docket No. 12-KCPE-764-RTS regarding the near term costs of retirement and the potential future costs for dismantlement of the Company's

fossil-fueled electric generating units. In 2014, I also provided pre-filed testimony for KCP&L before the MPSC in Case No. ER-2014-0370 on this issue.

Q: Do you hold any professional licenses?

A: Yes. I am a licensed professional engineer in the State of Missouri (License No. 21087) and 12 other states. I also hold a Certificate of Record from the National Council of Examiners for Engineering and Surveying (No. 19249).

Q: Have you prepared an appendix that describes your training, licenses and power industry experience?

A: Yes. My professional qualifications are provided in Schedule CRR-1.

Q: Have you previously testified in a proceeding before the MPSC or before any other utility regulatory agency?

A: Yes, I have previously testified before the MPSC, the Public Utility Commission of the State of Hawaii and the Kansas Corporation Commission. The subject matter and references for the cases in which I participated are provided at the back of Schedule CRR-1.

SUMMARY

Q: Would you briefly describe the retirement and dismantlement costs developed for GMO's non-nuclear generating units?

A: Sega was retained by GMO to study the cost of decommissioning GMO's non-nuclear generating units. Decommissioning is the planned and orderly retirement of a generating unit and the dismantlement and reclamation of the site. The term *decommissioning* includes both retirement and dismantlement activities. Upon retirement from service, a generating unit may either be rendered safe and stored almost indefinitely through on-

going maintenance and security measures or it can be dismantled completely and the site reclaimed for other uses. Based upon Sega's experience in the electric generation industry at large and our familiarity with GMO's generating fleet, Sega developed an opinion of the probable costs for GMO to retire each of its fossil-fueled generating units. Costs for dismantlement were also developed separately for each unit.

Q: Please summarize retirement of an electric generating unit.

A: Retirement, as used in this study, refers to the planned, orderly and safe shutdown and removal from service of an electric generating unit, and assumes that the unit will not be used for service again. No actions will be taken to preserve the unit or any of its components for reuse. Retirement activities are specific to each unit and to the common facilities at sites with multiple generating units. Common site facilities are presumed to remain in service until the last unit on that site is retired.

Approximately three to six months before initiating retirement, a specific retirement plan will be prepared for each unit that takes into account the requirements of environmental permits and regulations for removing that unit from service. The retirement plan will also provide for necessary safety and security measures during retirement of the unit and for the time period from retirement until dismantlement.

First, the unit is rendered safe by de-energizing it and disconnecting it from providing output to the electric grid. The switchyards at each unit will remain in service, but isolated from the retired facility. Mechanical systems are de-energized as well. Fuel unloading, handling and storage facilities will be cleaned out, as well as all liquids, chemicals, coolants and reagents. Certain activities are required by specific unit permits and/or state or federal regulations to be performed when the unit ceases operations.

These may include closure of ash landfills, removal of river water intakes, and/or removal of fuel oil storage tanks. However, retirement activities do not include asbestos and lead paint abatement measures that are typically handled as ongoing maintenance expenses during the operating life of the unit and continuing if necessary after retirement. More detail is provided on retirement activities in our report, which is Schedule CRR-2.

Q: Please summarize dismantlement of an electric generating unit.

A: Once the unit or facility has been retired and its dismantlement is scheduled, an engineer will be retained to assist with environmental issues and technical details and develop a detailed dismantlement plan. The unit or facility will be characterized and the boundaries for demolition defined to set the scope of the work. A specialty demolition contractor will be hired to perform dismantlement and salvage. Dismantlement as contemplated in this study provides for the orderly removal of the unit's components to maximize safety and scrap value while preventing damage to the surrounding facilities. The assumptions for dismantlement for each of the units and facilities are provided in Schedule CRR-2.

Q: Did you consider salvage value in reaching your opinion of probable dismantlement costs for these units?

A: Yes, the approximate scrap values for iron and steel and non-ferrous metals were tallied for each unit or facility, based upon estimated quantities and averaged current-year scrap prices. These scrap values were listed separately because the scrap metal prices vary considerably, depending on industrial trends, international events and uncontrollable circumstances at the time of the salvage transactions.

Q: What are the results of your study?

A: The opinion of the probable costs for retirement and dismantlement developed by Sega for each of GMO's fossil-fueled units and the common facilities at each plant site are provided below in Table 1. All costs shown are in 2015 dollars as if the activities were performed in the current year and do not account for ownership percentages and jurisdictional allocations. The development of these costs is described and supported by the report in Schedule CRR-2.

In addition, Table 1 also contains a line item for retirement of common facilities at the Jeffery Energy Center (JEC). Sega did not perform a study of the costs for decommissioning the JEC. GMO owns a portion of the JEC, and Westar is the owner and operator of this generating plant. As with the other GMO-owned plants, certain activities are required by specific unit permits and/or state or federal regulations to be performed when the unit ceases operations. In the case of the JEC this includes closure of ash landfills. Since the costs for ash landfill closure are documented by Westar and submitted annually to the Kansas Department of Health and Environment, these costs were included in this Table 1. GMO will certainly have additional retirement costs when JEC is retired, but such costs have not yet been determined.

As shown below in Table 1, there is a significant difference in cost between retiring and dismantling a power plant. The costs to retire all of GMO's non-nuclear generating units and the additional costs for the JEC ash landfill closure at retirement are estimated to be approximately $87.3 million. To dismantle all of GMO's non-nuclear units, I estimate that it would cost an additional $208.3 million, which does not include JEC. Some components could be sold for scrap during dismantlement thereby recovering

an estimated $38.5 million and bringing the estimated Net Terminal Value (cost to dismantle less salvage) for all of GMO's fossil-fueled plants to $169.9 million. This amount does not include JEC.

Table 1 - Opinion of The Probable Costs for Decommissioning GMO's Electric Generating Units

(All cost values in 2015 dollars)

Name	Unit No.	Total Unit Capability[1] MW	First Year In Service	Retirement			Dismantlement		
				Unit Retirement	Activities Required by Permit, Regulation[2], or Agreement[3]	Total Retirement	Dismantlement	Scrap Value[4]	Net Terminal Cost
Sibley	1	49.8	1960	$482,368		$482,368	$6,034,974	$848,154	$5,186,820
	2	47.1	1962	$482,368		$482,368	$6,034,974	$848,154	$5,186,820
	3	364.1	1969	$535,958		$535,958	$16,835,426	$2,757,087	$14,078,339
	Common			$531,710	$13,950,965	$14,482,675	$10,134,174	$1,564,206	$8,569,968
South Harper	1	101.2							
	2	102.1	2005	$404,885		$404,885	$9,383,425	$358,946	$9,024,479
	3	100.0							
Greenwood	1	60.7	1975						
	2	61.7	1975	$413,021	$471,333	$884,354	$11,063,645	$353,736	$10,709,909
	3	63.0	1977						
	4	60.7	1979						
Crossroads	1	75.4							
	2	77.9	2002	$400,303		$400,303	$11,249,327	$389,486	$10,859,841
	3	75.9							
	4	77.8							
KCI	1	0	1971	$227,662		$227,662	$2,789,050	$91,317	$2,697,733
	2	0							
Nevada	1	17.7	1974	$281,190	$56,530	$337,720	$6,434,106	$45,397	$6,388,709
Ralph Green	3	70.9	1981	$285,572	$81,385	$366,957	$6,156,152	$95,230	$6,060,922
Lake Road	Boiler 1	N/A	1962	$120,344		$120,344	$3,098,749	$117,312	$2,981,437
	Boiler 2	N/A	1962	$120,344		$120,344	$3,098,749	$117,312	$2,981,437
	Boiler 3	N/A	1937	$161,768		$161,768	$3,611,257	$151,376	$3,459,881
	Boiler 4	N/A	1951	$138,357		$138,357	$4,045,457	$196,024	$3,849,433
	Boiler 5	N/A	1957	$183,266	$1,175,349	$1,358,615	$6,388,857	$224,107	$6,164,750
	Boiler 8	N/A	2006	$105,550		$105,550	$2,250,354	$224,107	$2,026,247
	#4 / #6	96.3	1966	$386,400	$637,591	$1,023,991	$8,380,637	$1,262,740	$7,117,897
	Generator 1	9.4	1950	$49,349		$49,349	$2,375,879	$38,162	$2,337,717
	Generator 2	19.0	1958	$49,349		$49,349	$2,615,898	$43,797	$2,572,101
	Generator 3	6.6	1962	$43,656		$43,656	$1,874,480	$25,661	$1,848,819
	CT 5	67.0	1974	$209,711		$209,711	$2,414,288	$88,266	$2,326,022
	CT 6	21.0	1989	$159,554		$159,554	$1,665,869	$91,317	$1,574,552
	CT 7	20.5	1990						
	Common			$875,025	$174,289	$1,049,314	$4,054,680	$248,964	$3,805,716
Iatan	1	712.9	1980	$1,035,765	$36,970,077	$38,005,842	$24,018,833	$10,000,000	$14,018,833
	2	881.5	2010	$1,031,343		$1,031,343	$27,449,519	$11,430,000	$16,019,519
	Common			$590,627	$6,042,837	$6,633,464	$24,874,543	$6,850,000	$18,024,543
Jeffery Energy Center[3]	1	718.0	1978						
	2	715.0	1980						
	3	722.0	1983						
	Common				$18,426,409	$18,426,409			
TOTALS		**5,395**	**N/A**	**$9,305,445**	**$77,986,765**	**$87,292,210**	**$208,333,302**	**$38,460,858**	**$169,872,444**

Notes

(1) Current net SPP accredited unit capability, MW.

(2) Activities required by permits and/or regulations that are to occur upon ceasing operations, including ash landfill closures, and river water intake.

(3) GMO owns a percentage of Jeffery Energy Center. Westar is the controlling owner.

(4) Current scrap values per averaged indices.

Q: Are retirement costs optional for GMO?

A: At present, GMO is not required to dismantle its plants upon retirement, and therefore, it is not known when, or even if, the portion of the costs in my study related only to dismantlement will be incurred. However, that is not the case for the costs of retiring the generating units and common facilities. Retirement costs are the costs that will be unavoidably incurred by the Company when the plant is shut-down, even if the closed plant is never dismantled.

Q: How have the results of your study been used in this case?

A: It is my understanding that the retirement costs I have identified have been incorporated into the depreciation study performed for GMO by Company witness, Mr. John Spanos. It is also my understanding that Mr. Spanos has not included the dismantling costs from my study in his depreciation study. By keeping the two categories of costs separate in my study, I have facilitated Mr. Spanos' efforts in this regard, and I have provided substantial evidence to the Commission clearly showing the distinction between the two categories of costs.

Q: Was the Schedule CRR-2 study prepared under your direction and supervision?

A: Yes. I am the Officer-in-Charge at Sega for this study and participated in determining the methodology and in the performance of the work with our team. I visited each of the plant sites, provided oversight during preparation of the report, and reviewed the results for reasonableness and appropriateness.

Q: Does this conclude your testimony?

A: Yes.

BEFORE THE PUBLIC SERVICE COMMISSION
OF THE STATE OF MISSOURI

In the Matter of KCP&L Greater Missouri Operations Company's Request for Authority to Implement A General Rate Increase for Electric Service	)))	Case No. ER-2016-0156

AFFIDAVIT OF CHRISTOPHER R. ROGERS

STATE OF KANSAS)
) **ss**
COUNTY OF JOHNSON)

Christopher R. Rogers, being first duly sworn on his oath, states:

1. My name is Christopher R. Rogers. I am employed by Sega, Inc. I have been retained to serve as an expert witness to provide testimony on behalf of KCP&L Greater Missouri Operations Company.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of KCP&L Greater Missouri Operations Company consisting of Eight (8) pages, having been prepared in written form for introduction into evidence in the above-captioned docket.

3. I have knowledge of the matters set forth therein. I hereby swear and affirm that my answers contained in the attached testimony to the questions therein propounded, including any attachments thereto, are true and accurate to the best of my knowledge, information and belief.

Christopher Robert Rogers
Christopher R. Rogers

Subscribed and sworn before me this 5th day of February, 2016.

Judith A Dennis
Notary Public

My commission expires: December 29, 2018

JUDITH A DENNIS NOTARY PUBLIC My Appt. Exp. 12/29/18 STATE OF KANSAS

Chris R. Rogers, P.E.

POSITION Vice President, Sega Inc.

EDUCATION B.S.M.E., 1974
Kansas State University
Manhattan, Kansas

M.S.C.E. Civil Engineering – Construction Management, 1981
University of Missouri-Columbia
Columbia, Missouri

LICENSES Professional Engineer Licenses

- California
- Colorado
- Florida
- Hawaii
- Idaho
- Illinois
- Kansas
- Kentucky
- Michigan
- Missouri
- Montana
- North Carolina
- Utah
- NCEES Record Certificate

AFFILIATIONS American Society of Mechanical Engineers

EXPERIENCE SUMMARY

Mr. Rogers is a Vice President of Sega Inc. and a licensed professional engineer with 40 years of experience in the power industry. He leads the firm's corporate risk management activities and directs the firm's planning and studies practice. Mr. Rogers also provides project management and engineering services for Sega's electric power generating clients.

He has provided engineering and management services for many types of electric generating projects, including simple and combined cycle combustion turbine units, coal and waste coal-fired fluidized bed boiler plants, pulverized coal units, and biomass-fired plants. He has performed engineering and feasibility reviews for financing, construction monitoring, and performance testing of numerous generating facilities.

Mr. Rogers was the Manager of Generating Facilities in the Electric Department of the staff of the Missouri Public Service Commission from 1983 through 1986. He supervised the construction management audits in the rate cases for the Callaway Plant and Wolfcreek Nuclear Generating Station, had limited participation in the Grand Gulf Nuclear Station rate case, and performed other assignments concerning regulated generating facilities throughout the State of Missouri.

During the first decade of his career, Mr. Rogers performed mechanical engineering design services for large utility-owned coal-fired central generating facilities while employed by a nationally recognized consulting engineering firm. He served on project design teams in the main office and as the chief mechanical resident engineer on a green-field, coal-fired power plant construction site.

SELECTED PROJECT EXPERIENCE

- **Kansas City Power & Light Company, Kansas City, Missouri** - Officer-in-charge of study for the 2016 Kansas City Power & Light – Greater Missouri Operations Company (GMO) Missouri rate case providing opinion of probable costs of retirement and dismantlement of 25 fossil-fueled generating units totaling approximately 1,720-MW of capacity, including six (6) coal-fired units, and fifteen (19) combustion turbines. Prepared direct testimony for filing with the Missouri Public Service Commission sponsoring Sega's report in Case No. ER-2014-____.

  Officer-in-charge of study for the 2014 Missouri rate case providing opinion of probable costs of retirement and dismantlement of 24 fossil-fueled generating units and 99 wind turbine generators totaling 5,306-MW of capacity, including eight (8) coal-fired units, one (1) combined-cycle plant, and fifteen (15) combustion turbines. Submitted pre-filed direct testimony before the Missouri Public Service Commission sponsoring Sega's report in Case No. ER-2014-0370.

  Officer-in-charge of study for the 2014 Kansas rate case providing opinion of probable costs of retirement and dismantlement of 24 fossil-fueled generating units and 99 wind turbine generators totaling 5,306-MW of capacity, including eight (8) coal-fired units, one (1) combined-cycle plant, and fifteen (15) combustion turbines. Prepared direct testimony for filing with the Kansas Corporation Commission sponsoring Sega's report for Docket No. 15-KCPE-116-RTS.

  Officer-in-charge of study for the 2012 Kansas rate case providing opinion of probable costs for retirement and dismantlement of 24 fossil-fueled generating units totaling 5,260-MW of capacity, including eight (8) coal-fired units, one (1) combined-cycle plant, and fifteen (15) combustion turbines. Provided pre-filed direct and rebuttal testimony before the Kansas Corporation Commission sponsoring Sega's report in Docket No. 12-KCPE-764-RTS.

- **Kansas City Power & Light Company, Kansas City, Missouri -** Officer-in-charge and project manager for 2014 power plant siting study to identify and evaluate multiple candidate sites for potential location of a new combined-cycle plants, simple-cycle peaking turbines, and reciprocating engine generating plants. Provided detailed report of findings to Kansas City Power & Light Company Resource Planning Department.

Officer-in-charge and project manager for 2010 Great Plains Energy combined cycle plant siting study to identify and evaluate multiple candidate sites for potential location of new 600-MW class combined-cycle plant. Provided detailed report of findings to Kansas City Power & Light Company Resource Planning Department.

- **Kansas City Power & Light Company - GMO, Lake Road Generating Station, St. Joseph, Missouri** – Officer-in-charge and project manager for a study that assessed the feasibility of the KCP&L industrial steam generation and delivery system to serve its industrial steam customers.

- **Kansas City Power & Light - GMO (Formerly Aquila), South Harper Peaking Facility, Peculiar, Missouri** – 315-MW simple-cycle peaking plant. Project manager of Owner's Engineer for siting, permitting support, detailed installation design, balance of plant procurement, construction management services, commissioning, and documentation support. Sega's project manager and site manager.

- **Kansas City Power & Light, West Gardner and Osawatomie Generating Stations** – Two simple-cycle peaking projects. Sega, Inc's turnkey proposal manager for engineer-led EPC proposal for 400-MW of GE 7E gas turbine generator sets.

- **Independence Power & Light Department, Independence, Missouri** – Master plan study for a nominal 320-MW municipal utility. Project manager for five-year planning study including existing generation assessment, transmission system assessment, load forecast, alternative power supply analysis and economic evaluation.

- **State of Hawaii Division of Consumer Advocacy** – Investigated island-wide blackouts that occurred on Oahu and Maui after the earthquakes on October 15, 2006 and again on Oahu after lightning events on December 26, 2008. Officer-in-charge and project manager of team investigating causes of the outages, assessing utility outage recovery operations and identifying potential improvements to prevent or minimize future outages.

- **Utah Municipal Power Agency, Spanish Fork, Utah** – Officer-in-charge and project manager for due diligence assessment of a simple cycle 200-MW peaking plant consisting of five GE LM6000 combustion turbine generator sets.

- **Utah Municipal Power Agency, Spanish Fork, Utah** – Officer-in-Charge and Project manager for a study assessing the feasibility of potential sites and development of opinions of probable cost for installation of simple-cycle combustion turbines and reciprocating engine generating sets as a subcontractor to Sawvel and Associates of Findlay, Ohio.

- **Kansas City Board of Public Utilities, Nearman Creek CT4, Kansas City, Kansas** – 85-MW simple-cycle peaking unit. Owner's Engineer (Sega, Inc.) site manager for commissioning, including checkout, performance testing, emissions testing and management of construction completion closeout activities.

- **Trigen – Kansas City Energy Corporation, Kansas City, Missouri** – Sega, Inc.'s project manager for feasibility study to repower a district heating plant with an 80-MW combustion turbine and heat recovery steam generator cogeneration project.

- **Conserve Energy System, Centralia, Illinois** – Sega, Inc.'s project manager on a technical feasibility study for a 215-MW coal-fired atmospheric circulating fluidized bed boiler steam electric generating plant.

- **Cargill, Inc., Blair, Nebraska** – Sega, Inc.'s project manager for feasibility study for an 100-MW net combustion turbine and heat recovery steam generator cogeneration project.

- **Independence Power & Light Department, Independence, Missouri** – Sega, Inc.'s project manager for major refurbishment program on six GE Frame 5 and one GE 7B-regenerative, oil and gas-fired gas turbines. Project included condition assessments, specifications, and contracting for renewal and upgrade components, unit controls replacement, remote digital controls addition, and major overhaul of each unit.

- **Somerset Generating Station, Somerset, Massachusetts** – Black & Veatch's project manager on independent engineering review, performing condition assessments for Montaup Electric Company's divestiture of a 40-MW net, oil-fired combustion turbine (2 x FT4) black start peaking unit, a 100-MW coal-fired power plant, a total of 16-MW of diesel generators (8 x 2-MW GM-EMD) and a 2-MW hydro electric plant.

- **Constellation Energy, Freehold, New Jersey** – Sega, Inc.'s project manager for review of project proforma and preparation of testimony before the New Jersey Board of Public Utilities concerning net present value of a 110-MW net, gas-fired combined cycle cogeneration project.

- **Cherokee County Cogeneration Project, Gaffney, South Carolina** – Sega, Inc.'s project manager for an 80-MW net, gas-fired combined cycle (GE 106FA) cogeneration project in Gaffney, South Carolina for Prudential Power Financing. Performed technical review of project during design, permitting, contracting, and financing. Conducted construction monitoring for lender. Also served as interim president of project development entity during lender's takeover of project and equity sale to FP&L.

- **Independence Power and Light, Independence, Missouri** – Sega, Inc.'s project manager for study of 100-MW coal-fired steam electric unit, including conceptual design and estimating performance and cost for client's comparison to participation in Iatan II Project. Compiled and compared capital and operation and maintenance cost of alternative 100-MW coal-fired steam electric plants including pulverized coal and CFB plants, and natural gas-fired combined cycle and simple cycle units of the same size.

- **Florida State Correction Facility**, Starke, Florida – Bibb and Associates' project manager for independent review for potential equity investor, KLT Power, Inc. on a 23-MW, wood gasification and natural gas-fired, combined-cycle cogeneration project proposed near Starke, Florida.

- **Indeck-Oswego Energy Center, Oswego, New Yor**k – Bibb and Associates' project manager on independent engineering review for BA Securities, Inc. regarding the power sales agreement during term of financing of 51-MW, gas-fired combined-cycle (GE6B) cogeneration project in Oswego, New York.

- **North Carolina EMC**, Raleigh, North Carolina – Bibb and Associates' project manager of the Owner's Engineer team that wrote specifications and evaluated EPC proposals for a 330-MW gas-fired combined-cycle project and 100-MW gas-fired simple-cycle project in North Carolina.

- **Indeck-Olean Energy Center, Olean, New York** – Bibb and Associates' project manager on independent engineering review for bank group consisting of Canadian Imperial Bank of Commerce, BOT Financial, Inc., Westpac Banking Corporation, and Toronto Dominion Bank. Project was a 79-MW, gas-fired combined-cycle (GE 6B) cogeneration project in Olean, New York. Scope included review of technical feasibility and economic viability of project for financing, construction progress monitoring and oversight of performance demonstration tests.

- **Orlando CoGen Limited**, **L.P, Orlando, Florida.** – Bibb and Associates' project manager for independent engineering review for senior lender, the Sumitomo Bank, Limited of a 120-MW gas-fired, single-shaft combined cycle (ABB11N1/VAX) cogeneration project in Orlando, Florida developed by Air Products and Chemicals, Inc. and Utilicorp United.

- **ACE Cogeneration Project, Trona, California** – Bibb and Associates' project manager for independent engineering assessment for equity investor, US West Capital, Inc., including design, permit status, operations and maintenance of an existing 96-MW, coal-fired CFB steam electric plant.

- **Arroyo Cogeneration, Escondido, California** – Bibb and Associates' project manager for engineering review of project for development financing for Heller Financial, Inc, including alternate site selection program for a 49.9-MW, gas-fired, combined cycle (GE LM6000) cogeneration project.

- **Nestles Freehold Cogeneration Project, Freehold, New Jersey** – Bibb and Associates' project manager for independent engineering review for development financing by Heller Financial, Inc. of a proposed 110-MW, gas-fired, single-shaft combined cycle (ABB11N1/VAX) cogeneration project by Constellation Energy.

- **Intercontinental Energy, Bellingham, Massachusetts and Sayreville, New Jersey** – Bibb and Associates' project manager for independent engineering review for potential equity investor, American Energy Division of Potomac Capital Investment Corporation, for two 300-MW, gas-fired combined cycle (2 x W501D) cogeneration projects.

- **Sunnyside Cogeneration Project, Carbon County, Utah** – RW Beck and Associates' project manager for independent engineering review for senior lender, Swiss Bank Corporation, of the design and permitting review of a 50-MW waste coal-fired circulating fluidized bed boiler electric generating plant.

- **North Branch Power Project, Bayard, West Virginia** – RW Beck and Associates' project manager on independent engineering review for financing and construction monitoring for senior lender, Security Pacific Bank of a 80-MW waste coal-fired, circulating fluidized bed boiler project.

- **Unocal Geothermal, Monterey, California** – RW Beck and Associates' engineer, retained by Unocal to provide independent third-party oversight and monitoring of biennial performance tests by Pacific Gas and Electric Company at the Moss Landing Power Station (two 750-MW super-critical, gas and oil-fired steam electric generating units) related to geothermal steam pricing at Unocal's Geysers Geothermal projects.

- **St. Nicholas Power Project, Mahanoy Township, Pennsylvania** – RW Beck and Associates' project manager on independent engineering review for financing, construction monitoring and performance test monitoring for senior lender, Bank of New England for an 80-MW waste coal-fired steam electric plant.

- **Callaway Nuclear Generating Station, Fulton, Missouri** – Manager of Generating Facilities for the Missouri PSC staff, investigated and/or provided testimony concerning project construction management, in-service criteria, net electric capability, decommissioning funding, and in-service completion in rate case for an 1150-MW, PWR nuclear generating station.

- **Wolf Creek Nuclear Generating Station, Burlington, Kansas** – Manager of Generating Facilities for the Missouri PSC staff, investigated and/or provided testimony concerning project construction management, in-service criteria and startup, related fossil-fuel plant retirements, related plant accreditations, depreciation, and net electric capability in rate case for an 1120-MW PWR nuclear generating station.

- **Grand Gulf Generating Station I, Grand Gulf, Mississippi** –. Manager of Generating Facilities for the Missouri PSC staff, investigated and provided testimony concerning in-service criteria, in-service status, and overall project NRC inspection and licensing status for a 1250-MW BWR nuclear generating station.

- **Plains-Escalante Generating Station, Unit 1, Prewitt, New Mexico** – Burns & McDonnell's senior mechanical design engineer for mechanical equipment and systems, equipment procurement, construction contracting and coordination; and chief resident mechanical engineer during construction of a 220-MW pulverized coal power plant.

- **Basin Electric Power Cooperative, Inc., Laramie River Station, Wheatland, Wyoming** - Burns & McDonnell's mechanical design engineer for equipment and systems, equipment procurement, and construction contracting and CPM scheduler for coordination of construction completion of systems with sequenced system start-up program for three, 600-MW, pulverized coal-generating units for the Missouri Basin Joint Power Project Agency, lead by the Basin Electric Power Cooperative, Inc.

TESTIMONY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION

Issue Description	Exhibit No.		Transcript Vol. No.	Page Nos.
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HAWAII ELECTRIC LIGHT COMPANY, INC.
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Consumer Advocates Statement of Position:	Filed August 24, 2007
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KANSAS CITY POWER & LIGHT COMPANY, INC.
DOCKET NO. 12-KCPE-764-RTS

The Costs of Retirement and Dismantlement: Decommissioning KCP&L Fossil-Fueled Generating Units	Pre-filed Direct Testimony Pre-filed Rebuttal Testimony

SCHEDULE CRR-2

Kansas City Power & Light Co.

The Costs of Retirement and Dismantlement:

Decommissioning KCP&L-GMO's Generating Units

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Sega®
ENGINEERING & TECHNICAL SERVICES

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CERTIFICATION

I hereby certify that this document was prepared by me or under my direct supervision and that I am a duly Licensed Professional Engineer under the laws of the State of Missouri.

Christopher Robert Rogers
February 3, 2016

Christopher R. Rogers, P.E.
State of Missouri P.E. No. 021087

SECTION 1

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

1.1 INTRODUCTION

Kansas City Power & Light Company Greater Missouri Operations (GMO) Company retained Sega, Inc. (Sega) to provide an opinion of probable costs for retirement and dismantlement of its generating units. This report presents the results of Sega's study of the costs for decommissioning these facilities.

Decommissioning is comprised of two principal phases: ***retirement*** and ***dismantlement***. ***Retirement*** is the shutdown or closure and removal from service of a generating unit or facility, and includes disconnection, de-energization, cleanout, and securing of the units to render them safe. ***Retirement*** triggers unavoidable costs for compliance with the mandatory provisions of the various plants' permits and with the specific requirements of State and Federal regulations for the closure of ash landfills, the removal and remediation of fuel-oil tanks, and the reclamation of river water intakes.

GMO is not required to dismantle its plants upon retirement, and therefore, it is not known when, or even if, dismantlement costs will be incurred. Often a unit may not be dismantled until sometime after it is retired, particularly if there are other operational generating units on the same site. ***Dismantlement*** is the orderly demolition of the unit in a controlled and safe manner so as to preserve the scrap value of reclaimed materials while appropriately protecting the workers and the environment. Scrap values are considered separately from dismantlement costs because scrap values have proven volatile over time. Scrap values in this report were developed from current average index prices, and were netted out against dismantlement costs to produce net terminal costs for each unit. All costs are provided in current day, 2015 dollars.

1.2 DESCRIPTION OF FACILITIES

The GMO generating facilities are located on eight sites and include 18 simple-cycle combustion turbines, four steam electric generating units, and a steam production facility utilizing six boilers that can be fired to generate electricity by supplying steam to three turbine generators or supplying steam to commercial customers. The major attributes of each unit are provided in Figure 1.1 and further described below.

Plant Name	Unit No.	Current Net SPP Accredited Capability, MW	First Year In Service	Fuel / Type
Sibley	1	51	1960	Coal/Steam
	2	51	1962	
	3	363.8	1969	
South Harper	1	104.5	2005	Natural Gas-Fired Combustion Turbines
	2	105.6	2005	
	3	103.8	2005	
Greenwood	1	62.5	1975	Distillate-Fired/ Natural Gas-Fired Combustion Turbines
	2	60.8	1975	
	3	65.8	1977	
	4	63.3	1979	
Crossroads	1	74.9	2002	Natural Gas-Fired Combustion Turbines
	2	72.9	2002	
	3	74.6	2002	
	4	74.4	2002	
KCI	1	0	1971	Natural Gas-Fired Combustion Turbines
	2	0	1971	
Nevada	1	20.8	1974	Distillate-Fired Combustion Turbine
Ralph Green	3	71.5	1981	Natural Gas-Fired Combustion Turbine
Lake Road	Boiler 1	N/A	1962	Distillate-Fired/ Natural Gas-Fired Boiler
	Boiler 2	N/A	1962	Distillate-Fired/ Natural Gas-Fired Boiler
	Boiler 3	N/A	1936	Natural Gas Fired Boiler
	Boiler 4	N/A	1951	Distillate-Fired/ Natural Gas-Fired Boiler
	Boiler 5	N/A	1959	Coal-Fired/Natural Gas-Fired Boiler
	Boiler 8	N/A	2006	Distillate-Fired/ Natural Gas-Fired Boiler
	#4/#6	99.0	1967	Coal-Fired/Natural Gas-Fired
	Generator 1	21.7	1951	Distillate-Fired/ Natural Gas-Fired Coal-Fired
	Generator 2	27.3	1957	Distillate-Fired/ Natural Gas-Fired Coal-Fired
	Generator 3	11.2	1962	Distillate-Fired/ Natural Gas-Fired Coal-Fired
	#5	63.0	1973	Distillate-Fired/ Natural Gas-Fired
	#6	21.0	1989	Distillate-Fired Combustion Turbine
	#7	21.7	1990	Distillate-Fired Combustion Turbine
Iatan	1	705	1980	Coal/Steam
	2	881	2010	Coal/Steam

Figure 1.1 - GMO Electric Generating Units

1.2.1 Facility Descriptions

Sibley Generating Station is a three-unit, coal-fired electric generating station located in Jackson County, near the town of Sibley, Missouri. Sibley Units 1 and 2 have sub-critical boilers, electrostatic precipitators (ESPs), and an SNCR. Sibley Unit 3 is a super-critical boiler, ESP, and an SCR.

South Harper Generating Station is a three-unit, natural gas-fired combustion turbine peaking plant in Cass County, near the town of Peculiar, Missouri.

Greenwood Generating Station is a four-unit distillate and natural gas-fired combustion turbine peaking plant in Jackson County, near the town of Greenwood, Missouri.

Crossroads Generating Station is a four-unit natural gas-fired combustion turbine peaking plant in Clarksdale, Mississippi.

KCI Generating Station is a two-unit, natural gas-fired combustion turbine peaking plant in Platte County, Missouri on the eastern edge of the Kansas City International Airport property.

Nevada Generating Station is a single-unit, distillate and natural gas-fired combustion turbine peaking plant located in Vernon County, near Nevada, Missouri.

Ralph Green Station is a single-unit, natural gas-fired combustion turbine peaking plant located in Cass County, in Pleasant Hill, Missouri.

Lake Road Generating Station is a multi-unit facility located in Buchanan County in St. Joseph, Missouri. Lake Road generates electricity from four steam turbine generators that receive steam from seven different boilers. These boilers burn either gas, distillate, or coal. These same boilers also produce steam that is sold to local steam customers. Lake Road also includes three combustion turbines that fire distillate (CTG 5, CTG 6, and CTG 7) or natural gas (CTG 5).

Iatan Generating Station is located in rural Platte County, near the town of Weston, Missouri. Unit 1 is a pulverized coal-fired, sub-critical steam electric plant with an SCR, baghouse, and wet scrubber. Unit 2 is a pulverized coal-fired, super-critical steam electric plant with an SCR, baghouse, and wet scrubber.

1.3 APPROACH

Sega met with representatives of GMO to gather information about the generating units and visited each of the plant sites (with the exception of the Crossroads facility). Discussions were held with certain plant staff, further documentation was obtained, and a walkdown of each unit was conducted. Sega utilized Microsoft® Project 2010 (MS Project) software with resource loading to develop and compile opinions of probable costs and schedules for the retirement of each unit. Costs were developed based on GMO's current labor rates and those of its present maintenance contractors. Site-specific retirement costs were developed using a bottom-up approach for each task.

The basis and limits for retiring or dismantling each unit were defined while visiting the plant sites. For instance, it was assumed that the switchyard and/or substation (as applicable) for each generator would remain in service following either retirement or dismantlement. In general, plant roads, fencing, and site grading were presumed to remain undisturbed unless otherwise specifically required to be removed. Closure of ash landfills, and the removal and remediation of river water intakes and fuel oil storage tanks were included in the retirement phase as required by applicable permits.

Dismantlement costs for Sibley Unit 3 was developed from the ground up. It was assumed that common facilities at each plant site, such as coal unloading, storage and handling systems, water treatment systems, ash handling systems, and office buildings, would remain in service until the last unit is retired. For multiple-unit sites, retirement and dismantlement costs were developed separately for the common plant facilities. For instance, applicable ash landfill closure costs for the units were included in the common plant category rather than for individual units.

The estimates of probable cost for "stack removal" and "final site grading and drainage" for the various sites were not developed using MS Project software. The "stack removal" costs for the various stacks were based on a budgetary estimate for the demolition of the existing Iatan Unit 1 stack. This estimate was scaled to estimate the demolition for the other stacks involved in this study. The "final site grading and drainage" estimate of probable cost was developed by Sega but was not developed in an MS Project schedule. Both of these activities are represented in the MS Project schedule in Appendix A for the applicable units as a onetime cost/use in the resource allocation section of the file; therefore, they appear as a one-day activity in the schedule with the estimated costs as a one-time expense.

1.4 RESULTS

The opinion of the probable costs for retirement and dismantlement developed by Sega for each of GMO's units and the common facilities at each plant site are provided in Figure 1.2. All costs shown are in 2015 dollars. The costs are provided for the full ownership of these generating facilities. Fractional shares of ownership and jurisdictional allocations have not been taken into account in these costs. Ongoing expenses for the sites such as security, routine inspections, groundwater monitoring, etc., which would continue as long as the Company continues to own the sites, are not included in the decommissioning costs. Retirement costs are separately provided for each unit and for related common plant facilities. The costs of dismantlement and scrap values are provided for each unit and for common plant, as well as the final net terminal costs.

As shown in Figure 1.2, there is a significant difference between the costs of retiring and the costs of dismantling a power plant. In Sega's opinion, the probable cost to dismantle all of GMO's units is approximately $208 million. Some materials could be sold for scrap, thereby recovering approximately $38 million and bringing the estimated net terminal value for dismantling all of GMO's plants to $170 million, based upon the current averaged scrap indices.

However, were GMO to retire its generating units in place without dismantlement, Sega believes the cost would be approximately $68.9 million.

Name	Unit No.	Retirement			Dismantlement		
		Unit Retirement	Activities Required by Permit Agreement or Regulation [2]	Total Retirement	Dismantlement	Scrap Value [3]	Net Terminal Cost
Sibley	1	$482,368		$482,368	$6,034,974	$848,154	$5,186,820
	2	$482,368		$482,368	$6,034,974	$848,154	$5,186,820
	3	$535,958		$535,958	$16,835,426	$2,757,087	$14,078,339
	Common	$531,710	$13,950,965	$14,482,675	$10,134,174	$1,564,206	$8,569,968
South Harper	1 2 3	$404,885		$404,885	$9,383,425	$358,946	$9,024,479
Greenwood	1 2 3 4	$413,021	$471,333	$884,354	$11,063,645	$353,746	$10,709,899
Crossroads	1 2 3 4	$400,303		$400,303	$11,249,327	$389,486	$10,859,841
KCI	1 2	$227,662		$227,662	$2,789,050	$91,317	$2,697,733
Nevada	1	$281,190	$56,530	$337,720	$6,434,106	$45,397	$6,388,709
Ralph Green	3	$285,572	$81,385	$366,957	$6,156,152	$95,230	$6,060,922
Lake Road	Boiler 1	$120,344		$120,344	$3,098,749	$117,312	$2,981,437
	Boiler 2	$120,344		$120,344	$3,098,749	$117,312	$2,981,437
	Boiler 3	$161,768		$161,768	$3,611,257	$151,376	$3,459,881
	Boiler 4	$138,357		$138,357	$4,045,457	$196,024	$3,849,433
	Boiler 5	$183,266	$1,175,349	$1,358,615	$6,388,857	$224,107	$6,164,750
	Boiler 8	$105,550		$105,550	$2,250,354	$224,107	$2,026,247
	#4 / #6	$386,400	$637,591	$1,023,991	$8,380,637	$1,262,740	$7,117,897
	Generator 1	$49,349		$49,349	$2,375,879	$38,162	$2,337,717
	Generator 2	$49,349		$49,349	$2,615,898	$43,797	$2,572,101
	Generator 3	$43,656		$43,656	$1,874,480	$25,661	$1,848,819
	CT 5	$209,711		$209,711	$2,414,288	$88,266	$2,326,022
	CT 6 & 7	$159,554		$159,554	$1,665,869	$91,317	$1,574,552
	Common	$875,025	$174,289	$1,049,314	$4,054,680	$248,964	$3,805,716
latan	1	$1,035,765	$36,970,077	$38,005,842	$24,018,833	$10,000,000	$14,018,833
	2	$1,031,343		$1,031,343	$27,449,519	$11,430,000	$16,019,519
	Common	$590,627	$6,042,837	$6,633,464	$24,874,543	$6,850,000	$18,024,543
		$9,305,445	**$59,560,356**	**$68,865,801**	**$208,333,302**	**$38,460,868**	**$169,872,434**

Figure 1.2 - Probable Costs of Decommissioning GMO Electric Generating Units[1]

(1) All values in 2015 U.S. dollars.

(2) Activities required by permits and/or regulations that are to occur upon ceasing operations, including ash landfill closures and river water intake structures.

(3) Current scrap values per averaged indices.

SECTION 2

RETIREMENT

RETIREMENT

2.1 INTRODUCTION

Sega developed an opinion of probable cost to retire the GMO facilities previously listed in Figure 1.1 and further described in Appendix A. The opinion of probable cost is a buildup of estimated costs to perform the retirement activities to leave each facility in a safe state. A resource-loaded MS Project schedule was developed for the retirement of each facility. Each schedule includes the activity, duration of the activity, resources required for each activity, and the probable cost of each activity. The results for each facility are provided in Appendix A of this report.

The opinion of probable cost for the retirement of each coal-fired generating facility is broken down into the retirement of each unit (or boiler, turbine, and CTG in the case of Lake Road), plus the retirement of the common facilities. The common facilities will be retired when the last unit is retired at a site.

2.2 OPINION OF PROBABLE COST BASIS

Retirement activities will be performed by KCP&L bargaining unit personnel and managed by GMO. Man-hour costs for both management and bargaining unit personnel were provide by GMO. At the direction of GMO, the direct man-hour rate was multiplied by 1.4 to account for benefits and overhead loadings.

The estimates of probable cost to retire the combustion turbines are based on retiring all of the combustion turbines at a given site, not on an individual combustion turbine retirement basis. The only exception is at Lake Road. At Lake Road, CTG 5 is retired as a single unit and CTGs 6 and 7 are retired together per direction from the Lake Road plant staff.

A 5-percent "Owner Internal Costs" is included in the opinion of probable cost. This line item is included to cover the costs of various internal GMO departments that will charge to the project during the implementation of the retirement activities.

A 25-percent "Owner Contingency" is included in the opinion of probable cost. This level of contingency is consistent with Association for the Advancement of Cost Engineering (AACE-International) contingency level guidelines based on the engineering progress completed at the point when the cost estimate was developed.

2.3 RETIREMENT ACTIVITIES

Prior to starting the actual retirement activities, a retirement plan will be developed. This plan will address any laws, ordinances, regulations, and standards dictating how ash, slag, scrubber by-products, and any other waste stream is stored and/or removed from the plant site. An environmental assessment will be performed to develop a plan to address these issues and to assure that permits required to complete the retirement activities are in place. The retirement plan will also address plant safety during the time interval between plant retirement and eventual dismantlement. This plan should include the requirements for periodic inspections to assess the condition and integrity of the plant structures so that contractors can safely demolish the plant when so required. The costs to perform these activities are estimated in the "Pre-Retirement Activities" line item of each facility's opinion of probable cost.

The following activities and conditions are required to leave a generating facility (unit, common facilities, or entire plant, as may be applicable) in a safe state and are included in each facility's opinion of probable cost:

1. All equipment, tanks, vessels, containers, drums, headers, exchangers, and sumps will be drained and vented. Fuel oil, lubricating oil, liquid propane, bulk hydrogen, Halon, liquid ammonia, water treatment chemicals, lab chemicals, cleaning solutions, and Freon will be handled per plant procedures and plan permitting requirements. Man-ways, hand-holes, vents, and drains will be opened to ensure drainage. Drains will remain open.

2. The electrical sources will be isolated from the facility. The exact details of this scope of work will be determined during the pre-retirement activities phase. At a minimum, all electrical buses will be disconnected at the source. The medium- and low-voltage switchgear will be racked out by fully withdrawing the circuit breakers. Fuses will be removed, and circuit breakers and disconnect switches will be left in the open position. Motors

will be disconnected at the source and motor lube oil will be drained (as applicable).

3. Fuel yard equipment will be cleaned and vacuumed to reduce or eliminate the hazards of fugitive coal dust.

4. To the maximum extent possible, all drains will be emptied and vented. Low-point drains will remain open.

5. Fuel gas piping and city/rural water piping will be cut and capped at the property line.

6. Chimney Federal Aviation Agency (FAA) required lighting will be kept in service.

7. Buildings will be "secured". The determination of the detailed activities required to leave a building in a secure state is included in the pre-retirement activities and will include isolating all power sources, draining potable water lines, draining and venting sewage lines, securing doors and windows, capping any means of egress for vermin, removing hazardous materials, and moving any relevant plant documentation to alternate off-site storage sites.

8. Fuel oil and waste oil will be drained and removed.

9. Boiler chemicals will be drained and removed.

10. Boilers and HRSGs will be drained. The water and steam side will be vented. The gas side will be vacuumed to remove ash and slag. Drum doors and boiler doors will be left open. Bottom ash systems will be drained, cleaned, and vented.

11. Ductwork will be vacuumed and left open.

12. Condensate and feedwater piping will be drained and vented.

13. Feedwater heaters will be drained and vented.

14. Deaerator and deaerator storage tanks will be drained and vented.

15. The turbine and condenser will be drained and vented.

16. The generator will be electrically and mechanically isolated. The generator and exciter cooling water systems will be drained and vented. Hydrogen gas tanks and the generator hydrogen systems will be vented.

17. Compressed air systems will be drained and vented. Desiccant will be removed from the compressed air dryer systems.

18. Circulating water systems and turbine cooling water systems will be drained and vented. Circulating water chemical feeds will be drained and vented.

19. Baghouses will be opened, cleaned, and vented. Filter bags and cages will be removed.

20. Wet Flue Gas Desulfurization (FGD) systems will be drained, opened, cleaned, and vented.

21. Dry FGD systems will be drained, opened, cleaned, and vented.

22. Re-agent preparation facilities will be drained, opened, cleaned, and vented.

23. SCRs will be opened, cleaned, and vented. Catalyst will be removed. Ammonia storage tanks will be emptied and vented.

24. The battery systems will have the battery electrolytes and battery cells removed and disposed.

25. Sewage treatment facilities will be drained, cleaned, and vented.

26. Oily drain tanks will be opened and pumped out.

27. CO_2 systems used for fire protection will be drained, opened, and vented.

28. Any other activities required by law, regulation or permit for a specific unit, common facility or plant site will be performed.

Once the site retirement activities are complete, several months of post-retirement activities will commence. These activities include determining the disposition of site documentation, assuring permits are in correct condition, developing plans to monitor the retired facility, accounting and environmental activities, and re-assigning personnel as required.

2.4 ARO ACTIVITIES

Asset Retirement Obligations (AROs) are a means that GMO utilizes to track the costs of activities that are required to be performed when one of its generating units ceases operation and is removed from service. These are activities that are required to be performed upon retirement according to permits, statutes, agreements, and regulations. For certain activities, such as ash landfill closures, GMO is required to periodically report

estimated cost updates to state environmental agencies (Kansas Department of Health and Environment and Missouri Department of Natural Resources). These agencies require GMO to periodically demonstrate the ability to fund these closure activities. This is because the costs for ash landfill closures and post-closure activities are significant.

Other activities, such as the removal of river water intakes, are stated requirements in the standard form permits issued by the United States Army Corp of Engineers. Also included in AROs are amounts for the abatement and removal of fuel oil storage tanks of the plants located in Missouri (Greenwood, Nevada, Lake Road, and Iatan Generating Stations).

While GMO accounts for asbestos abatement activities in AROs for the Greenwood, Nevada, and Sibley Generating Stations, these activities were excluded from the retirement and decommissioning costs. Asbestos abatement activities are ongoing at each of these sites during the life of the units, and will continue to be performed after retirement, but before dismantlement. Thus, asbestos abatement was not included in this decommissioning study.

Wherever KCP&L already had estimates and a basis for valuing the costs of such ARO closure activities, Sega reviewed and utilized these estimates, adjusting to 2015 present-day dollars. Where there was no prior estimate available, Sega developed an opinion of probable costs for their closure. Each of these costs is provided in Appendix A.

Appendix D is a table showing the source of the requirement that dictates each ARO activity.

SECTION 3

DISMANTLEMENT

DISMANTLEMENT

3.1 INTRODUCTION

Sega developed an opinion of probable cost to dismantle the GMO facilities that are listed in Appendix A. The opinion of probable cost is a buildup of estimated costs to perform the dismantlement activities to remove equipment and building superstructures down to grade-level foundations. Below-grade foundations, piping, and duct banks will be abandoned in place. A resource-loaded MS Project schedule was developed for the dismantlement of the facilities. Each schedule includes the activity, duration of the activity, resource required for each activity, and the probable cost of each activity. The results for each of the facilities are provided in Appendix A.

The opinion of probable cost for the dismantlement of each coal-fired generating facility is broken down into the dismantlement of each unit, plus the dismantlement of the common facilities. The common facilities will be dismantled when the last unit at the site is dismantled.

The estimate of probable cost to dismantle the combustion turbines are based on dismantling all of the combustion turbines at the site, not on an individual combustion turbine dismantlement basis with the exception of Lake Road. At Lake Road, CTG 5 is dismantled as a single unit and CTGs 6 and 7 are dismantled together per direction from the Lake Road plant staff.

3.2 OPINION OF PROBABLE COST BASIS

The project will be managed by GMO staff. GMO will hire an Owner's Engineer to assist with environmental issues and the technical dismantlement details. GMO will hire a Demolition General Contractor (DGC) to perform the complete dismantlement of each unit.

The opinion of probable cost is presented as the straight netting of the DGC's firm price cost, minus the current scrap value of the equipment and materials.

At the initiation of dismantlement, this study assumes that the unit or common facility has been previously retired as detailed in Section 2 - Retirement.

A resource-loaded MS-Project dismantlement schedule and an opinion of probable cost was developed for Iatan Unit 1, Sibley Unit 3, South Harper (all three units), Greenwood (all four units), Crossroads (all four units), KCI (both units), Nevada (one unit), Ralph Green (one unit), and Lake Road Boiler 1, Lake Road Boiler 2, Lake Road Boiler 3, Lake Road Boiler 4, Lake Road Boiler 5, Lake Road Boiler 8, Lake Road CTGs 6 and 7, Lake Road CTG 5, Lake Road T-G 1, Lake Road T-G 2, Lake Road T-G 3, and the common facilities at Iatan, Sibley, and Lake Road. The opinion of probable costs developed for Sibley Unit 3 was used to derive the dismantlement costs for Sibley 1, Sibley 2, and Lake Road 4/6 using the AACE International Capacity Factor Method. The cost for Iatan Unit 2 was derived from the cost to dismantle Iatan Unit 1 using the AACE International Capacity Factor method.

A 5-percent "Owner Internal Cost" is included in the opinion of probable cost. This line item is included to cover the costs of various internal GMO departments that will charge to the project during the implementation of the dismantlement activities.

A 25-percent "Owner Contingency" is included in the opinion of probable cost. This level of contingency is consistent with the AACE International contingency level based on the engineering progress completed at the point when the cost estimate is developed.

3.3 DISMANTLEMENT ACTIVITIES

The dismantlement of a facility is divided into pre-dismantlement activities, dismantlement activities, and project closure activities.

3.3.1 Pre-Dismantlement Activities

Pre-dismantlement activities consist of the detailed pre-planning of the dismantlement process. This pre-planning includes establishing the GMO project management team; hiring an Owner's Engineer; developing a detailed dismantlement scope of work, including how to address any environmental issues; developing a level 1 project schedule; and contracting with a DGC.

The GMO project management team will be responsible for the project execution and will consist of a full-time project manager, two full-time engineers, a full-time project administrative assistant, and a part-time procurement specialist. This team will have the authority to manage the dismantlement of the plant.

The Owner's Engineer will assist GMO with the technical aspects of executing the project. The Owner's Engineer will help establish the boundaries of demolition, provide environmental consulting, and develop the technical specifications for the DGC contract request for proposal. The Owner's Engineer will provide 1-1/2 full-time equivalent field engineers during the demolition phase of the project. The Owner's Engineer will also provide detailed design for equipment that requires modifications to keep other units or common facilities in operation during demolition and after the unit is dismantled.

The KCP&L project management team and the Owner's Engineer will review all existing permits to assure that any relevant existing permit requirements are met during demolition. This team will also get any additional required permits in place for demolition (outside of the normal permits that are the responsibility of the DGC).

Prior to dismantlement activities, a detailed site characterization study will be performed. This study involves a series of site investigations to determine potential subsurface environmental issues at the site, a description of the hydrological and hydrogeological conditions on the site, and a determination of potential waste streams generated during the demolition work. Based on the outcome of the site characterization study, reclamation, and remediation plans that address the environmental issues and site conditions will be

developed. The site characterization study and the development of the remediation plans can take up to six months to complete. The site characterization study will be performed by the Owner's Engineer.

The GMO project management team will identify the boundaries of dismantlement and the location of system and equipment isolation points between the unit to be demolished, common facilities, and units to remain.

The GMO project management team will be responsible for bidding and contracting with a qualified DGC.

Prior to the DGC mobilizing on site, the GMO project management team will confirm that the unit to be dismantled is ready to be turned over to the DGC.

3.3.2 Dismantlement Activities for a Coal-Fired Unit

The demolition contractor will be structured into several crews that will bring equipment and materials to the ground. A separate dedicated crew will be responsible for classifying the scrap by type and removing the scrap from the site.

The coal-fired units will be demolished in a phased and sequential manner to assure worker safety and to minimize any interferences with surrounding equipment. Please refer to the man-power loaded schedule and graphs in Appendix A for the details of each demolition phase.

3.3.2.1 *Phase 1 Demolition - Boiler and Turbine Equipment Removal*

Mechanical and electrical equipment and material inside the boiler and turbine building footprints will be removed. The goal of this phase is to remove the majority of the equipment in the boiler and turbine buildings leaving only the boiler, turbine, building, and support steel.

In this phase of the project, the switchyard is disconnected from the generating facility.

3.3.2.2 *Phase 2 Demolition - Boiler and Turbine Removal*

The boiler equipment will be removed at the start of this phase. Then, the boiler furnace and backpass will be removed from the bottom up (boilers are hung from the top of the boiler structure) and the structural steel is removed from the top down. Once the structural steel and all equipment are removed, the boiler equipment foundations will be demolished to existing grade.

In parallel with the above activities, the turbine, condenser neck heat exchangers, condenser, and miscellaneous turbine equipment will be removed. The turbine building and turbine pedestal is then demolished to grade.

3.3.2.3 *Phase 3 Demolition - Precipitator and AQCS Dismantlement*

If the unit has a precipitator, the precipitator will be removed similar to the process for removing the boiler. The precipitator internals will be removed from the bottom up and the precipitator structural steel will be removed from the top down. The precipitator foundation will be removed down to grade.

If the unit has a wet or dry scrubber and/or a baghouse, the dismantlement will start at the stack and work back towards the boiler to avoid dismantlement activities interferences.

3.3.2.4 *Phase 4 Demolition - Yard Demolition*

This phase removes equipment and materials external to the boiler and turbine areas. Underground piping, conduit, and duct banks will be abandoned in place with the exception of the circulating water pipe. The concrete reinforced circulating water pipes will be excavated, collapsed by crushing, and backfilled. Electrical man-holes will be collapsed by crushing and backfilled. Special care will be taken to assure that any materials left in the ground will not adversely impact site drainage.

3.3.2.5 *Phase 5 - Final Site Grading and Drainage*

Final grading and drainage includes a minimum amount of grading to assure that the site drainage facilities remain in place and includes final seeding of the site.

3.3.3 Dismantlement Activities for a Combustion Turbine Site

The demolition contractor will be structured into several crews that will bring equipment and materials to the ground. A separate dedicated crew will be responsible for classifying the scrap by type and removing the scrap from the site.

The combustion turbines, auxiliary equipment, and buildings will be demolished in a phased and sequential manner to assure worker safety and to minimize any interferences with surrounding equipment. Please refer to the man-power loaded schedule and graphs in Appendix A for the details of each demolition phase.

Final grading and drainage includes a minimum amount of grading to assure that the site drainage facilities remain in place and includes final seeding of the site.

3.3.4 Dismantlement Activities for Common Facilities

The demolition contractor will be structured into several crews that will bring equipment and materials to the ground. A separate dedicated crew will be responsible for classifying the scrap by type and removing the scrap from the site.

The common facilities dismantlement activities consist primarily of the removal of chimneys, fuel yard equipment, removal of site-specific common equipment, and the removal of facility buildings. The phasing of the common dismantlement processes are site specific and will be determined during the pre-dismantlement activity phase of the project.

Final grading and drainage includes a minimum amount of grading to assure that the site drainage facilities remain in place and includes final seeding of the site.

3.4 PROJECT CLOSURE ACTIVITIES

This phase of the project confirms that the remediation and reclamation of the site has been successfully complete and that all required "record" documentation needed by GMO is complete and on file.

3.5 SCRAP METAL VALUES

Scrap metal weights were developed for a 700-MW coal-fired unit based on the actual quantities and materials documented in the original construction documents. These scrap metal weights were applied to the other coal-fired units using the AACE International Capacity Factor Method.

Scrap metal weights for the combustion turbines, boilers, and turbine generators were based on weights for similar-sized equipment from previous Sega projects.

Please see Appendix B for the opinion of current average scrap values for each unit.

APPENDICES

APPENDIX A

OPINIONS OF COSTS BY UNITS

SIBLEY

SIBLEY STATION

The Sibley Generating Station consists of three coal-fired power plants.

Sibley Unit 1 has an SPP-accredited unit rating of 51 MW and was placed in service in 1960. Unit 1 has a sub-critical Babcock & Wilcox boiler and a Siemens turbine. River water is used for condenser cooling. Unit 1 has an electrostatic precipitator for particulate removal and an SNCR system for NO_x control.

Sibley Unit 2 has an SPP-accredited unit rating of 51 MW and was placed in service in 1962. Unit 2 has a sub-critical Babcock & Wilcox boiler and a General Electric turbine. River water is used for condenser cooling. Unit 2 has an electrostatic precipitator for particulate removal and an SNCR system for NO_x control.

Sibley Unit 3 has an SPP-accredited unit rating of 363.8 MW and was placed in service in 1969. Unit 3 has a super-critical Babcock & Wilcox boiler and a Siemens turbine. River water is used for condenser cooling. Unit 3 has an electrostatic precipitator for particulate removal and an SCR for NO_x control.

The Sibley common fuel yard has a bottom car dumper that can transfer fuel to either a bituminous fuel storage pile or a sub-bituminous fuel storage pile. The two different fuels can be blended prior to being transported to either the crusher house or to the blended pile. The blended pile has a reclaim system that can transport blended fuel to the crusher house. Crushed fuel is then transported to the Units 1, 2, and 3 silos. The fuel yard also has a tire chips storage and conveyor system that can transport tire chips to the Unit 3 silos.

All three Sibley units have a propane igniter system. The units are supplied with propane from common propane storage tanks and a common propane vaporizer.

All three units beneficially use coal combustion products off site. Coal combustion products that are not beneficially used off site are disposed of in the on-site solid waste landfill.

The following are the major systems and equipment that were included in the retirement and dismantlement of each unit and the major systems and equipment that were considered common (additional details are listed in the attached retirement and dismantlement schedules included in this Appendix).

SIBLEY UNIT 1

1. Boiler and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Electrostatic precipitator.
4. Dedicated Unit 1 fuel handling equipment.
5. Dedicated Unit 1 propane equipment.
6. Dedicated Unit 1 SNCR process equipment.

SIBLEY UNIT 2

1. Boiler and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Electrostatic precipitator.
4. Dedicated Unit 2 fuel handling equipment.
5. Dedicated Unit 2 propane equipment.
6. Dedicated Unit 2 SNCR process equipment.

SIBLEY UNIT 3

1. Boiler and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Electrostatic precipitator.

4. Dedicated Unit 3 fuel handling equipment.
5. Dedicated Unit 3 propane equipment.
6. Dedicated Unit 3 SCR process equipment.

COMMON

1. Administration/Service building.
2. Fuel yard office building.
3. Temporary service building.
4. Warehouses.
5. Tractor shed and out building.
6. Water treatment and sewage treatment.
8. Common fuel handling equipment.
9. NO_x out ultra system
10. Fire water systems.
11. Stack.
12. Diesel generator.
13. Intake.

UNIT 1

Sibley Unit 1 Retirement

Owner Costs			
Pre-Retirement Activities		$100,821	
Retirement Activities		$240,134	
Post-Retirement Activities		$26,564	
Owner Direct Total			$367,519
Owner Internal Costs	5.00%		$18,376
Owner Contingency:	25.00%		$96,474
Sibley Unit 1 Retirement Opinion of Probable Cost:			$482,368.69

Sibley Unit 1 Retirement Costs

ID	Task Name	Cost
1	**Sibley Unit 1 Retirement**	**$367,519.09**
2	**Pre-Engineering**	**$100,821.60**
3	Permit review and engineering analysis, establish isolation points, and confirm	$100,821.60
4	**KCL&L Overhead Costs**	**$83,646.00**
5	KCP&L Retirement Manager	$83,646.00
6	**Equipment Rentals**	**$28,339.20**
7	Vacuum truck	$28,339.20
8	**Retirement**	**$128,148.29**
9	**Electrical**	**$18,911.68**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit bre	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Oil-Filled Power Transformers**	**$5,549.44**
24	De-energize all transformer primaries and verify that the secondary is de	$893.28
25	De-energize all low-voltage AC or DC power sources for space heaters, co	$893.28
26	Drain and dispose of oil.	$2,642.88
27	Clean up and dispose of oil on surface areas around the transformers on	$1,120.00
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, co	$893.28
31	**Motors**	**$6,216.00**
32	De-energize all primary power at the source.	$1,786.56
33	De-energize all low-voltage power sources for space heaters or other aux	$1,786.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,642.88
35	**Coal Handling**	**$29,248.24**
36	Isolate area K Unit 1 Silos.	$8,522.80
37	Confirm all fuel lines and feedrs are clear of coal and coal dust.	$1,685.44
38	Perform cleaning of the coal handling equipment to assure that all coal and	$19,040.00
39	**Propane Igniter System**	**$2,528.16**
40	Isolate lines from source, open and vent.	$2,528.16
41	**Boiler Chemical Feed**	**$1,685.44**
42	Drain all chemical feed tanks.	$1,685.44
43	**Boiler**	**$29,591.57**
44	Open boiler doors.	$880.96

Sibley Unit 1 Retirement Costs

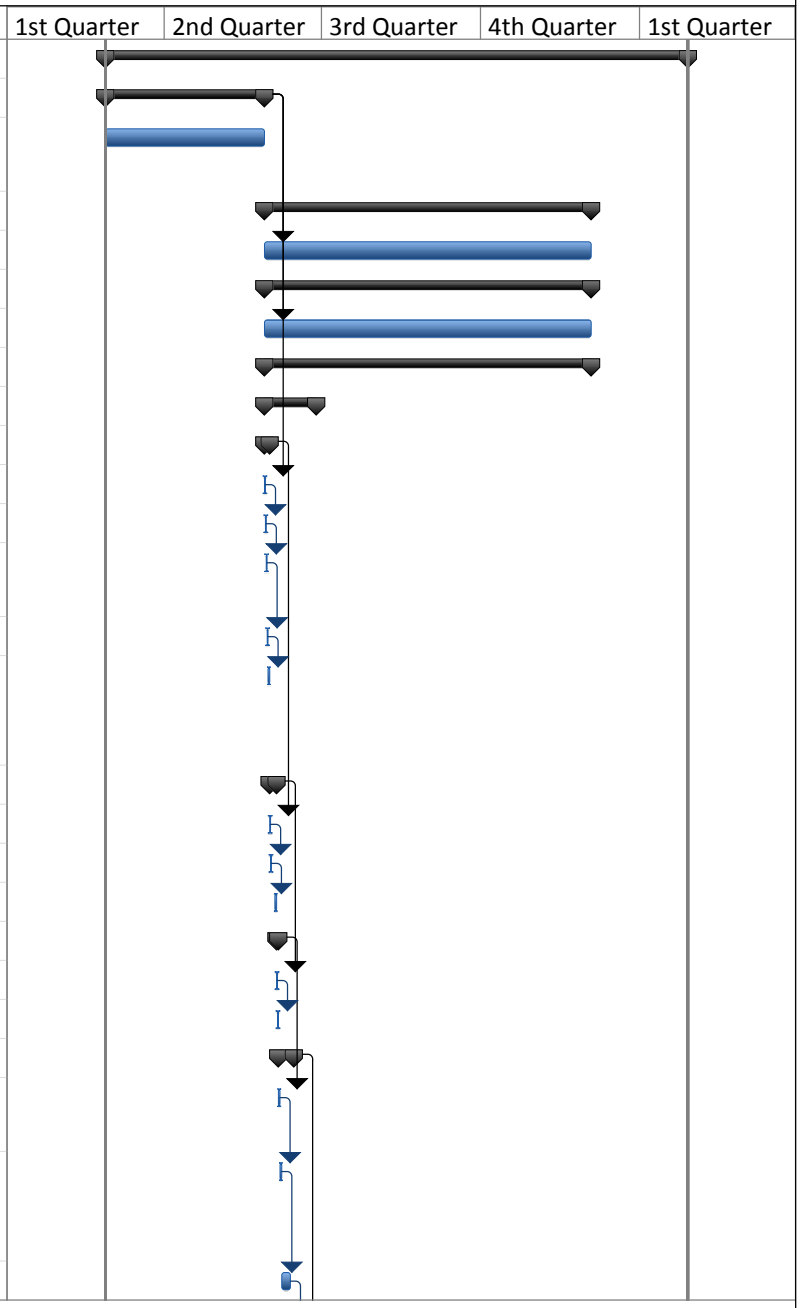
ID	Task Name	Cost
45	Gas side - perform cleaning of the boiler and bottom ash system.	$16,800.00
46	Drain boiler, drums, downcomers and headers.	$842.72
47	Open drum doors and blowdown tank doors.	$880.96
48	Drain and vent the service water and ash sluice water systems	$1,541.36
49	Clean bottom ash, economizer ash and fly ash system.	$2,480.13
50	Open, flush with water and vent the SNCR/RRI piping	$6,165.44
51	**Precipitator**	**$10,603.04**
52	Multiple cleaning cycles for collection plates.	$2,528.16
53	Clear hoppers of all ash	$2,805.44
54	Disconnect tranformers.	$1,786.56
55	Mechanically secure all compartment dampers and hopper outlet valves in	$720.48
56	Disconnect ash transport piping and washdown hoppers and interior of cas	$1,000.48
57	Install bird screens across hopper ash outlet and ash line flanges.	$880.96
58	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are i	$880.96
59	**Ductwork**	**$6,480.96**
60	Open ductwork doors.	$880.96
61	Perform extensive cleaning of the ductwork.	$5,600.00
62	Isolate ductwork at tie to ductwork common to Unit 2	$0.00
63	**Condensate and Feedwater Piping**	**$2,528.16**
64	Drain water from the system.	$842.72
65	Leave open vents and drains.	$842.72
66	Drain, open and vent condensate storage tanks	$842.72
67	**Feedwater heaters**	**$2,528.16**
68	Drain feedwater heaters	$842.72
69	Leave open vents and drains.	$1,685.44
70	**Turbine and Condenser**	**$4,385.68**
71	Drain hotwell and leave doors open.	$861.84
72	Open main turbine doors.	$880.96
73	Remove lube oil.	$2,642.88
74	Drain Gland Water Tank and Condensate Collection Tank	$0.00
75	**Generator**	**$6,095.76**
76	Verify that generator circuit breaker is open and racked out or that high-vo	$446.64
77	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
78	De-energize power supplies to generator excitation system at the source.	$446.64
79	De-energize AC and DC power supplies to generator and exciter space heat	$446.64
80	Drain generator and exciter cooling water systems (if applicable).	$861.84
81	Disconnect and remove hydrogen gas tanks and purge generator hydrogen	$1,685.44
82	Disconnect and remove fire protection system gas/foam tanks and purge fi	$1,761.92
83	**Circulation Water and Turbine Cooling Water System**	**$3,409.12**
84	Drain.	$1,685.44
85	Open water box doors.	$880.96
86	Drain any circulating water chemical feed tanks.	$842.72
87	**Compressed Air System**	**$842.72**
88	Open vents and drains.	$842.72

Sibley Unit 1 Retirement Costs

ID	Task Name	Cost
89	**Auxiliary Steam System**	**$2,528.16**
90	Drain water from system.	$842.72
91	Open and vent F.D. Fan Steam Coils	$1,685.44
92	**Bearing Cooling Water and Boiler Cooling Water System**	**$842.72**
93	Drain water from system and vent.	$842.72
94	**Condenser Air Extraction System**	**$842.72**
95	Drain water from system.	$842.72
96	**Building Heating System**	**$842.72**
97	Drain water from system.	$842.72
98	**Battery System**	**$4,253.28**
99	De-energize all battery chargers from the source.	$446.64
100	Open all AC and DC circuit breakers and/or fused switches on battery charg	$446.64
101	Remove and dispose of battery electrolyte.	$1,680.00
102	Remove and dispose of battery cells.	$1,120.00
103	Clean up and dispose of electrolyte on surface areas around batteries.	$560.00
104	**Post Retirement Activities**	**$26,564.00**
105	Post Retirement Activities	$26,564.00

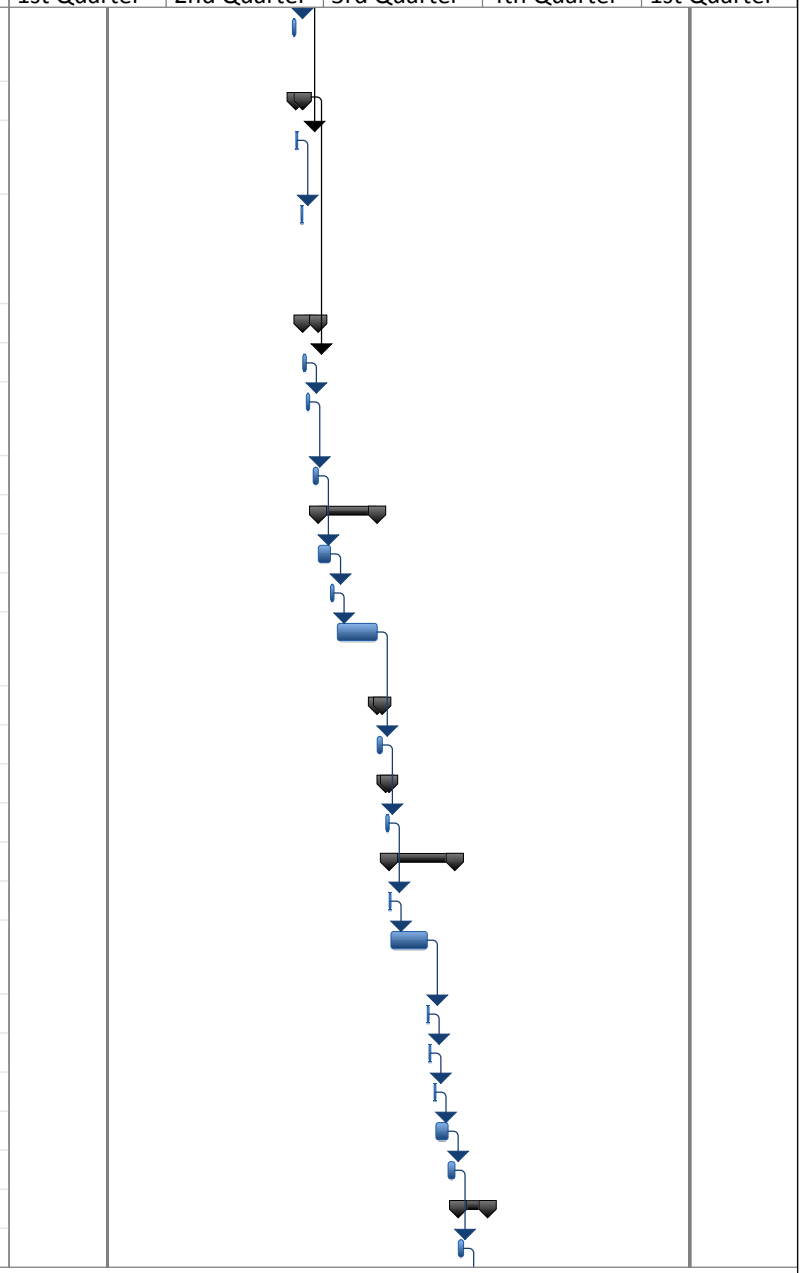
Sibley Unit 1 Retirement

ID	Task Name	Duration
1	**Sibley Unit 1 Retirement**	**241 days**
2	**Pre-Engineering**	**66 days**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	66 days
4	**KCL&L Overhead Costs**	**135 days**
5	KCP&L Retirement Manager	135 days
6	**Equipment Rentals**	**135 days**
7	Vacuum truck	135 days
8	**Retirement**	**135 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Oil-Filled Power Transformers**	**7 days**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
26	Drain and dispose of oil.	3 days



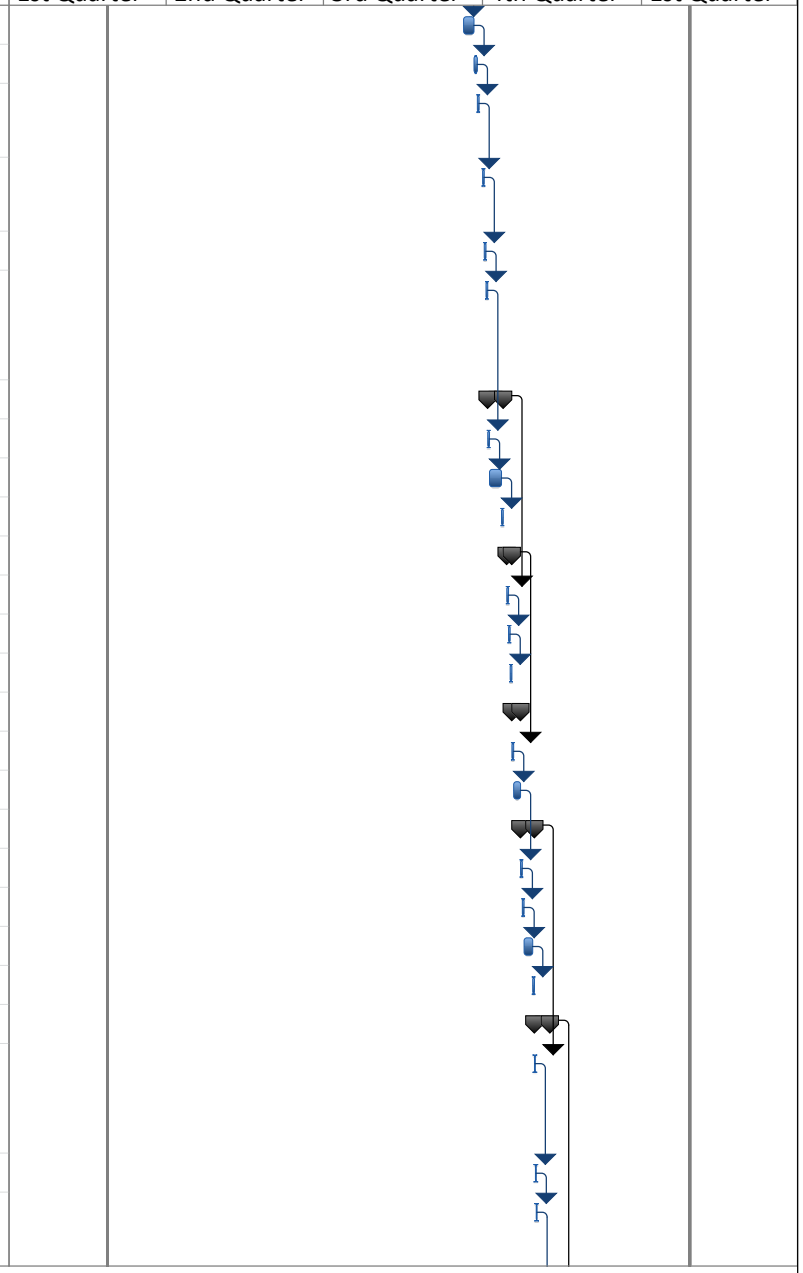
Sibley Unit 1 Retirement

ID	Task Name	Duration
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	2 days
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Coal Handling**	**24 days**
36	Isolate area K Unit 1 Silos.	5 days
37	Confirm all fuel lines and feedrs are clear of coal and coal dust.	2 days
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	17 days
39	**Propane Igniter System**	**3 days**
40	Isolate lines from source, open and vent.	3 days
41	**Boiler Chemical Feed**	**2 days**
42	Drain all chemical feed tanks.	2 days
43	**Boiler**	**28 days**
44	Open boiler doors.	1 day
45	Gas side - perform cleaning of the boiler and bottom ash system.	15 days
46	Drain boiler, drums, downcomers and headers.	1 day
47	Open drum doors and blowdown tank doors.	1 day
48	Drain and vent the service water and ash sluice water systems	1 day
49	Clean bottom ash, economizer ash and fly ash system.	5 days
50	Open, flush with water and vent the SNCR/RRI piping	4 days
51	**Precipitator**	**13 days**
52	Multiple cleaning cycles for collection plates.	3 days



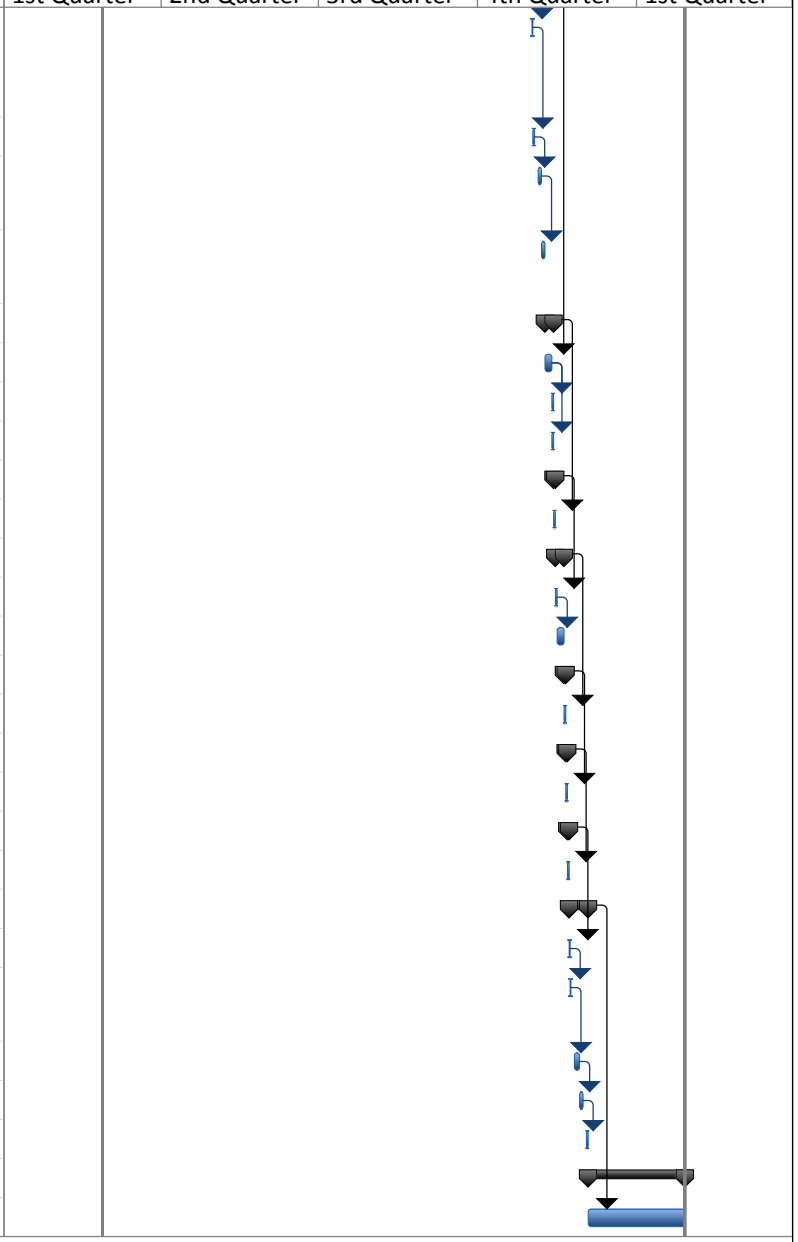
Sibley Unit 1 Retirement

ID	Task Name	Duration
53	Clear hoppers of all ash	4 days
54	Disconnect tranformers.	2 days
55	Mechanically secure all compartment dampers and hopper outlet valves in open position.	1 day
56	Disconnect ash transport piping and washdown hoppers and interior of casing.	1 day
57	Install bird screens across hopper ash outlet and ash line flanges.	1 day
58	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	1 day
59	**Ductwork**	**7 days**
60	Open ductwork doors.	1 day
61	Perform extensive cleaning of the ductwork.	5 days
62	Isolate ductwork at tie to ductwork common to Unit 2	1 day
63	**Condensate and Feedwater Piping**	**3 days**
64	Drain water from the system.	1 day
65	Leave open vents and drains.	1 day
66	Drain, open and vent condensate storage tanks	1 day
67	**Feedwater heaters**	**3 days**
68	Drain feedwater heaters	1 day
69	Leave open vents and drains.	2 days
70	**Turbine and Condenser**	**6 days**
71	Drain hotwell and leave doors open.	1 day
72	Open main turbine doors.	1 day
73	Remove lube oil.	3 days
74	Drain Gland Water Tank and Condensate Collection Tank	1 day
75	**Generator**	**7 days**
76	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
77	Verify that generator field breaker or contactor (if applicable) is op	0.5 days
78	De-energize power supplies to generator excitation system at the source.	0.5 days



Sibley Unit 1 Retirement

ID	Task Name	Duration
79	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator	0.5 days
80	Drain generator and exciter cooling water systems (if applicable).	1 day
81	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
82	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
83	**Circulation Water and Turbine Cooling Water System**	**3 days**
84	Drain.	2 days
85	Open water box doors.	1 day
86	Drain any circulating water chemical feed tanks.	1 day
87	**Compressed Air System**	**1 day**
88	Open vents and drains.	1 day
89	**Auxiliary Steam System**	**3 days**
90	Drain water from system.	1 day
91	Open and vent F.D. Fan Steam Coils	2 days
92	**Bearing Cooling Water and Boiler Cooling Water System**	**1 day**
93	Drain water from system and vent.	1 day
94	**Condenser Air Extraction System**	**1 day**
95	Drain water from system.	1 day
96	**Building Heating System**	**1 day**
97	Drain water from system.	1 day
98	**Battery System**	**7 days**
99	De-energize all battery chargers from the source.	0.5 days
100	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
101	Remove and dispose of battery electrolyte.	3 days
102	Remove and dispose of battery cells.	2 days
103	Clean up and dispose of electrolyte on surface areas around batteri	1 day
104	**Post Retirement Activities**	**40 days**
105	Post Retirement Activities	40 days



Sibley Unit 1 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$492,984	
Post-Dismantlement Activities			$49,140	
Owner Costs Total*				$1,434,884
Demolition General Contractor (DGC) Costs				
Site Management			$268,729	
Equipment Rental			$457,572	
Consummables			$456,510	
Scrap Crew(s)			$452,980	
Dismantlement			$1,008,001	
Contractor Direct Cost*		$2,643,792		
Contractor Allowances				
DGC Insurance	2.00%		$52,876	
Contingency/Profit	15.00%		$404,500	
Performance Bond	2.00%		$62,023.36	
Contractor Costs Total:				$3,163,191
Total:				$4,598,075
Owner Internal Costs:	5.00%			$229,904
Owner Contingency:	25.00%			$1,206,995
Sibley Unit 1 Dismantlement Opinion of Probable Cost:				$6,034,974

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $4,078,676

UNIT 2

Sibley Unit 2 Retirement

Owner Costs			
Pre-Retirement Activities		$100,821	
Retirement Activities		$240,134	
Post-Retirement Activities		$26,564	
Owner Direct Total			$367,519
Owner Internal Costs	5.00%		$18,376
Owner Contingency:	25.00%		$96,474
Sibley Unit 2 Retirement Opinion of Probable Cost:			$482,368.69

Sibley Unit 2 Retirement

ID	Task Name	Cost
1	**Sibley Unit 2 Retirement**	**$367,519.09**
2	**Pre-Engineering**	**$100,821.60**
3	Permit review and engineering analysis, establish isolation points, and confirm	$100,821.60
4	**KCL&L Overhead Costs**	**$83,646.00**
5	KCP&L Retirement Manager	$83,646.00
6	**Equipment Rentals**	**$28,339.20**
7	Vacuum truck	$28,339.20
8	**Retirement**	**$128,148.29**
9	**Electrical**	**$18,911.68**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit bre	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Oil-Filled Power Transformers**	**$5,549.44**
24	De-energize all transformer primaries and verify that the secondary is de	$893.28
25	De-energize all low-voltage AC or DC power sources for space heaters, co	$893.28
26	Drain and dispose of oil.	$2,642.88
27	Clean up and dispose of oil on surface areas around the transformers on	$1,120.00
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, co	$893.28
31	**Motors**	**$6,216.00**
32	De-energize all primary power at the source.	$1,786.56
33	De-energize all low-voltage power sources for space heaters or other aux	$1,786.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,642.88
35	**Coal Handling**	**$29,248.24**
36	Isolate area K Unit 1 Silos.	$8,522.80
37	Confirm all fuel lines and feedrs are clear of coal and coal dust.	$1,685.44
38	Perform cleaning of the coal handling equipment to assure that all coal and	$19,040.00
39	**Propane Igniter System**	**$2,528.16**
40	Isolate lines from source, open and vent.	$2,528.16
41	**Boiler Chemical Feed**	**$1,685.44**
42	Drain all chemical feed tanks.	$1,685.44
43	**Boiler**	**$29,591.57**
44	Open boiler doors.	$880.96

Sibley Unit 2 Retirement

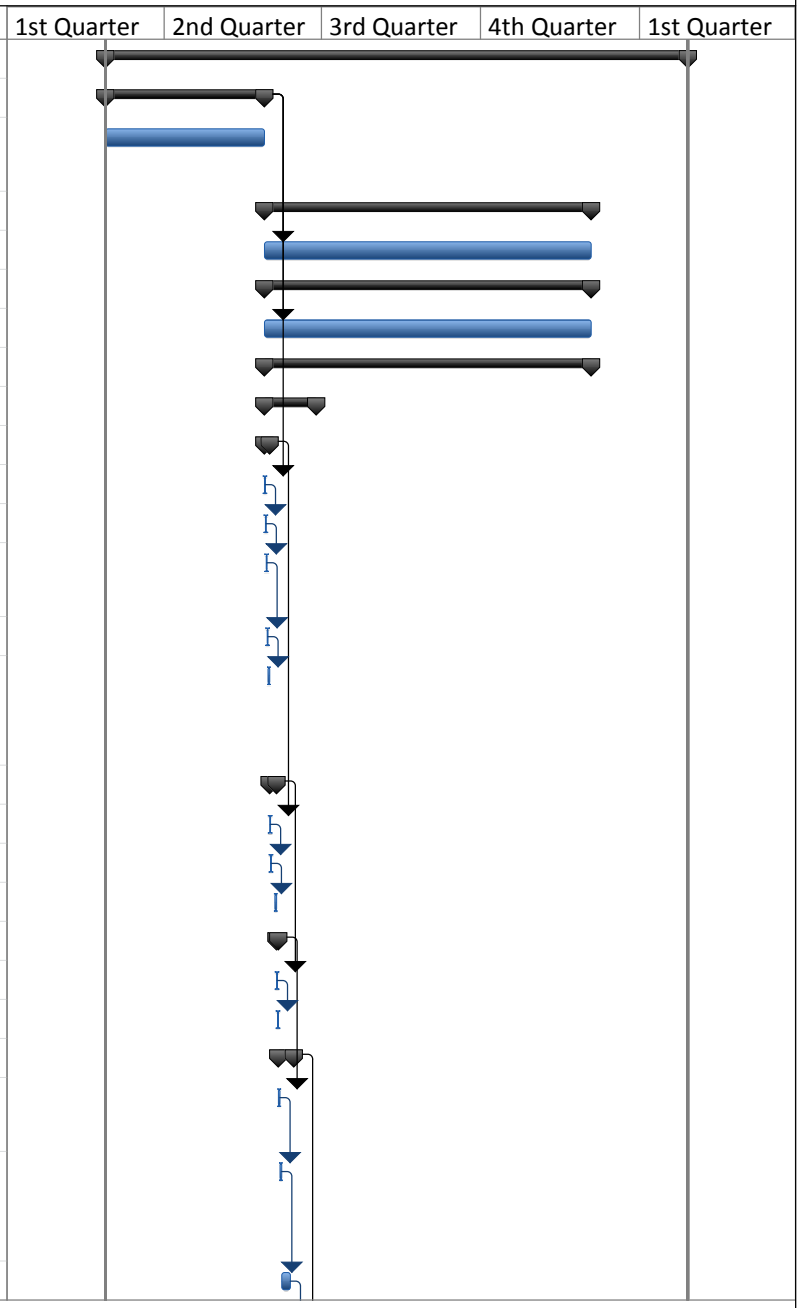
ID	Task Name	Cost
45	Gas side - perform cleaning of the boiler and bottom ash system.	$16,800.00
46	Drain boiler, drums, downcomers and headers.	$842.72
47	Open drum doors and blowdown tank doors.	$880.96
48	Drain and vent the service water and ash sluice water systems	$1,541.36
49	Clean bottom ash, economizer ash and fly ash system.	$2,480.13
50	Open, flush with water and vent the SNCR/RRI piping	$6,165.44
51	**Precipitator**	**$10,603.04**
52	Multiple cleaning cycles for collection plates.	$2,528.16
53	Clear hoppers of all ash	$2,805.44
54	Disconnect tranformers.	$1,786.56
55	Mechanically secure all compartment dampers and hopper outlet valves in	$720.48
56	Disconnect ash transport piping and washdown hoppers and interior of cas	$1,000.48
57	Install bird screens across hopper ash outlet and ash line flanges.	$880.96
58	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are i	$880.96
59	**Ductwork**	**$6,480.96**
60	Open ductwork doors.	$880.96
61	Perform extensive cleaning of the ductwork.	$5,600.00
62	Isolate ductwork at tie to ductwork common to Unit 2	$0.00
63	**Condensate and Feedwater Piping**	**$2,528.16**
64	Drain water from the system.	$842.72
65	Leave open vents and drains.	$842.72
66	Drain, open and vent condensate storage tanks	$842.72
67	**Feedwater heaters**	**$2,528.16**
68	Drain feedwater heaters	$842.72
69	Leave open vents and drains.	$1,685.44
70	**Turbine and Condenser**	**$4,385.68**
71	Drain hotwell and leave doors open.	$861.84
72	Open main turbine doors.	$880.96
73	Remove lube oil.	$2,642.88
74	Drain Gland Water Tank and Condensate Collection Tank	$0.00
75	**Generator**	**$6,095.76**
76	Verify that generator circuit breaker is open and racked out or that high-vo	$446.64
77	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
78	De-energize power supplies to generator excitation system at the source.	$446.64
79	De-energize AC and DC power supplies to generator and exciter space heat	$446.64
80	Drain generator and exciter cooling water systems (if applicable).	$861.84
81	Disconnect and remove hydrogen gas tanks and purge generator hydrogen	$1,685.44
82	Disconnect and remove fire protection system gas/foam tanks and purge fi	$1,761.92
83	**Circulation Water and Turbine Cooling Water System**	**$3,409.12**
84	Drain.	$1,685.44
85	Open water box doors.	$880.96
86	Drain any circulating water chemical feed tanks.	$842.72
87	**Compressed Air System**	**$842.72**
88	Open vents and drains.	$842.72

Sibley Unit 2 Retirement

ID	Task Name	Cost
89	**Auxiliary Steam System**	**$2,528.16**
90	Drain water from system.	$842.72
91	Open and vent F.D. Fan Steam Coils	$1,685.44
92	**Bearing Cooling Water and Boiler Cooling Water System**	**$842.72**
93	Drain water from system and vent.	$842.72
94	**Condenser Air Extraction System**	**$842.72**
95	Drain water from system.	$842.72
96	**Building Heating System**	**$842.72**
97	Drain water from system.	$842.72
98	**Battery System**	**$4,253.28**
99	De-energize all battery chargers from the source.	$446.64
100	Open all AC and DC circuit breakers and/or fused switches on battery charg	$446.64
101	Remove and dispose of battery electrolyte.	$1,680.00
102	Remove and dispose of battery cells.	$1,120.00
103	Clean up and dispose of electrolyte on surface areas around batteries.	$560.00
104	**Post Retirement Activities**	**$26,564.00**
105	Post Retirement Activities	$26,564.00

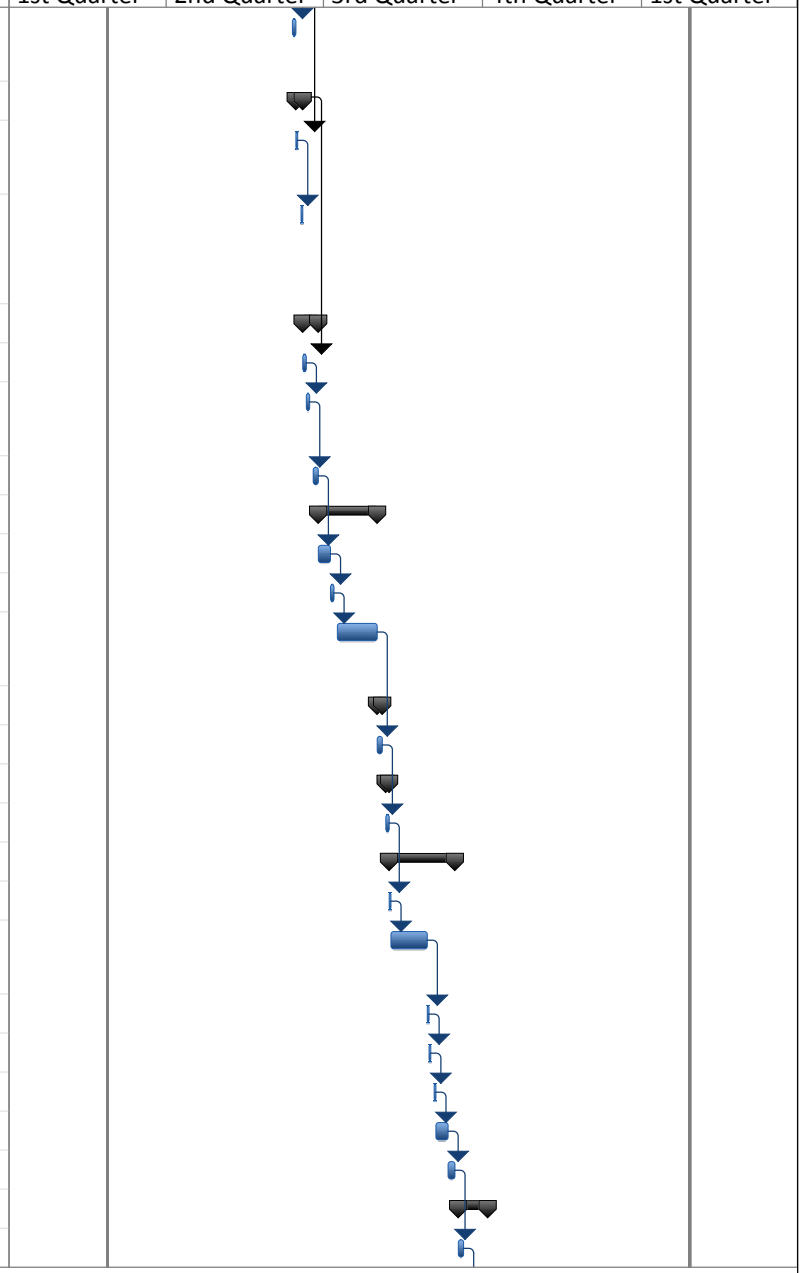
Sibley Unit 2 Retirement

ID	Task Name	Duration
1	**Sibley Unit 2 Retirement**	**241 days**
2	**Pre-Engineering**	**66 days**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	66 days
4	**KCL&L Overhead Costs**	**135 days**
5	KCP&L Retirement Manager	135 days
6	**Equipment Rentals**	**135 days**
7	Vacuum truck	135 days
8	**Retirement**	**135 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Oil-Filled Power Transformers**	**7 days**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
26	Drain and dispose of oil.	3 days



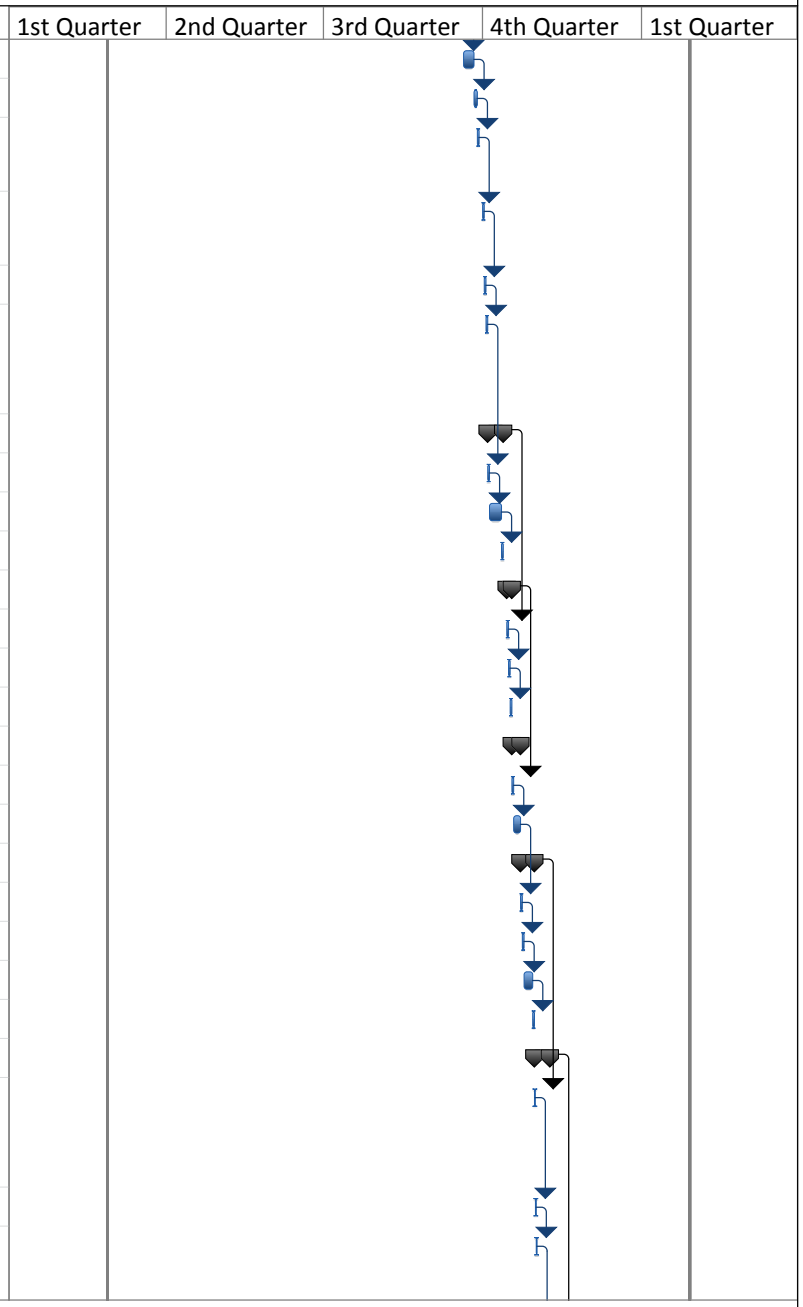
Sibley Unit 2 Retirement

ID	Task Name	Duration
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	2 days
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Coal Handling**	**24 days**
36	Isolate area K Unit 1 Silos.	5 days
37	Confirm all fuel lines and feedrs are clear of coal and coal dust.	2 days
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	17 days
39	**Propane Igniter System**	**3 days**
40	Isolate lines from source, open and vent.	3 days
41	**Boiler Chemical Feed**	**2 days**
42	Drain all chemical feed tanks.	2 days
43	**Boiler**	**28 days**
44	Open boiler doors.	1 day
45	Gas side - perform cleaning of the boiler and bottom ash system.	15 days
46	Drain boiler, drums, downcomers and headers.	1 day
47	Open drum doors and blowdown tank doors.	1 day
48	Drain and vent the service water and ash sluice water systems	1 day
49	Clean bottom ash, economizer ash and fly ash system.	5 days
50	Open, flush with water and vent the SNCR/RRI piping	4 days
51	**Precipitator**	**13 days**
52	Multiple cleaning cycles for collection plates.	3 days



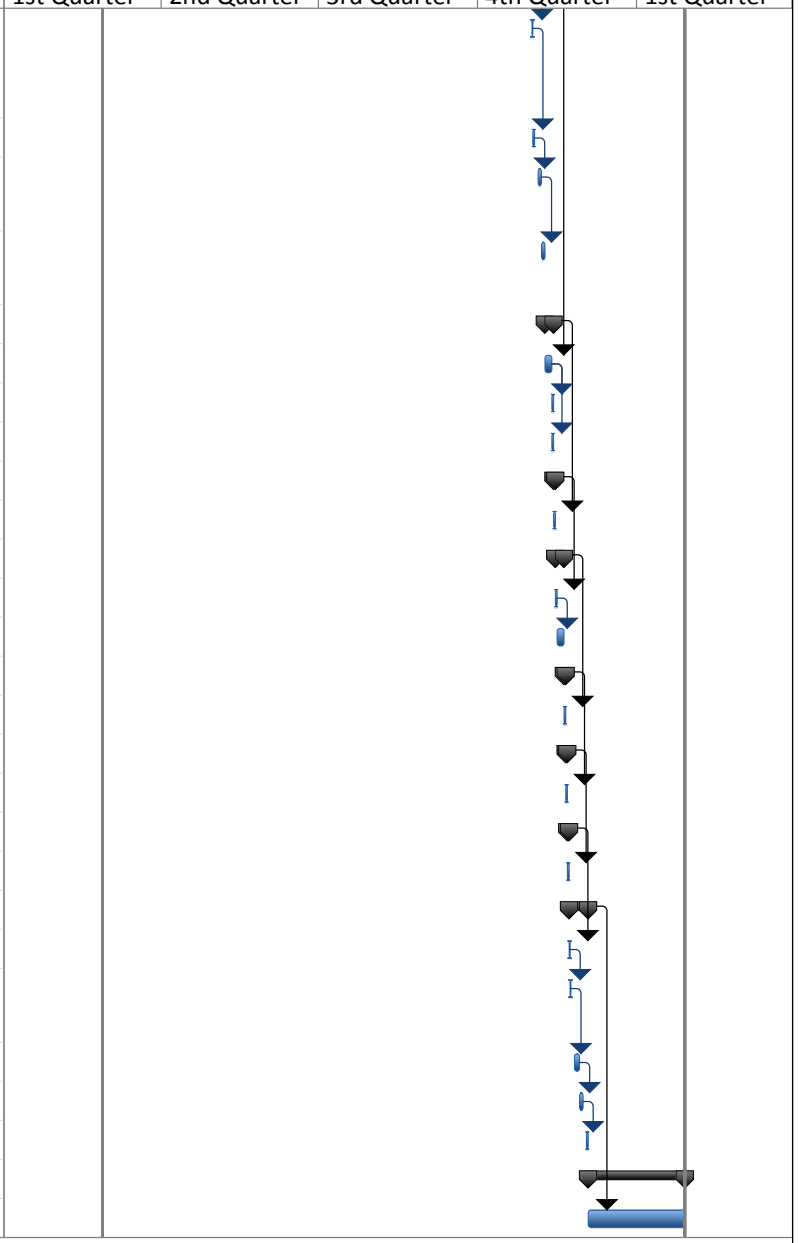
Sibley Unit 2 Retirement

ID	Task Name	Duration
53	Clear hoppers of all ash	4 days
54	Disconnect tranformers.	2 days
55	Mechanically secure all compartment dampers and hopper outlet valves in open position.	1 day
56	Disconnect ash transport piping and washdown hoppers and interior of casing.	1 day
57	Install bird screens across hopper ash outlet and ash line flanges.	1 day
58	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	1 day
59	**Ductwork**	**7 days**
60	Open ductwork doors.	1 day
61	Perform extensive cleaning of the ductwork.	5 days
62	Isolate ductwork at tie to ductwork common to Unit 2	1 day
63	**Condensate and Feedwater Piping**	**3 days**
64	Drain water from the system.	1 day
65	Leave open vents and drains.	1 day
66	Drain, open and vent condensate storage tanks	1 day
67	**Feedwater heaters**	**3 days**
68	Drain feedwater heaters	1 day
69	Leave open vents and drains.	2 days
70	**Turbine and Condenser**	**6 days**
71	Drain hotwell and leave doors open.	1 day
72	Open main turbine doors.	1 day
73	Remove lube oil.	3 days
74	Drain Gland Water Tank and Condensate Collection Tank	1 day
75	**Generator**	**7 days**
76	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
77	Verify that generator field breaker or contactor (if applicable) is op	0.5 days
78	De-energize power supplies to generator excitation system at the source.	0.5 days



Sibley Unit 2 Retirement

ID	Task Name	Duration
79	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator	0.5 days
80	Drain generator and exciter cooling water systems (if applicable).	1 day
81	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
82	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
83	**Circulation Water and Turbine Cooling Water System**	**3 days**
84	Drain.	2 days
85	Open water box doors.	1 day
86	Drain any circulating water chemical feed tanks.	1 day
87	**Compressed Air System**	**1 day**
88	Open vents and drains.	1 day
89	**Auxiliary Steam System**	**3 days**
90	Drain water from system.	1 day
91	Open and vent F.D. Fan Steam Coils	2 days
92	**Bearing Cooling Water and Boiler Cooling Water System**	**1 day**
93	Drain water from system and vent.	1 day
94	**Condenser Air Extraction System**	**1 day**
95	Drain water from system.	1 day
96	**Building Heating System**	**1 day**
97	Drain water from system.	1 day
98	**Battery System**	**7 days**
99	De-energize all battery chargers from the source.	0.5 days
100	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
101	Remove and dispose of battery electrolyte.	3 days
102	Remove and dispose of battery cells.	2 days
103	Clean up and dispose of electrolyte on surface areas around batteri	1 day
104	**Post Retirement Activities**	**40 days**
105	Post Retirement Activities	40 days



Sibley Unit 2 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$492,984	
Post-Dismantlement Activities			$49,140	
Owner Costs Total*				$1,434,884
Demolition General Contractor (DGC) Costs				
Site Management			$268,729	
Equipment Rental			$457,572	
Consummables			$456,510	
Scrap Crew(s)			$452,980	
Dismantlement			$1,008,001	
Contractor Direct Cost*		$2,643,792		
Contractor Allowances				
DGC Insurance	2.00%		$52,876	
Contingency/Profit	15.00%		$404,500	
Performance Bond	2.00%		$62,023.36	
Contractor Costs Total:				$3,163,191
Total:				$4,598,075
Owner Internal Costs:	5.00%			$229,904
Owner Contingency:	25.00%			$1,206,995
Sibley Unit 2 Dismantlement Opinion of Probable Cost:				$6,034,974

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $4,078,676

UNIT 3

Sibley Unit 3 Retirement

Owner Costs			
Pre-Retirement Activities		$100,821	
Retirement Activities		$280,964	
Post-Retirement Activities		$26,564	
Owner Direct Total			$408,349
Owner Internal Costs	5.00%		$20,417
Owner Contingency:	25.00%		$107,192

Sibley Unit 3 Retirement Opinion of Probable Cost: $535,958.06

Sibley Unit 3 Retirement

ID	Task Name	Cost
1	**Sibley Unit 3 Retirement**	**$408,350.61**
2	**Pre-Engineering**	**$100,821.60**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	$100,821.60
4	**KCL&L Overhead Costs**	**$99,755.60**
5	KCP&L Retirement Manager	$99,755.60
6	**Equipment Rentals**	**$33,797.12**
7	Vacuum truck	$33,797.12
8	**Retirement**	**$147,412.29**
9	**Electrical**	**$18,911.68**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Oil-Filled Power Transformers**	**$5,549.44**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
26	Drain and dispose of oil.	$2,642.88
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,120.00
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
31	**Motors**	**$6,216.00**
32	De-energize all primary power at the source.	$1,786.56

Sibley Unit 3 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,642.88
35	**Coal Handling**	**$25,790.00**
36	Empty all silos in Area M.	$1,704.56
37	Confirm conveyors are run out of fuel.	$1,685.44
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from area.	$22,400.00
39	**Propane Igniter System**	**$2,528.16**
40	Isolate lines from source, open and vent.	$2,528.16
41	**Boiler Chemical Feed**	**$1,685.44**
42	Drain all chemical feed tanks.	$1,685.44
43	**Condensate Polisher**	**$4,529.12**
44	Drain water from system.	$842.72
45	Drain acid and caustic tanks.	$1,685.44
46	Open tanks and vessels.	$880.96
47	Remove resin.	$1,120.00
48	**Boiler**	**$32,108.85**
49	Open boiler doors.	$880.96
50	Gas side - perform cleaning of the boiler and bottom ash system.	$22,400.00
51	Drain boiler, drum, downcomers and headers.	$842.72
52	Open drum doors.	$880.96
53	Drain, vent and clean the fly ash, slag and transport water system	$2,480.13
54	Drain and vent the steam coil air heaters and piping	$1,541.36
55	Drain and vent the steam coil air heater drain tanks	$1,541.36
56	Drain and vent boiler sampling system panel and piping	$1,541.36
57	**Precipitator**	**$9,901.68**
58	Multiple cleaning cycles for collection plates.	$2,528.16
59	Clear hoppers of all ash	$2,104.08
60	Disconnect transformers.	$1,786.56
61	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$720.48
62	Disconnect ash transport piping and washdown hoppers and interior of casing.	$1,000.48
63	Install bird screens across hopper ash outlet and ash line flanges.	$880.96
64	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$880.96
65	**Ductwork**	**$12,080.96**
66	Open ductwork doors.	$880.96
67	Perform extensive cleaning of the ductwork.	$11,200.00
68	Isolate ductwork at tie to common ductwork.	$0.00
69	**Condensate and Feedwater Piping**	**$1,685.44**
70	Drain water from the system.	$842.72

Sibley Unit 3 Retirement

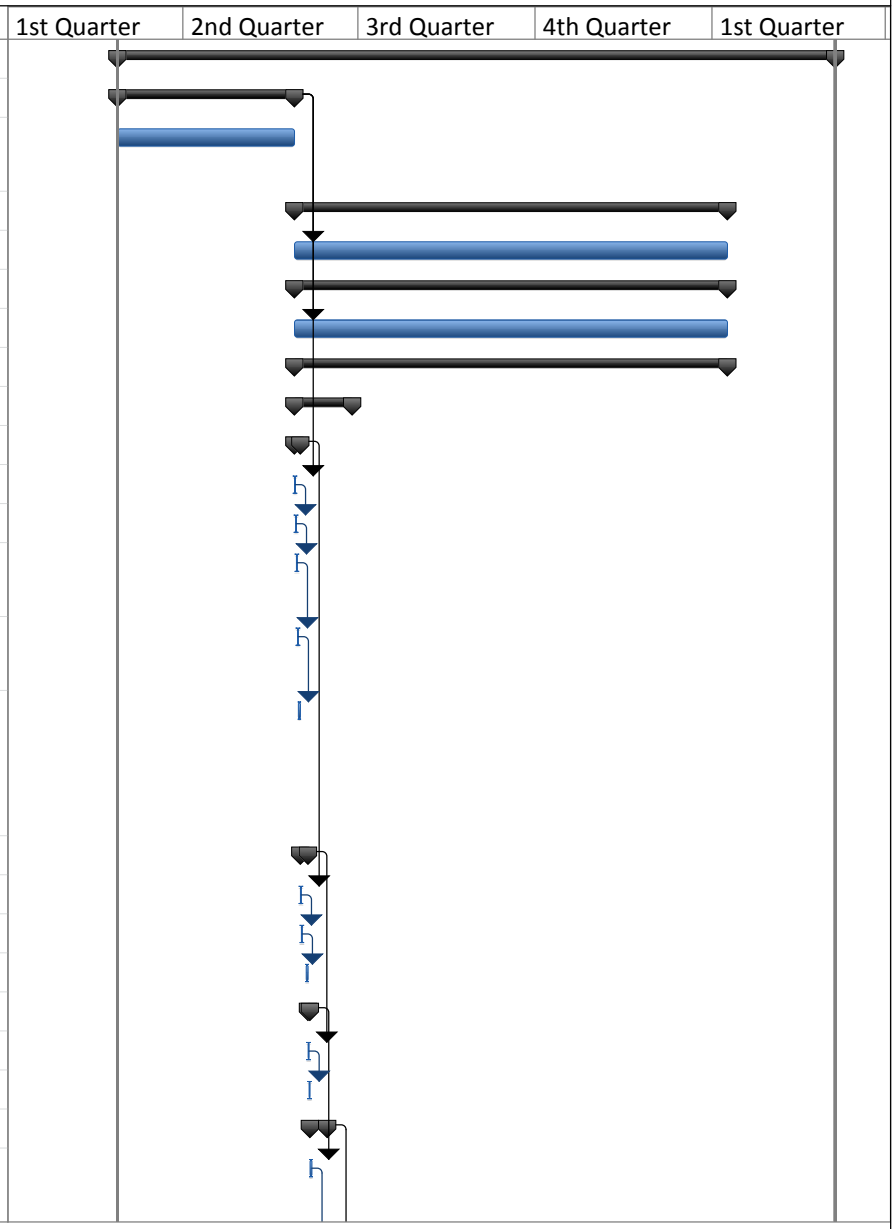
ID	Task Name	Cost
71	Leave open vents and drains.	$842.72
72	**Feedwater heaters**	**$3,370.88**
73	Drain feedwater heaters	$842.72
74	Leave open vents and drains.	$1,685.44
75	Drain and vent the heater drain piping.	$842.72
76	**Deaerator and Deaerator Storage Tank**	**$1,685.44**
77	Drain Deaerator and Storage	$842.72
78	Leave open vents and drains.	$842.72
79	**SCR**	**$9,053.52**
80	Vacuum fly ash from catalyst.	$1,680.00
81	Remove catalyst of salvage or disposal.	$2,441.44
82	Padlock or tack weld access doors shut.	$880.96
83	Remove ammonia from storage tank for resale.	$701.36
84	Wash out and drain storage tank and supply piping.	$701.36
85	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$861.84
86	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,786.56
87	**Turbine(s) and Condenser**	**$5,266.64**
88	Drain hotwell and leave doors open.	$861.84
89	Open main turbine doors.	$880.96
90	Open bfp turbine doors.	$880.96
91	Remove lube oil.	$2,642.88
92	**Generator**	**$6,095.76**
93	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$446.64
94	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
95	De-energize power supplies to generator excitation system at the source.	$446.64
96	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	$446.64
97	Drain generator and exciter cooling water systems (if applicable).	$861.84
98	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,685.44
99	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,761.92
100	**Circulation Water and Turbine Cooling Water System**	**$3,409.12**
101	Drain.	$1,685.44
102	Open water box doors.	$880.96
103	Drain any circulating water chemical feed tanks.	$842.72

Sibley Unit 3 Retirement

ID	Task Name	Cost
104	**Compressed Air System**	**$842.72**
105	Open vents and drains.	$842.72
106	**Auxiliary Steam System**	**$842.72**
107	Drain water from system.	$842.72
108	**Station Cooling Water System**	**$1,685.44**
109	Drain water from system.	$842.72
110	Vent piping.	$842.72
111	**Condenser Air Extraction**	**$842.72**
112	Drain water from system.	$842.72
113	**Building Heating System**	**$842.72**
114	Drain water from system.	$842.72
115	**Battery System**	**$4,253.28**
116	De-energize all battery chargers from the source.	$446.64
117	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$446.64
118	Remove and dispose of battery electrolyte.	$1,680.00
119	Remove and dispose of battery cells.	$1,120.00
120	Clean up and dispose of electrolyte on surface areas around batteries.	$560.00
121	**Post Retirement Activities**	**$26,564.00**
122	Post Retirement Activities	$26,564.00

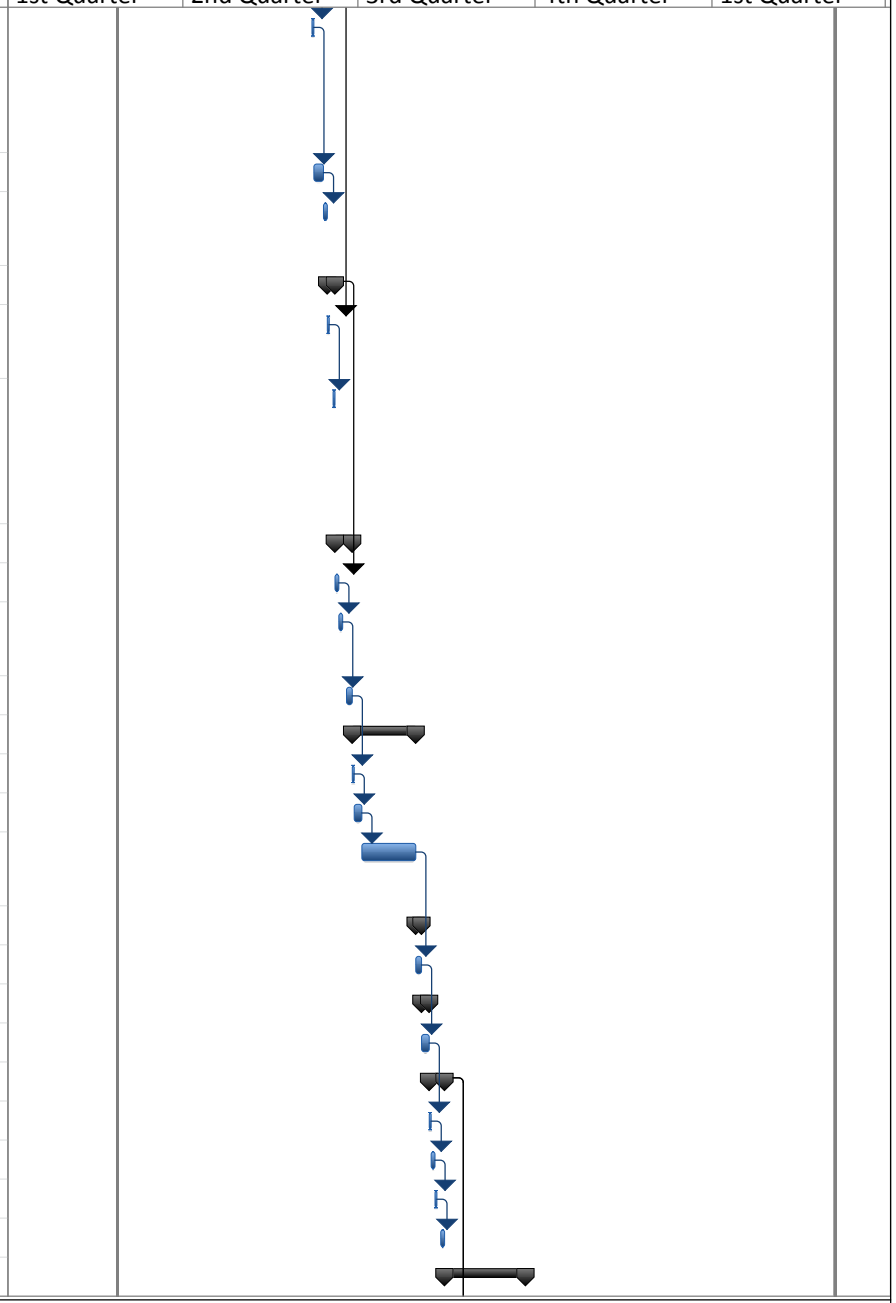
Sibley Unit 3 Retirement

ID	Task Name	Duration
1	**Sibley Unit 3 Retirement**	**267 days**
2	**Pre-Engineering**	**66 days**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to	66 days
4	**KCL&L Overhead Costs**	**161 days**
5	KCP&L Retirement Manager	161 days
6	**Equipment Rentals**	**161 days**
7	Vacuum truck	161 days
8	**Retirement**	**161 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Oil-Filled Power Transformers**	**7 days**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day



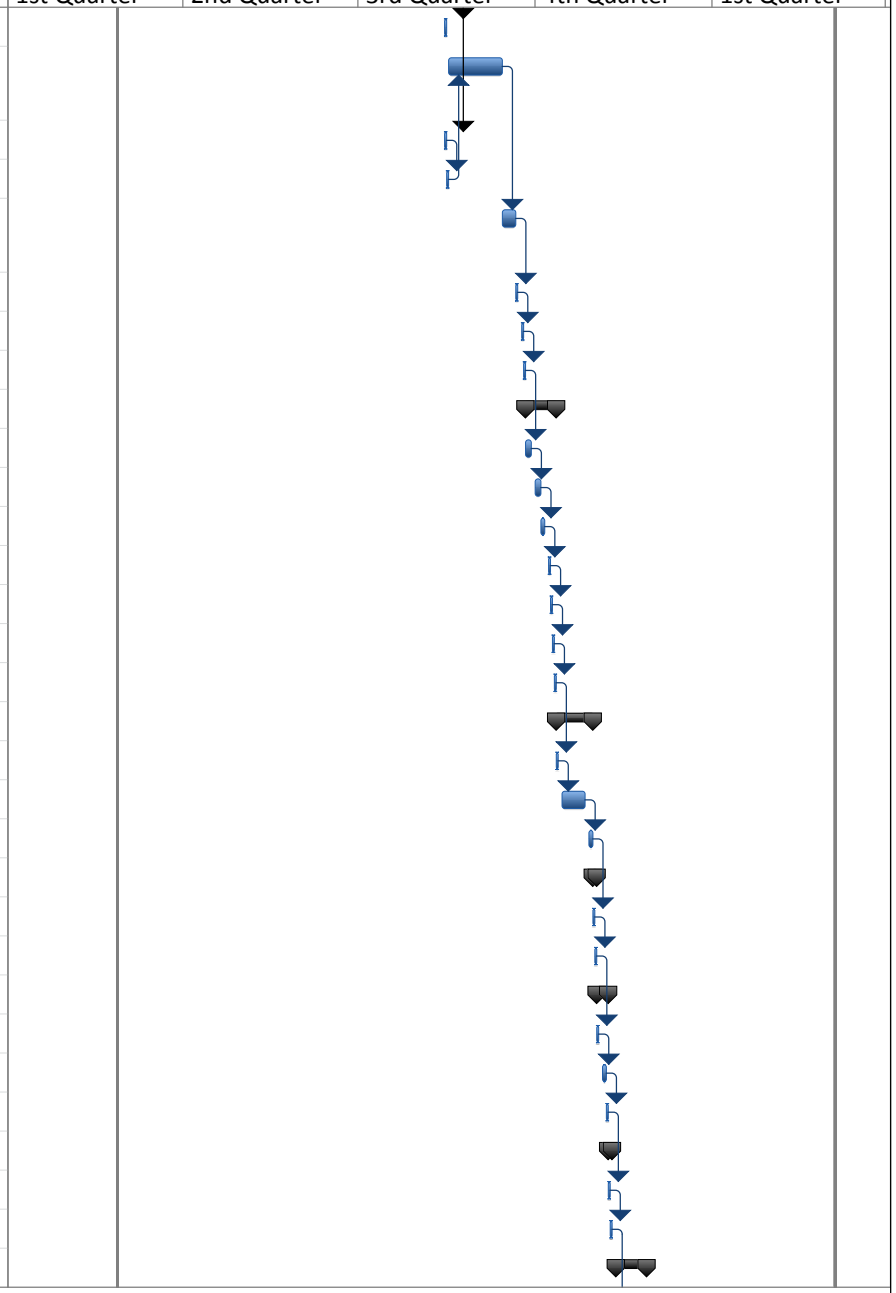
Sibley Unit 3 Retirement

ID	Task Name	Duration
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
26	Drain and dispose of oil.	3 days
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	2 days
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Coal Handling**	**23 days**
36	Empty all silos in Area M.	1 day
37	Confirm conveyors are run out of fuel.	2 days
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from area.	20 days
39	**Propane Igniter System**	**3 days**
40	Isolate lines from source, open and vent.	3 days
41	**Boiler Chemical Feed**	**2 days**
42	Drain all chemical feed tanks.	2 days
43	**Condensate Polisher**	**6 days**
44	Drain water from system.	1 day
45	Drain acid and caustic tanks.	2 days
46	Open tanks and vessels.	1 day
47	Remove resin.	2 days
48	**Boiler**	**30 days**



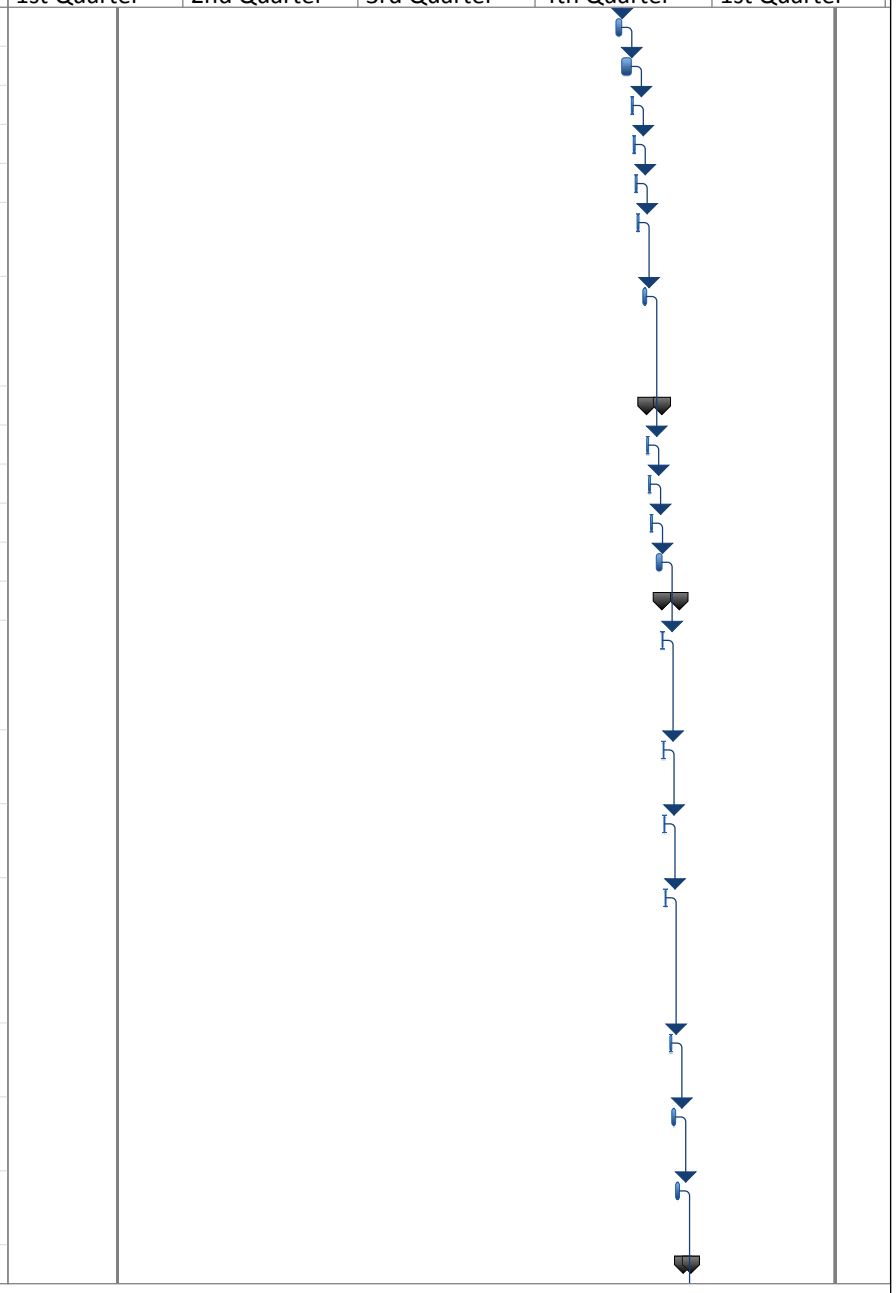
Sibley Unit 3 Retirement

ID	Task Name	Duration
49	Open boiler doors.	1 day
50	Gas side - perform cleaning of the boiler and bottom ash system.	20 days
51	Drain boiler, drum, downcomers and headers.	1 day
52	Open drum doors.	1 day
53	Drain, vent and clean the fly ash, slag and transport water system	5 days
54	Drain and vent the steam coil air heaters and piping	1 day
55	Drain and vent the steam coil air heater drain tanks	1 day
56	Drain and vent boiler sampling system panel and piping	1 day
57	**Precipitator**	**12 days**
58	Multiple cleaning cycles for collection plates.	3 days
59	Clear hoppers of all ash	3 days
60	Disconnect transformers.	2 days
61	Mechanically secure all compartment dampers and hopper	1 day
62	Disconnect ash transport piping and washdown hoppers ar	1 day
63	Install bird screens across hopper ash outlet and ash line fl	1 day
64	Padlock or tack weld all hopper doors shut. (note: if ash ho	1 day
65	**Ductwork**	**13 days**
66	Open ductwork doors.	1 day
67	Perform extensive cleaning of the ductwork.	10 days
68	Isolate ductwork at tie to common ductwork.	2 days
69	**Condensate and Feedwater Piping**	**2 days**
70	Drain water from the system.	1 day
71	Leave open vents and drains.	1 day
72	**Feedwater heaters**	**4 days**
73	Drain feedwater heaters	1 day
74	Leave open vents and drains.	2 days
75	Drain and vent the heater drain piping.	1 day
76	**Deaerator and Deaerator Storage Tank**	**2 days**
77	Drain Deaerator and Storage	1 day
78	Leave open vents and drains.	1 day
79	**SCR**	**12 days**



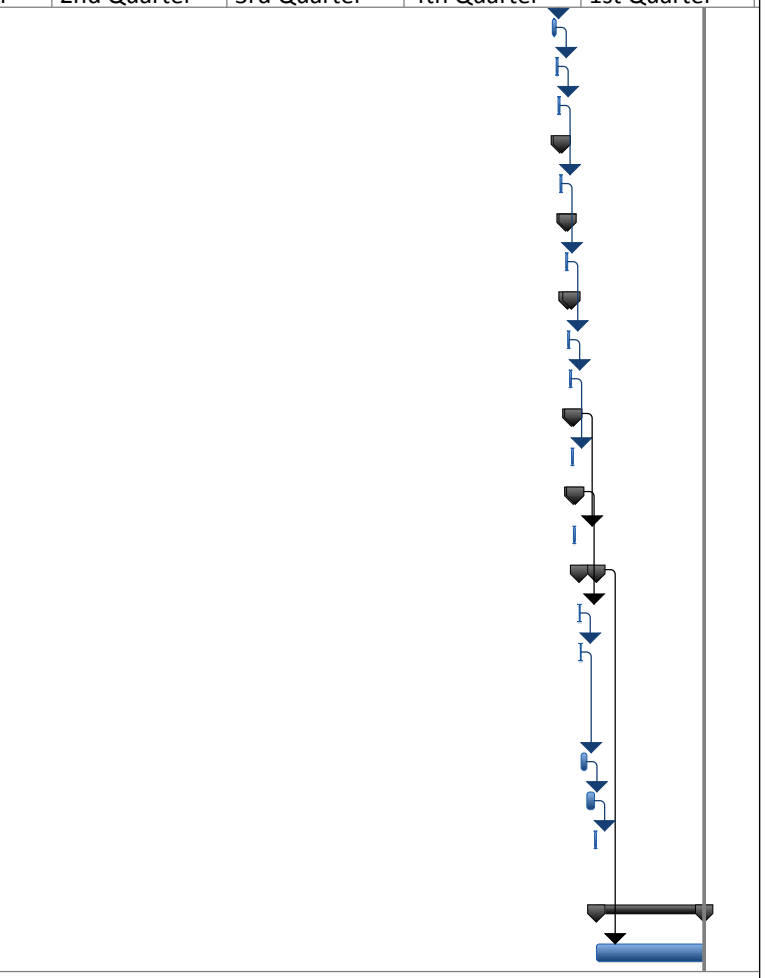
Sibley Unit 3 Retirement

ID	Task Name	Duration
80	Vacuum fly ash from catalyst.	3 days
81	Remove catalyst of salvage or disposal.	3 days
82	Padlock or tack weld access doors shut.	1 day
83	Remove ammonia from storage tank for resale.	1 day
84	Wash out and drain storage tank and supply piping.	1 day
85	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	1 day
86	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
87	**Turbine(s) and Condenser**	**6 days**
88	Drain hotwell and leave doors open.	1 day
89	Open main turbine doors.	1 day
90	Open bfp turbine doors.	1 day
91	Remove lube oil.	3 days
92	**Generator**	**7 days**
93	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
94	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
95	De-energize power supplies to generator excitation system at the source.	0.5 days
96	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	0.5 days
97	Drain generator and exciter cooling water systems (if applicable).	1 day
98	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
99	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
100	**Circulation Water and Turbine Cooling Water System**	**4 days**



Sibley Unit 3 Retirement

ID	Task Name	Duration
101	Drain.	2 days
102	Open water box doors.	1 day
103	Drain any circulating water chemical feed tanks.	1 day
104	**Compressed Air System**	**1 day**
105	Open vents and drains.	1 day
106	**Auxiliary Steam System**	**1 day**
107	Drain water from system.	1 day
108	**Station Cooling Water System**	**2 days**
109	Drain water from system.	1 day
110	Vent piping.	1 day
111	**Condenser Air Extraction**	**1 day**
112	Drain water from system.	1 day
113	**Building Heating System**	**1 day**
114	Drain water from system.	1 day
115	**Battery System**	**7 days**
116	De-energize all battery chargers from the source.	0.5 days
117	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
118	Remove and dispose of battery electrolyte.	3 days
119	Remove and dispose of battery cells.	2 days
120	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
121	**Post Retirement Activities**	**40 days**
122	Post Retirement Activities	40 days



Sibley Unit 3 Dismantlement

Owner Costs					
	Pre-Dismantlement Activities			$892,760	
	Overhead During Dismantlement			$1,602,538	
	Post-Dismantlement Activities			$49,140	
		Owner Costs Total*			$2,544,438
Demolition General Contractor (DGC) Costs					
	Site Management			$873,555	
	Equipment Rental			$1,487,425	
	Consummables			$1,483,973	
	Scrap Crew(s)			$1,472,497	
	Dismantlement			$3,276,697	
		Contractor Direct Cost*	$8,594,147		
	Contractor Allowances				
	DGC Insurance	2.00%		$171,883	
	Contingency/Profit	15.00%		$1,314,904	
	Performance Bond	2.00%		$201,618.69	
		Contractor Costs Total:			$10,282,553

Total:		$12,826,991
Owner Internal Costs:	5.00%	$641,350
Owner Contingency:	25.00%	$3,367,085
Sibley Unit 3 Dismantlement Opinion of Probable Cost:		$16,835,426

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $11,138,585

Sibley Unit 3 Dismantlement

ID	Task Name	Cost
1	**Sibley Unit 3 Dismantlement**	**$11,138,588.64**
2	**Pre-Dismantlement Activities**	**$892,760.32**
3	Detailed Planning & Hire Owner's Engineer	$104,441.28
4	Detailed Site Characterization Study	$610,335.44
5	Hire Demolition General Contractor	$167,184.00
6	KCP&L Prepares Unit for Dismantlement	$10,799.60
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,602,538.32**
9	KCP&L Project Manager	$254,655.60
10	KCP&L Administrative Support	$94,168.32
11	KCP&L Engineer	$418,562.40
12	Owners Engineer Project Manager	$124,944.00
13	Owners Engineer - Engineer	$710,208.00
14	**Demoliton Contractor Overhead during Dismantlement**	**$873,555.84**
15	Demolition Contractor Project Manager	$247,158.96
16	Demolition Contractor Safety Manager	$220,065.84
17	Demolition Contractor Superintendent	$406,331.04
18	**Demolition Contractor Equipment Rental Costs**	**$1,487,425.44**
19	Equipment Rental	$1,487,425.44
20	**Demolition Contractor Consummables**	**$1,483,973.04**
21	Consummables	$1,483,973.04
22	**Scrap Crew(s)**	**$1,472,497.92**
23	Crew to Handle Scrap Material(s)	$1,472,497.92
24	**Dismantlement Directs**	**$3,276,697.76**
25	**Phase 1 Demolition**	**$775,861.84**
26	**Electrical Demolition**	**$342,149.76**
27	Electrical Demolition Equipment	$342,149.76
28	**Condensate System**	**$73,445.76**
29	Condensate Pumps	$3,582.72
30	Condensate Booster Pumps	$1,791.36
31	Gland Steam Condenser	$3,582.72
32	Low Pressure Heaters (except the condenser neck heat exchangers)	$26,870.40
33	Deaerator	$7,165.44
34	Deaerator Storage Tank	$7,165.44
35	Condensate Piping	$17,913.60
36	Polisher Vessels, Regen Vessels and Support Skids	$5,374.08
37	**Boiler Feed System**	**$42,298.88**
38	Boiler Feed Pump Turbines (2) and Exhaust	$10,054.40
39	Boiler Feed Pumps - Turbine Driven	$14,330.88
40	Start-up Boiler Feed Pump	$0.00
41	High Pressure Heaters	$17,913.60
42	Feedwater piping	$0.00
43	**Critical Piping**	**$69,863.04**

Sibley Unit 3 Dismantlement

ID	Task Name	Cost
44	Main Steam Piping	$23,287.68
45	Cold Reheat Piping	$23,287.68
46	Hot Reheat Piping	$23,287.68
47	**Extraction Steam System**	**$17,913.60**
48	Piping and Valves	$17,913.60
49	**Heater Drips**	**$8,956.80**
50	Heater Drip Pump	$1,791.36
51	Piping	$7,165.44
52	**Auxiliary Steam**	**$12,539.52**
53	Auxiliary Steam Piping, Tanks and Misc. Equipment	$12,539.52
54	**Circulating Water (plant side)**	**$5,374.08**
55	Waterboxes	$5,374.08
56	**Station Cooling Water**	**$16,122.24**
57	Station Cooling Water Pumps	$1,791.36
58	Station Cooling Water Heat Exchanger	$3,582.72
59	Station Cooling Water Piping	$10,748.16
60	Chemical Mixing Tank	$0.00
61	Station Cooling Water Head Tank	$0.00
62	**Service Water**	**$12,539.52**
63	Service Water Piping	$12,539.52
64	**Propane System (plant side)**	**$16,122.24**
65	Propane Piping and Valves	$7,165.44
66	Igniters	$8,956.80
67	**Air Preheat System**	**$7,165.44**
68	Steam Coil Air Heater Piping	$3,582.72
69	Steam Coil Drain Pumps	$1,791.36
70	Steam Coil Drain Tanks	$1,791.36
71	**Condenser Air Extraction System**	**$12,539.52**
72	Vacuum Pumps	$7,165.44
73	Vacuum Priming Pump	$1,791.36
74	Vacuum Pump Piping	$3,582.72
75	**Turbine Seals and Drains**	**$7,165.44**
76	Piping	$7,165.44
77	**Turbine Lube Oil System**	**$20,564.40**
78	Turbine Lube Oil Tank	$9,816.24
79	Turbine Lube Oil Pumps	$7,165.44
80	Turbine Oil Mist Eliminator	$3,582.72
81	**Generator Auxiliary Systems**	**$25,079.04**
82	Hydrogen Cooler Skid and Piping	$5,374.08
83	Stator Cooling Water Skid and Piping	$5,374.08
84	Isophase Bus Duct	$7,165.44
85	Exciter Heat Exchanger	$3,582.72
86	EHC Coolers	$3,582.72
87	**Chemical Feed Systems**	**$14,330.88**

Sibley Unit 3 Dismantlement

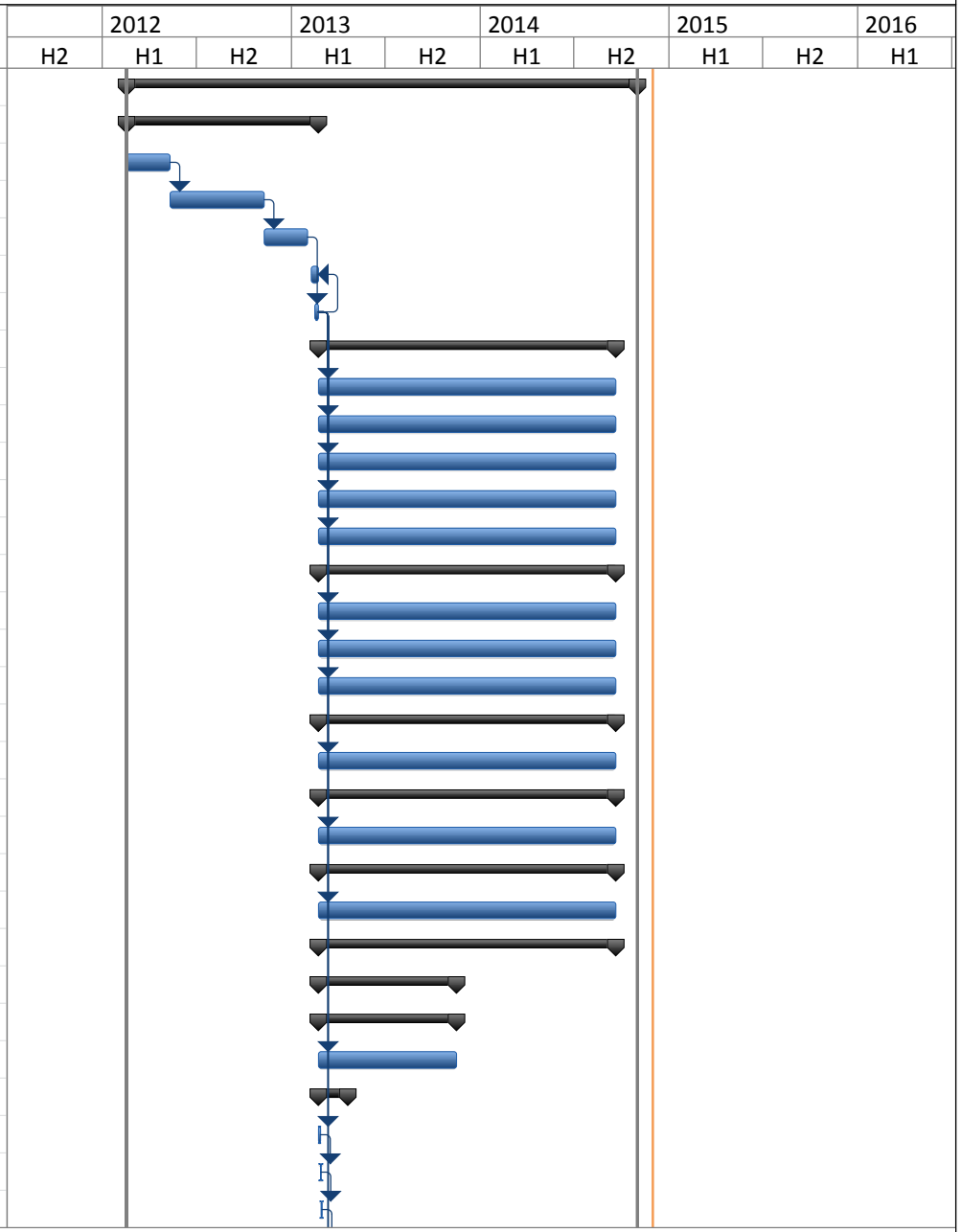
ID	Task Name	Cost
88	Tanks	$3,582.72
89	Pumps	$5,374.08
90	Piping	$5,374.08
91	**Sampling Systems**	**$10,017.12**
92	Field Mounted Heat Exchangers	$3,582.72
93	Piping	$2,851.68
94	Sample Panel	$3,582.72
95	**Building Heating Systems**	**$13,307.84**
96	Steam Unit Heaters	$9,505.60
97	Steam Piping	$3,802.24
98	**Compressed Air System**	**$26,870.40**
99	Air Compressors	$7,165.44
100	Air Drying Equipment	$5,374.08
101	Air Reciever Tanks	$5,374.08
102	Compressed Air Piping	$8,956.80
103	**Miscellaneous Equipment**	**$21,496.32**
104	Miscellaneous Equipment (including Fire Protection)	$21,496.32
105	**Phase 2 Demolition**	**$2,409,476.56**
106	**Precipitator**	**$107,481.60**
107	Remove Precipitator	$107,481.60
108	**Boiler Equipment**	**$536,314.56**
109	Fans	$53,740.80
110	Bottom Ash	$16,451.52
111	Air Heater	$143,308.80
112	Steam Drum	$71,654.40
113	Coal Bunkers	$71,654.40
114	Soot Blowers	$25,447.68
115	Ductwork	$100,316.16
116	SCR	$53,740.80
117	**Boiler Removal**	**$329,610.24**
118	Furnace	$179,136.00
119	Back Pass	$150,474.24
120	**Boiler Steel Framing**	**$616,227.84**
121	Hanger Girders at Top	$107,481.60
122	All Other Framing	$286,617.60
123	Bracing and Girts	$143,308.80
124	Columns	$78,819.84
125	**Boiler Foundations**	**$128,977.92**
126	Equipment Foundation Demolition to Grade	$128,977.92
127	**Remove Turbine**	**$690,864.40**
128	Remove HP Turbine	$26,321.60
129	Remove IP Turbine	$26,321.60
130	Remove LP Turbine	$26,321.60
131	Remove Generator	$39,482.40

Sibley Unit 3 Dismantlement

ID	Task Name	Cost
132	Remove Condenser Neck Heat Exchanger	$13,160.80
133	Remove Condenser	$26,321.60
134	Remove Misc. Auxiliary Turbine Equipment	$39,482.40
135	**Turbine Pedestal Demolition to Grade**	**$197,412.00**
136	Top Slab and Beams	$78,964.80
137	Columns	$118,447.20
138	**Remove Turbine Building**	**$296,040.40**
139	Siding and Roofing	$92,778.00
140	All Framing Elevations	$131,608.00
141	Bracing and Girts	$52,643.20
142	Columns	$19,011.20
143	**Phase 3 Demolition**	**$91,359.36**
144	**Yard Demolition**	**$91,359.36**
145	**Remove Ash Handling Equipment and Piping**	**$62,697.60**
146	Slag Tank	$17,913.60
147	Hydrovayer Pumps	$8,956.80
148	Slag Tank Pumps	$3,582.72
149	Hydrovayer Fly Ash System	$8,956.80
150	Vacuum Filter System	$5,374.08
151	Remove Slag Transport System Piping and Misc. Equipment	$17,913.60
152	**Remove Fuel Yard Equipment**	**$19,704.96**
153	Remove Conveyor 10	$8,956.80
154	Remove Conveyor 10A	$3,582.72
155	Remove Conveyor 10AA	$3,582.72
156	Remove Conveyor 10AB	$3,582.72
157	Remove Condensate Storage Tanks (2)	$8,956.80
158	**Project Close-Out**	**$49,140.00**
159	Project Close-Out Activities	$49,140.00

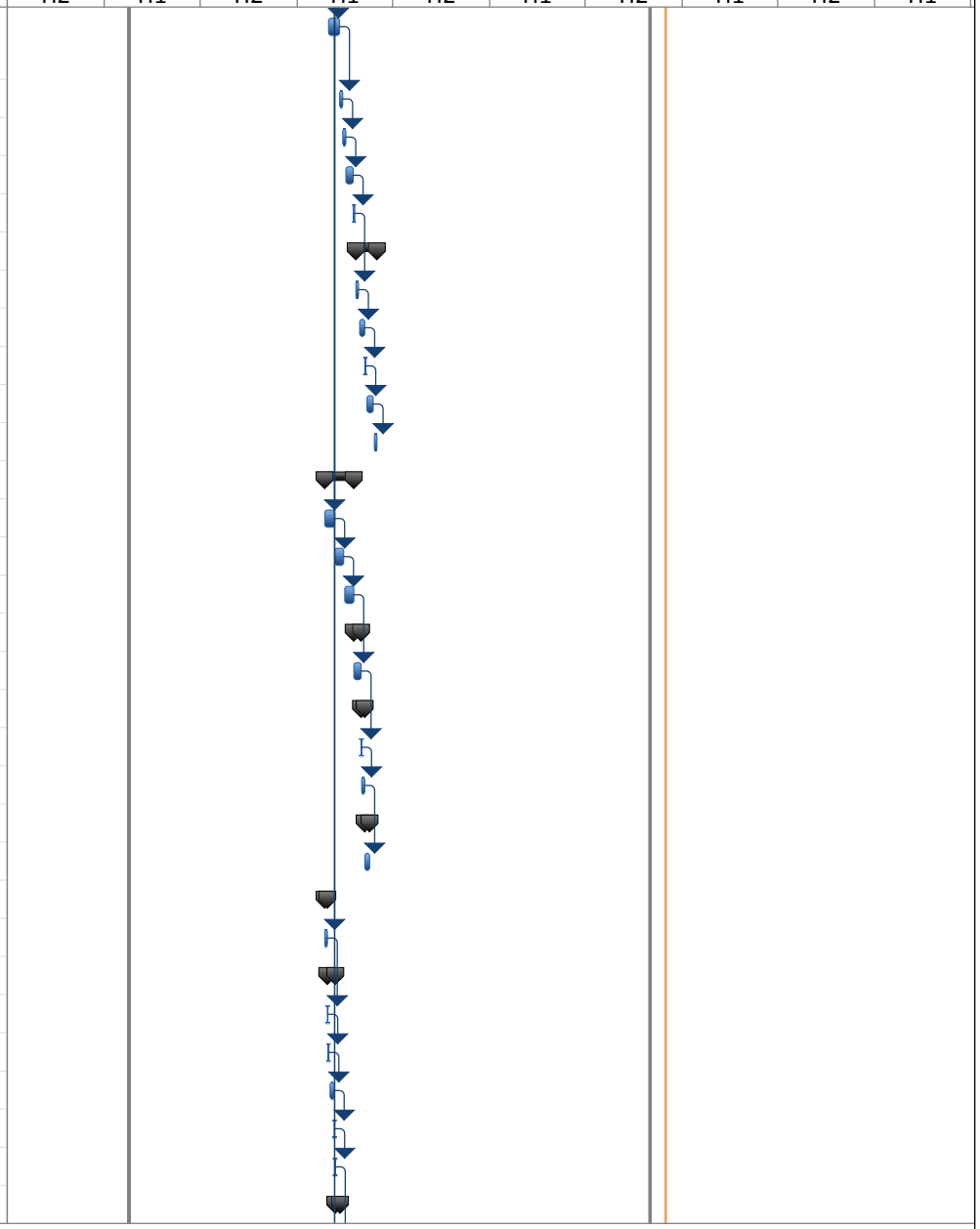
Sibley Unit 3 Dismantlement

ID	Task Name	Duration
1	**Sibley Unit 3 Dismantlement**	**706 days**
2	**Pre-Dismantlement Activities**	**265 days**
3	Detailed Planning & Hire Owner's Engineer	3 mons
4	Detailed Site Characterization Study	130 days
5	Hire Demolition General Contractor	3 mons
6	KCP&L Prepares Unit for Dismantlement	2 wks
7	Demolition Contractor Mobilizes on Site	5 days
8	**KCP&L Overhead during Dismantlement**	**411 days**
9	KCP&L Project Manager	411 days
10	KCP&L Administrative Support	411 days
11	KCP&L Engineer	411 days
12	Owners Engineer Project Manager	411 days
13	Owners Engineer - Engineer	411 days
14	**Demoliton Contractor Overhead during Dismantlemen**	**411 days**
15	Demolition Contractor Project Manager	411 days
16	Demolition Contractor Safety Manager	411 days
17	Demolition Contractor Superintendent	411 days
18	**Demolition Contractor Equipment Rental Costs**	**411 days**
19	Equipment Rental	411 days
20	**Demolition Contractor Consummables**	**411 days**
21	Consummables	411 days
22	**Scrap Crew(s)**	**411 days**
23	Crew to Handle Scrap Material(s)	411 days
24	**Dismantlement Directs**	**411 days**
25	**Phase 1 Demolition**	**191 days**
26	**Electrical Demolition**	**191 days**
27	Electrical Demolition Equipment	191 days
28	**Condensate System**	**41 days**
29	Condensate Pumps	2 days
30	Condensate Booster Pumps	1 day
31	Gland Steam Condenser	2 days



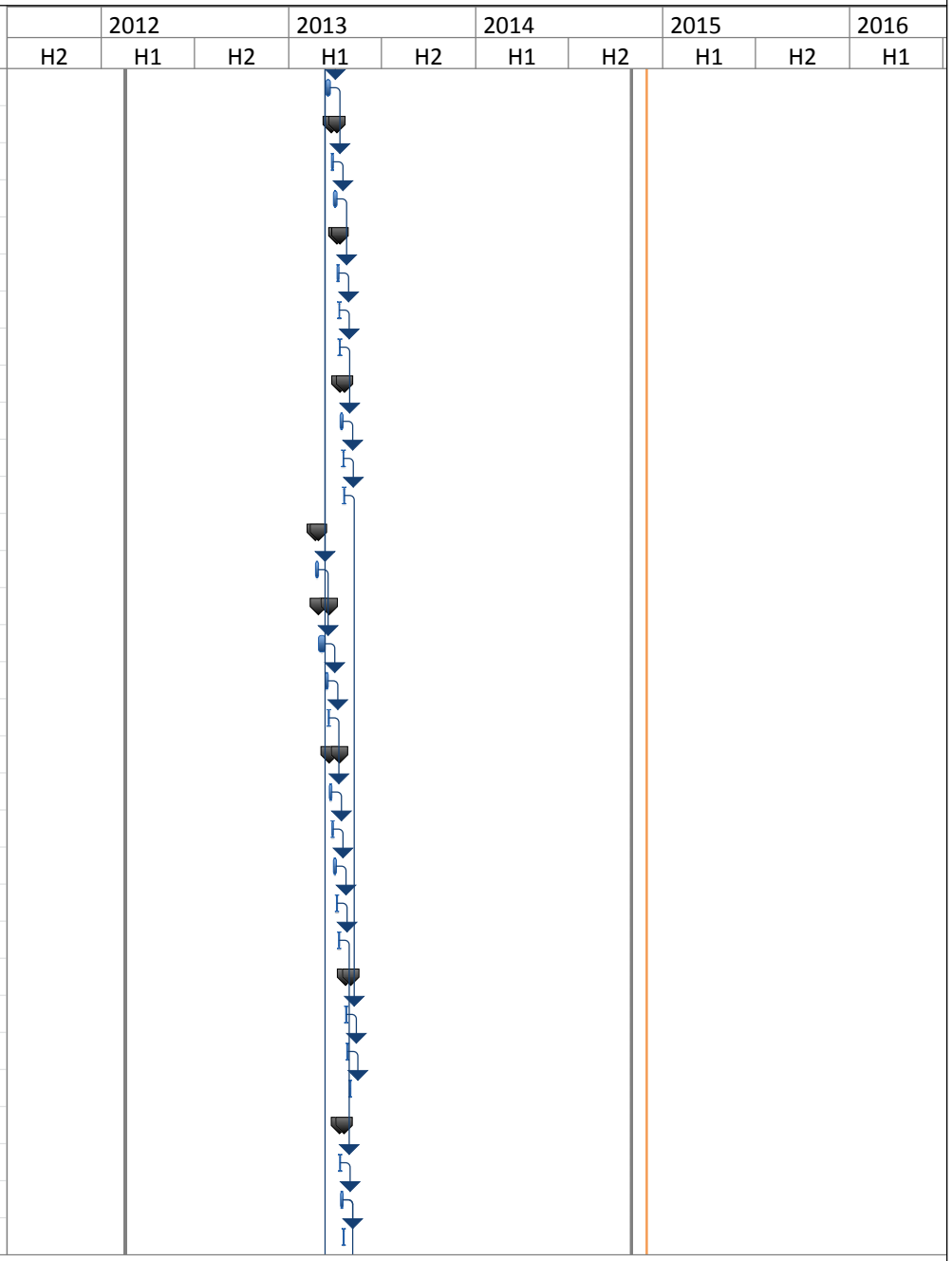
Sibley Unit 3 Dismantlement

ID	Task Name	Duration
32	Low Pressure Heaters (except the condenser neck heat exchangers)	15 days
33	Deaerator	4 days
34	Deaerator Storage Tank	4 days
35	Condensate Piping	10 days
36	Polisher Vessels, Regen Vessels and Support Ski	3 days
37	**Boiler Feed System**	**30 days**
38	Boiler Feed Pump Turbines (2) and Exhaust	5 days
39	Boiler Feed Pumps - Turbine Driven	8 days
40	Start-up Boiler Feed Pump	2 days
41	High Pressure Heaters	10 days
42	Feedwater piping	5 days
43	**Critical Piping**	**39 days**
44	Main Steam Piping	13 days
45	Cold Reheat Piping	13 days
46	Hot Reheat Piping	13 days
47	**Extraction Steam System**	**10 days**
48	Piping and Valves	10 days
49	**Heater Drips**	**5 days**
50	Heater Drip Pump	1 day
51	Piping	4 days
52	**Auxiliary Steam**	**7 days**
53	Auxiliary Steam Piping, Tanks and Misc. Equipm	7 days
54	**Circulating Water (plant side)**	**3 days**
55	Waterboxes	3 days
56	**Station Cooling Water**	**11 days**
57	Station Cooling Water Pumps	1 day
58	Station Cooling Water Heat Exchanger	2 days
59	Station Cooling Water Piping	6 days
60	Chemical Mixing Tank	1 day
61	Station Cooling Water Head Tank	1 day
62	**Service Water**	**7 days**



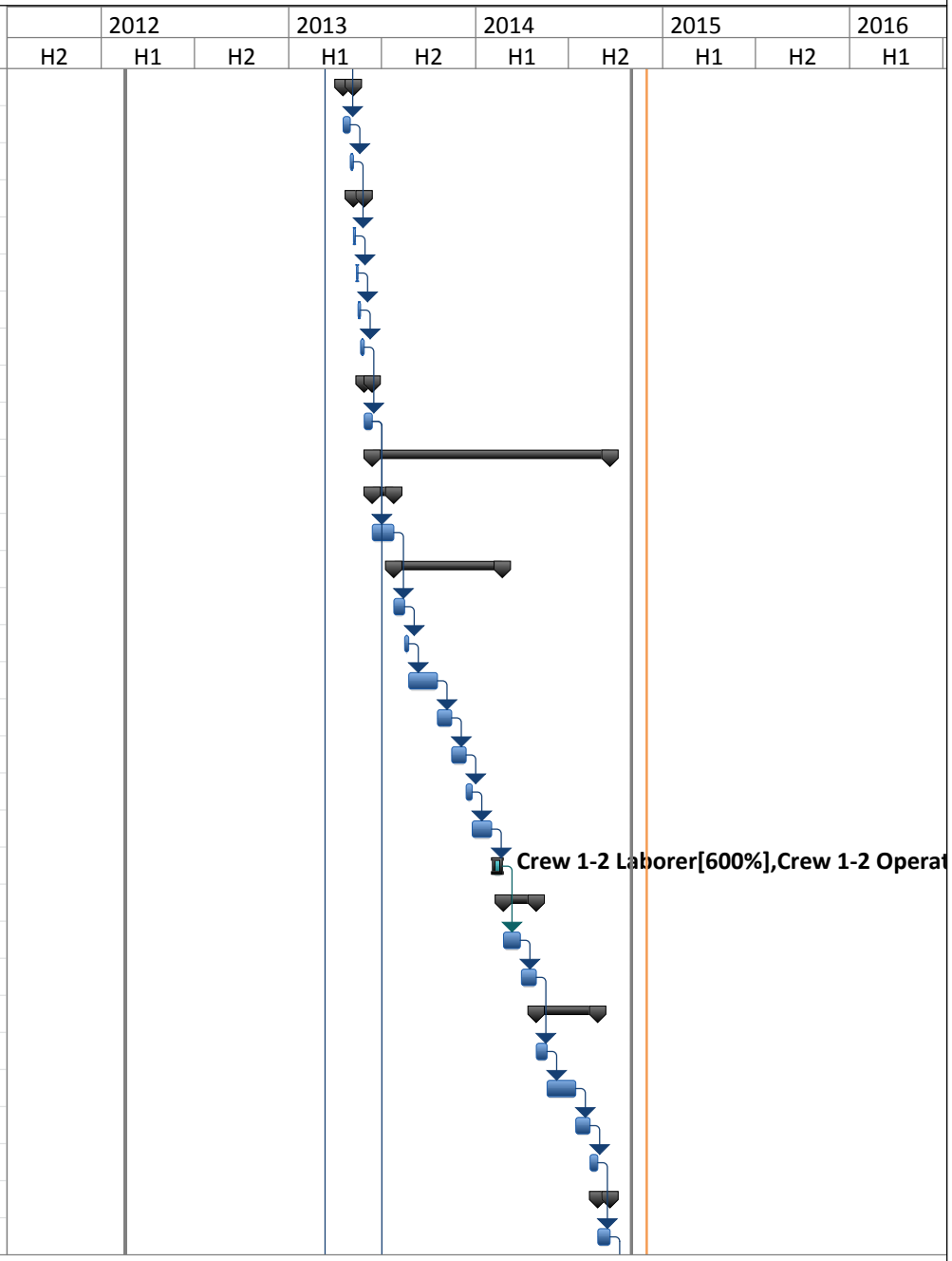
Sibley Unit 3 Dismantlement

ID	Task Name	Duration
63	Service Water Piping	7 days
64	**Propane System (plant side)**	**9 days**
65	Propane Piping and Valves	4 days
66	Igniters	5 days
67	**Air Preheat System**	**4 days**
68	Steam Coil Air Heater Piping	2 days
69	Steam Coil Drain Pumps	1 day
70	Steam Coil Drain Tanks	1 day
71	**Condenser Air Extraction System**	**7 days**
72	Vacuum Pumps	4 days
73	Vacuum Priming Pump	1 day
74	Vacuum Pump Piping	2 days
75	**Turbine Seals and Drains**	**4 days**
76	Piping	4 days
77	**Turbine Lube Oil System**	**15 days**
78	Turbine Lube Oil Tank	9 days
79	Turbine Lube Oil Pumps	4 days
80	Turbine Oil Mist Eliminator	2 days
81	**Generator Auxiliary Systems**	**14 days**
82	Hydrogen Cooler Skid and Piping	3 days
83	Stator Cooling Water Skid and Piping	3 days
84	Isophase Bus Duct	4 days
85	Exciter Heat Exchanger	2 days
86	EHC Coolers	2 days
87	**Chemical Feed Systems**	**8 days**
88	Tanks	2 days
89	Pumps	3 days
90	Piping	3 days
91	**Sampling Systems**	**7 days**
92	Field Mounted Heat Exchangers	2 days
93	Piping	3 days
94	Sample Panel	2 days



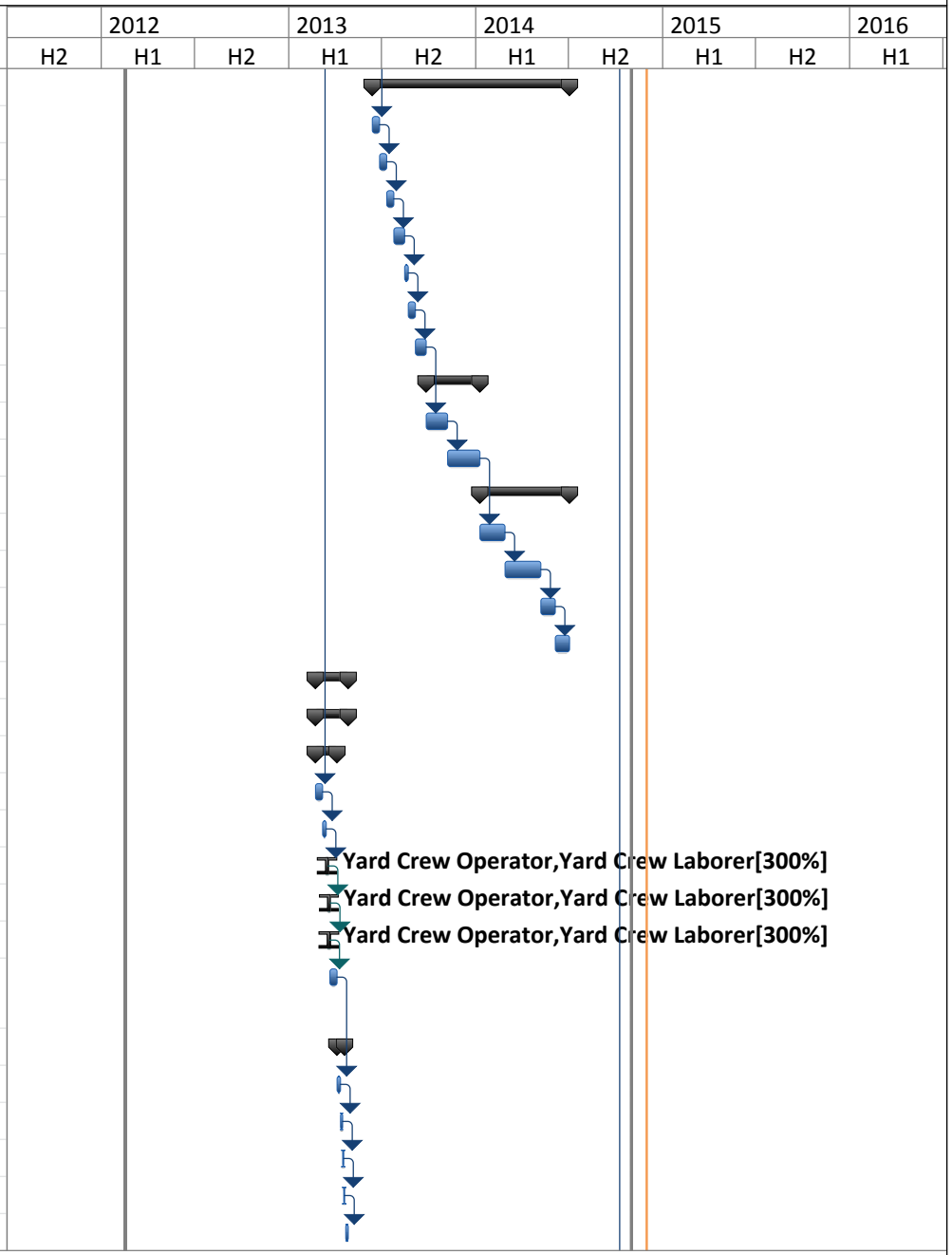
Sibley Unit 3 Dismantlement

ID	Task Name	Duration
95	**Building Heating Systems**	**14 days**
96	Steam Unit Heaters	10 days
97	Steam Piping	4 days
98	**Compressed Air System**	**15 days**
99	Air Compressors	4 days
100	Air Drying Equipment	3 days
101	Air Reciever Tanks	3 days
102	Compressed Air Piping	5 days
103	**Miscellaneous Equipment**	**12 days**
104	Miscellaneous Equipment (including Fire Protec	12 days
105	**Phase 2 Demolition**	**332 days**
106	**Precipitator**	**30 days**
107	Remove Precipitator	30 days
108	**Boiler Equipment**	**152 days**
109	Fans	15 days
110	Bottom Ash	6 days
111	Air Heater	40 days
112	Steam Drum	20 days
113	Coal Bunkers	20 days
114	Soot Blowers	8 days
115	Ductwork	28 days
116	SCR	15 days
117	**Boiler Removal**	**46 days**
118	Furnace	25 days
119	Back Pass	21 days
120	**Boiler Steel Framing**	**86 days**
121	Hanger Girders at Top	15 days
122	All Other Framing	40 days
123	Bracing and Girts	20 days
124	Columns	11 days
125	**Boiler Foundations**	**18 days**
126	Equipment Foundation Demolition to Grade	18 days



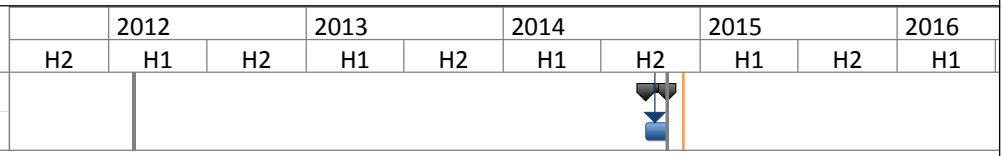
Sibley Unit 3 Dismantlement

ID	Task Name	Duration
127	**Remove Turbine**	**275 days**
128	Remove HP Turbine	10 days
129	Remove IP Turbine	10 days
130	Remove LP Turbine	10 days
131	Remove Generator	15 days
132	Remove Condenser Neck Heat Exchanger	5 days
133	Remove Condenser	10 days
134	Remove Misc. Auxiliary Turbine Equipment	15 days
135	**Turbine Pedestal Demolition to Grade**	**75 days**
136	Top Slab and Beams	30 days
137	Columns	45 days
138	**Remove Turbine Building**	**125 days**
139	Siding and Roofing	35 days
140	All Framing Elevations	50 days
141	Bracing and Girts	20 days
142	Columns	20 days
143	**Phase 3 Demolition**	**46 days**
144	**Yard Demolition**	**46 days**
145	**Remove Ash Handling Equipment and Piping**	**30 days**
146	Slag Tank	10 days
147	Hydrovayer Pumps	5 days
148	Slag Tank Pumps	2 days
149	Hydrovayer Fly Ash System	5 days
150	Vacuum Filter System	3 days
151	Remove Slag Transport System Piping and Misc. Equipment	10 days
152	**Remove Fuel Yard Equipment**	**11 days**
153	Remove Conveyor 10	5 days
154	Remove Conveyor 10A	2 days
155	Remove Conveyor 10AA	2 days
156	Remove Conveyor 10AB	2 days
157	Remove Condensate Storage Tanks (2)	5 days



Sibley Unit 3 Dismantlement

ID	Task Name	Duration
158	**Project Close-Out**	**30 days**
159	Project Close-Out Activities	30 days



COMMON

Sibley Common Retirement

Owner Costs			
Pre-Retirement Activities		$52,488	
Retirement Activities		$326,401	
Post-Retirement Activities		$26,224	
Owner Direct Total			$405,113
Owner Internal Costs	5.00%		$20,256
Owner Contingency:	25.00%		$106,342
Sibley Common Retirement Opinion of Probable Cost:			$531,710.81

Activities Required by Permit or Regulation

Propane Storage Tanks	$32,531	
Units 1 & 2 River Intake	$592,147	
Unit 3 River Intake	$592,147	
Landfill Stage A	$1,150,440	
Sibley Landfill Post Closure	$2,082,900	
Sibley Ash Pond Closure	$9,500,800	
Activities Required by Permit or Regulation:		$13,950,965

Sibley Common Retirement

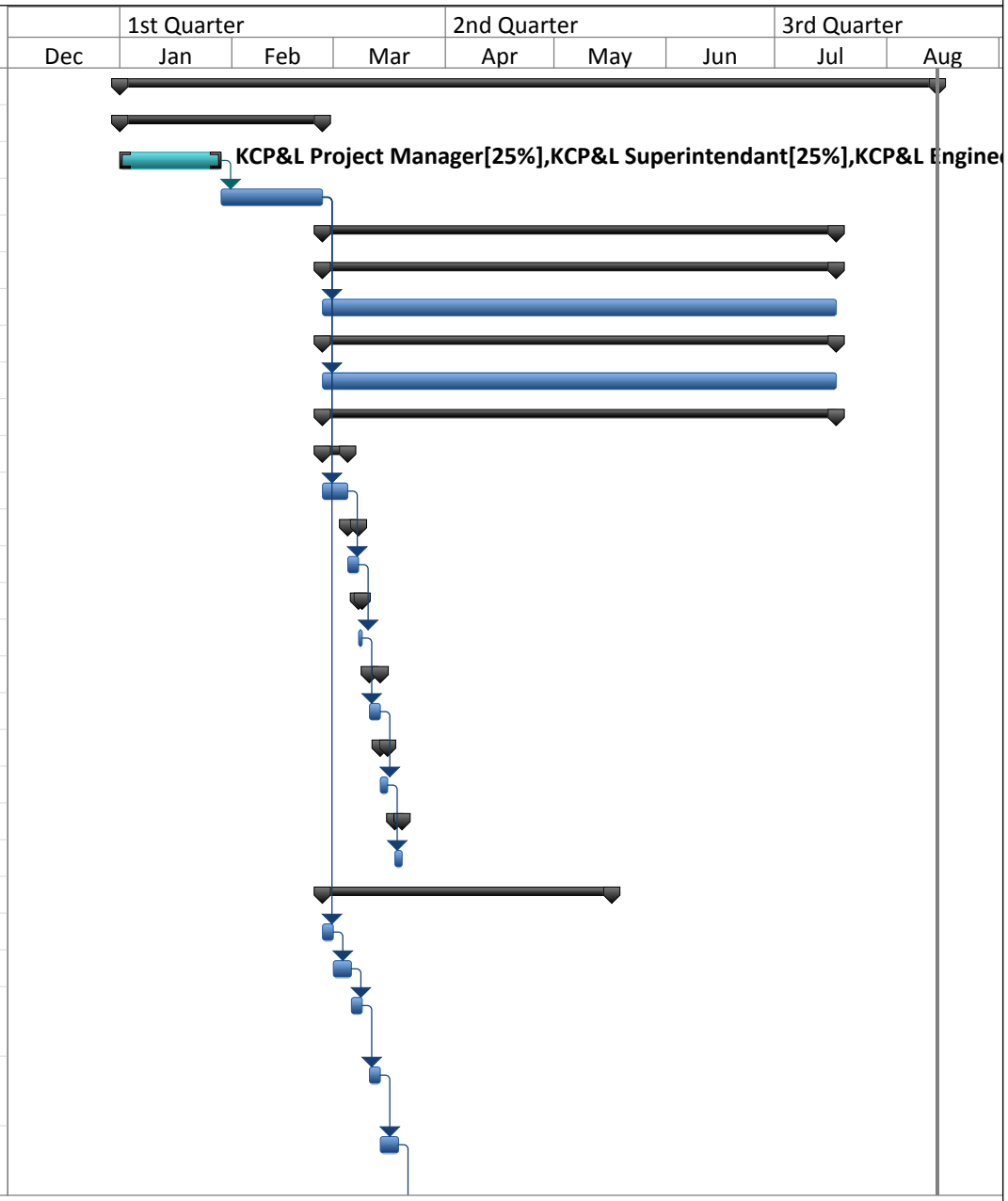
ID	Task Name	Cost
1	**Sibley Common Retirement**	**$405,075.52**
2	**Pre-Retirement Activities**	**$52,448.80**
3	Permitting Review	$26,224.40
4	Develop Detailed Retirement Plan	$26,224.40
5	**Overheads**	**$170,845.92**
6	**Retirement Overheads**	**$149,434.08**
7	Added Overhead Staff for Common Retirement	$149,434.08
8	**Common Removal Equipment Rental**	**$21,411.84**
9	Common Removal Equipment Rental	$21,411.84
10	**Retirement Activities**	**$155,556.40**
11	**Administration/Service Building**	**$9,342.40**
12	Secure Administration/Service Building	$9,342.40
13	**Fuel Yard Office Building**	**$5,605.44**
14	Secure Fuel Yard Office Building	$5,605.44
15	**Temporary Service Building**	**$1,868.48**
16	Secure Temporary Service Building	$1,868.48
17	**Warehouse**	**$5,605.44**
18	Secure Warehouse and Middle Warehouse	$5,605.44
19	**Tractor Shed**	**$4,630.24**
20	Secure Tractor Shed	$4,630.24
21	**Out Buildings**	**$3,736.96**
22	Secure the Insulators Shack and Hedrick Hall	$3,736.96
23	**Fuel Yard**	**$72,354.40**
24	Empty Rotary Car Dumper and Clean (Area A)	$2,941.36
25	Empty Sample House and Clean (Area B)	$3,784.08
26	Empty Transfer Hoppers and Clean Transfer House 1 (AreaD)	$3,784.08
27	Empty and Clean the Bituminous Stackout Reclaim (Area C)	$3,784.08
28	Empty and Clean the Sub-Bituminous Stackout/Reclaim (Area E)	$3,784.08
29	Empty Transfer Hoppers and Clean Transfer House 2 (Area F)	$3,784.08
30	Empty Transfer Hoppers and Clean the New Crusher House (Area G)	$3,784.08
31	Empty and Clean the Blended Stackout/Reclaim (Area H)	$3,784.08
32	Empty and Clean the Old Crusher House (Area I)	$3,784.08
33	Empty and Clean Silo E	$2,941.36
34	Empty Transfer Hoppers and Clean Transfer House (Area J)	$3,784.08
35	**Conveyors**	**$20,181.76**
36	Clean Conveyors - 5, 5A, 6, 6A, 16, 17, 7W, 7E, 7, 18, 18S, 18N ,11, 15, 8, 10C, 9A, 9, 12, 12A, 13, 14, 14A, 3 and 3A	$20,181.76
37	Remove Bags and Clean Dust Collectors	$5,926.40
38	Clean and Secure Miscellaneous Fuel Yard Equipment and clean laydown yards	$6,306.80
39	**Nox Out Ultra System**	**$17,861.28**
40	Drain and clean Tank 1100, 1200 and 1300	$3,784.08
41	Drain and clean the Solutionizing Tank	$3,784.08

Sibley Common Retirement

ID	Task Name	Cost
42	Drain and clean the equipment in the HFD Enclosure	$3,859.92
43	Open, clean and vent the equipment and piping by the MDM building	$6,433.20
44	**Intake Structures and Intake Chemical Feed System**	**$842.72**
45	Remove Chemicals	$842.72
46	**Underground Circulating Water Piping**	**$3,849.60**
47	Drain the Underground Circulating Water Piping	$3,849.60
48	**Sewage Treatment**	**$4,202.72**
49	Clean the Sewage Treatment Facility	$4,202.72
50	**Water Treatment**	**$21,443.12**
51	Drain and clean clarifier	$2,522.72
52	Empty, clean and vent gravity filters	$2,522.72
53	Open and vent storage tanks	$1,261.36
54	Empty, clean and vent carbon filters	$3,784.08
55	Remove RO membranes and open membrane housings	$1,261.36
56	Remove deminerilizer resins, clean and vent vessels	$5,045.44
57	Remove chemicals and flush storage tanks	$2,522.72
58	Flush and vent all water treatment piping.	$2,522.72
59	**Fuel Storage**	**$3,370.88**
60	Remove propane from propane storage tanks and vent.	$842.72
61	Vent propane piping and vaporizer.	$842.72
62	Drain and vent the Diesel Fuel Tank	$1,685.44
63	**Unit 3 Diesel Generator**	**$842.72**
64	Drain and vent diesel generator tank	$842.72
65	**Post Retirement Closure Activities**	**$26,224.40**
66	Post Retirement Closure Activities	$26,224.40

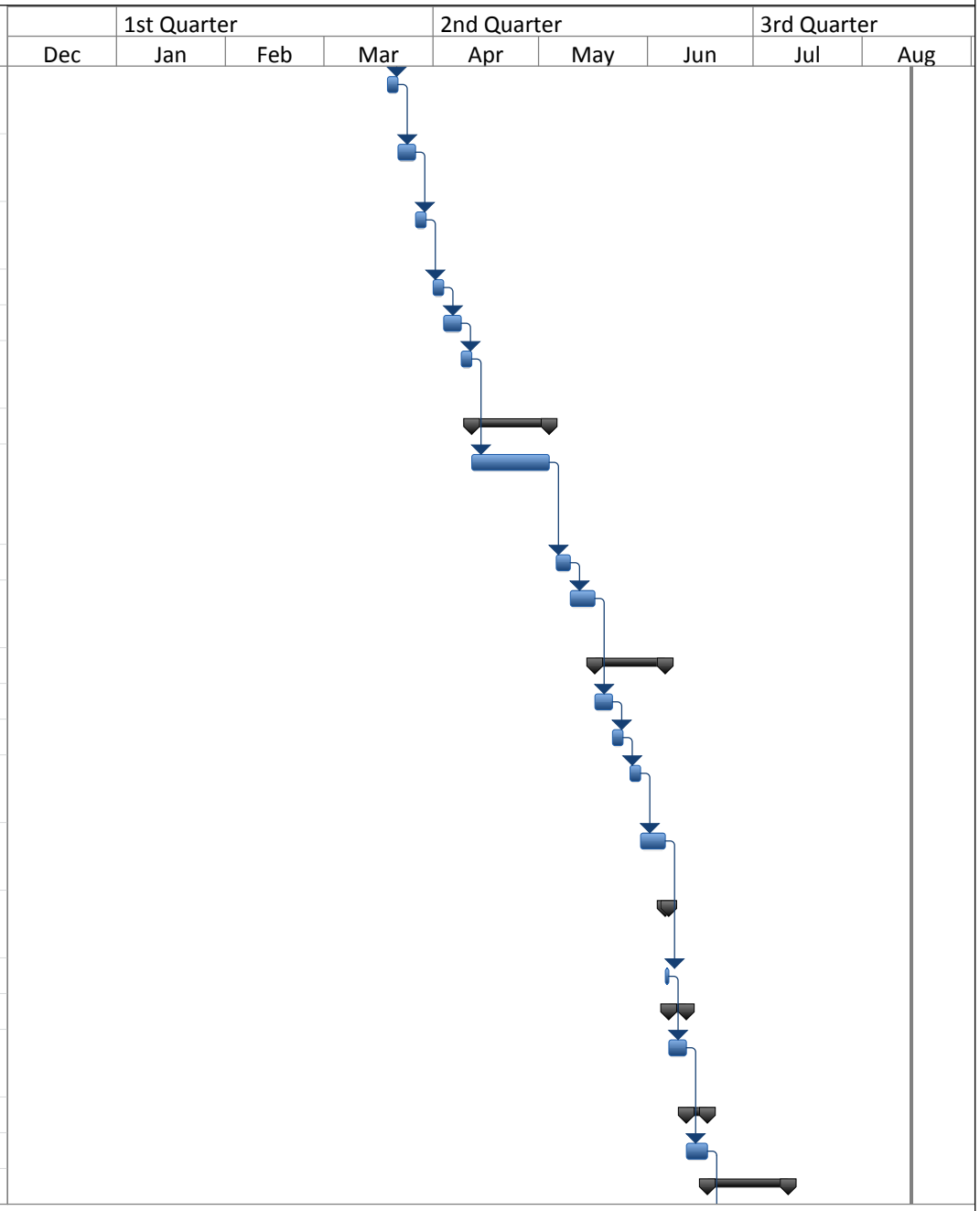
Sibley Common Retirement

ID	Task Name	Duration
1	**Sibley Common Retirement**	**162 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Overheads**	**102 days**
6	**Retirement Overheads**	**102 days**
7	Added Overhead Staff for Common Retireme	102 days
8	**Common Removal Equipment Rental**	**102 days**
9	Common Removal Equipment Rental	102 days
10	**Retirement Activities**	**102 days**
11	**Administration/Service Building**	**5 days**
12	Secure Administration/Service Building	5 days
13	**Fuel Yard Office Building**	**3 days**
14	Secure Fuel Yard Office Building	3 days
15	**Temporary Service Building**	**1 day**
16	Secure Temporary Service Building	1 day
17	**Warehouse**	**3 days**
18	Secure Warehouse and Middle Warehouse	3 days
19	**Tractor Shed**	**2 days**
20	Secure Tractor Shed	2 days
21	**Out Buildings**	**2 days**
22	Secure the Insulators Shack and Hedrick Hall	2 days
23	**Fuel Yard**	**58 days**
24	Empty Rotary Car Dumper and Clean (Area A	3 days
25	Empty Sample House and Clean (Area B)	3 days
26	Empty Transfer Hoppers and Clean Transfer House 1 (AreaD)	3 days
27	Empty and Clean the Bituminous Stackout Reclaim (Area C)	3 days
28	Empty and Clean the Sub-Bituminous Stackout/Reclaim (Area E)	3 days



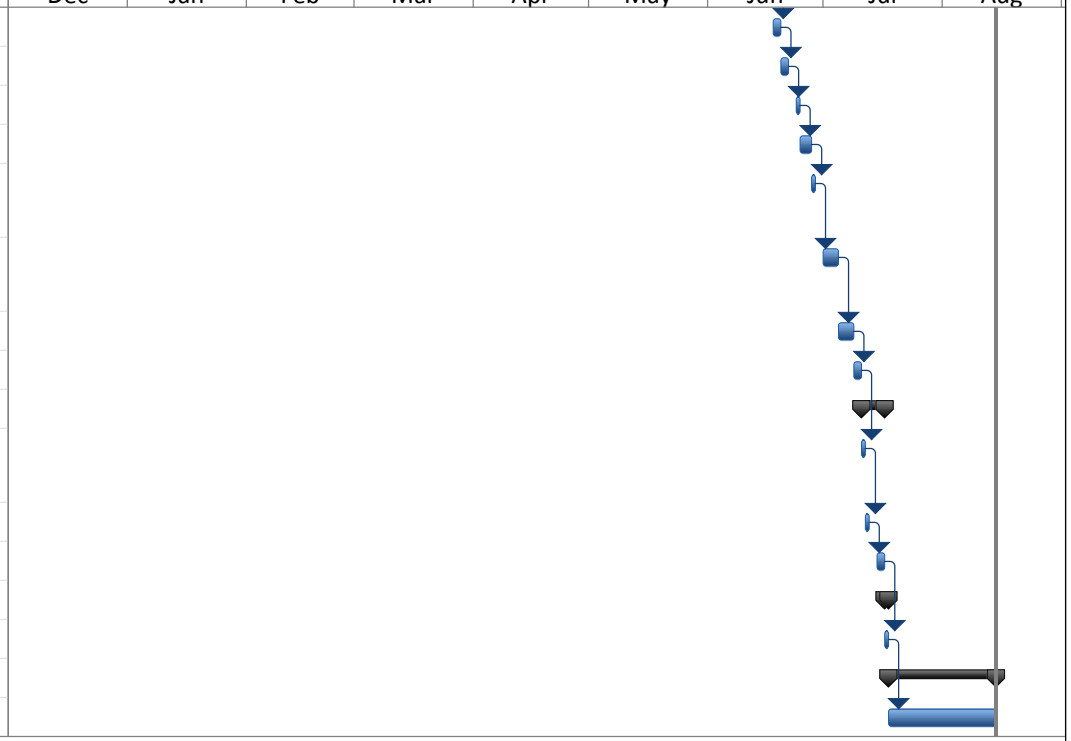
Sibley Common Retirement

ID	Task Name	Duration
29	Empty Transfer Hoppers and Clean Transfer House 2 (Area F)	3 days
30	Empty Transfer Hoppers and Clean the New Crusher House (Area G)	3 days
31	Empty and Clean the Blended Stackout/Reclaim (Area H)	3 days
32	Empty and Clean the Old Crusher House (Are	3 days
33	Empty and Clean Silo E	3 days
34	Empty Transfer Hoppers and Clean Transfer House (Area J)	3 days
35	**Conveyors**	**16 days**
36	Clean Conveyors - 5, 5A, 6, 6A, 16, 17, 7W, 7E, 7, 18, 18S, 18N ,11, 15, 8, 10C, 9A, 9, 12, 12A, 13, 14, 14A, 3 and 3A	16 days
37	Remove Bags and Clean Dust Collectors	4 days
38	Clean and Secure Miscellaneous Fuel Yard Equipment and clean laydown yards	5 days
39	**Nox Out Ultra System**	**14 days**
40	Drain and clean Tank 1100, 1200 and 1300	3 days
41	Drain and clean the Solutionizing Tank	3 days
42	Drain and clean the equipment in the HFD Enclosure	3 days
43	Open, clean and vent the equipment and piping by the MDM building	5 days
44	**Intake Structures and Intake Chemical Feed System**	**1 day**
45	Remove Chemicals	1 day
46	**Underground Circulating Water Piping**	**3 days**
47	Drain the Underground Circulating Water Piping	3 days
48	**Sewage Treatment**	**4 days**
49	Clean the Sewage Treatment Facility	4 days
50	**Water Treatment**	**17 days**



Sibley Common Retirement

ID	Task Name	Duration
51	Drain and clean clarifier	2 days
52	Empty, clean and vent gravity filters	2 days
53	Open and vent storage tanks	1 day
54	Empty, clean and vent carbon filters	3 days
55	Remove RO membranes and open membrane housings	1 day
56	Remove deminerilizer resins, clean and vent vessels	4 days
57	Remove chemicals and flush storage tanks	2 days
58	Flush and vent all water treatment piping.	2 days
59	**Fuel Storage**	**4 days**
60	Remove propane from propane storage tanks and vent.	1 day
61	Vent propane piping and vaporizer.	1 day
62	Drain and vent the Diesel Fuel Tank	2 days
63	**Unit 3 Diesel Generator**	**1 day**
64	Drain and vent diesel generator tank	1 day
65	**Post Retirement Closure Activities**	**20 days**
66	Post Retirement Closure Activities	20 days



Sibley Common Dismantlement

Owner Additional Costs				
Pre-Dismantlement Activities			$0	
Overhead During Dismantlement			$0	
Owner Costs Total*				$0
Demolition General Contractor (DGC) Costs				
Additional Site Management			$123,085	
Equipment Rental			$600,070	
Consummables			$899,049	
Scrap Crew(s)			$892,097	
Dismantlement			$3,939,133	
Contractor Direct Cost*		$6,453,434		
Contractor Allowances				
DGC Insurance	2.00%		$129,069	
Contingency/Profit	15.00%		$987,375	
Performance Bond	2.00%		$151,398	
Contractor Costs Total:				$7,721,276
Total:				$7,721,276
Owner Internal Costs:	5.00%			$386,064
Owner Contingency:	25.00%			$2,026,835
Sibley Common Dismantlement Opinion of Probable Cost:				$10,134,174

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $6,453,434

Sibley Common Dismantlement

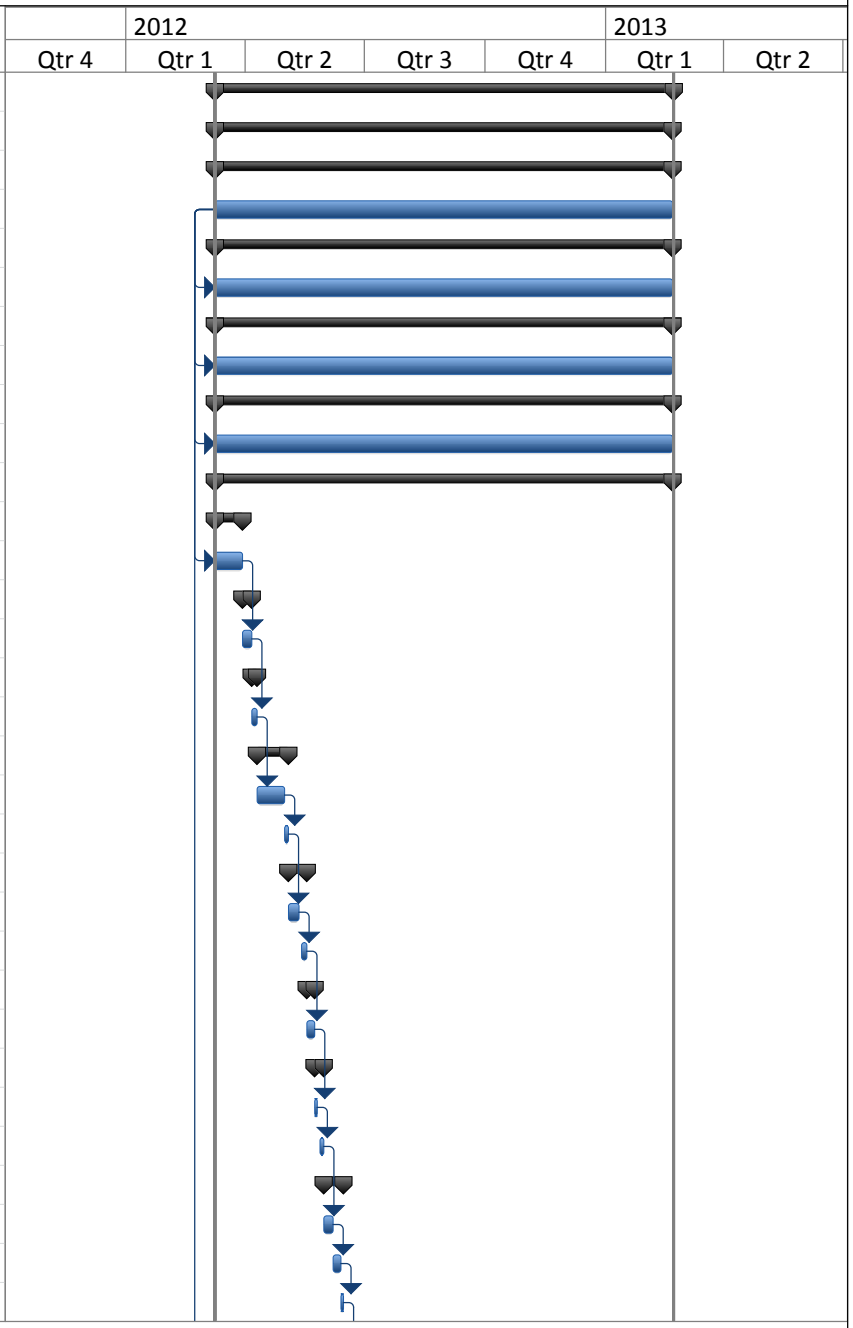
ID	Task Name	Cost
1	**Sibley Common Dismantlement**	**$6,453,436.08**
2	**Overheads**	**$2,514,302.40**
3	**Common Removal Overheads**	**$123,085.68**
4	Added Overhead Staff for Common Removals	$123,085.68
5	**Common Removal Equipment Rental**	**$600,070.08**
6	Common Removal Equipment Rental	$600,070.08
7	**Demolition Contractor Consummables**	**$899,049.36**
8	Consummables	$899,049.36
9	**Scrap Crew**	**$892,097.28**
10	Crew(s) to Handle Scrap Material	$892,097.28
11	**Dismantlement Activities**	**$3,939,133.68**
12	**Administration/Service Building**	**$53,740.80**
13	Remove Administration/Service Building	$53,740.80
14	**Fuel Yard Office Building**	**$17,913.60**
15	Remove Fuel Yard Office Building	$17,913.60
16	**Temporary Service Building**	**$7,165.44**
17	Remove Temporary Service Building	$7,165.44
18	**Parking Lots and Plant Roads**	**$64,488.96**
19	Plant Roads and Parking Areas	$53,740.80
20	Guard Shack	$10,748.16
21	**Warehouse(s)**	**$35,827.20**
22	Remove Main Warehouse	$21,496.32
23	Remove Middle Warehouse	$14,330.88
24	**Tractor Shed**	**$14,330.88**
25	Remove Tractor Shed	$14,330.88
26	**Out Buildings**	**$11,607.60**
27	Remove Insulators Shack	$4,643.04
28	Remove Hedrick Hall	$6,964.56
29	**Fuel Equipment**	**$25,536.72**
30	Remove Propane Tanks and above ground piping	$11,607.60
31	Remove Vaporizer	$9,286.08
32	Remove Diesel Generator Tank	$4,643.04
33	**Fuel Yard**	**$302,143.44**
34	Remove Rotary Car Dumper	$23,215.20
35	Remove Sample House	$23,215.20
36	Remove Transfer Hoppers	$11,607.60
37	Remove Bituminous Stackout Reclaim	$16,250.64
38	Remove Sub-Bituminous Stackout/Reclaim	$16,250.64
39	Remove Transfer House 2	$13,929.12
40	Remove New Crusher House	$34,822.80
41	Remove the Blended Stackout/Reclaim	$16,250.64
42	Remove Old Crusher House	$27,858.24
43	Remove Transfer House	$13,929.12
44	**Conveyors**	**$46,430.40**

Sibley Common Dismantlement

ID	Task Name	Cost
45	Remove Conveyors - 5, 5A, 6, 6A, 16, 17, 7W, 7E, 7, 18, 18S, 18N ,1	$46,430.40
46	Remove Dust Collectors	$4,643.04
47	Remove Miscellaneous Fuel Yard Equipment	$53,740.80
48	**Nox Out Ultra System**	**$18,572.16**
49	Remove Tank 1100, 1200 and 1300	$4,643.04
50	Remove Solutionizing Tank	$4,643.04
51	Remove HFD Enclosure	$6,964.56
52	Remove miscellaneous piping and steel.	$2,321.52
53	**Underground Circulating Water Piping**	**$53,740.80**
54	Excavate Underground Circulating Water Piping	$17,913.60
55	Collapse Underground Circulating Water Piping	$10,748.16
56	Backfill and Compact Over Circulating Water Piping	$25,079.04
57	**Sewage Treatment**	**$21,496.32**
58	Remove Sewage Treatment Pumps and Miscellaneous Equipment	$7,165.44
59	Remove Sewage Treatment Concrete Structures	$14,330.88
60	**Yard Fire Water Systems**	**$21,496.32**
61	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	$21,496.32
62	**Water Treatment**	**$46,430.40**
63	Remove clarifier	$4,643.04
64	Remove gravity filters	$4,643.04
65	Remove storage tanks	$9,286.08
66	Remove carbon filters	$4,643.04
67	Remove RO skids	$4,643.04
68	Remove demineralizer vessels	$6,964.56
69	Remove regeneration equipment	$6,964.56
70	Remove miscellanous piping and support equipment	$4,643.04
71	**Unit 3 Diesel Generator**	**$4,643.04**
72	Remove Unit 3 Diesel Generator	$4,643.04
73	**Common Stack**	**$3,240,000.00**
74	Remove Common Stack to Grade	$3,240,000.00
75	**Final Site Grading and Drainage**	**$0.00**
76	Final Site Grading and Drainage	$0.00

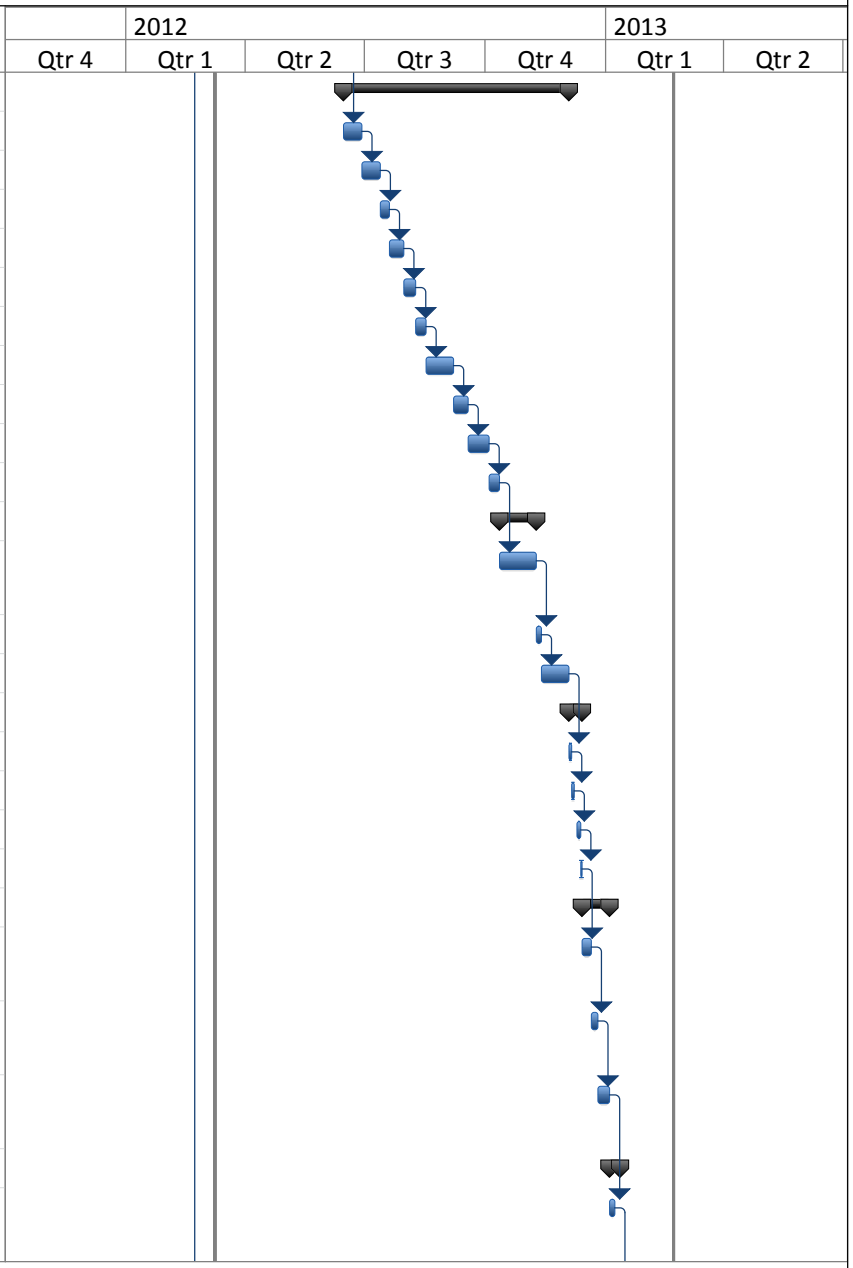
Sibley Common Dismantlement

ID	Task Name	Duration
1	**Sibley Common Dismantlement**	**250 days**
2	**Overheads**	**249 days**
3	**Common Removal Overheads**	**249 days**
4	Added Overhead Staff for Common Removals	249 days
5	**Common Removal Equipment Rental**	**249 days**
6	Common Removal Equipment Rental	249 days
7	**Demolition Contractor Consummables**	**249 days**
8	Consummables	249 days
9	**Scrap Crew**	**249 days**
10	Crew(s) to Handle Scrap Material	249 days
11	**Dismantlement Activities**	**249 days**
12	**Administration/Service Building**	**15 days**
13	Remove Administration/Service Building	15 days
14	**Fuel Yard Office Building**	**5 days**
15	Remove Fuel Yard Office Building	5 days
16	**Temporary Service Building**	**2 days**
17	Remove Temporary Service Building	2 days
18	**Parking Lots and Plant Roads**	**18 days**
19	Plant Roads and Parking Areas	15 days
20	Guard Shack	3 days
21	**Warehouse(s)**	**10 days**
22	Remove Main Warehouse	6 days
23	Remove Middle Warehouse	4 days
24	**Tractor Shed**	**4 days**
25	Remove Tractor Shed	4 days
26	**Out Buildings**	**5 days**
27	Remove Insulators Shack	2 days
28	Remove Hedrick Hall	3 days
29	**Fuel Equipment**	**11 days**
30	Remove Propane Tanks and above ground piping	5 days
31	Remove Vaporizer	4 days
32	Remove Diesel Generator Tank	2 days



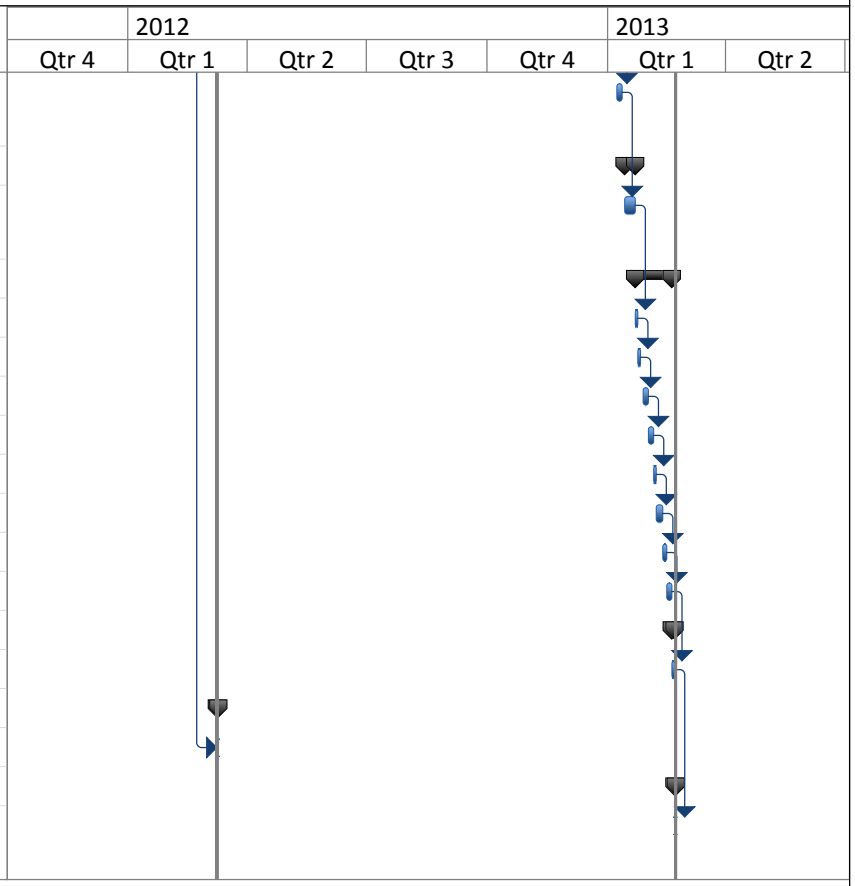
Sibley Common Dismantlement

ID	Task Name	Duration
33	**Fuel Yard**	**122 days**
34	Remove Rotary Car Dumper	10 days
35	Remove Sample House	10 days
36	Remove Transfer Hoppers	5 days
37	Remove Bituminous Stackout Reclaim	7 days
38	Remove Sub-Bituminous Stackout/Reclaim	7 days
39	Remove Transfer House 2	6 days
40	Remove New Crusher House	15 days
41	Remove the Blended Stackout/Reclaim	7 days
42	Remove Old Crusher House	12 days
43	Remove Transfer House	6 days
44	**Conveyors**	**20 days**
45	Remove Conveyors - 5, 5A, 6, 6A, 16, 17, 7W, 7E, 7, 18, 18S, 18N ,11, 15, 8, 10C, 9A, 9, 12, 12A, 13, 14, 14A, 3 and 3A	20 days
46	Remove Dust Collectors	2 days
47	Remove Miscellaneous Fuel Yard Equipment	15 days
48	**Nox Out Ultra System**	**8 days**
49	Remove Tank 1100, 1200 and 1300	2 days
50	Remove Solutionizing Tank	2 days
51	Remove HFD Enclosure	3 days
52	Remove miscellaneous piping and steel.	1 day
53	**Underground Circulating Water Piping**	**15 days**
54	Excavate Underground Circulating Water Piping	5 days
55	Collapse Underground Circulating Water Piping	3 days
56	Backfill and Compact Over Circulating Water Piping	7 days
57	**Sewage Treatment**	**6 days**
58	Remove Sewage Treatment Pumps and Miscellaneous Equipment	2 days



Sibley Common Dismantlement

ID	Task Name	Duration
59	Remove Sewage Treatment Concrete Structures	4 days
60	**Yard Fire Water Systems**	**6 days**
61	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	6 days
62	**Water Treatment**	**20 days**
63	Remove clarifier	2 days
64	Remove gravity filters	2 days
65	Remove storage tanks	4 days
66	Remove carbon filters	2 days
67	Remove RO skids	2 days
68	Remove demineralizer vessels	3 days
69	Remove regeneration equipment	3 days
70	Remove miscellanous piping and support equipment	2 days
71	**Unit 3 Diesel Generator**	**2 days**
72	Remove Unit 3 Diesel Generator	2 days
73	**Common Stack**	**1 day**
74	Remove Common Stack to Grade	1 day
75	**Final Site Grading and Drainage**	**1 day**
76	Final Site Grading and Drainage	1 day



SOUTH HARPER

SOUTH HARPER STATION

The South Harper Generating Station consists of three natural gas-fired combustion turbine generator sets.

Combined, these combustion turbines have an SPP-accredited unit rating of 313.9 MW. South Harper was placed into service in 2005. Each unit is comprised of a Siemens Model 504D5A combustion turbine with a generator step-up transformer and auxiliary power transformer.

The following are the major systems and equipment that were included in the retirement and dismantlement of the South Harper Generating Station.

1. Combustion turbine generator sets and auxiliaries.
2. Generation step-up and auxiliary transformers.
3. Outdoor switchgear.
4. Exhaust stacks.
5. Administration building.
6. Natural gas filtering skid.
7. Flammable material storage building.
8. Service/Instrument air compressors.
9. Waste water tank.

South Harper Retirement

Owner Costs			
Pre-Retirement Activities		$43,834	
Retirement Activities		$219,498	
Post-Retirement Activities		$45,152	
Owner Direct Total			$308,484
Owner Internal Costs	5.00%		$15,424
Owner Contingency:	25.00%		$80,977
South Harper Retirement Opinion of Probable Cost:			$404,885.25

South Harper Retirement

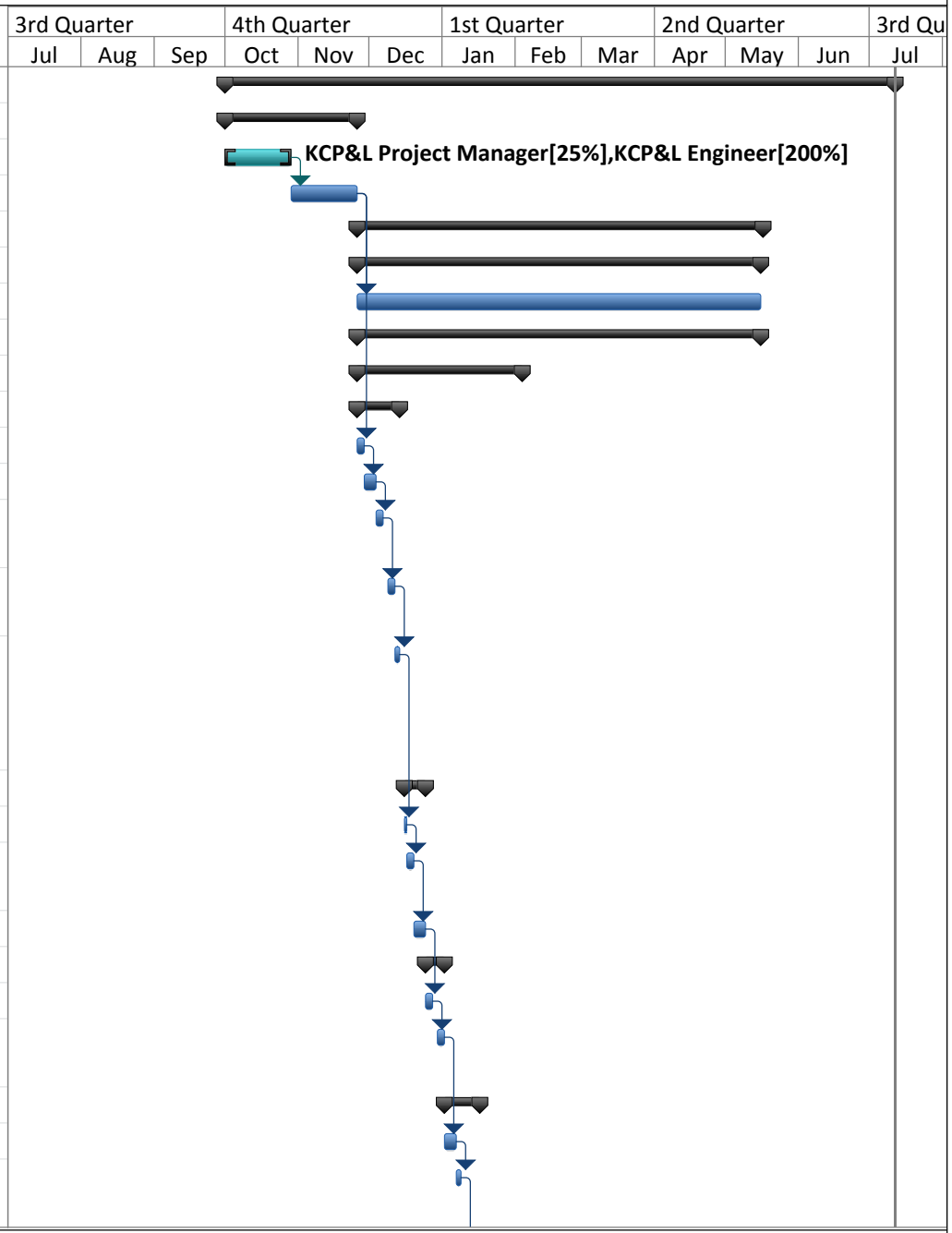
ID	Task Name	Cost
1	**South Harper Retirement**	**$308,484.94**
2	**Pre-Retirement Activities**	**$43,834.00**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Retirement**	**$219,498.94**
6	**Project Management During Retirement**	**$98,648.46**
7	Project Management During Retirement	$98,648.46
8	**Retirement Activities**	**$119,567.28**
9	**Electrical**	**$44,664.00**
10	**Medium and Low Voltage Drawout Switchgear**	**$12,505.92**
11	De-energize all buses at the source.	$2,679.84
12	Open all circuit breakers.	$2,679.84
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$2,679.84
14	Verify that the closing/tripping springs are discharged.	$2,679.84
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$1,786.56
16	**Motor Control Centers**	**$6,252.96**
17	De-energize all buses at the source.	$893.28
18	Open all circuit breakers and disconnect switches.	$2,679.84
19	Remove all fuses in control circuits.	$2,679.84
20	**Low-voltage Switchboards and Panelboards**	**$5,359.68**
21	De-energize all buses at the source.	$2,679.84
22	Open all circuit breakers and disconnect switches.	$2,679.84
23	**Oil-Filled Power Transformers**	**$9,826.08**
24	De-energize all buses at the source.	$2,679.84
25	Open all circuit breakers and disconnect switches.	$1,786.56
26	De-energize all buses at the source.	$2,679.84
27	Open all circuit breakers and disconnect switches.	$2,679.84
28	**Dry-type Power Transformers**	**$4,466.40**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$2,679.84
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$1,786.56
31	**Motors**	**$6,252.96**
32	De-energize all primary power at the source.	$1,786.56
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,679.84
35	**Administration Building**	**$9,342.40**
36	Secure the Administration Building	$9,342.40

South Harper Retirement

ID	Task Name	Cost
37	**Flammabe Material Storage Building**	**$5,605.44**
38	Secure the Flammable Material Storage Building	$5,605.44
39	**Fuel Gas System**	**$10,783.04**
40	Isolate Fuel Gas System	$3,907.44
41	Vent Fuel Gas Piping and Equipment	$2,528.16
42	Open and Vent Knock-Out Drum	$861.84
43	Drain, Open and Vent the Drain Tank	$861.84
44	Empty the Coalescing Filter	$1,761.92
45	Open and Vent Equipment on the CT Gas Valve Module	$861.84
46	**Lube Oil Cooling Water System**	**$7,756.56**
47	Open and Drain the Water Side of the Lube Oil Coolers	$5,171.04
48	Open and Vent the Coolers and Expansion Tank	$2,585.52
49	**Oily Drain Tank**	**$3,954.00**
50	Open and Pump Out the Oily Drain Tank	$3,954.00
51	**Wash Water Skid**	**$5,171.04**
52	Open and Drain the Detergent Tank	$1,723.68
53	Open and Drain the Demineralized Water Tank	$1,723.68
54	Empty the Demineralized Water Tank	$1,723.68
55	**Compressed Air**	**$3,447.36**
56	Empty Dessiccant Air Dryers and Vent	$1,723.68
57	Open and Vent the Air Reciever	$1,723.68
58	**Miscelleaneous Piping**	**$7,756.56**
59	Open and Vent the Exhaust Frame Cooling Piping	$2,585.52
60	Open and Vent the CT Air Processing Piping	$0.00
61	Open and Vent the Inlet Air Heating Piping	$2,585.52
62	Open and Vent the CT Air Processing Piping	$2,585.52
63	**Fire Protection Piping**	**$6,856.48**
64	Empty the CO2 Storage Tank	$5,132.80
65	Open and Vent the Fire Protection Piping	$1,723.68
66	**Lube Oil System**	**$11,587.04**
67	Empty and Remove from Site the Lubricating Oil	$6,416.00
68	Drain Lubricating Oil Piping	$3,447.36
69	Open and Vent Lubricating Oil Piping	$1,723.68
70	**Potable Water**	**$2,643.36**
71	Disconnect Potable Water at Property Boundary	$2,643.36
72	**Waste Water Tank**	**$1,283.20**
73	Open, Drain and Vent Waste Water Tank	$1,283.20
74	**Post Retirement Closure Activity**	**$45,152.00**
75	Post Retirement Closure Activity	$45,152.00

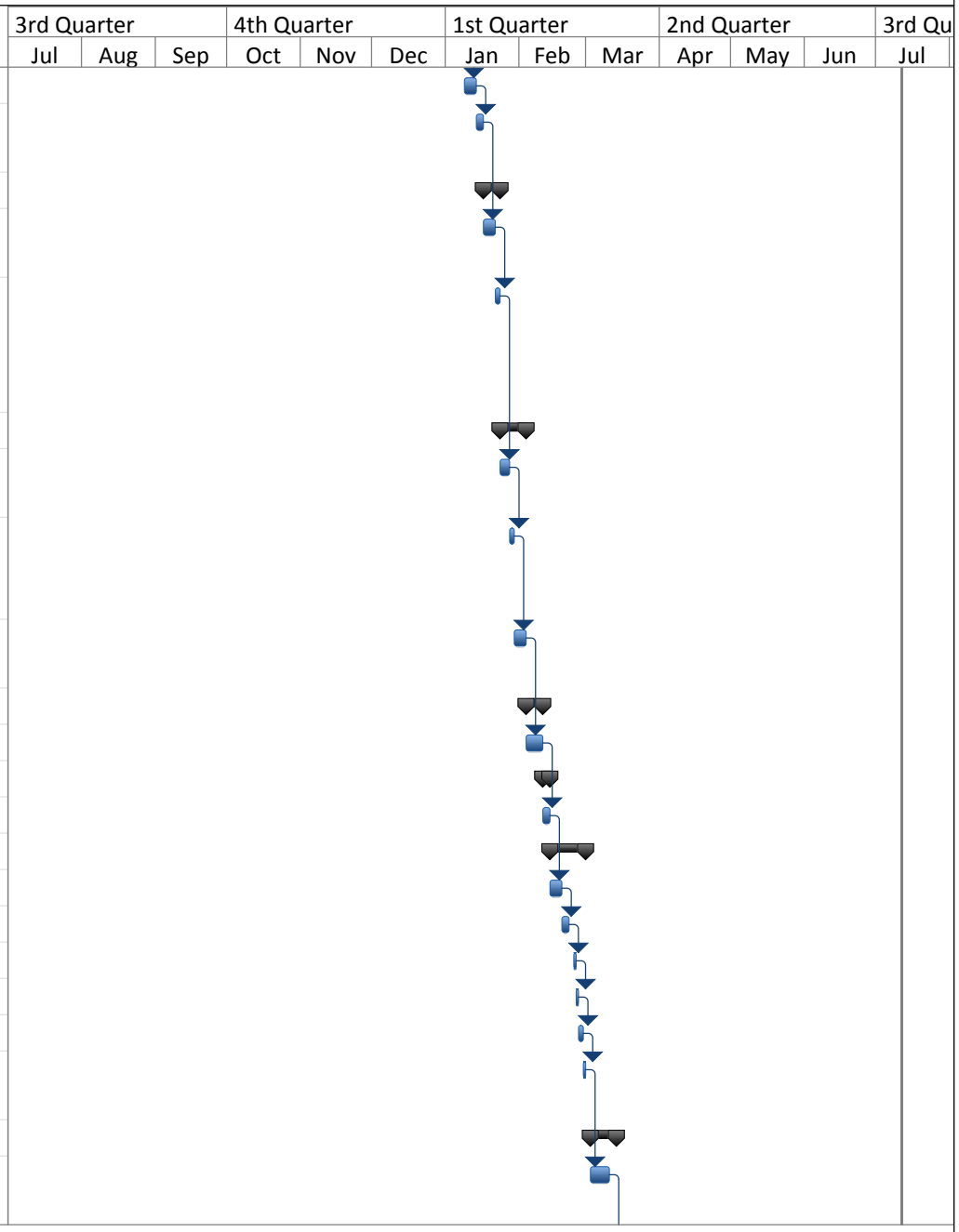
South Harper Retirement

ID	Task Name	Duration
1	**South Harper Retirement**	**204 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement**	**124 days**
6	**Project Management During Retirement**	**123 days**
7	Project Management During Retirement	123 days
8	**Retirement Activities**	**123 days**
9	**Electrical**	**50 days**
10	**Medium and Low Voltage Drawout Switchge**	**14 days**
11	De-energize all buses at the source.	3 days
12	Open all circuit breakers.	3 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	3 days
14	Verify that the closing/tripping springs are discharged.	3 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each	2 days
16	**Motor Control Centers**	**7 days**
17	De-energize all buses at the source.	1 day
18	Open all circuit breakers and disconnect switches.	3 days
19	Remove all fuses in control circuits.	3 days
20	**Low-voltage Switchboards and Panelboards**	**6 days**
21	De-energize all buses at the source.	3 days
22	Open all circuit breakers and disconnect switches.	3 days
23	**Oil-Filled Power Transformers**	**11 days**
24	De-energize all buses at the source.	3 days
25	Open all circuit breakers and disconnect switches.	2 days



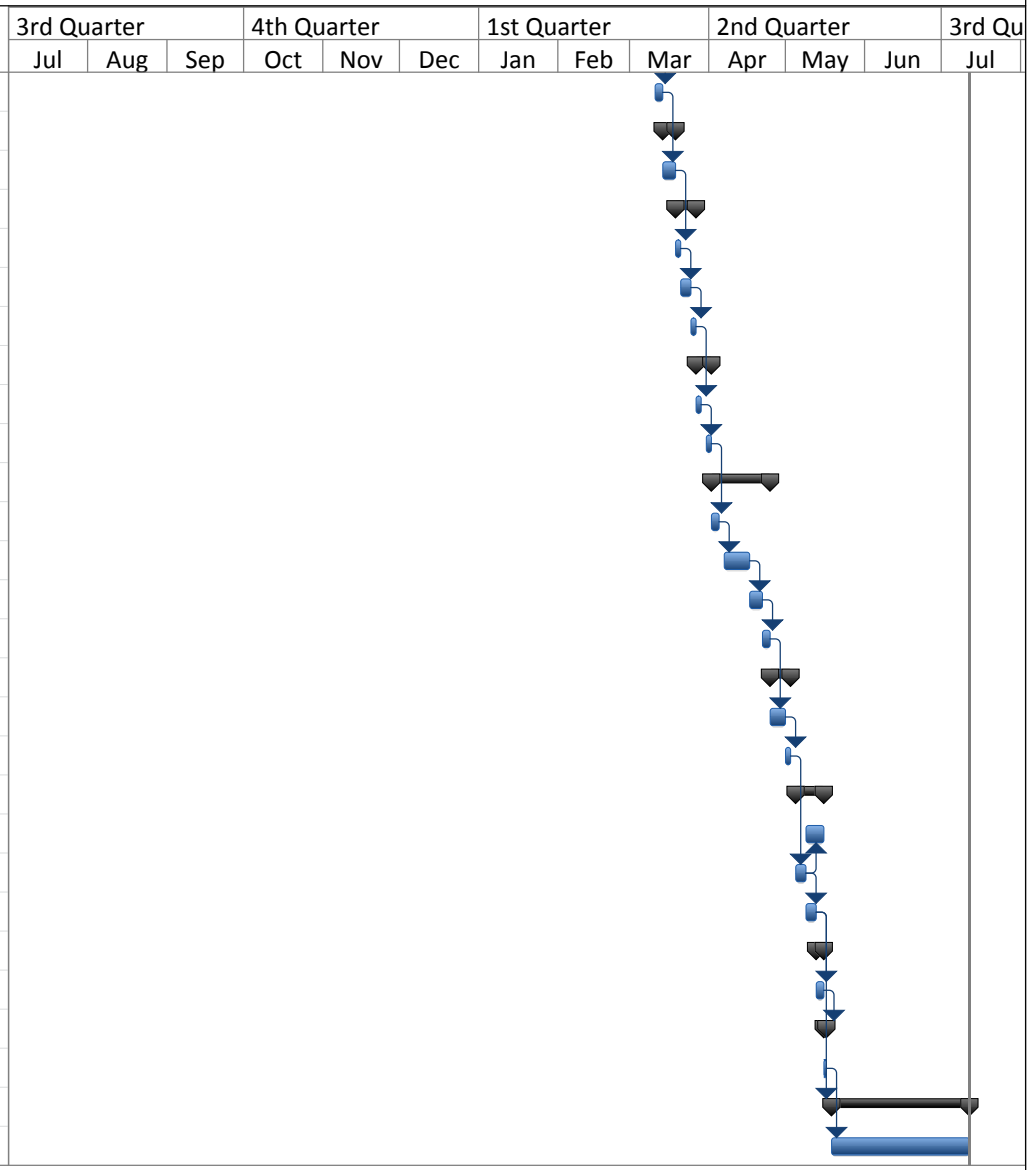
South Harper Retirement

ID	Task Name	Duration
26	De-energize all buses at the source.	3 days
27	Open all circuit breakers and disconnect switches.	3 days
28	**Dry-type Power Transformers**	**5 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	3 days
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses	2 days
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Administration Building**	**5 days**
36	Secure the Administration Building	5 days
37	**Flammabe Material Storage Building**	**3 days**
38	Secure the Flammable Material Storage Build	3 days
39	**Fuel Gas System**	**11 days**
40	Isolate Fuel Gas System	3 days
41	Vent Fuel Gas Piping and Equipment	3 days
42	Open and Vent Knock-Out Drum	1 day
43	Drain, Open and Vent the Drain Tank	1 day
44	Empty the Coalescing Filter	2 days
45	Open and Vent Equipment on the CT Gas Valve Module	1 day
46	**Lube Oil Cooling Water System**	**9 days**
47	Open and Drain the Water Side of the Lube Oil Coolers	6 days



South Harper Retirement

ID	Task Name	Duration
48	Open and Vent the Coolers and Expansion Tai	3 days
49	**Oily Drain Tank**	**3 days**
50	Open and Pump Out the Oily Drain Tank	3 days
51	**Wash Water Skid**	**6 days**
52	Open and Drain the Detergent Tank	2 days
53	Open and Drain the Demineralized Water Tar	2 days
54	Empty the Demineralized Water Tank	2 days
55	**Compressed Air**	**4 days**
56	Empty Dessiccant Air Dryers and Vent	2 days
57	Open and Vent the Air Reciever	2 days
58	**Miscelleaneous Piping**	**17 days**
59	Open and Vent the Exhaust Frame Cooling Pi	3 days
60	Open and Vent the CT Air Processing Piping	8 days
61	Open and Vent the Inlet Air Heating Piping	3 days
62	Open and Vent the CT Air Processing Piping	3 days
63	**Fire Protection Piping**	**6 days**
64	Empty the CO2 Storage Tank	4 days
65	Open and Vent the Fire Protection Piping	2 days
66	**Lube Oil System**	**9 days**
67	Empty and Remove from Site the Lubricating	5 days
68	Drain Lubricating Oil Piping	4 days
69	Open and Vent Lubricating Oil Piping	2 days
70	**Potable Water**	**3 days**
71	Disconnect Potable Water at Property Bound	3 days
72	**Waste Water Tank**	**1 day**
73	Open, Drain and Vent Waste Water Tank	1 day
74	**Post Retirement Closure Activity**	**40 days**
75	Post Retirement Closure Activity	40 days



South Harper Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$1,493,362	
Post-Dismantlement Activities			$49,140	
Owner Costs Total*				$2,435,262
Demolition General Contractor (DGC) Costs				
Site Management			$814,043	
Equipment Rental			$1,386,092	
Consummables			$138,875	
Scrap Crew(s)			$364,064	
Dismantlement			$1,236,894	
Contractor Direct Cost*		$3,939,968		
Contractor Allowances				
DGC Insurance	2.00%		$78,799	
Contingency/Profit	15.00%		$602,815	
Performance Bond	2.00%		$92,431.65	
Contractor Costs Total:				$4,714,014
Total:				$7,149,276
Owner Internal Costs:	5.00%			$357,464
Owner Contingency:	25.00%			$1,876,685
South Harper Dismantlement Opinion of Probable Cost:				$9,383,425

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $6,375,230

South Harper Dismantlement

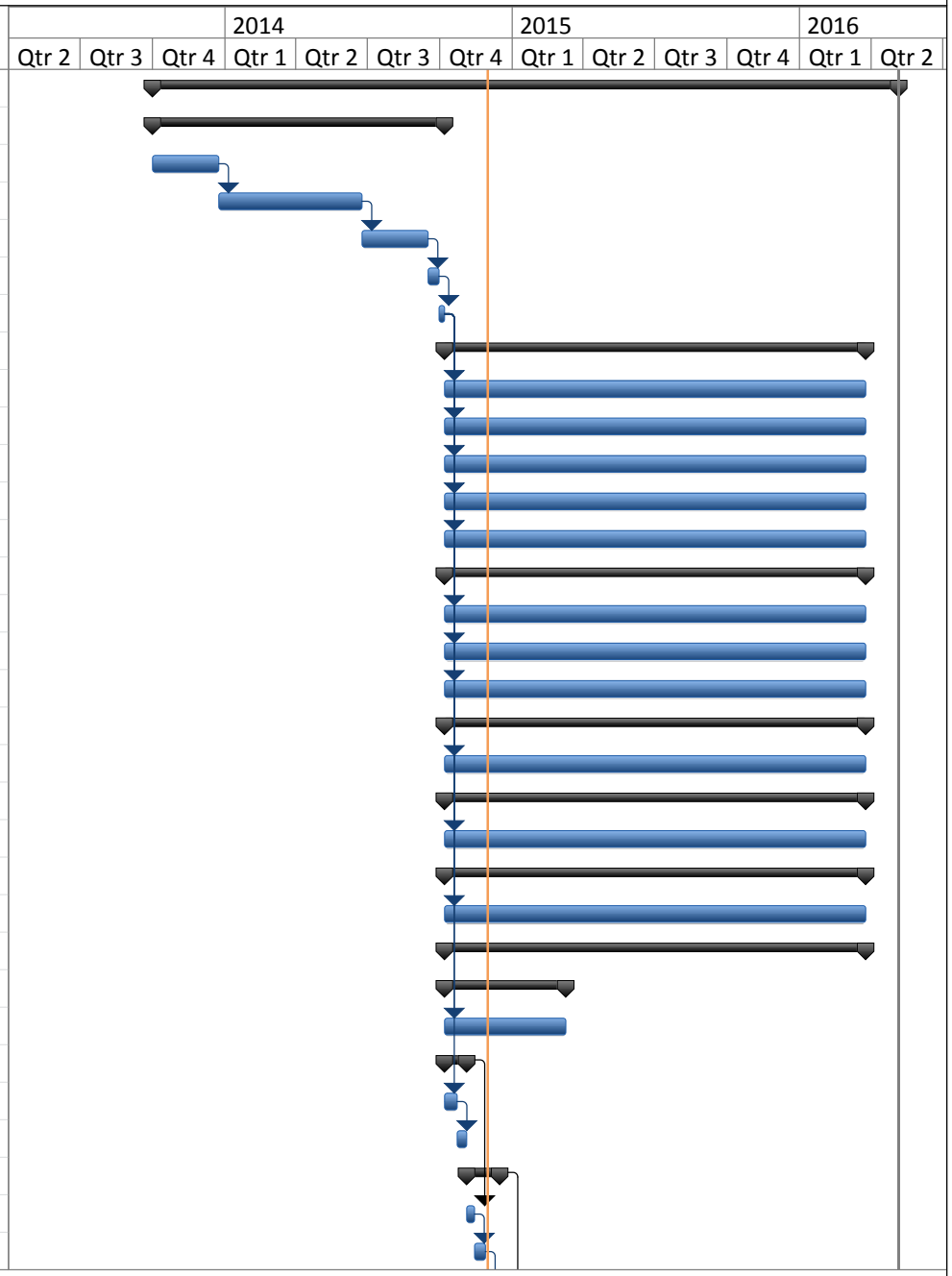
ID	Task Name	Cost
1	**South Harper CT Dismantlement**	**$6,375,218.40**
2	**Pre-Demolition Activities**	**$892,760.32**
3	Detailed Planning & Hire Owner's Engineer	$104,441.28
4	Detailed Site Characterization Study	$610,335.44
5	Hire Demolition general Contractor	$167,184.00
6	KCP&L Prepares Unit for Dismantlement	$10,799.60
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,493,362.96**
9	KCP&L Project Manager	$237,306.80
10	KCP&L Administrative Support	$87,752.96
11	KCP&L Engineer	$390,047.20
12	Owners Engineer Project Manager	$116,432.00
13	Owners Engineer - Engineer	$661,824.00
14	**Demolition Contractor Overhead during Dismantlement**	**$814,043.52**
15	Demolition Contractor Project Manager	$230,320.88
16	Demolition Contractor Safety Manager	$205,073.52
17	Demolition Contractor Superintendent	$378,649.12
18	**Demolition Contractor Equipment Rental Cost**	**$1,386,092.32**
19	Equipment Rental	$1,386,092.32
20	**Demolition Contractor Consumables**	**$138,860.48**
21	Consumables	$138,860.48
22	**Scrap Crews**	**$364,064.48**
23	Crew to Handle Scrap Material(s)	$364,064.48
24	**Dismantlement**	**$1,236,894.32**
25	**Electrical**	**$197,049.60**
26	Electrical Demolition of Equipment	$197,049.60
27	**Fuel Gas System**	**$21,113.20**
28	Remove all above grade fuel gas piping.	$6,782.32
29	Gas Filter Skid	$14,330.88
30	**Lube Oil System**	**$53,740.80**
31	Lube Oil Piping	$14,330.88
32	Lube Oil Pumps	$17,913.60
33	Lube Oil Tanks	$21,496.32
34	**Compressed Air System**	**$21,496.32**
35	Compressed Air Piping	$10,748.16
36	Compressors	$5,374.08
37	Air Receiver	$3,582.72
38	Dryer	$1,791.36
39	**Fire Protection**	**$26,870.40**
40	Fire Protection Piping	$19,704.96
41	CO2 Storage Tank	$7,165.44
42	**Wash Water Skid**	**$10,748.16**
43	Detergent Tank	$10,748.16
44	**Miscellaneous Piping**	**$62,697.60**

South Harper Dismantlement

ID	Task Name	Cost
45	Exhaust Frame Cooling Piping	$17,913.60
46	CT Air Processing Piping	$21,496.32
47	Inlet Air Heating Piping	$23,287.68
48	**Generator**	**$0.00**
49	Generators	$0.00
50	**Combustion Turbine**	**$263,329.92**
51	Inlet Heaters	$17,913.60
52	Inlet ducts	$26,870.40
53	Exhaust ducts	$35,827.20
54	Combustion Turbines	$62,697.60
55	Combustion Turbine Foundations	$66,280.32
56	Enclosures	$53,740.80
57	**CEMS**	**$42,992.64**
58	CEMS Building	$21,496.32
59	CEMS Building Foundation	$21,496.32
60	**Stack**	**$80,611.20**
61	Stacks	$80,611.20
62	**Buildings**	**$23,287.68**
63	Remove Administration Building	$17,913.60
64	Remove Flammable Material Storage Building	$5,374.08
65	**Waste Water Tank**	**$8,956.80**
66	Remove Waste Water Tank	$8,956.80
67	**Site Prep**	**$424,000.00**
68	Final Grading and Drainage	$424,000.00
69	**Post Dismantlement Activities**	**$49,140.00**
70	Post Dismantlement Activities	$49,140.00

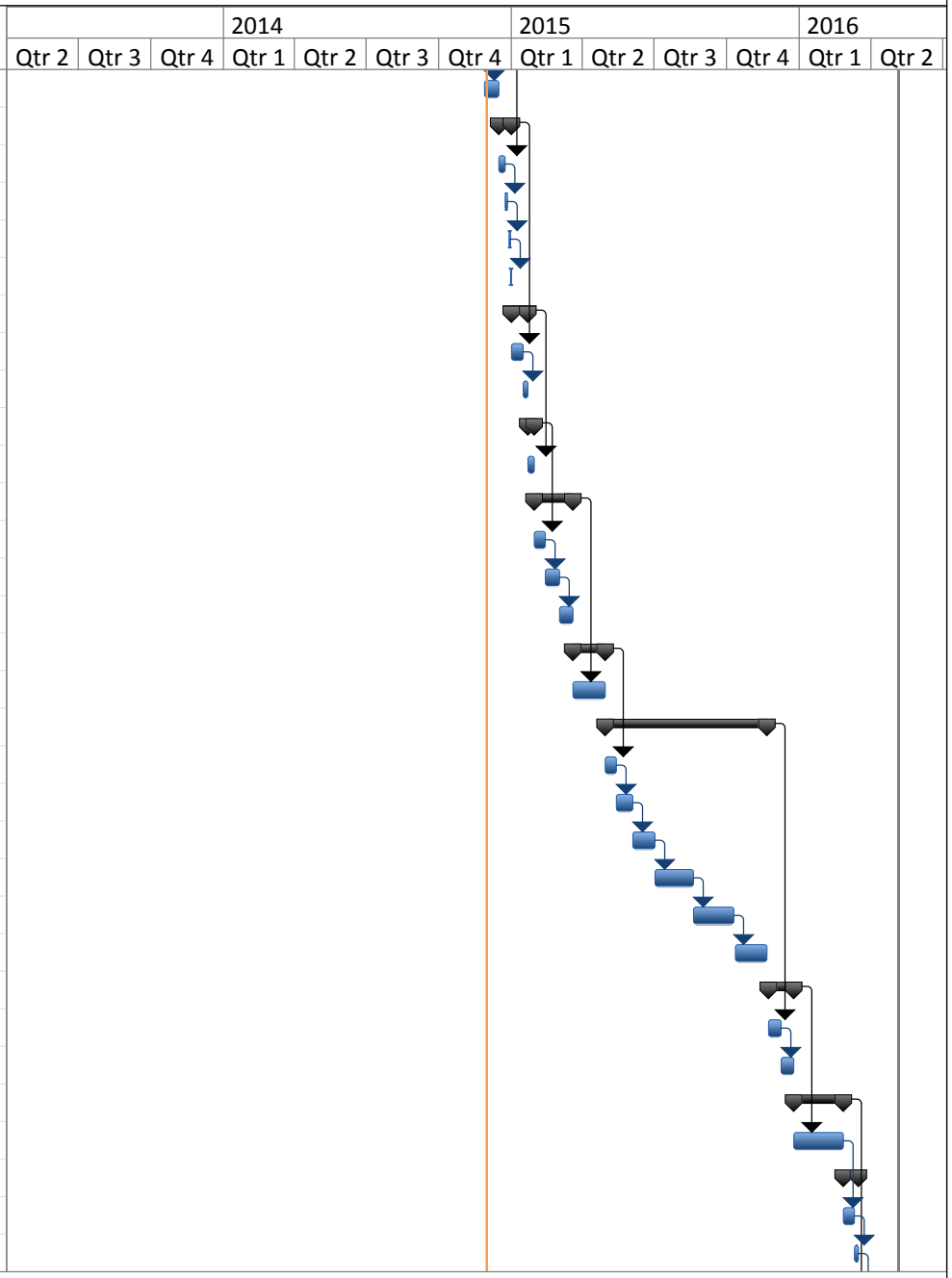
South Harper Dismantlement

ID	Task Name	Duration
1	**South Harper CT Dismantlement**	**678 days**
2	**Pre-Demolition Activities**	**265 days**
3	Detailed Planning & Hire Owner's Engineer	3 mons
4	Detailed Site Characterization Study	130 days
5	Hire Demolition general Contractor	3 mons
6	KCP&L Prepares Unit for Dismantlement	2 wks
7	Demolition Contractor Mobilizes on Site	5 days
8	**KCP&L Overhead during Dismantlement**	**383 days**
9	KCP&L Project Manager	383 days
10	KCP&L Administrative Support	383 days
11	KCP&L Engineer	383 days
12	Owners Engineer Project Manager	383 days
13	Owners Engineer - Engineer	383 days
14	**Demolition Contractor Overhead during Dismantlemer**	**383 days**
15	Demolition Contractor Project Manager	383 days
16	Demolition Contractor Safety Manager	383 days
17	Demolition Contractor Superintendent	383 days
18	**Demolition Contractor Equipment Rental Cost**	**383 days**
19	Equipment Rental	383 days
20	**Demolition Contractor Consumables**	**383 days**
21	Consumables	383 days
22	**Scrap Crews**	**383 days**
23	Crew to Handle Scrap Material(s)	383 days
24	**Dismantlement**	**383 days**
25	**Electrical**	**110 days**
26	Electrical Demolition of Equipment	110 days
27	**Fuel Gas System**	**20 days**
28	Remove all above grade fuel gas piping.	12 days
29	Gas Filter Skid	8 days
30	**Lube Oil System**	**30 days**
31	Lube Oil Piping	8 days
32	Lube Oil Pumps	10 days



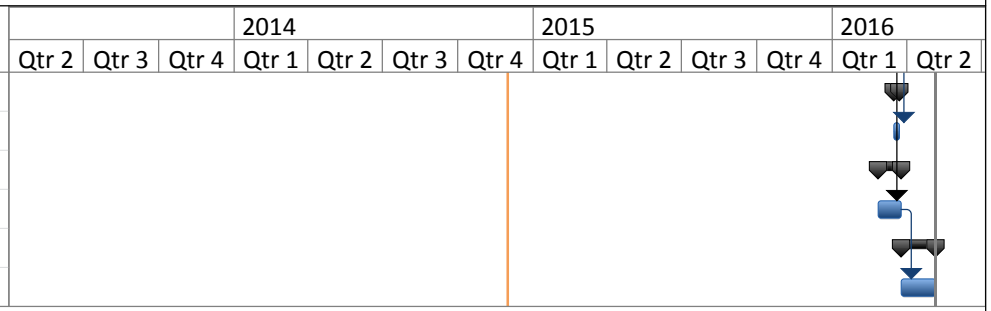
South Harper Dismantlement

ID	Task Name	Duration
33	Lube Oil Tanks	12 days
34	**Compressed Air System**	**12 days**
35	Compressed Air Piping	6 days
36	Compressors	3 days
37	Air Receiver	2 days
38	Dryer	1 day
39	**Fire Protection**	**15 days**
40	Fire Protection Piping	11 days
41	CO2 Storage Tank	4 days
42	**Wash Water Skid**	**6 days**
43	Detergent Tank	6 days
44	**Miscellaneous Piping**	**35 days**
45	Exhaust Frame Cooling Piping	10 days
46	CT Air Processing Piping	12 days
47	Inlet Air Heating Piping	13 days
48	**Generator**	**29 days**
49	Generators	29 days
50	**Combustion Turbine**	**147 days**
51	Inlet Heaters	10 days
52	Inlet ducts	15 days
53	Exhaust ducts	20 days
54	Combustion Turbines	35 days
55	Combustion Turbine Foundations	37 days
56	Enclosures	30 days
57	**CEMS**	**24 days**
58	CEMS Building	12 days
59	CEMS Building Foundation	12 days
60	**Stack**	**45 days**
61	Stacks	45 days
62	**Buildings**	**13 days**
63	Remove Administration Building	10 days
64	Remove Flammable Material Storage Building	3 days



South Harper Dismantlement

ID	Task Name	Duration
65	**Waste Water Tank**	**5 days**
66	Remove Waste Water Tank	5 days
67	**Site Prep**	**20 days**
68	Final Grading and Drainage	20 days
69	**Post Dismantlement Activities**	**30 days**
70	Post Dismantlement Activities	30 days



GREENWOOD

GREENWOOD STATION

The Greenwood Generating Station consists of four natural gas-fired and distillate-fired combustion turbine generator sets.

Combined, these combustion turbines have an SPP-accredited unit rating of 252.7 MW. Greenwood Units 1 and 2 were placed in service in 1975. Greenwood Unit 3 was placed in service in 1977. Greenwood Unit 4 was placed in service in 1979. Each unit is comprised of a GE Model MA7001B combustion turbine with a generator step-up transformer and auxiliary power transformer.

The following are the major systems and equipment that were included in the retirement and dismantlement of the Greenwood Generating Station.

1. Combustion turbine generator sets and auxiliaries.
2. Generation step-up and auxiliary transformers.
3. Outdoor switchgear.
4. Exhaust stacks.
5. Administration building.
6. Combustion turbine building.
7. Natural gas filtering skid.
8. Water treatment.
9. Service/Instrument air compressors.
10. Diesel generator.
11. Fuel oil storage and transfer equipment.

Greenwood Retirement

Owner Costs			
Pre-Retirement Activities		$43,834	
Retirement Activities		$225,697	
Post-Retirement Activities		$45,152	
Owner Direct Total			$314,683
Owner Internal Costs	5.00%		$15,734
Owner Contingency:	25.00%		$82,604
Greenwood Retirement Opinion of Probable Cost:			$413,021.44

Activities Required by Permit or Regulation

Greenwood Storage Tank	$157,111	
Greenwood Storage Tank (2)	$157,111	
Greenwood Storage Tank (3)	$157,111	
Activities Required by Permit or Regulation:		$471,333

Greenwood Retirement

ID	Task Name	Cost
1	**Greenwood Retirement**	**$314,683.28**
2	**Pre-Retirement Activities**	**$43,834.00**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Retirement**	**$225,697.28**
6	**Project Management During Retirement**	**$105,866.64**
7	Project Management During Retirement	$105,866.64
8	**Retirement Activities**	**$119,830.64**
9	**Electrical**	**$44,664.00**
10	**Medium and Low Voltage Drawout Switchgear**	**$12,505.92**
11	De-energize all buses at the source.	$2,679.84
12	Open all circuit breakers.	$2,679.84
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$2,679.84
14	Verify that the closing/tripping springs are discharged.	$2,679.84
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$1,786.56
16	**Motor Control Centers**	**$6,252.96**
17	De-energize all buses at the source.	$893.28
18	Open all circuit breakers and disconnect switches.	$1,786.56
19	Remove all fuses in control circuits.	$3,573.12
20	**Low-voltage Switchboards and Panelboards**	**$5,359.68**
21	De-energize all buses at the source.	$2,679.84
22	Open all circuit breakers and disconnect switches.	$2,679.84
23	**Oil-Filled Power Transformers**	**$9,826.08**
24	De-energize all buses at the source.	$2,679.84
25	Open all circuit breakers and disconnect switches.	$1,786.56
26	De-energize all buses at the source.	$2,679.84
27	Open all circuit breakers and disconnect switches.	$2,679.84
28	**Dry-type Power Transformers**	**$4,466.40**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$2,679.84
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$1,786.56
31	**Motors**	**$6,252.96**
32	De-energize all primary power at the source.	$1,786.56
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,679.84
35	**Administration Building**	**$7,473.92**

Greenwood Retirement

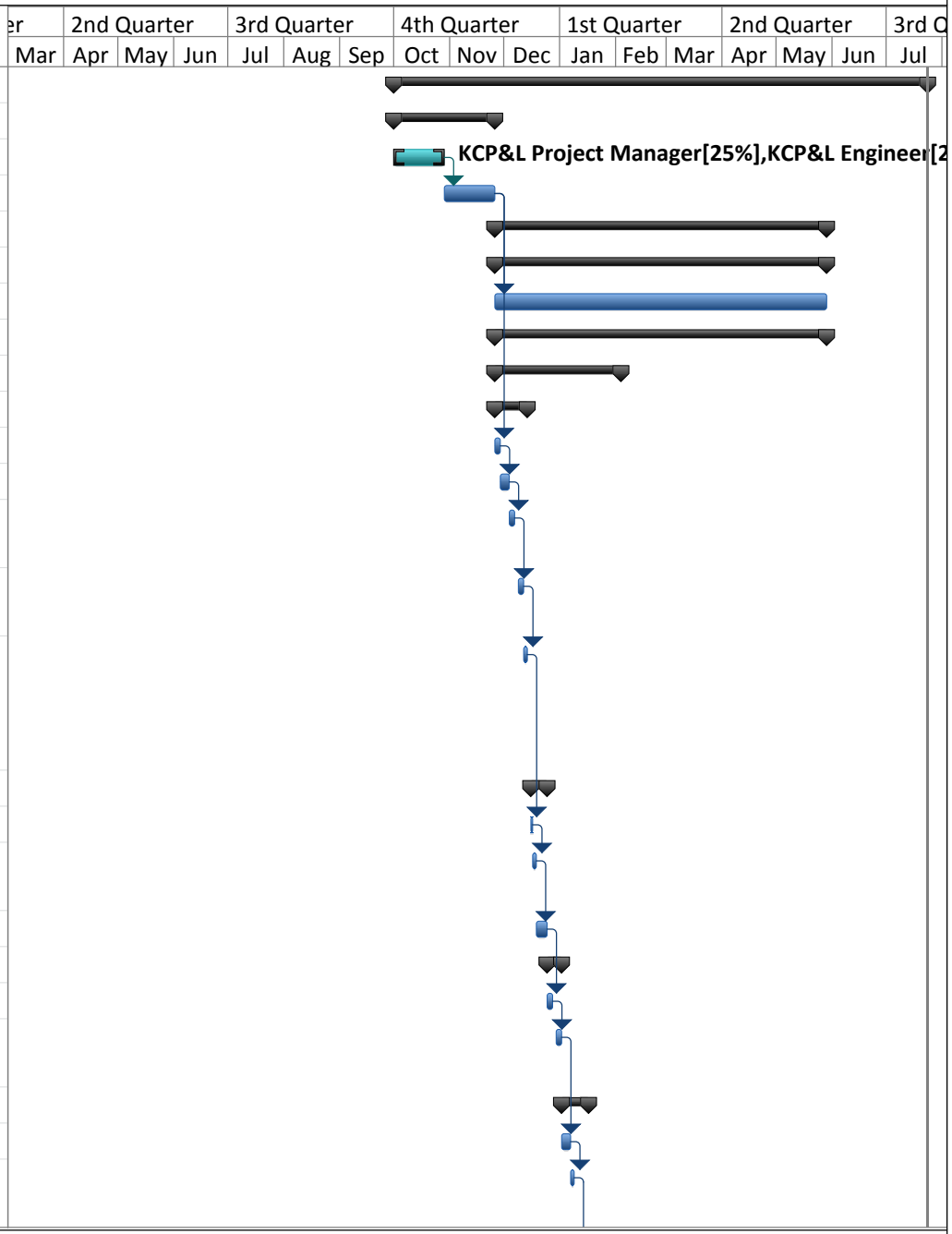
ID	Task Name	Cost
36	Secure the Administration Building/Maintenance Shop	$7,473.92
37	**Combustion Turbine Buildings**	**$0.00**
38	Secure the Combustion Turbine Buildings	$0.00
39	**Fuel Gas System**	**$10,783.04**
40	Isolate Fuel Gas System	$3,907.44
41	Vent Fuel Gas Piping and Equipment	$2,528.16
42	Open and Vent Knock-Out Drum	$861.84
43	Drain, Open and Vent the Drain Tank	$861.84
44	Empty the Coalescing Filter	$1,761.92
45	Open and Vent Equipment on the CT Gas Valve Module	$861.84
46	**Lube Oil Cooling Water System**	**$7,756.56**
47	Open and Drain the Water Side of the Lube Oil Coolers	$5,171.04
48	Open and Vent the Coolers and Expansion Tank	$2,585.52
49	**Oily Drain Tank**	**$3,954.00**
50	Open and Pump Out the Oily Drain Tank	$3,954.00
51	**Wash Water Skid**	**$5,171.04**
52	Open and Drain the Detergent Tank	$1,723.68
53	Open and Drain the Demineralized Water Tank	$1,723.68
54	Empty the Demineralized Water Tank	$1,723.68
55	**Compressed Air**	**$3,447.36**
56	Empty Dessiccant Air Dryers and Vent	$1,723.68
57	Open and Vent the Air Reciever	$1,723.68
58	**Miscelleaneous Piping**	**$7,756.56**
59	Open and Vent the Exhaust Frame Cooling Piping	$2,585.52
60	Open and Vent the CT Air Processing Piping	$0.00
61	Open and Vent the Inlet Air Heating Piping	$2,585.52
62	Open and Vent the CT Air Processing Piping	$2,585.52
63	**Fire Protection Piping**	**$6,856.48**
64	Empty the CO2 Storage Tank	$5,132.80
65	Open and Vent the Fire Protection Piping	$1,723.68
66	**Lube Oil System**	**$11,587.04**
67	Empty and Remove from Site the Lubricating Oil	$6,416.00
68	Drain Lubricating Oil Piping	$3,447.36
69	Open and Vent Lubricating Oil Piping	$1,723.68
70	**Fuel Oil Storage and Unloading**	**$861.84**
71	Remove Fuel Oil from Fuel Oil Storage and Vent	$861.84
72	**Water Treatment**	**$7,756.56**
73	Drain All Tanks and Vessels	$1,723.68
74	Remove Resin from Vessels	$2,585.52
75	Remove Chemicals	$2,585.52
76	Open and Vent Vessels	$861.84
77	**Diesel Generator**	**$0.00**
78	Empty and Vent Diesel Generator F.O. Tank	$0.00
79	**Potable Water**	**$1,762.24**

Greenwood Retirement

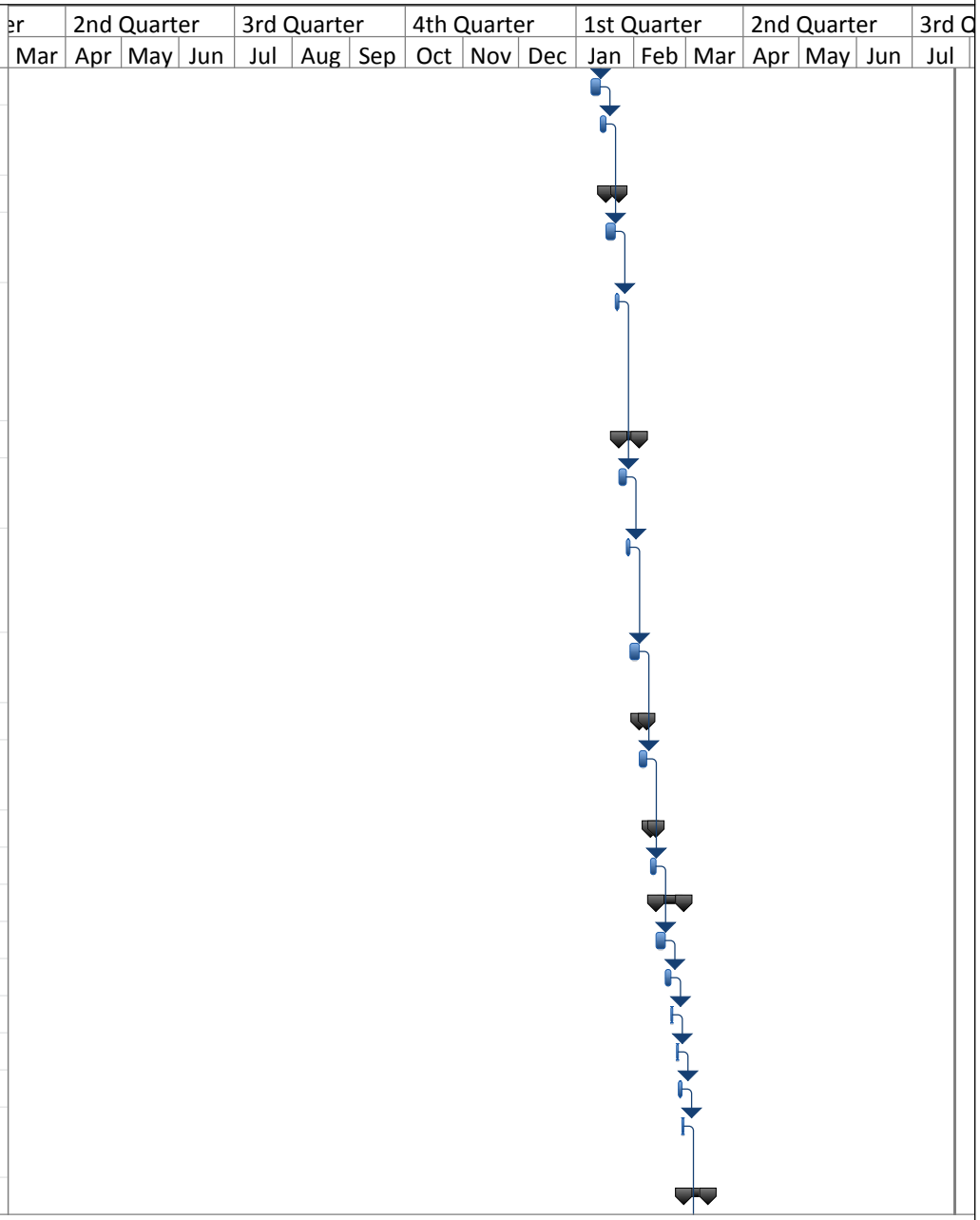
ID	Task Name	Cost
80	Disconnect Potable Water at Property Boundary	$1,762.24
81	**Post Retirement Closure Activity**	**$45,152.00**
82	Post Retirement Closure Activity	$45,152.00

Greenwood Retirement

ID	Task Name	Duration
1	**Greenwood Retirement**	**212 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement**	**132 days**
6	**Project Management During Retirement**	**132 days**
7	Project Management During Retirement	132 days
8	**Retirement Activities**	**132 days**
9	**Electrical**	**50 days**
10	**Medium and Low Voltage Drawout Switchge**	**14 days**
11	De-energize all buses at the source.	3 days
12	Open all circuit breakers.	3 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	3 days
14	Verify that the closing/tripping springs are discharged.	3 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each	2 days
16	**Motor Control Centers**	**7 days**
17	De-energize all buses at the source.	1 day
18	Open all circuit breakers and disconnect switches.	2 days
19	Remove all fuses in control circuits.	4 days
20	**Low-voltage Switchboards and Panelboards**	**6 days**
21	De-energize all buses at the source.	3 days
22	Open all circuit breakers and disconnect switches.	3 days
23	**Oil-Filled Power Transformers**	**11 days**
24	De-energize all buses at the source.	3 days
25	Open all circuit breakers and disconnect switches.	2 days

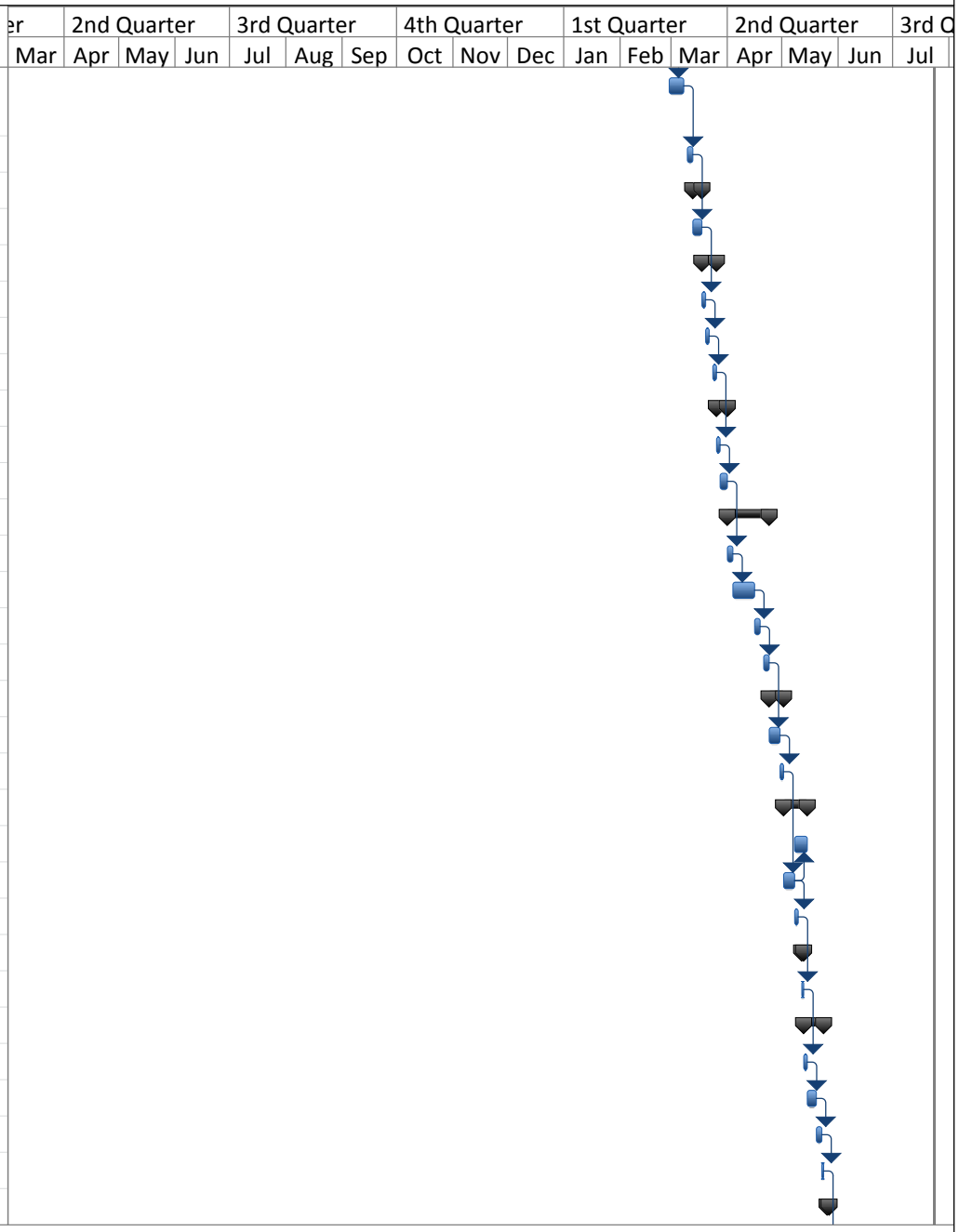


ID	Task Name	Duration
26	De-energize all buses at the source.	3 days
27	Open all circuit breakers and disconnect switches.	3 days
28	**Dry-type Power Transformers**	**5 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	3 days
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses	2 days
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Administration Building**	**4 days**
36	Secure the Administration Building/Maintenance Shop	4 days
37	**Combustion Turbine Buildings**	**3 days**
38	Secure the Combustion Turbine Buildings	3 days
39	**Fuel Gas System**	**11 days**
40	Isolate Fuel Gas System	3 days
41	Vent Fuel Gas Piping and Equipment	3 days
42	Open and Vent Knock-Out Drum	1 day
43	Drain, Open and Vent the Drain Tank	1 day
44	Empty the Coalescing Filter	2 days
45	Open and Vent Equipment on the CT Gas Valve Module	1 day
46	**Lube Oil Cooling Water System**	**9 days**



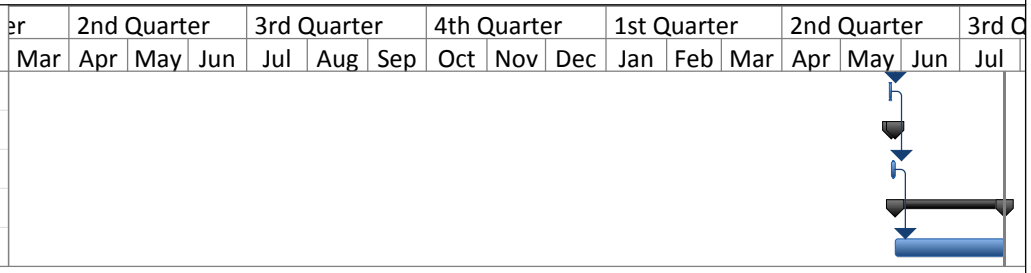
Greenwood Retirement

ID	Task Name	Duration
47	Open and Drain the Water Side of the Lube Oil Coolers	6 days
48	Open and Vent the Coolers and Expansion Tar	3 days
49	**Oily Drain Tank**	**3 days**
50	Open and Pump Out the Oily Drain Tank	3 days
51	**Wash Water Skid**	**6 days**
52	Open and Drain the Detergent Tank	2 days
53	Open and Drain the Demineralized Water Tar	2 days
54	Empty the Demineralized Water Tank	2 days
55	**Compressed Air**	**4 days**
56	Empty Dessiccant Air Dryers and Vent	2 days
57	Open and Vent the Air Reciever	2 days
58	**Miscelleaneous Piping**	**17 days**
59	Open and Vent the Exhaust Frame Cooling Pi	3 days
60	Open and Vent the CT Air Processing Piping	8 days
61	Open and Vent the Inlet Air Heating Piping	3 days
62	Open and Vent the CT Air Processing Piping	3 days
63	**Fire Protection Piping**	**6 days**
64	Empty the CO2 Storage Tank	4 days
65	Open and Vent the Fire Protection Piping	2 days
66	**Lube Oil System**	**9 days**
67	Empty and Remove from Site the Lubricating	5 days
68	Drain Lubricating Oil Piping	4 days
69	Open and Vent Lubricating Oil Piping	2 days
70	**Fuel Oil Storage and Unloading**	**1 day**
71	Remove Fuel Oil from Fuel Oil Storage and Ve	1 day
72	**Water Treatment**	**9 days**
73	Drain All Tanks and Vessels	2 days
74	Remove Resin from Vessels	3 days
75	Remove Chemicals	3 days
76	Open and Vent Vessels	1 day
77	**Diesel Generator**	**1 day**



Greenwood Retirement

ID	Task Name	Duration
78	Empty and Vent Diesel Generator F.O. Tank	1 day
79	**Potable Water**	**2 days**
80	Disconnect Potable Water at Property Bound	2 days
81	**Post Retirement Closure Activity**	**40 days**
82	Post Retirement Closure Activity	40 days



Greenwood Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$1,477,766	
Post-Dismantlement Activities			$49,140	
Owner Costs Total*				$2,419,666
Demolition General Contractor (DGC) Costs				
Site Management			$805,541	
Equipment Rental			$1,371,616	
Consummables			$1,368,432	
Scrap Crew(s)			$360,262	
Dismantlement			$1,117,115	
Contractor Direct Cost*		$5,022,966		
Contractor Allowances				
DGC Insurance	2.00%		$100,459	
Contingency/Profit	15.00%		$768,514	
Performance Bond	2.00%		$117,838.78	
Contractor Costs Total:				$6,009,778
Total:				$8,429,444
Owner Internal Costs:	5.00%			$421,472
Owner Contingency:	25.00%			$2,212,729
Greenwood Dismantlement Opinion of Probable Cost:				$11,063,645

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $7,442,632

Greenwood Dismantlement

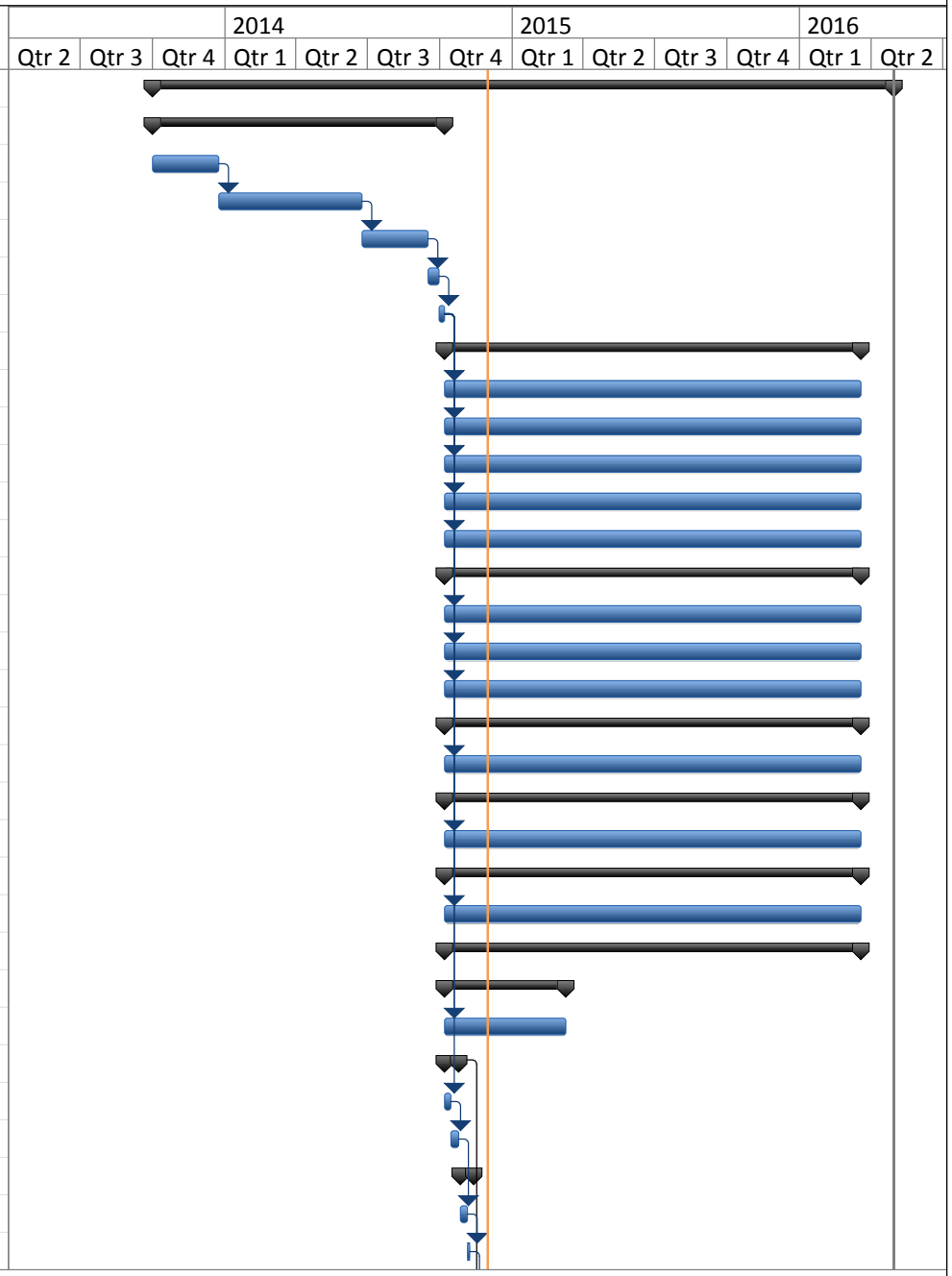
ID	Task Name	Cost
1	**Greenwood Dismantlement**	**$7,442,635.44**
2	**Pre-Demolition Activities**	**$892,760.32**
3	Detailed Planning & Hire Owner's Engineer	$104,441.28
4	Detailed Site Characterization Study	$610,335.44
5	Hire Demolition general Contractor	$167,184.00
6	KCP&L Prepares Unit for Dismantlement	$10,799.60
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,477,766.48**
9	KCP&L Project Manager	$234,828.40
10	KCP&L Administrative Support	$86,836.48
11	KCP&L Engineer	$385,973.60
12	Owners Engineer Project Manager	$115,216.00
13	Owners Engineer - Engineer	$654,912.00
14	**Demolition Contractor Overhead during Dismantlement**	**$805,541.76**
15	Demolition Contractor Project Manager	$227,915.44
16	Demolition Contractor Safety Manager	$202,931.76
17	Demolition Contractor Superintendent	$374,694.56
18	**Demolition Contractor Equipment Rental Cost**	**$1,371,616.16**
19	Equipment Rental	$1,371,616.16
20	**Demolition Contractor Consumables**	**$1,368,432.56**
21	Consumables	$1,368,432.56
22	**Scrap Crews**	**$360,262.24**
23	Crew to Handle Scrap Material(s)	$360,262.24
24	**Dismantlement**	**$1,117,115.92**
25	**Electrical**	**$197,049.60**
26	Electrical Demolition of Equipment	$197,049.60
27	**Fuel Gas System**	**$17,932.24**
28	Remove all above grade fuel gas piping.	$3,601.36
29	Gas Filter Skid	$14,330.88
30	**Fueil Oil System**	**$17,913.60**
31	Remove above grade fuel oil piping	$12,539.52
32	Remove fuel oil forwarding equipment	$5,374.08
33	Remove fuel oil forwarding building	$0.00
34	**Demineralizer**	**$17,913.60**
35	Remove demineralizer vessels	$3,582.72
36	Remove acid and caustic tanks	$7,165.44
37	Remove hot water tank	$3,582.72
38	Remove misc. demineralizer piping.	$3,582.72
39	**Lube Oil System**	**$53,740.80**
40	Lube Oil Piping	$14,330.88
41	Lube Oil Pumps	$17,913.60
42	Lube Oil Tanks	$21,496.32
43	**Compressed Air System**	**$21,496.32**
44	Compressed Air Piping	$10,748.16

Greenwood Dismantlement

ID	Task Name	Cost
45	Compressors	$5,374.08
46	Air Receiver	$3,582.72
47	Dryer	$1,791.36
48	**Fire Protection**	**$26,870.40**
49	Fire Protection Piping	$19,704.96
50	CO2 Storage Tank	$7,165.44
51	**Wash Water Skid**	**$10,748.16**
52	Detergent Tank	$10,748.16
53	**Miscellaneous Piping**	**$62,697.60**
54	Exhaust Frame Cooling Piping	$17,913.60
55	CT Air Processing Piping	$21,496.32
56	Inlet Air Heating Piping	$23,287.68
57	**Generator**	**$51,949.44**
58	Generators	$51,949.44
59	**Combustion Turbine**	**$263,329.92**
60	Inlet Heaters	$17,913.60
61	Inlet ducts	$26,870.40
62	Exhaust ducts	$35,827.20
63	Combustion Turbines	$62,697.60
64	Combustion Turbine Foundations	$66,280.32
65	Enclosures	$53,740.80
66	**Diesel Generator**	**$3,582.72**
67	Remove diesel generator	$3,582.72
68	**CEMS**	**$42,992.64**
69	CEMS Building	$21,496.32
70	CEMS Building Foundation	$21,496.32
71	**Stack**	**$80,611.20**
72	Stacks	$80,611.20
73	**Buildings**	**$23,287.68**
74	Remove Administration/Maintenance Building	$17,913.60
75	Remove CT Buildings including gantry crane	$5,374.08
76	**Site Prep**	**$225,000.00**
77	Final Grading and Drainage	$225,000.00
78	**Post Dismantlement Activities**	**$49,140.00**
79	Post Dismantlement Activities	$49,140.00

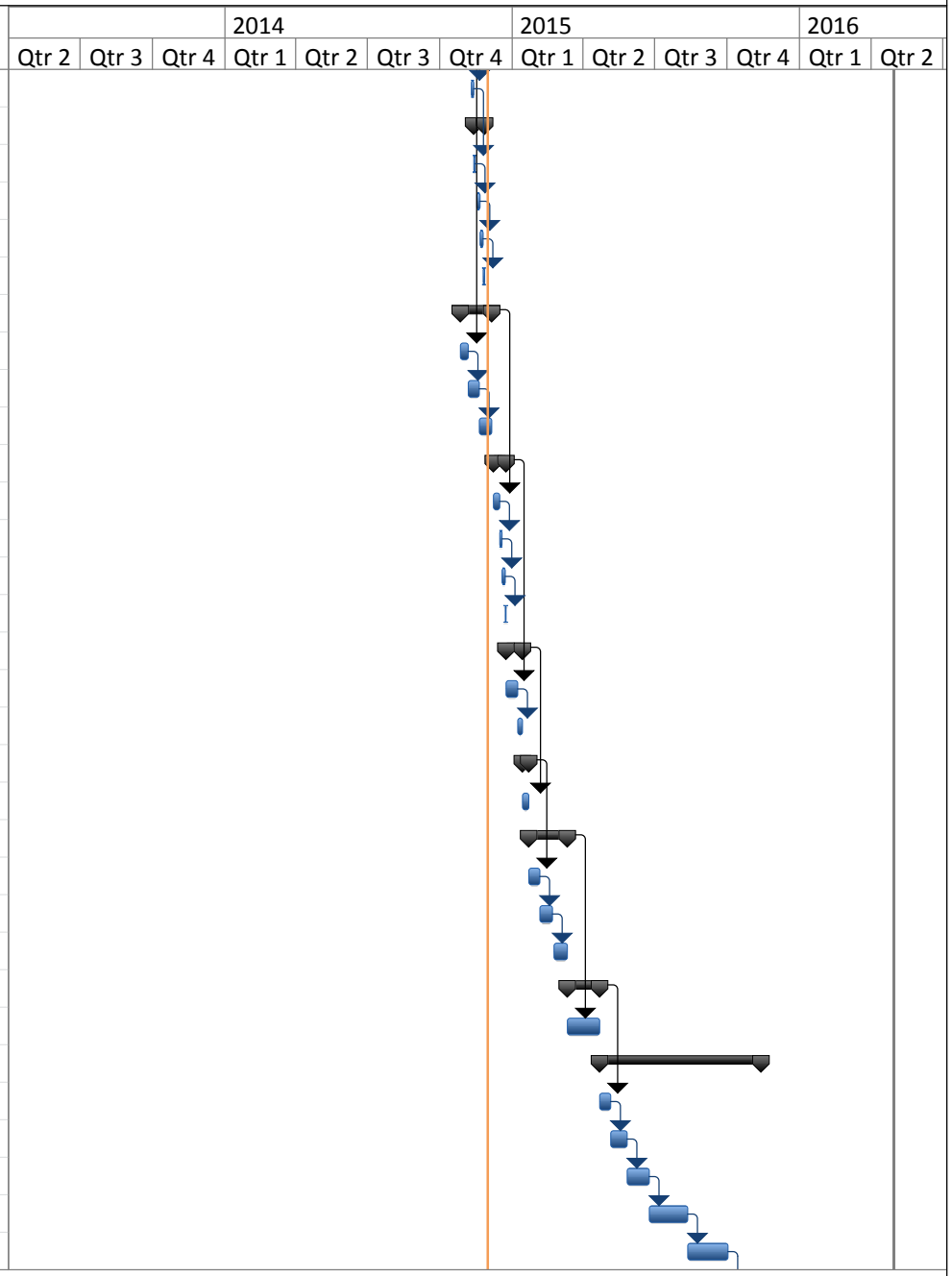
Greenwood Dismantlement

ID	Task Name	Duration
1	**Greenwood Dismantlement**	**674 days**
2	**Pre-Demolition Activities**	**265 days**
3	Detailed Planning & Hire Owner's Engineer	3 mons
4	Detailed Site Characterization Study	130 days
5	Hire Demolition general Contractor	3 mons
6	KCP&L Prepares Unit for Dismantlement	2 wks
7	Demolition Contractor Mobilizes on Site	5 days
8	**KCP&L Overhead during Dismantlement**	**379 days**
9	KCP&L Project Manager	379 days
10	KCP&L Administrative Support	379 days
11	KCP&L Engineer	379 days
12	Owners Engineer Project Manager	379 days
13	Owners Engineer - Engineer	379 days
14	**Demolition Contractor Overhead during Dismantlemer**	**379 days**
15	Demolition Contractor Project Manager	379 days
16	Demolition Contractor Safety Manager	379 days
17	Demolition Contractor Superintendent	379 days
18	**Demolition Contractor Equipment Rental Cost**	**379 days**
19	Equipment Rental	379 days
20	**Demolition Contractor Consumables**	**379 days**
21	Consumables	379 days
22	**Scrap Crews**	**379 days**
23	Crew to Handle Scrap Material(s)	379 days
24	**Dismantlement**	**379 days**
25	**Electrical**	**110 days**
26	Electrical Demolition of Equipment	110 days
27	**Fuel Gas System**	**14 days**
28	Remove all above grade fuel gas piping.	6 days
29	Gas Filter Skid	8 days
30	**Fueil Oil System**	**13 days**
31	Remove above grade fuel oil piping	7 days
32	Remove fuel oil forwarding equipment	3 days



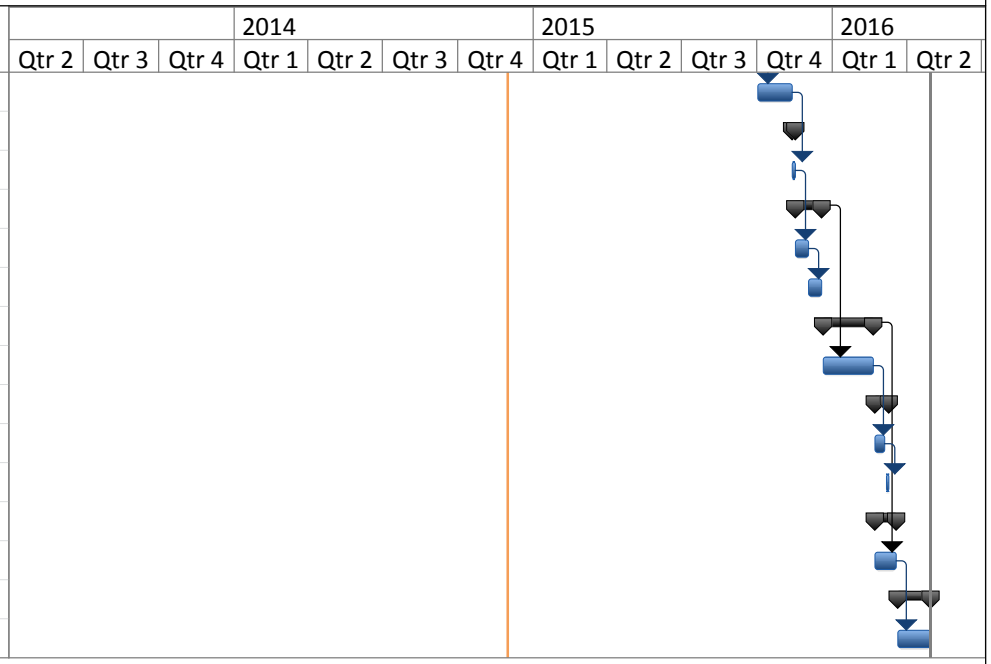
Greenwood Dismantlement

ID	Task Name	Duration
33	Remove fuel oil forwarding building	3 days
34	**Demineralizer**	**10 days**
35	Remove demineralizer vessels	2 days
36	Remove acid and caustic tanks	4 days
37	Remove hot water tank	2 days
38	Remove misc. demineralizer piping.	2 days
39	**Lube Oil System**	**30 days**
40	Lube Oil Piping	8 days
41	Lube Oil Pumps	10 days
42	Lube Oil Tanks	12 days
43	**Compressed Air System**	**12 days**
44	Compressed Air Piping	6 days
45	Compressors	3 days
46	Air Receiver	2 days
47	Dryer	1 day
48	**Fire Protection**	**15 days**
49	Fire Protection Piping	11 days
50	CO2 Storage Tank	4 days
51	**Wash Water Skid**	**6 days**
52	Detergent Tank	6 days
53	**Miscellaneous Piping**	**35 days**
54	Exhaust Frame Cooling Piping	10 days
55	CT Air Processing Piping	12 days
56	Inlet Air Heating Piping	13 days
57	**Generator**	**29 days**
58	Generators	29 days
59	**Combustion Turbine**	**147 days**
60	Inlet Heaters	10 days
61	Inlet ducts	15 days
62	Exhaust ducts	20 days
63	Combustion Turbines	35 days
64	Combustion Turbine Foundations	37 days



Greenwood Dismantlement

ID	Task Name	Duration
65	Enclosures	30 days
66	**Diesel Generator**	**2 days**
67	Remove diesel generator	2 days
68	**CEMS**	**24 days**
69	CEMS Building	12 days
70	CEMS Building Foundation	12 days
71	**Stack**	**45 days**
72	Stacks	45 days
73	**Buildings**	**13 days**
74	Remove Administration/Maintenance Building	10 days
75	Remove CT Buildings including gantry crane	3 days
76	**Site Prep**	**20 days**
77	Final Grading and Drainage	20 days
78	**Post Dismantlement Activities**	**30 days**
79	Post Dismantlement Activities	30 days



CROSSROADS

CROSSROADS STATION

The Crossroads Generating Station consists of four natural gas-fired combustion turbine generator sets.

Combined, these combustion turbines have an SPP-accredited unit rating of 276.8 MW. Crossroads was placed into service in 2002. Each unit is comprised of a GE Model MS7001EA combustion turbine with a generator step-up transformer and auxiliary power transformer.

The following are the major systems and equipment that were included in the retirement and dismantlement of the Crossroads Generating Station.

1. Combustion turbine generator sets and auxiliaries.
2. Generation step-up and auxiliary transformers.
3. Outdoor switchgear.
4. Exhaust stacks.
5. Maintenance building.
6. Natural gas filtering skid.
7. Service/Instrument air compressors.

Crossroads Retirement

Owner Costs			
Pre-Retirement Activities		$43,834	
Retirement Activities		$215,997	
Post-Retirement Activities		$45,162	
Owner Direct Total			$304,993
Owner Internal Costs	5.00%		$15,250
Owner Contingency:	25.00%		$80,061
Crossroads Retirement Opinion of Probable Cost:			$400,303.31

Crossroads Retirement

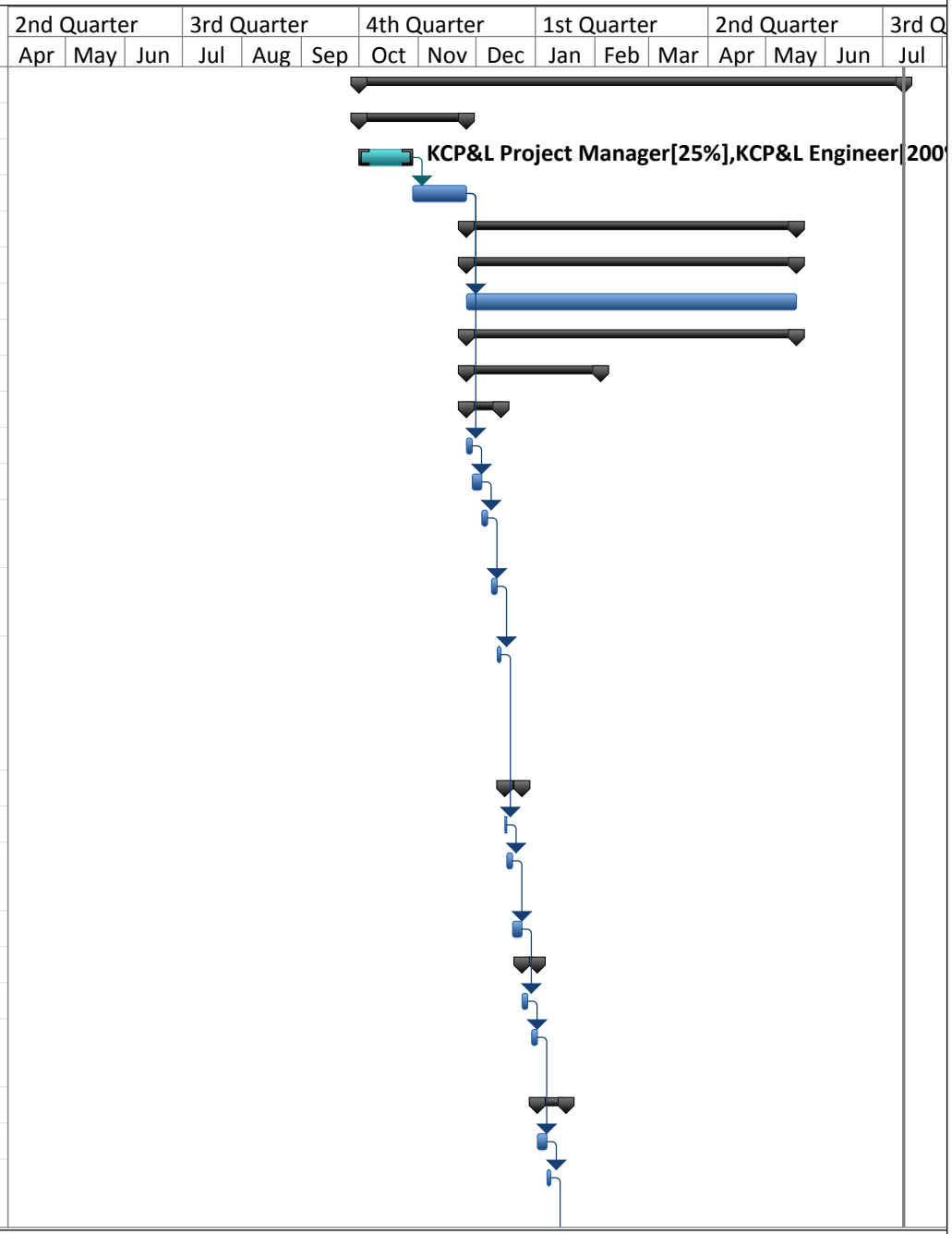
ID	Task Name	Cost
1	**Crossroads Retirement**	**$304,983.84**
2	**Pre-Retirement Activities**	**$43,834.00**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Retirement**	**$215,997.84**
6	**Project Management During Retirement**	**$99,450.48**
7	Project Management During Retirement	$99,450.48
8	**Retirement Activities**	**$116,547.36**
9	**Electrical**	**$44,664.00**
10	**Medium and Low Voltage Drawout Switchgear**	**$12,505.92**
11	De-energize all buses at the source.	$2,679.84
12	Open all circuit breakers.	$2,679.84
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$2,679.84
14	Verify that the closing/tripping springs are discharged.	$2,679.84
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$1,786.56
16	**Motor Control Centers**	**$6,252.96**
17	De-energize all buses at the source.	$893.28
18	Open all circuit breakers and disconnect switches.	$2,679.84
19	Remove all fuses in control circuits.	$2,679.84
20	**Low-voltage Switchboards and Panelboards**	**$5,359.68**
21	De-energize all buses at the source.	$2,679.84
22	Open all circuit breakers and disconnect switches.	$2,679.84
23	**Oil-Filled Power Transformers**	**$9,826.08**
24	De-energize all buses at the source.	$2,679.84
25	Open all circuit breakers and disconnect switches.	$1,786.56
26	De-energize all buses at the source.	$2,679.84
27	Open all circuit breakers and disconnect switches.	$2,679.84
28	**Dry-type Power Transformers**	**$4,466.40**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$2,679.84
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$1,786.56
31	**Motors**	**$6,252.96**
32	De-energize all primary power at the source.	$1,786.56
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,679.84
35	**Maintenance Building**	**$9,342.40**

Crossroads Retirement

ID	Task Name	Cost
36	Secure the Maintenance Building	$9,342.40
37	**Fuel Gas System**	**$10,783.04**
38	Isolate Fuel Gas System	$3,907.44
39	Vent Fuel Gas Piping and Equipment	$2,528.16
40	Open and Vent Knock-Out Drum	$861.84
41	Drain, Open and Vent the Drain Tank	$861.84
42	Empty the Coalescing Filter	$1,761.92
43	Open and Vent Equipment on the CT Gas Valve Module	$861.84
44	**Lube Oil Cooling Water System**	**$7,756.56**
45	Open and Drain the Water Side of the Lube Oil Coolers	$5,171.04
46	Open and Vent the Coolers and Expansion Tank	$2,585.52
47	**Oily Drain Tank**	**$3,954.00**
48	Open and Pump Out the Oily Drain Tank	$3,954.00
49	**Wash Water Skid**	**$5,171.04**
50	Open and Drain the Detergent Tank	$1,723.68
51	Open and Drain the Demineralized Water Tank	$1,723.68
52	Empty the Demineralized Water Tank	$1,723.68
53	**Compressed Air**	**$3,447.36**
54	Empty Dessiccant Air Dryers and Vent	$1,723.68
55	Open and Vent the Air Reciever	$1,723.68
56	**Miscelleaneous Piping**	**$10,342.08**
57	Open and Vent the Exhaust Frame Cooling Piping	$3,447.36
58	Open and Vent the CT Air Processing Piping	$0.00
59	Open and Vent the Inlet Air Heating Piping	$3,447.36
60	Open and Vent the CT Air Processing Piping	$3,447.36
61	**Fire Protection Piping**	**$6,856.48**
62	Empty the CO2 Storage Tank	$5,132.80
63	Open and Vent the Fire Protection Piping	$1,723.68
64	**Lube Oil System**	**$11,587.04**
65	Empty and Remove from Site the Lubricating Oil	$6,416.00
66	Drain Lubricating Oil Piping	$3,447.36
67	Open and Vent Lubricating Oil Piping	$1,723.68
68	**Potable Water**	**$2,643.36**
69	Disconnect Potable Water at Property Boundary	$2,643.36
70	**Post Retirement Closure Activity**	**$45,152.00**
71	Post Retirement Closure Activity	$45,152.00

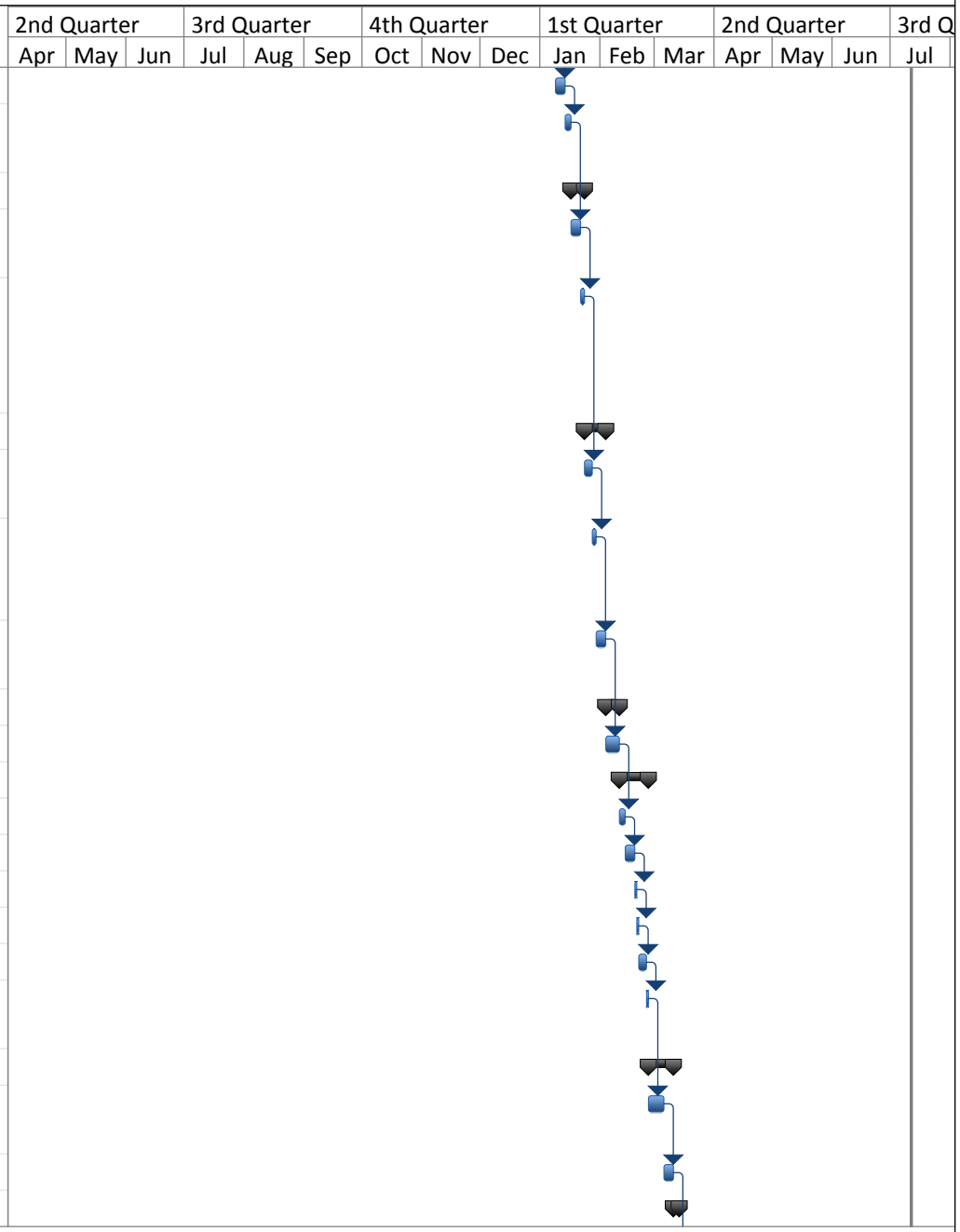
Crossroads Retirement

ID	Task Name	Duration
1	**Crossroads Retirement**	**204 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement**	**124 days**
6	**Project Management During Retirement**	**124 days**
7	Project Management During Retirement	124 days
8	**Retirement Activities**	**124 days**
9	**Electrical**	**50 days**
10	**Medium and Low Voltage Drawout Switchge**	**14 days**
11	De-energize all buses at the source.	3 days
12	Open all circuit breakers.	3 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	3 days
14	Verify that the closing/tripping springs are discharged.	3 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each	2 days
16	**Motor Control Centers**	**7 days**
17	De-energize all buses at the source.	1 day
18	Open all circuit breakers and disconnect switches.	3 days
19	Remove all fuses in control circuits.	3 days
20	**Low-voltage Switchboards and Panelboards**	**6 days**
21	De-energize all buses at the source.	3 days
22	Open all circuit breakers and disconnect switches.	3 days
23	**Oil-Filled Power Transformers**	**11 days**
24	De-energize all buses at the source.	3 days
25	Open all circuit breakers and disconnect switches.	2 days



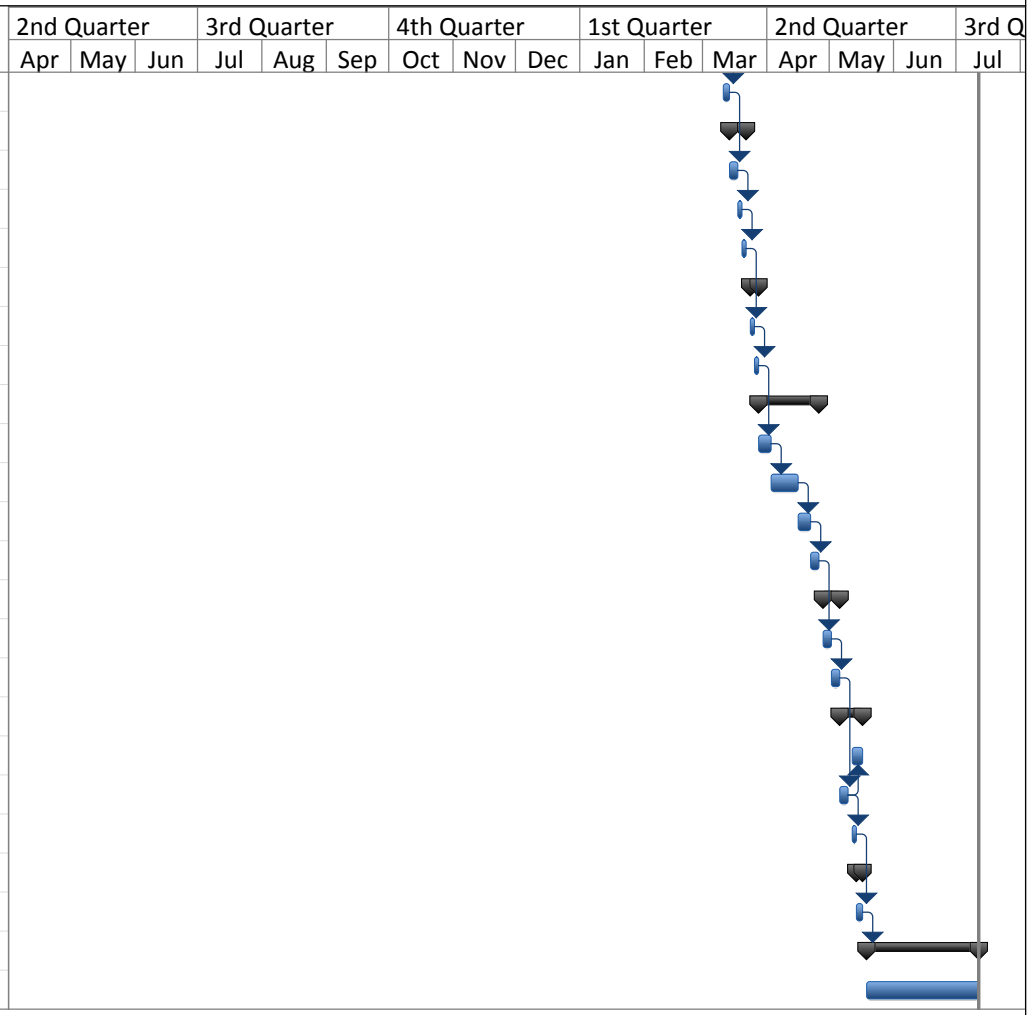
Crossroads Retirement

ID	Task Name	Duration
26	De-energize all buses at the source.	3 days
27	Open all circuit breakers and disconnect switches.	3 days
28	**Dry-type Power Transformers**	**5 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	3 days
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses	2 days
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Maintenance Building**	**5 days**
36	Secure the Maintenance Building	5 days
37	**Fuel Gas System**	**11 days**
38	Isolate Fuel Gas System	3 days
39	Vent Fuel Gas Piping and Equipment	3 days
40	Open and Vent Knock-Out Drum	1 day
41	Drain, Open and Vent the Drain Tank	1 day
42	Empty the Coalescing Filter	2 days
43	Open and Vent Equipment on the CT Gas Valve Module	1 day
44	**Lube Oil Cooling Water System**	**9 days**
45	Open and Drain the Water Side of the Lube Oil Coolers	6 days
46	Open and Vent the Coolers and Expansion Tai	3 days
47	**Oily Drain Tank**	**3 days**



Crossroads Retirement

ID	Task Name	Duration
48	Open and Pump Out the Oily Drain Tank	3 days
49	**Wash Water Skid**	**6 days**
50	Open and Drain the Detergent Tank	2 days
51	Open and Drain the Demineralized Water Tar	2 days
52	Empty the Demineralized Water Tank	2 days
53	**Compressed Air**	**4 days**
54	Empty Dessiccant Air Dryers and Vent	2 days
55	Open and Vent the Air Reciever	2 days
56	**Miscelleaneous Piping**	**21 days**
57	Open and Vent the Exhaust Frame Cooling Pi	4 days
58	Open and Vent the CT Air Processing Piping	9 days
59	Open and Vent the Inlet Air Heating Piping	4 days
60	Open and Vent the CT Air Processing Piping	4 days
61	**Fire Protection Piping**	**6 days**
62	Empty the CO2 Storage Tank	4 days
63	Open and Vent the Fire Protection Piping	2 days
64	**Lube Oil System**	**9 days**
65	Empty and Remove from Site the Lubricating	5 days
66	Drain Lubricating Oil Piping	4 days
67	Open and Vent Lubricating Oil Piping	2 days
68	**Potable Water**	**3 days**
69	Disconnect Potable Water at Property Bound	3 days
70	**Post Retirement Closure Activity**	**40 days**
71	Post Retirement Closure Activity	40 days



Crossroads Dismantlement

Owner Costs					
	Pre-Dismantlement Activities			$887,360	
	Overhead During Dismantlement			$1,551,849	
	Post-Dismantlement Activities			$49,140	
		Owner Costs Total*			$2,488,349
Demolition General Contractor (DGC) Costs					
	Site Management			$845,925	
	Equipment Rental			$1,440,377	
	Consummables			$1,437,034	
	Scrap Crew(s)			$378,322	
	Dismantlement			$982,145	
		Contractor Direct Cost*	$5,083,803		
	Contractor Allowances				
	DGC Insurance	2.00%		$101,676	
	Contingency/Profit	15.00%		$777,822	
	Performance Bond	2.00%		$119,266.02	
		Contractor Costs Total:			$6,082,567
Total:					$8,570,916
Owner Internal Costs:		5.00%			$428,546
Owner Contingency:		25.00%			$2,249,865
Crossroads Dismantlement Opinion of Probable Cost:					$11,249,327

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $7,572,152

Crossroads Dismantlement

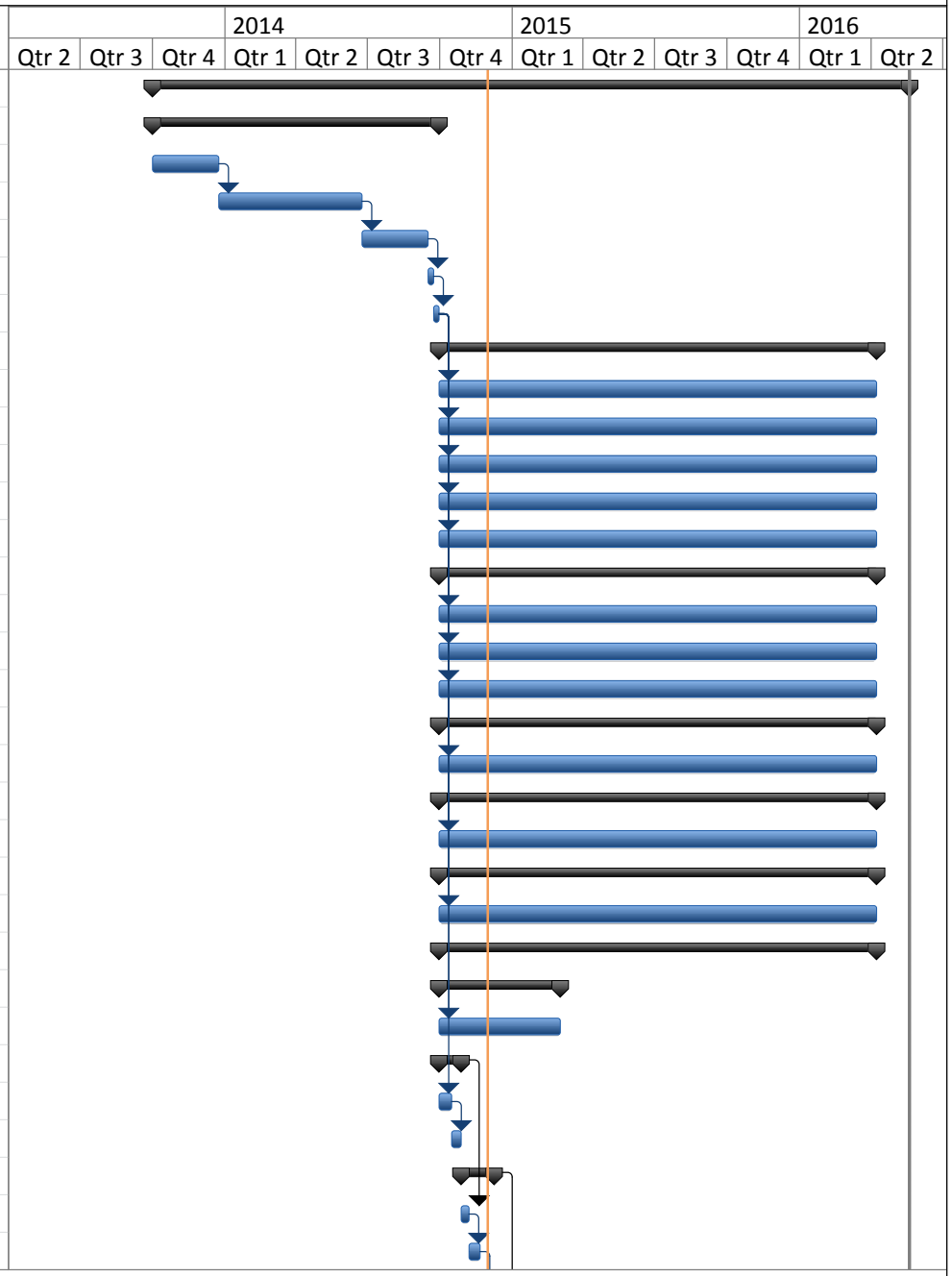
ID	Task Name	Cost
1	**Crossroads Dismantlement**	**$7,572,156.16**
2	**Pre-Demolition Activities**	**$887,360.52**
3	Detailed Planning & Hire Owner's Engineer	$104,441.28
4	Detailed Site Characterization Study	$610,335.44
5	Hire Demolition general Contractor	$167,184.00
6	KCP&L Prepares Unit for Dismantlement	$5,399.80
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,551,849.76**
9	KCP&L Project Manager	$246,600.80
10	KCP&L Administrative Support	$91,189.76
11	KCP&L Engineer	$405,323.20
12	Owners Engineer Project Manager	$120,992.00
13	Owners Engineer - Engineer	$687,744.00
14	**Demolition Contractor Overhead during Dismantlement**	**$845,925.12**
15	Demolition Contractor Project Manager	$239,341.28
16	Demolition Contractor Safety Manager	$213,105.12
17	Demolition Contractor Superintendent	$393,478.72
18	**Demolition Contractor Equipment Rental Cost**	**$1,440,377.92**
19	Equipment Rental	$1,440,377.92
20	**Demolition Contractor Consumables**	**$1,437,034.72**
21	Consumables	$1,437,034.72
22	**Scrap Crews**	**$378,322.88**
23	Crew to Handle Scrap Material(s)	$378,322.88
24	**Dismantlement**	**$982,145.24**
25	**Electrical**	**$197,049.60**
26	Electrical Demolition of Equipment	$197,049.60
27	**Fuel Gas System**	**$21,113.20**
28	Remove all above grade fuel gas piping.	$6,782.32
29	Gas Filter Skid	$14,330.88
30	**Lube Oil System**	**$53,740.80**
31	Lube Oil Piping	$14,330.88
32	Lube Oil Pumps	$17,913.60
33	Lube Oil Tanks	$21,496.32
34	**Compressed Air System**	**$21,496.32**
35	Compressed Air Piping	$10,748.16
36	Compressors	$5,374.08
37	Air Receiver	$3,582.72
38	Dryer	$1,791.36
39	**Fire Protection**	**$26,870.40**
40	Fire Protection Piping	$19,704.96
41	CO2 Storage Tank	$7,165.44
42	**Wash Water Skid**	**$10,748.16**
43	Detergent Tank	$10,748.16
44	**Miscellaneous Piping**	**$62,697.60**

Crossroads Dismantlement

ID	Task Name	Cost
45	Exhaust Frame Cooling Piping	$17,913.60
46	CT Air Processing Piping	$21,496.32
47	Inlet Air Heating Piping	$23,287.68
48	**Generator**	**$0.00**
49	Generators	$0.00
50	**Combustion Turbine**	**$263,329.92**
51	Inlet Heaters	$17,913.60
52	Inlet ducts	$26,870.40
53	Exhaust ducts	$35,827.20
54	Combustion Turbines	$62,697.60
55	Combustion Turbine Foundations	$66,280.32
56	Enclosures	$53,740.80
57	**CEMS**	**$42,992.64**
58	CEMS Building	$21,496.32
59	CEMS Building Foundation	$21,496.32
60	**Stack**	**$80,611.20**
61	Stacks	$80,611.20
62	**Buildings**	**$17,913.60**
63	Remove Maintenance Building	$17,913.60
64	**Waste Water Tank**	**$8,956.80**
65	Remove Waste Water Tank	$8,956.80
66	**Site Prep**	**$174,625.00**
67	Final Grading and Drainage	$174,625.00
68	**Post Dismantlement Activities**	**$49,140.00**
69	Post Dismantlement Activities	$49,140.00

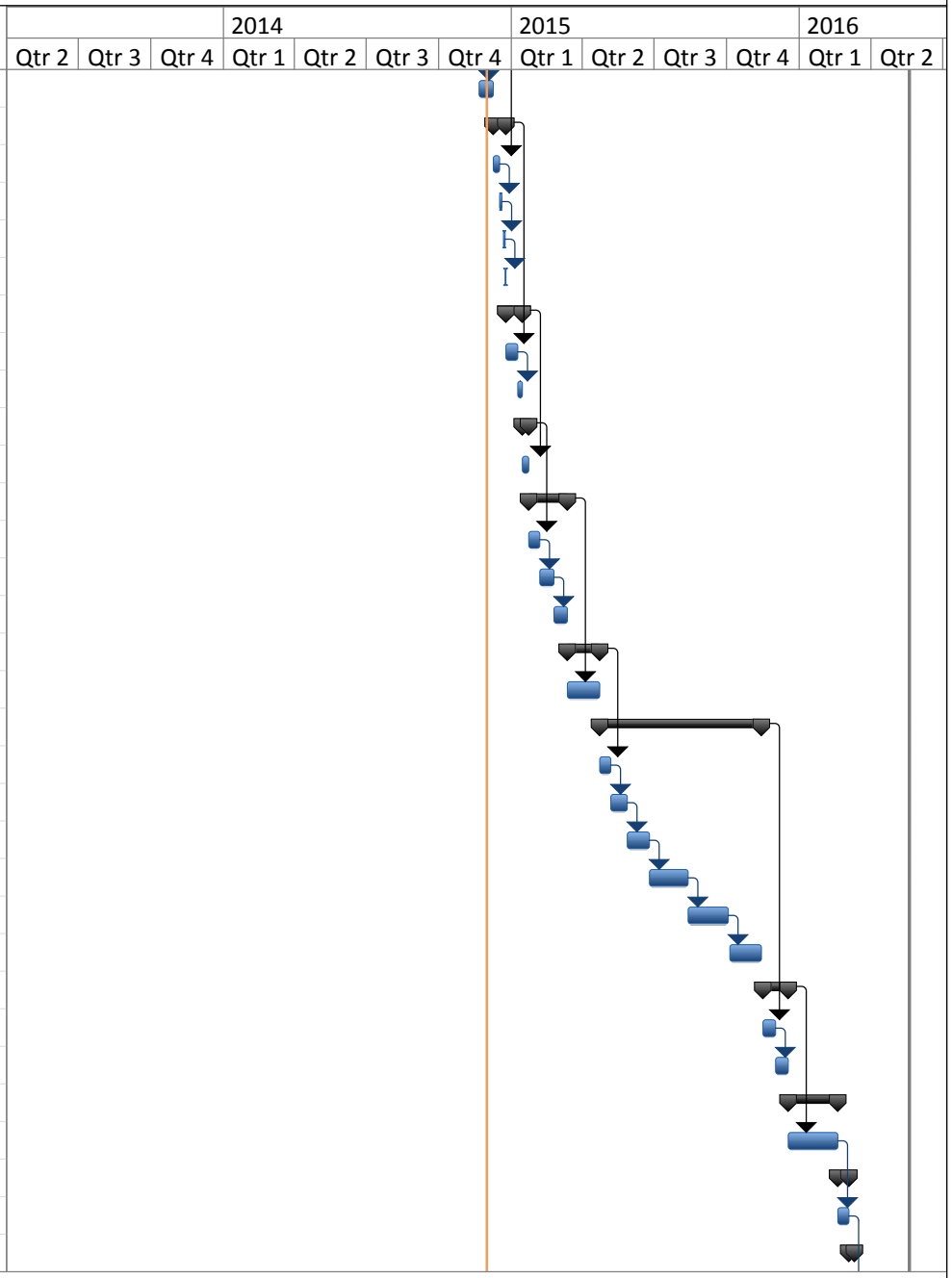
Crossroads Dismantlement

ID	Task Name	Duration
1	**Crossroads Dismantlement**	**688 days**
2	**Pre-Demolition Activities**	**260 days**
3	Detailed Planning & Hire Owner's Engineer	3 mons
4	Detailed Site Characterization Study	130 days
5	Hire Demolition general Contractor	3 mons
6	KCP&L Prepares Unit for Dismantlement	1 wk
7	Demolition Contractor Mobilizes on Site	5 days
8	**KCP&L Overhead during Dismantlement**	**398 days**
9	KCP&L Project Manager	398 days
10	KCP&L Administrative Support	398 days
11	KCP&L Engineer	398 days
12	Owners Engineer Project Manager	398 days
13	Owners Engineer - Engineer	398 days
14	**Demolition Contractor Overhead during Dismantlemen**	**398 days**
15	Demolition Contractor Project Manager	398 days
16	Demolition Contractor Safety Manager	398 days
17	Demolition Contractor Superintendent	398 days
18	**Demolition Contractor Equipment Rental Cost**	**398 days**
19	Equipment Rental	398 days
20	**Demolition Contractor Consumables**	**398 days**
21	Consumables	398 days
22	**Scrap Crews**	**398 days**
23	Crew to Handle Scrap Material(s)	398 days
24	**Dismantlement**	**398 days**
25	**Electrical**	**110 days**
26	Electrical Demolition of Equipment	110 days
27	**Fuel Gas System**	**20 days**
28	Remove all above grade fuel gas piping.	12 days
29	Gas Filter Skid	8 days
30	**Lube Oil System**	**30 days**
31	Lube Oil Piping	8 days
32	Lube Oil Pumps	10 days



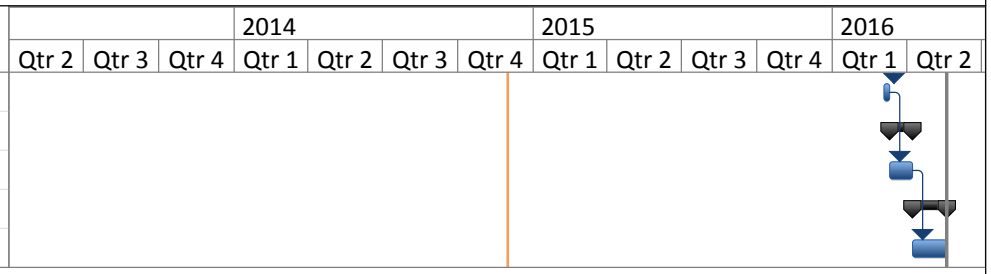
Crossroads Dismantlement

ID	Task Name	Duration
33	Lube Oil Tanks	12 days
34	**Compressed Air System**	**12 days**
35	Compressed Air Piping	6 days
36	Compressors	3 days
37	Air Receiver	2 days
38	Dryer	1 day
39	**Fire Protection**	**15 days**
40	Fire Protection Piping	11 days
41	CO2 Storage Tank	4 days
42	**Wash Water Skid**	**6 days**
43	Detergent Tank	6 days
44	**Miscellaneous Piping**	**35 days**
45	Exhaust Frame Cooling Piping	10 days
46	CT Air Processing Piping	12 days
47	Inlet Air Heating Piping	13 days
48	**Generator**	**29 days**
49	Generators	29 days
50	**Combustion Turbine**	**147 days**
51	Inlet Heaters	10 days
52	Inlet ducts	15 days
53	Exhaust ducts	20 days
54	Combustion Turbines	35 days
55	Combustion Turbine Foundations	37 days
56	Enclosures	30 days
57	**CEMS**	**24 days**
58	CEMS Building	12 days
59	CEMS Building Foundation	12 days
60	**Stack**	**45 days**
61	Stacks	45 days
62	**Buildings**	**10 days**
63	Remove Maintenance Building	10 days
64	**Waste Water Tank**	**5 days**



Crossroads Dismantlement

ID	Task Name	Duration
65	Remove Waste Water Tank	5 days
66	**Site Prep**	**20 days**
67	Final Grading and Drainage	20 days
68	**Post Dismantlement Activities**	**30 days**
69	Post Dismantlement Activities	30 days



KCI

KCI STATION

The KCI Generating Station consists of two natural gas-fired combustion turbine generator sets.

Combined, these combustion turbines have an SPP-accredited unit rating of 0 MW. KCI was placed into service in 1971. Each unit is comprised of a Pratt & Whitney GG4A-7 combustion turbine with a generator step-up transformer and auxiliary power transformer.

The following are the major systems and equipment that were included in the retirement and dismantlement of the KCI Generating Station.

1. Combustion turbine generator sets and auxiliaries.
2. Generation step-up and auxiliary transformers.
3. Outdoor switchgear.
4. Exhaust stacks.
5. Control Room/Maintenance building.
6. Gas compressor building and equipment.
7. Black-start generator.
8. Service/Instrument air compressors.
9. Glycol cooling towers.
10. Fire protection systems.

KCI Retirement

Owner Costs			
Pre-Retirement Activities		$43,834	
Retirement Activities		$112,691	
Post-Retirement Activities		$16,932	
Owner Direct Total			$173,457
Owner Internal Costs	5.00%		$8,673
Owner Contingency:	25.00%		$45,532
KCI Retirement Opinion of Probable Cost:			$227,662.31

KCI Retirement

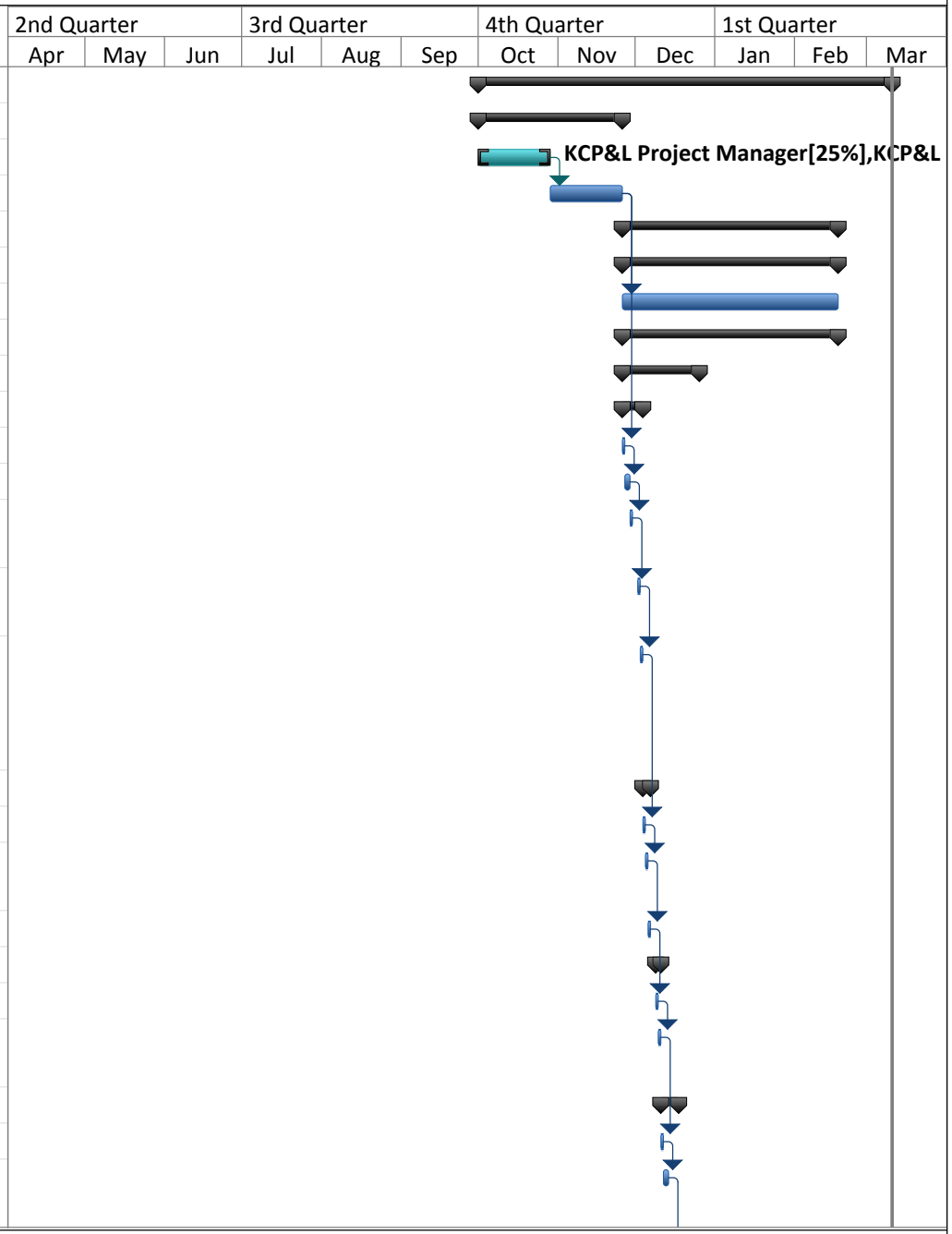
ID	Task Name	Cost
1	**KCI Retirement**	**$173,457.84**
2	**Pre-Retirement Activities**	**$43,834.00**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Retirement**	**$112,691.84**
6	**Project Management During Retirement**	**$48,121.20**
7	Project Management During Retirement	$48,121.20
8	**Retirement Activities**	**$64,570.64**
9	**Electrical**	**$19,652.16**
10	**Medium and Low Voltage Drawout Switchgear**	**$5,359.68**
11	De-energize all buses at the source.	$893.28
12	Open all circuit breakers.	$1,786.56
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$893.28
14	Verify that the closing/tripping springs are discharged.	$893.28
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$2,679.84**
17	De-energize all buses at the source.	$893.28
18	Open all circuit breakers and disconnect switches.	$893.28
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$1,786.56**
21	De-energize all buses at the source.	$893.28
22	Open all circuit breakers and disconnect switches.	$893.28
23	**Oil-Filled Power Transformers**	**$4,466.40**
24	De-energize all buses at the source.	$893.28
25	Open all circuit breakers and disconnect switches.	$1,786.56
26	De-energize all buses at the source.	$893.28
27	Open all circuit breakers and disconnect switches.	$893.28
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
31	**Motors**	**$3,573.12**
32	De-energize all primary power at the source.	$893.28
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$893.28
34	Drain lube oil system (if applicable) and dispose of oil.	$1,786.56
35	**Enclosure Building**	**$3,736.96**

KCI Retirement

ID	Task Name	Cost
36	Secure the Enclosure Building	$3,736.96
37	**Gas Compressor Building**	**$1,868.48**
38	Secure the Gas Compressor Building	$1,868.48
39	**Shop Building**	**$3,736.96**
40	Secure the Shop Building	$3,736.96
41	**Cooling Towers**	**$5,209.92**
42	Drain Cooling Tower	$3,907.44
43	Drain Cooling Tower Chemical Storage Tanks	$1,302.48
44	**Fuel Gas System**	**$5,612.00**
45	Isolate Fuel Gas System	$3,907.44
46	Vent Fuel Gas Piping and Equipment	$842.72
47	Open and Vent Equipment on the CT Gas Valve Module	$861.84
48	**Lube Oil Cooling Water System**	**$2,585.52**
49	Open and Drain the Glycol Side of the Lube Oil Coolers	$1,723.68
50	Open and Vent the Coolers and Expansion Tank	$861.84
51	**Sump**	**$3,954.00**
52	Open and Pump Out the Sump	$3,954.00
53	**Miscelleaneous Piping**	**$2,585.52**
54	Open and Vent Miscellaneous Piping	$2,585.52
55	**Fire Protection Piping**	**$3,428.24**
56	Empty the CO2 Storage Tank	$2,566.40
57	Open and Vent the Fire Protection Piping	$861.84
58	**Lube Oil System**	**$5,151.92**
59	Empty and Remove from Site the Lubricating Oil	$2,566.40
60	Drain Lubricating Oil Piping	$1,723.68
61	Open and Vent Lubricating Oil Piping	$861.84
62	**Service Piping**	**$5,286.72**
63	Disconnect Potable Water at Property Boundary	$2,643.36
64	Disconnect Compressed Air at Property Boundary	$2,643.36
65	**Black Start Engine**	**$1,762.24**
66	Vent Fuel Gas Piping to Black Start Enginer	$881.12
67	**Post Retirement Closure Activity**	**$16,932.00**
68	Post Retirement Closure Activity	$16,932.00

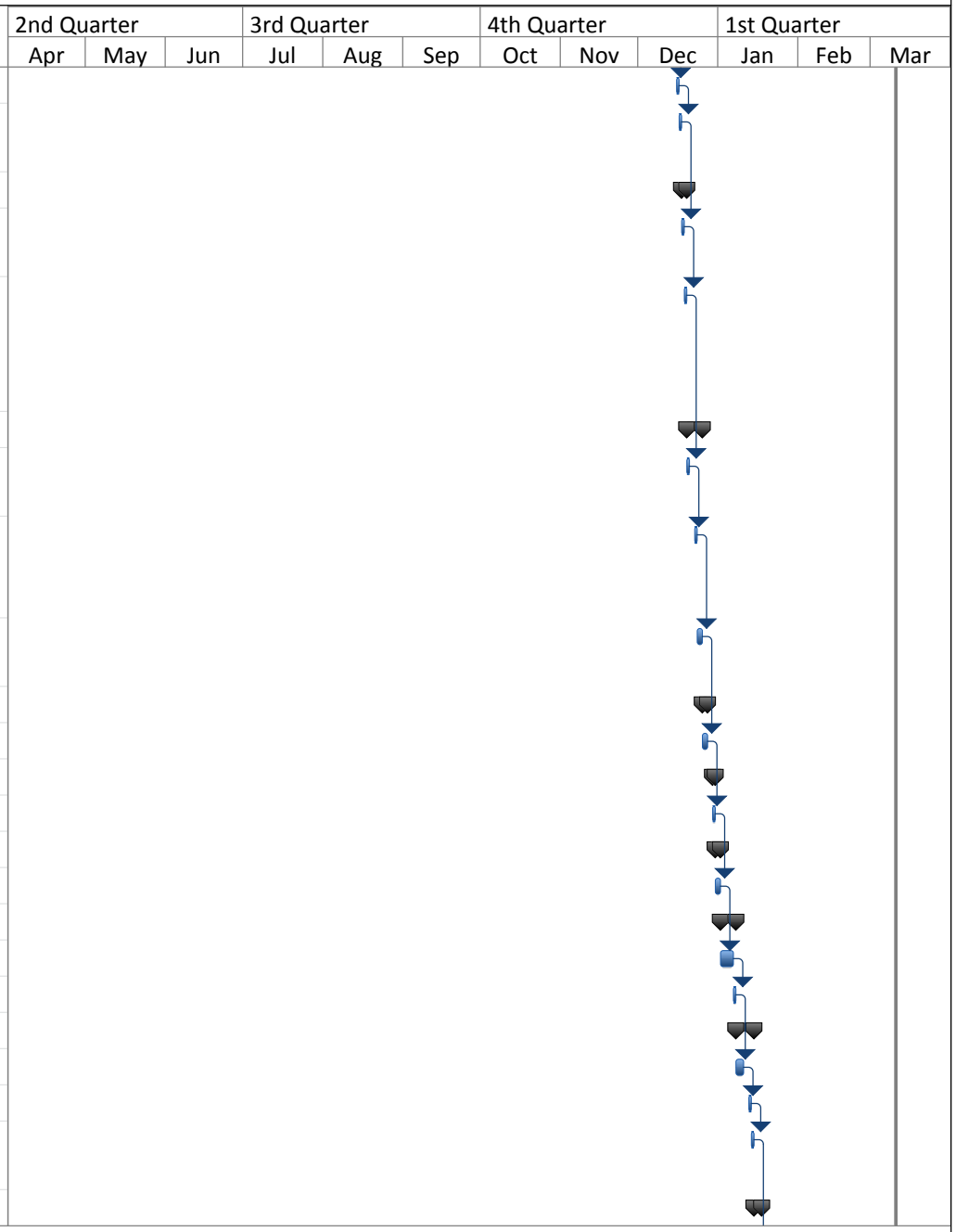
KCI Retirement

ID	Task Name	Duration
1	**KCI Retirement**	**115 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement**	**60 days**
6	**Project Management During Retirement**	**60 days**
7	Project Management During Retirement	60 days
8	**Retirement Activities**	**60 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Drawout Switchge**	**6 days**
11	De-energize all buses at the source.	1 day
12	Open all circuit breakers.	2 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	1 day
14	Verify that the closing/tripping springs are discharged.	1 day
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each	1 day
16	**Motor Control Centers**	**3 days**
17	De-energize all buses at the source.	1 day
18	Open all circuit breakers and disconnect switches.	1 day
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**2 days**
21	De-energize all buses at the source.	1 day
22	Open all circuit breakers and disconnect switches.	1 day
23	**Oil-Filled Power Transformers**	**5 days**
24	De-energize all buses at the source.	1 day
25	Open all circuit breakers and disconnect switches.	2 days



KCI Retirement

ID	Task Name	Duration
26	De-energize all buses at the source.	1 day
27	Open all circuit breakers and disconnect switches.	1 day
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses	1 day
31	**Motors**	**4 days**
32	De-energize all primary power at the source.	1 day
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	1 day
34	Drain lube oil system (if applicable) and dispose of oil.	2 days
35	**Enclosure Building**	**2 days**
36	Secure the Enclosure Building	2 days
37	**Gas Compressor Building**	**1 day**
38	Secure the Gas Compressor Building	1 day
39	**Shop Building**	**2 days**
40	Secure the Shop Building	2 days
41	**Cooling Towers**	**4 days**
42	Drain Cooling Tower	3 days
43	Drain Cooling Tower Chemical Storage Tanks	1 day
44	**Fuel Gas System**	**5 days**
45	Isolate Fuel Gas System	3 days
46	Vent Fuel Gas Piping and Equipment	1 day
47	Open and Vent Equipment on the CT Gas Valve Module	1 day
48	**Lube Oil Cooling Water System**	**3 days**



KCI Retirement

ID	Task Name	Duration
49	Open and Drain the Glycol Side of the Lube Oil Coolers	2 days
50	Open and Vent the Coolers and Expansion Tar	1 day
51	**Sump**	**3 days**
52	Open and Pump Out the Sump	3 days
53	**Miscelleaneous Piping**	**3 days**
54	Open and Vent Miscellaneous Piping	3 days
55	**Fire Protection Piping**	**3 days**
56	Empty the CO2 Storage Tank	2 days
57	Open and Vent the Fire Protection Piping	1 day
58	**Lube Oil System**	**5 days**
59	Empty and Remove from Site the Lubricating	2 days
60	Drain Lubricating Oil Piping	2 days
61	Open and Vent Lubricating Oil Piping	1 day
62	**Service Piping**	**6 days**
63	Disconnect Potable Water at Property Bound	3 days
64	Disconnect Compressed Air at Property Boun	3 days
65	**Black Start Engine**	**1 day**
66	Vent Fuel Gas Piping to Black Start Enginer	1 day
67	**Post Retirement Closure Activity**	**15 days**
68	Post Retirement Closure Activity	15 days

KCI Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$473,576	
Overhead During Dismantlement			$279,378	
Post-Dismantlement Activities			$32,760	
Owner Costs Total*				$785,714
Demolition General Contractor (DGC) Costs				
Site Management			$176,411	
Equipment Rental			$300,380	
Consummables			$299,683	
Scrap Crew(s)			$78,896	
Dismantlement			$263,996	
Contractor Direct Cost*		$1,119,366		
Contractor Allowances				
DGC Insurance	2.00%		$22,387	
Contingency/Profit	15.00%		$171,263	
Performance Bond	2.00%		$26,260.33	
Contractor Costs Total:				$1,339,277
Total:				$2,124,991
Owner Internal Costs:	5.00%			$106,250
Owner Contingency:	25.00%			$557,810
KCI Dismantlement Opinion of Probable Cost:				$2,789,050

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $1,905,080

KCI Dismantlement

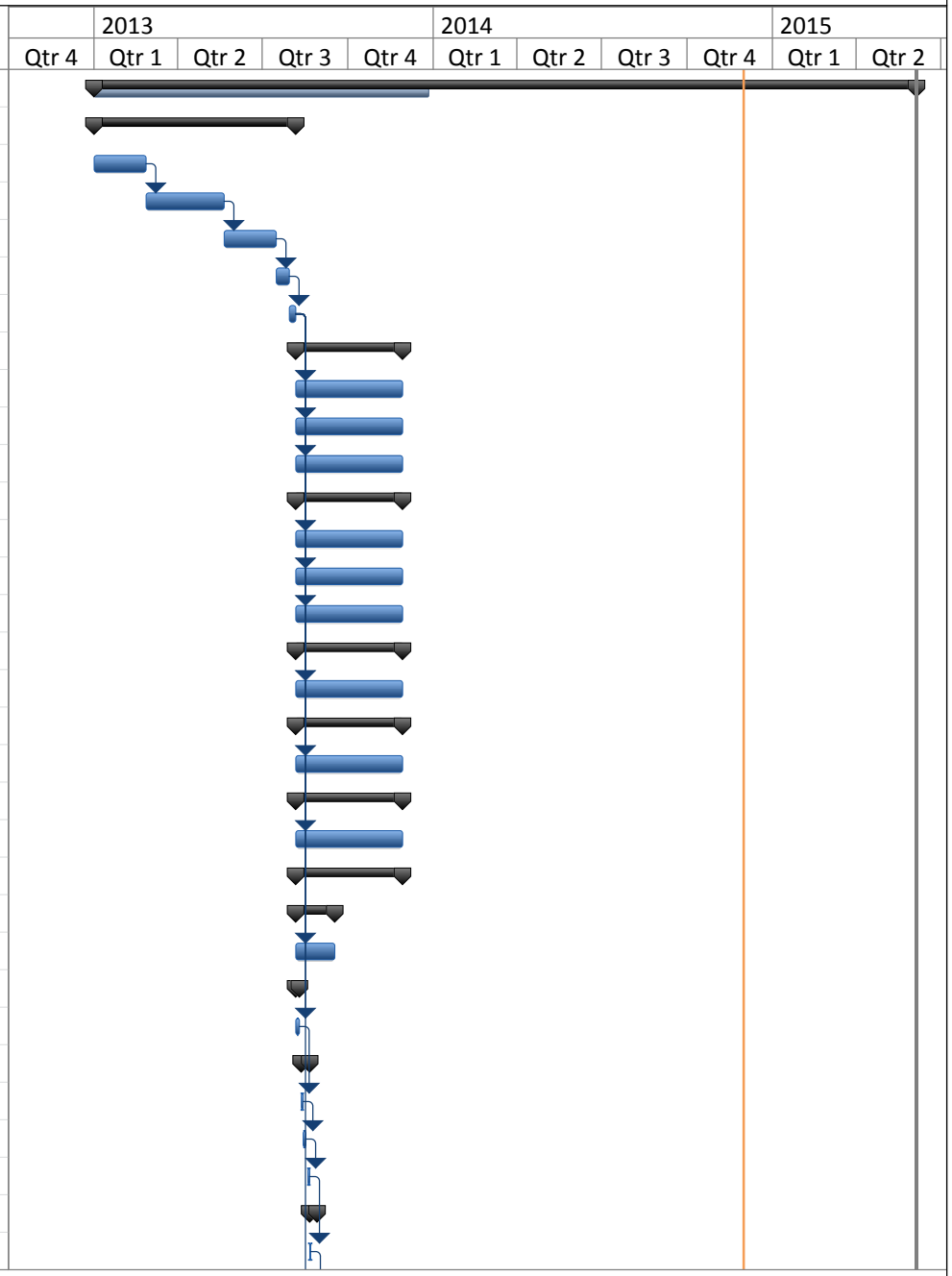
ID	Task Name	Cost
1	**KCI Dismantlement**	**$1,905,082.52**
2	**Pre-Demolition Activities**	**$473,576.40**
3	Detailed Planning & Hire Owner's Engineer	$69,627.52
4	Detailed Site Characterization Study	$281,693.28
5	Hire Demolition general Contractor	$111,456.00
6	KCP&L Prepares Unit for Dismantlement	$10,799.60
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$279,378.00**
9	KCP&L Project Manager	$51,426.80
10	KCP&L Engineer	$84,527.20
11	Owners Engineer - Engineer	$143,424.00
12	**Demolition Contractor Overhead during Dismantlement**	**$176,411.52**
13	Demolition Contractor Project Manager	$49,912.88
14	Demolition Contractor Safety Manager	$44,441.52
15	Demolition Contractor Superintendent	$82,057.12
16	**Demolition Contractor Equipment Rental Cost**	**$300,380.32**
17	Equipment Rental	$300,380.32
18	**Demolition Contractor Consumables**	**$299,683.12**
19	Consumables	$299,683.12
20	**Scrap Crews**	**$78,896.48**
21	Crew to Handle Scrap Material(s)	$78,896.48
22	**Dismantlement**	**$263,996.68**
23	**Electrical**	**$53,740.80**
24	Electrical Demolition of Equipment	$53,740.80
25	**Shop Building**	**$7,165.44**
26	Remove the Shop Building	$7,165.44
27	**Fuel Gas System**	**$10,437.52**
28	Remove all above grade fuel gas piping.	$1,480.72
29	Remove Gas Compressor Equipment	$5,374.08
30	Remove Gas Compressor Building	$3,582.72
31	**Lube Oil System**	**$10,748.16**
32	Lube Oil Piping	$1,791.36
33	Lube Oil Pumps	$3,582.72
34	Lube Oil Tanks	$5,374.08
35	**Compressed Air System**	**$1,791.36**
36	Remove Above Ground Compressed Air Piping	$1,791.36
37	**Fire Protection**	**$10,748.16**
38	Fire Protection Piping	$3,582.72
39	CO2 Storage Tank	$7,165.44
40	**Miscellaneous Piping**	**$10,748.16**
41	Remove Miscellaneous Piping	$8,956.80
42	Remove Above Ground Service Water Piping	$1,791.36
43	**Generator**	**$17,913.60**
44	Generators	$17,913.60

KCI Dismantlement

ID	Task Name	Cost
45	**Combustion Turbine**	**$62,697.60**
46	Inlet ducts	$7,165.44
47	Exhaust ducts	$7,165.44
48	Combustion Turbines	$17,913.60
49	Combustion Turbine Foundation	$21,496.32
50	Combustion Turbine Enclosure Building	$8,956.80
51	**Cooling Towers**	**$10,748.16**
52	Remove Cooling Towers	$10,748.16
53	**Stack**	**$3,582.72**
54	Stacks	$3,582.72
55	**Site Prep**	**$63,675.00**
56	Final Grading and Drainage	$63,675.00
57	**Post Dismantlement Activities**	**$32,760.00**
58	Post Dismantlement Activities	$32,760.00

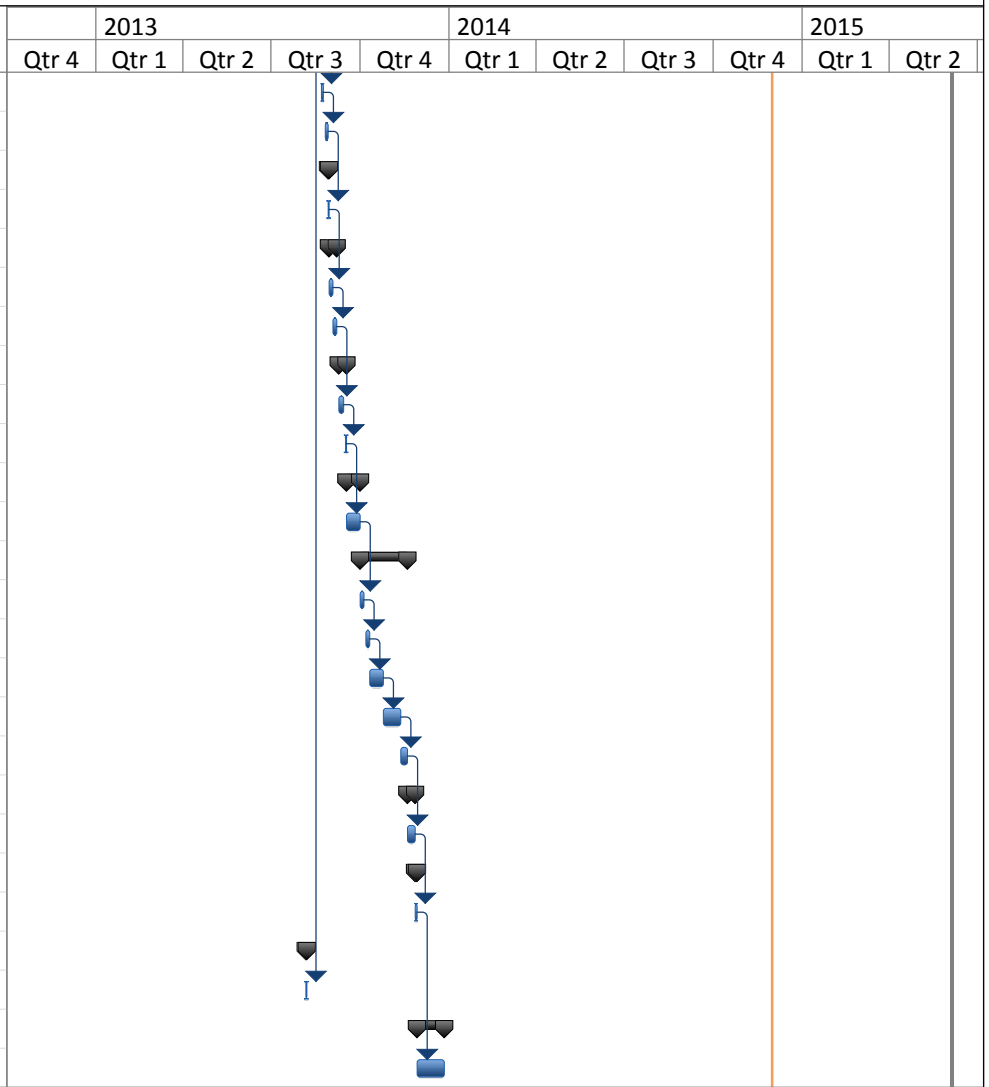
KCI Dismantlement

ID	Task Name	Duration
1	**KCI Dismantlement**	**633 days**
2	**Pre-Demolition Activities**	**155 days**
3	Detailed Planning & Hire Owner's Engineer	2 mons
4	Detailed Site Characterization Study	60 days
5	Hire Demolition general Contractor	2 mons
6	KCP&L Prepares Unit for Dismantlement	2 wks
7	Demolition Contractor Mobilizes on Site	5 days
8	**KCP&L Overhead during Dismantlement**	**83 days**
9	KCP&L Project Manager	83 days
10	KCP&L Engineer	83 days
11	Owners Engineer - Engineer	83 days
12	**Demolition Contractor Overhead during Dismantlemer**	**83 days**
13	Demolition Contractor Project Manager	83 days
14	Demolition Contractor Safety Manager	83 days
15	Demolition Contractor Superintendent	83 days
16	**Demolition Contractor Equipment Rental Cost**	**83 days**
17	Equipment Rental	83 days
18	**Demolition Contractor Consumables**	**83 days**
19	Consumables	83 days
20	**Scrap Crews**	**83 days**
21	Crew to Handle Scrap Material(s)	83 days
22	**Dismantlement**	**83 days**
23	**Electrical**	**30 days**
24	Electrical Demolition of Equipment	30 days
25	**Shop Building**	**4 days**
26	Remove the Shop Building	4 days
27	**Fuel Gas System**	**7 days**
28	Remove all above grade fuel gas piping.	2 days
29	Remove Gas Compressor Equipment	3 days
30	Remove Gas Compressor Building	2 days
31	**Lube Oil System**	**6 days**
32	Lube Oil Piping	1 day



KCI Dismantlement

ID	Task Name	Duration
33	Lube Oil Pumps	2 days
34	Lube Oil Tanks	3 days
35	**Compressed Air System**	**1 day**
36	Remove Above Ground Compressed Air Piping	1 day
37	**Fire Protection**	**6 days**
38	Fire Protection Piping	2 days
39	CO2 Storage Tank	4 days
40	**Miscellaneous Piping**	**6 days**
41	Remove Miscellaneous Piping	5 days
42	Remove Above Ground Service Water Piping	1 day
43	**Generator**	**10 days**
44	Generators	10 days
45	**Combustion Turbine**	**35 days**
46	Inlet ducts	4 days
47	Exhaust ducts	4 days
48	Combustion Turbines	10 days
49	Combustion Turbine Foundation	12 days
50	Combustion Turbine Enclosure Building	5 days
51	**Cooling Towers**	**6 days**
52	Remove Cooling Towers	6 days
53	**Stack**	**2 days**
54	Stacks	2 days
55	**Site Prep**	**1 day**
56	Final Grading and Drainage	1 day
57	**Post Dismantlement Activities**	**20 days**
58	Post Dismantlement Activities	20 days



NEVADA UNIT 1

NEVADA STATION

The Nevada Generating Station consists of a single distillate-fired combustion turbine generator set.

Nevada has an SPP-accredited unit rating of 20.8 MW. Nevada was placed into service in 1974. The unit is comprised of a GE Model MS5001P combustion turbine with a generator step-up transformer and auxiliary power transformer.

The following are the major systems and equipment that were included in the retirement and dismantlement of the Nevada Generating Station.

1. Combustion turbine generator sets and auxiliaries.
2. Generation step-up and auxiliary transformers.
3. Outdoor switchgear.
4. Exhaust stacks.
5. Maintenance building.
6. Fuel oil transfer equipment.
7. Service/Instrument air compressors.
8. Fuel oil storage.

Nevada Retirement

Owner Costs				
	Pre-Retirement Activities		$43,834	
	Retirement Activities		$125,254	
	Post-Retirement Activities		$45,152	
Owner Direct Total			$214,240	
Owner Internal Costs		5.00%	$10,712	
Owner Contingency:		25.00%	$56,238	
Nevada Retirement Opinion of Probable Cost:				$281,190.00

Activities Required by Permit or Regulation

	Nevada Storage Tank	$56,530	
	Activities Required by Permit or Regulation:		$56,530

Nevada Retirement

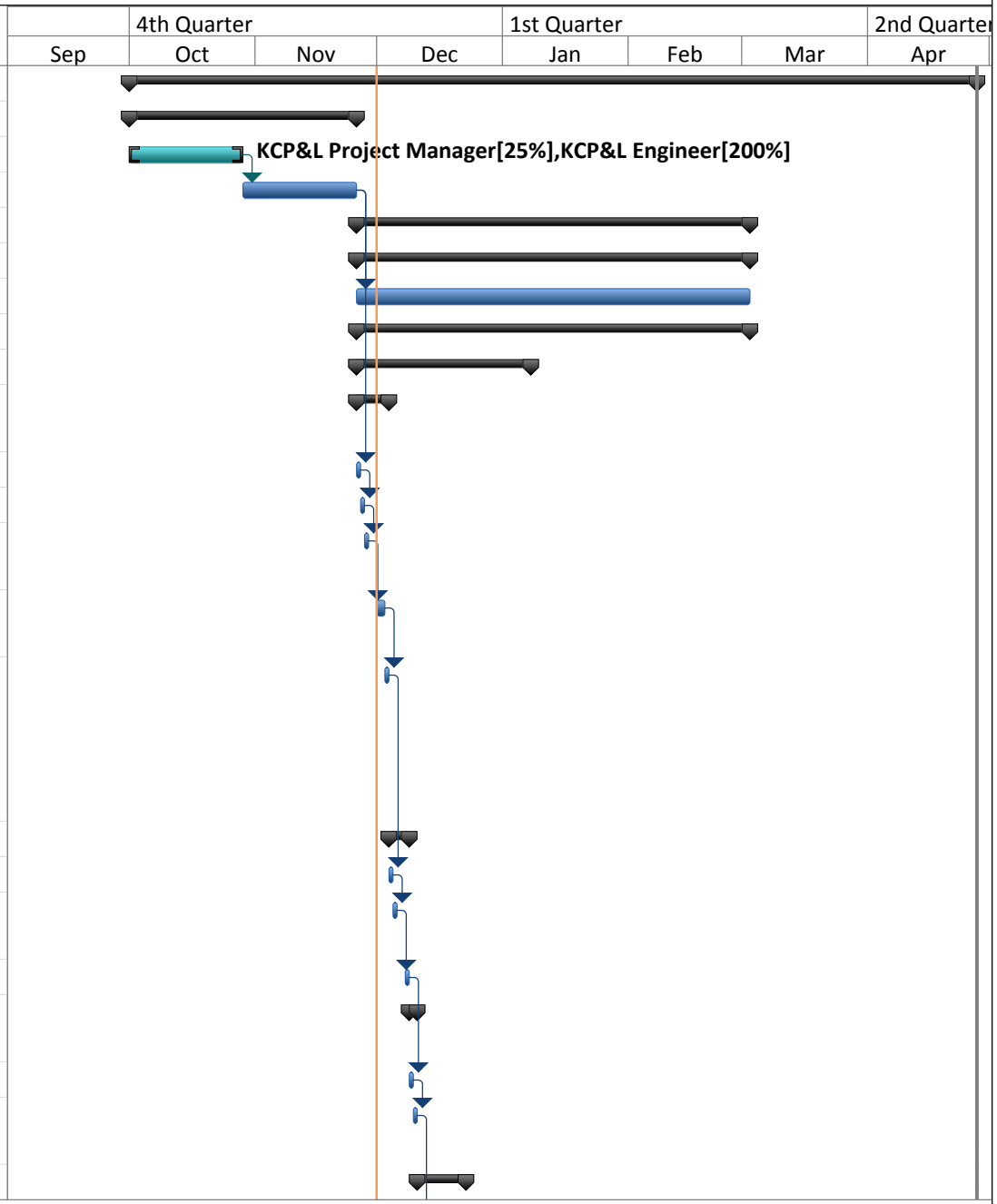
ID	Task Name	Cost
1	**Nevada Retirement**	**$214,240.42**
2	**Pre-Retirement Activities**	**$43,834.00**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Retirement**	**$125,254.42**
6	**Project Management During Retirement**	**$55,339.38**
7	Project Management During Retirement	$55,339.38
8	**Retirement Activities**	**$69,915.04**
9	**Electrical**	**$27,691.68**
10	**Medium and Low Voltage Drawout Switchgear**	**$5,359.68**
11	De-energize all buses at the source.	$893.28
12	Open all circuit breakers.	$893.28
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$893.28
14	Verify that the closing/tripping springs are discharged.	$1,786.56
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$2,679.84**
17	De-energize all buses at the source.	$893.28
18	Open all circuit breakers and disconnect switches.	$893.28
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$1,786.56**
21	De-energize all buses at the source.	$893.28
22	Open all circuit breakers and disconnect switches.	$893.28
23	**Oil-Filled Power Transformers**	**$7,146.24**
24	De-energize all buses at the source.	$893.28
25	Open all circuit breakers and disconnect switches.	$893.28
26	De-energize all buses at the source.	$893.28
27	Open all circuit breakers and disconnect switches.	$4,466.40
28	**Dry-type Power Transformers**	**$4,466.40**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$3,573.12
31	**Motors**	**$6,252.96**
32	De-energize all primary power at the source.	$893.28
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$893.28
34	Drain lube oil system (if applicable) and dispose of oil.	$4,466.40
35	**Maintenance Building**	**$3,736.96**
36	Secure the Maintenance Building	$3,736.96
37	**Fuel Oil System**	**$5,631.12**

Nevada Retirement

ID	Task Name	Cost
38	Isolate Fuel Oil System	$3,907.44
39	Drain and Vent Fuel Oil Piping	$1,723.68
40	**Lube Oil Cooling Water System**	**$2,585.52**
41	Open and Drain the Water Side of the Lube Oil Coolers	$1,723.68
42	Open and Vent the Coolers and Expansion Tank	$861.84
43	**Oily Drain Tank**	**$3,954.00**
44	Open and Pump Out the Oily Drain Tank	$3,954.00
45	**Compressed Air**	**$2,585.52**
46	Empty Dessiccant Air Dryers and Vent	$861.84
47	Open and Vent the Air Reciever	$1,723.68
48	**Miscelleaneous Piping**	**$5,171.04**
49	Open and Vent the Exhaust Frame Cooling Piping	$861.84
50	Open and Vent the Inlet Air Heating Piping	$861.84
51	Open & Vent the CT Air Process Piping	$861.84
52	Open and Vent the CT Air Processing Piping	$2,585.52
53	**Fire Protection Piping**	**$3,428.24**
54	Empty the CO2 Storage Tank	$2,566.40
55	Open and Vent the Fire Protection Piping	$861.84
56	**Lube Oil System**	**$8,580.16**
57	Empty and Remove from Site the Lubricating Oil	$5,132.80
58	Drain Lubricating Oil Piping	$1,723.68
59	Open and Vent Lubricating Oil Piping	$1,723.68
60	**Potable Water**	**$2,643.36**
61	Disconnect Potable Water at Property Boundary	$2,643.36
62	**Waste Water**	**$3,907.44**
63	Disconnect Waste Water at Property Boundary	$3,907.44
64	**Post Retirement Closure Activity**	**$45,152.00**
65	Post Retirement Closure Activity	$45,152.00

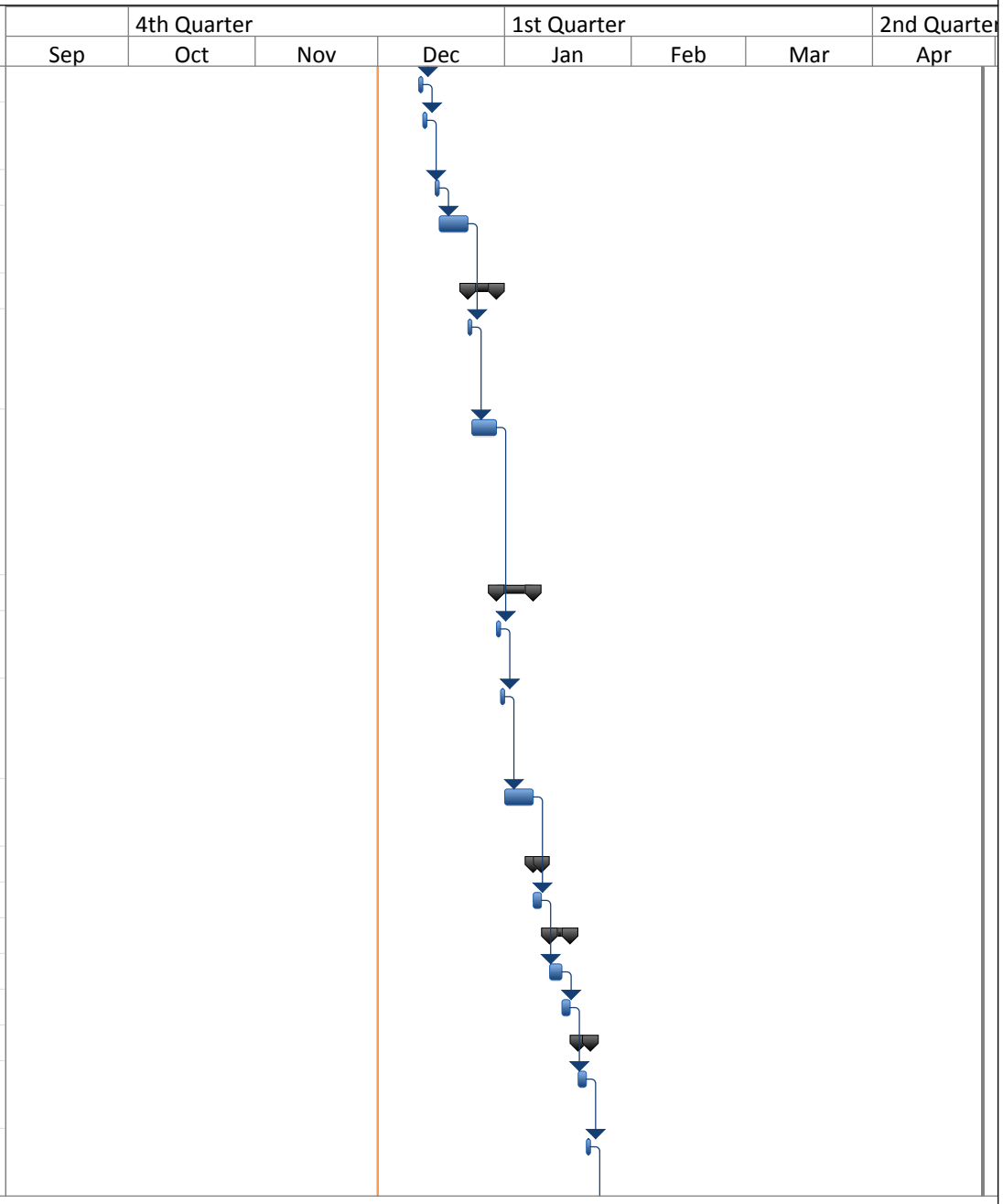
Nevada Retirement

ID	Task Name	Duration
1	**Nevada Retirement**	**149 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement**	**69 days**
6	**Project Management During Retirement**	**69 days**
7	Project Management During Retirement	69 days
8	**Retirement Activities**	**69 days**
9	**Electrical**	**31 days**
10	**Medium and Low Voltage Drawout Switchgear**	**6 days**
11	De-energize all buses at the source.	1 day
12	Open all circuit breakers.	1 day
13	Rack all circuit breakers into the fully withdrawn, disconnected	1 day
14	Verify that the closing/tripping springs are discharged.	2 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each	1 day
16	**Motor Control Centers**	**3 days**
17	De-energize all buses at the source.	1 day
18	Open all circuit breakers and disconnect switches.	1 day
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**2 days**
21	De-energize all buses at the source.	1 day
22	Open all circuit breakers and disconnect switches.	1 day
23	**Oil-Filled Power Transformers**	**8 days**



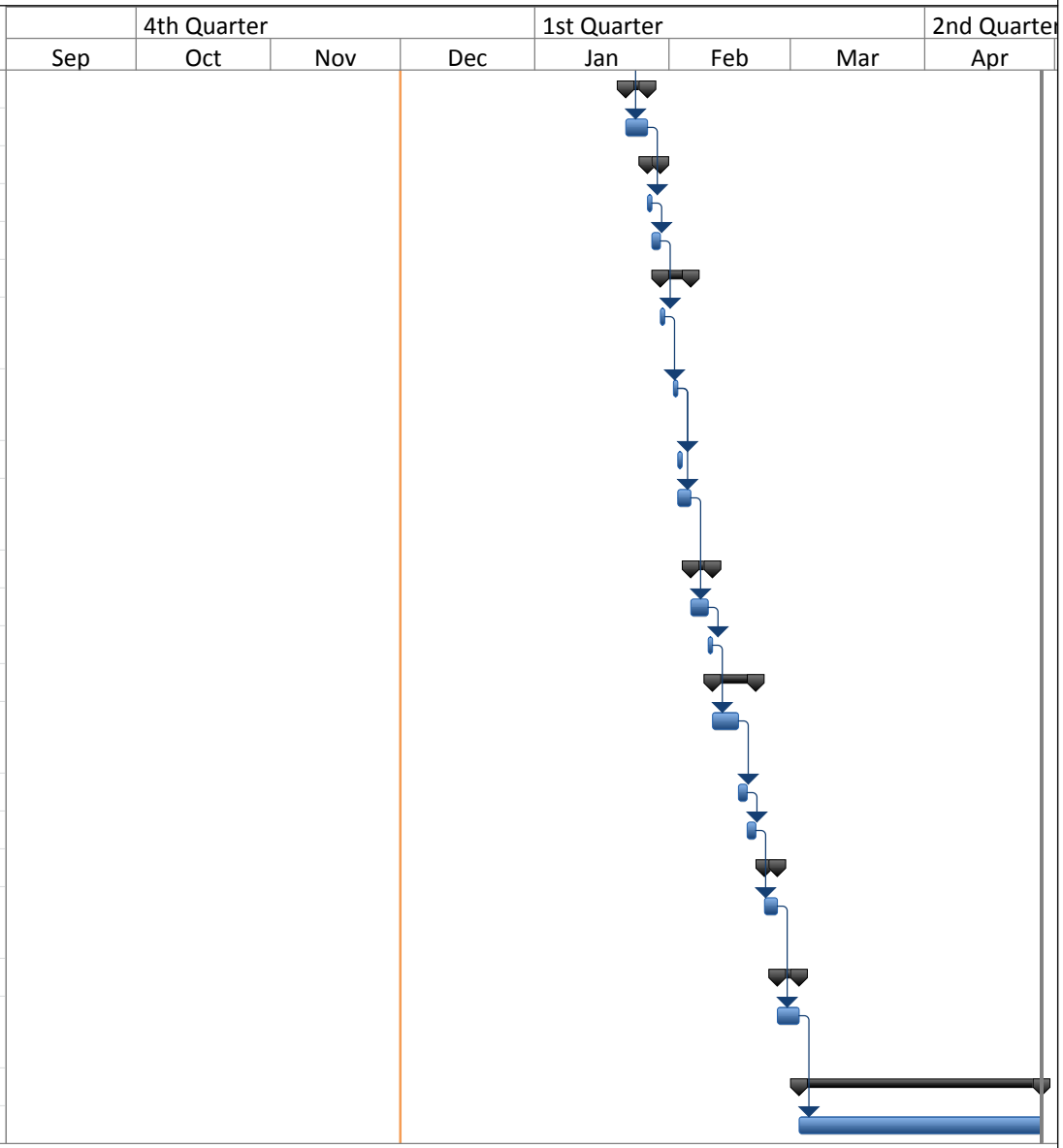
Nevada Retirement

ID	Task Name	Duration
24	De-energize all buses at the source.	1 day
25	Open all circuit breakers and disconnect switches.	1 day
26	De-energize all buses at the source.	1 day
27	Open all circuit breakers and disconnect switches.	5 days
28	**Dry-type Power Transformers**	**5 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	4 days
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	1 day
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	1 day
34	Drain lube oil system (if applicable) and dispose of oil.	5 days
35	**Maintenance Building**	**2 days**
36	Secure the Maintenance Building	2 days
37	**Fuel Oil System**	**5 days**
38	Isolate Fuel Oil System	3 days
39	Drain and Vent Fuel Oil Piping	2 days
40	**Lube Oil Cooling Water System**	**3 days**
41	Open and Drain the Water Side of the Lube Oil Coolers	2 days
42	Open and Vent the Coolers and Expansion Tank	1 day



Nevada Retirement

ID	Task Name	Duration
43	**Oily Drain Tank**	**3 days**
44	Open and Pump Out the Oily Drain Tank	3 days
45	**Compressed Air**	**3 days**
46	Empty Dessiccant Air Dryers and Vent	1 day
47	Open and Vent the Air Reciever	2 days
48	**Miscelleaneous Piping**	**5 days**
49	Open and Vent the Exhaust Frame Cooling Piping	1 day
50	Open and Vent the Inlet Air Heating Piping	1 day
51	Open & Vent the CT Air Process Piping	1 day
52	Open and Vent the CT Air Processing Piping	3 days
53	**Fire Protection Piping**	**3 days**
54	Empty the CO2 Storage Tank	2 days
55	Open and Vent the Fire Protection Pipin	1 day
56	**Lube Oil System**	**8 days**
57	Empty and Remove from Site the Lubricating Oil	4 days
58	Drain Lubricating Oil Piping	2 days
59	Open and Vent Lubricating Oil Piping	2 days
60	**Potable Water**	**3 days**
61	Disconnect Potable Water at Property Boundary	3 days
62	**Waste Water**	**3 days**
63	Disconnect Waste Water at Property Boundary	3 days
64	**Post Retirement Closure Activity**	**40 days**
65	Post Retirement Closure Activity	40 days



Nevada Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$799,319	
Post-Dismantlement Activities			$65,520	
Owner Costs Total*				$1,757,599
Demolition General Contractor (DGC) Costs				
Site Management			$435,715	
Equipment Rental			$741,903	
Consummables			$740,181	
Scrap Crew(s)			$194,864	
Dismantlement			$515,571	
Contractor Direct Cost*		$2,628,234		
Contractor Allowances				
DGC Insurance	2.00%		$52,565	
Contingency/Profit	15.00%		$402,120	
Performance Bond	2.00%		$61,658.37	
Contractor Costs Total:				$3,144,577
Total:				$4,902,176
Owner Internal Costs:	5.00%			$245,109
Owner Contingency:	25.00%			$1,286,821
Nevada Dismantlement Opinion of Probable Cost:				$6,434,106

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $4,385,833

Nevada Dismantlement

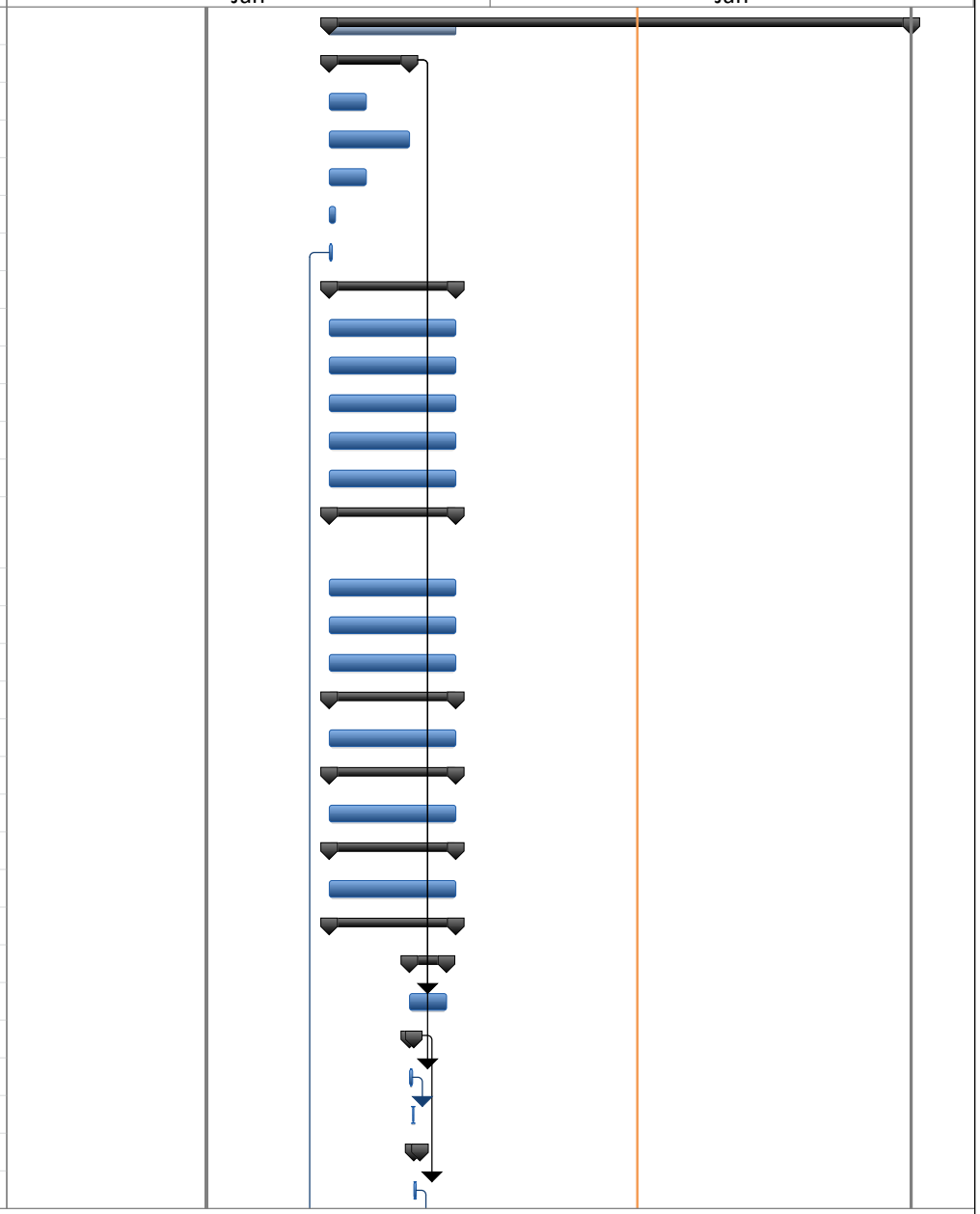
ID	Task Name	Cost
1	**Nevada CT Dismantlement**	**$4,385,836.20**
2	**Pre-Demolition Activities**	**$892,760.32**
3	Detailed Planning & Hire Owner's Engineer	$104,441.28
4	Detailed Site Characterization Study	$610,335.44
5	Hire Demolition general Contractor	$167,184.00
6	KCP&L Prepares Unit for Dismantlement	$10,799.60
7	Demolition Contractor Mobilizes on Sit	$0.00
8	**KCP&L Overhead during Dismantlement**	**$799,319.60**
9	KCP&L Project Manager	$127,018.00
10	KCP&L Administrative Support	$46,969.60
11	KCP&L Engineer	$208,772.00
12	Owners Engineer Project Manager	$62,320.00
13	Owners Engineer - Engineer	$354,240.00
14	**Demolition Contractor Overhead during Dismantlement**	**$435,715.20**
15	Demolition Contractor Project Manager	$123,278.80
16	Demolition Contractor Safety Manager	$109,765.20
17	Demolition Contractor Superintendent	$202,671.20
18	**Demolition Contractor Equipment Rental Cost**	**$741,903.20**
19	Equipment Rental	$741,903.20
20	**Demolition Contractor Consumables**	**$740,181.20**
21	Consumables	$740,181.20
22	**Scrap Crews**	**$194,864.80**
23	Crew to Handle Scrap Material(s)	$194,864.80
24	**Dismantlement**	**$515,571.88**
25	**Electrical**	**$107,481.60**
26	Electrical Demolition of Equipment	$107,481.60
27	**Fuel Oil System**	**$8,445.28**
28	Remove Above Ground Fuel Oil Piping	$3,071.20
29	Fuel Skids	$5,374.08
30	**Lube Oil System**	**$17,913.60**
31	Lube Oil Piping	$5,374.08
32	Lube Oil Pumps	$5,374.08
33	Lube Oil Tanks	$7,165.44
34	**Fire Protection**	**$26,870.40**
35	Fire Protection Piping	$10,748.16
36	Firewater Tank	$8,956.80
37	CO2 Storage Tank	$7,165.44
38	**Miscellaneous Piping**	**$25,079.04**
39	Exhaust Frame Cooling Piping	$7,165.44
40	CT Air Processing Piping	$8,956.80
41	Inlet Air Heating Piping	$8,956.80
42	**Generator**	**$10,748.16**
43	Generator	$10,748.16
44	**Combustion Turbine**	**$93,150.72**

Nevada Dismantlement

ID	Task Name	Cost
45	Inlet Heater	$5,374.08
46	Inlet duct	$10,748.16
47	Exhaust duct	$14,330.88
48	Combustion Turbine	$28,661.76
49	Combustion Turbine Foundation	$16,122.24
50	Enclosure	$17,913.60
51	**CEMS**	**$14,330.88**
52	CEMS Building	$7,165.44
53	CEMS Building Foundation	$7,165.44
54	**Stack**	**$26,870.40**
55	Stacks	$26,870.40
56	**Site Buildings**	**$8,956.80**
57	Remove Site Buildings	$8,956.80
58	**Site Prep**	**$175,725.00**
59	Final Grading and Drainage	$175,725.00
60	**Post Dismantlement Activities**	**$65,520.00**
61	Post Dismantlement Activities	$65,520.00

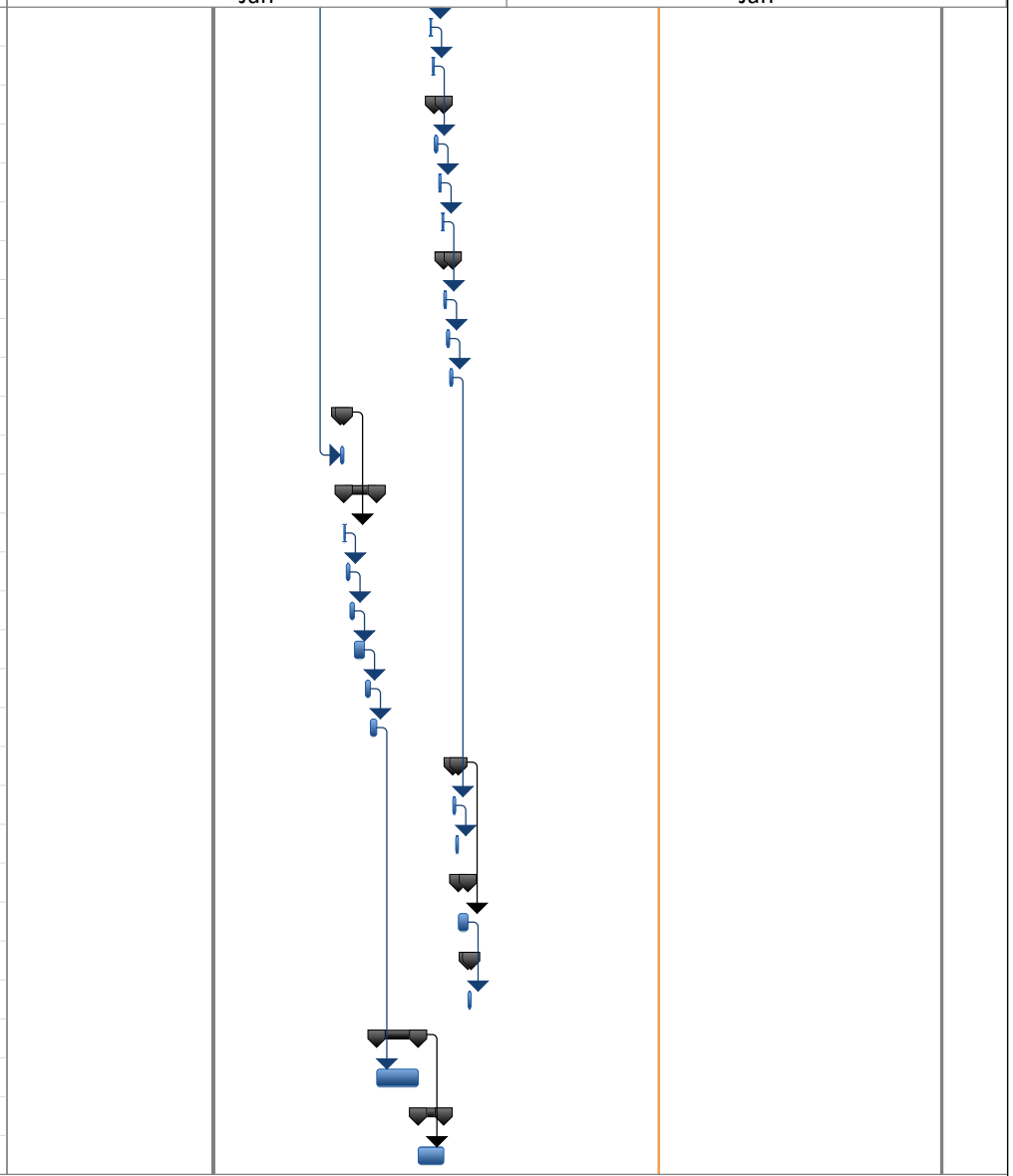
Nevada Dismantlement

ID	Task Name	Duration
1	**Nevada CT Dismantlement**	**944 days**
2	**Pre-Demolition Activities**	**130 days**
3	Detailed Planning & Hire Owner's Engineer	3 mons
4	Detailed Site Characterization Study	130 days
5	Hire Demolition general Contractor	3 mons
6	KCP&L Prepares Unit for Dismantlement	2 wks
7	Demolition Contractor Mobilizes on Sit	5 days
8	**KCP&L Overhead during Dismantlement**	**205 days**
9	KCP&L Project Manager	205 days
10	KCP&L Administrative Support	205 days
11	KCP&L Engineer	205 days
12	Owners Engineer Project Manager	205 days
13	Owners Engineer - Engineer	205 days
14	**Demolition Contractor Overhead during Dismantlement**	**205 days**
15	Demolition Contractor Project Manager	205 days
16	Demolition Contractor Safety Manager	205 days
17	Demolition Contractor Superintendent	205 days
18	**Demolition Contractor Equipment Rental Cost**	**205 days**
19	Equipment Rental	205 days
20	**Demolition Contractor Consumables**	**205 days**
21	Consumables	205 days
22	**Scrap Crews**	**205 days**
23	Crew to Handle Scrap Material(s)	205 days
24	**Dismantlement**	**205 days**
25	**Electrical**	**60 days**
26	Electrical Demolition of Equipment	60 days
27	**Fuel Oil System**	**8 days**
28	Remove Above Ground Fuel Oil Piping	5 days
29	Fuel Skids	3 days
30	**Lube Oil System**	**10 days**
31	Lube Oil Piping	3 days



Nevada Dismantlement

ID	Task Name	Duration
32	Lube Oil Pumps	3 days
33	Lube Oil Tanks	4 days
34	**Fire Protection**	**15 days**
35	Fire Protection Piping	6 days
36	Firewater Tank	5 days
37	CO2 Storage Tank	4 days
38	**Miscellaneous Piping**	**14 days**
39	Exhaust Frame Cooling Piping	4 days
40	CT Air Processing Piping	5 days
41	Inlet Air Heating Piping	5 days
42	**Generator**	**6 days**
43	Generator	6 days
44	**Combustion Turbine**	**52 days**
45	Inlet Heater	3 days
46	Inlet duct	6 days
47	Exhaust duct	8 days
48	Combustion Turbine	16 days
49	Combustion Turbine Foundation	9 days
50	Enclosure	10 days
51	**CEMS**	**8 days**
52	CEMS Building	4 days
53	CEMS Building Foundation	4 days
54	**Stack**	**15 days**
55	Stacks	15 days
56	**Site Buildings**	**5 days**
57	Remove Site Buildings	5 days
58	**Site Prep**	**65 days**
59	Final Grading and Drainage	65 days
60	**Post Dismantlement Activities**	**40 days**
61	Post Dismantlement Activities	40 days



RALPH GREEN UNIT 3

RALPH GREEN STATION

The Ralph Green Generating Station consists of a single gas-fired combustion turbine generator set.

Ralph Green has an SPP-accredited unit rating of 71.5 MW and was placed into service in 1981. The unit is comprised of a GE Model MS7001E combustion turbine with a generator step-up transformer and auxiliary power transformer.

The following are the major systems and equipment that were included in the retirement and dismantlement of the Ralph Green Generating Station.

1. Combustion turbine generator sets and auxiliaries.
2. Generation step-up and auxiliary transformers.
3. Outdoor switchgear.
4. Exhaust stack.
5. Administrative/Maintenance building.
6. Water treatment equipment.
7. Service/Instrument air compressors.
8. Demineralized water tank.

Ralph Green Retirement

Owner Costs				
	Pre-Retirement Activities		$43,834	
	Retirement Activities		$128,593	
	Post-Retirement Activities		$45,152	
Owner Direct Total			$217,579	
Owner Internal Costs		5.00%	$10,879	
Owner Contingency:		25.00%	$57,114	
Ralph Green Retirement Opinion of Probable Cost:				$285,572.44

Activities Required by Permit or Regulation

	Ash Pond Landfill Closure	$81,385	
	Activities Required by Permit or Regulation:		$81,385

Ralph Green Retirement

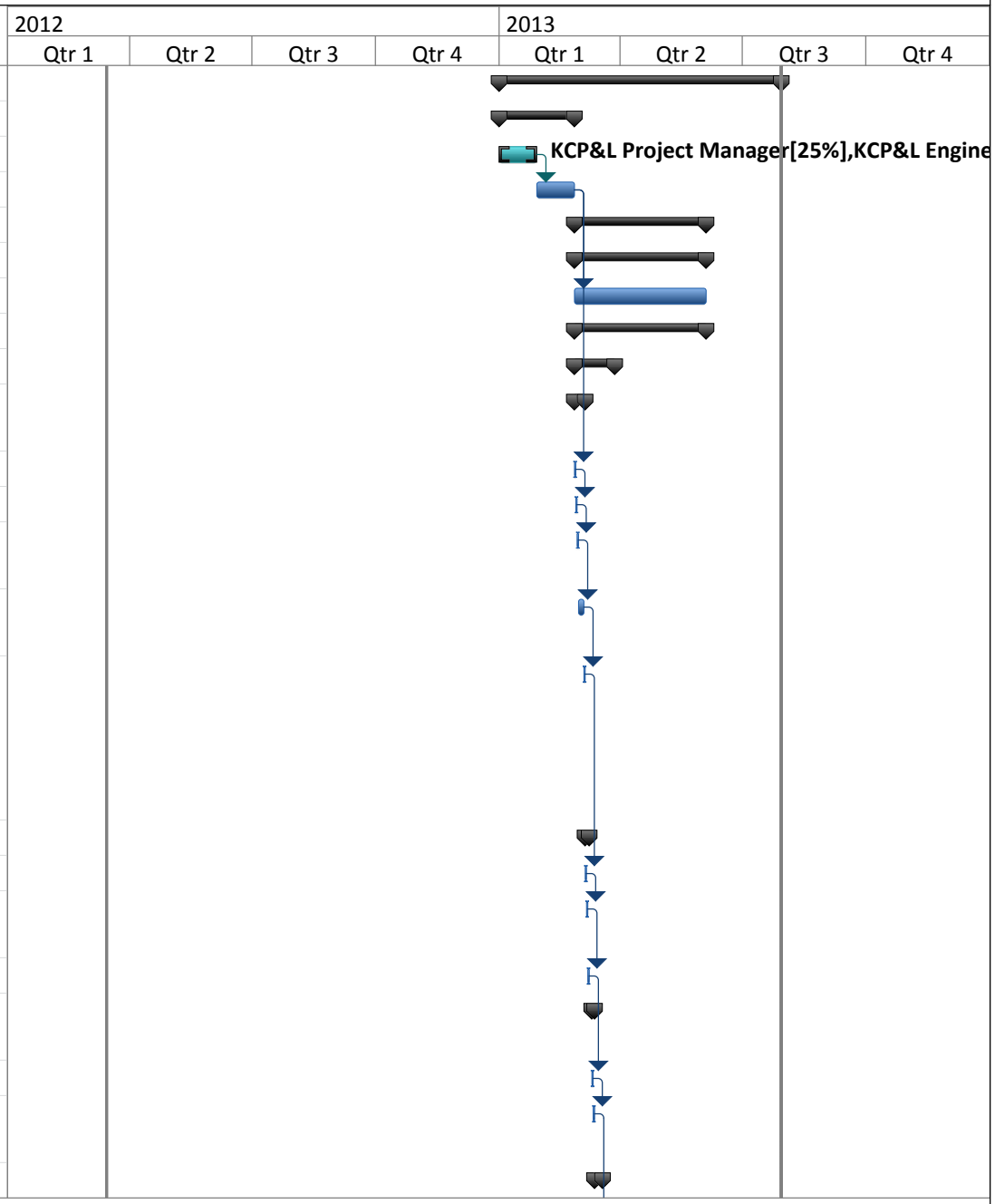
ID	Task Name	Cost
1	**Ralph Green Retirement**	**$217,579.72**
2	**Pre-Retirement Activities**	**$43,834.00**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Retirement**	**$128,593.72**
6	**Project Management During Retirement**	**$56,141.40**
7	Project Management During Retirement	$56,141.40
8	**Retirement Activities**	**$72,452.32**
9	**Electrical**	**$19,652.16**
10	**Medium and Low Voltage Drawout Switchgear**	**$5,359.68**
11	De-energize all buses at the source.	$893.28
12	Open all circuit breakers.	$893.28
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$893.28
14	Verify that the closing/tripping springs are discharged.	$1,786.56
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$2,679.84**
17	De-energize all buses at the source.	$893.28
18	Open all circuit breakers and disconnect switches.	$893.28
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$1,786.56**
21	De-energize all buses at the source.	$893.28
22	Open all circuit breakers and disconnect switches.	$893.28
23	**Oil-Filled Power Transformers**	**$3,573.12**
24	De-energize all buses at the source.	$893.28
25	Open all circuit breakers and disconnect switches.	$893.28
26	De-energize all buses at the source.	$893.28
27	Open all circuit breakers and disconnect switches.	$893.28
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
31	**Motors**	**$4,466.40**
32	De-energize all primary power at the source.	$893.28
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$893.28
34	Drain lube oil system (if applicable) and dispose of oil.	$2,679.84
35	**Administration/Maintenance Building**	**$7,235.60**
36	Secure Administration/Maintenance Building	$7,235.60
37	**Fuel Gas System**	**$10,783.04**

Ralph Green Retirement

ID	Task Name	Cost
38	Isolate Fuel Gas System	$3,907.44
39	Vent Fuel Gas Piping and Equipment	$2,528.16
40	Open and Vent Knock-Out Drum	$861.84
41	Drain, Open and Vent the Drain Tank	$861.84
42	Empty the Coalescing Filter	$1,761.92
43	Open and Vent Equipment on the CT Gas Valve Module	$861.84
44	**Lube Oil Cooling Water System**	**$2,585.52**
45	Open and Drain the Water Side of the Lube Oil Coolers	$1,723.68
46	Open and Vent the Coolers and Expansion Tank	$861.84
47	**Oily Drain Tank**	**$3,954.00**
48	Open and Pump Out the Oily Drain Tank	$3,954.00
49	**Wash Water Skid**	**$2,585.52**
50	Open and Drain the Detergent Tank	$861.84
51	Open and Drain the Demineralized Water Tank	$861.84
52	Empty the Demineralized Water Tank	$861.84
53	**Compressed Air**	**$1,723.68**
54	Empty Dessiccant Air Dryers and Vent	$861.84
55	Open and Vent the Air Reciever	$861.84
56	**Miscelleaneous Piping**	**$3,447.36**
57	Open and Vent the Exhaust Frame Cooling Piping	$861.84
58	Open and Vent the CT Air Processing Piping	$861.84
59	Open and Vent the Inlet Air Heating Piping	$861.84
60	Open and Vent the CT Air Processing Piping	$861.84
61	**Fire Protection Piping**	**$3,428.24**
62	Empty the CO2 Storage Tank	$2,566.40
63	Open and Vent the Fire Protection Piping	$861.84
64	**Lube Oil System**	**$7,718.32**
65	Empty and Remove from Site the Lubricating Oil	$5,132.80
66	Drain Lubricating Oil Piping	$1,723.68
67	Open and Vent Lubricating Oil Piping	$861.84
68	**Water Treatment**	**$9,338.88**
69	Drain All Tanks and Vessels	$1,723.68
70	Remove Resin from Vessels	$2,585.52
71	Remove Chemicals	$2,585.52
72	Open and Vent Vessels	$861.84
73	Open and Vent the 2 Water Storage Tanks	$861.84
74	Clean Neutralization Basin	$720.48
75	**Post Retirement Closure Activity**	**$45,152.00**
76	Post Retirement Closure Activity	$45,152.00

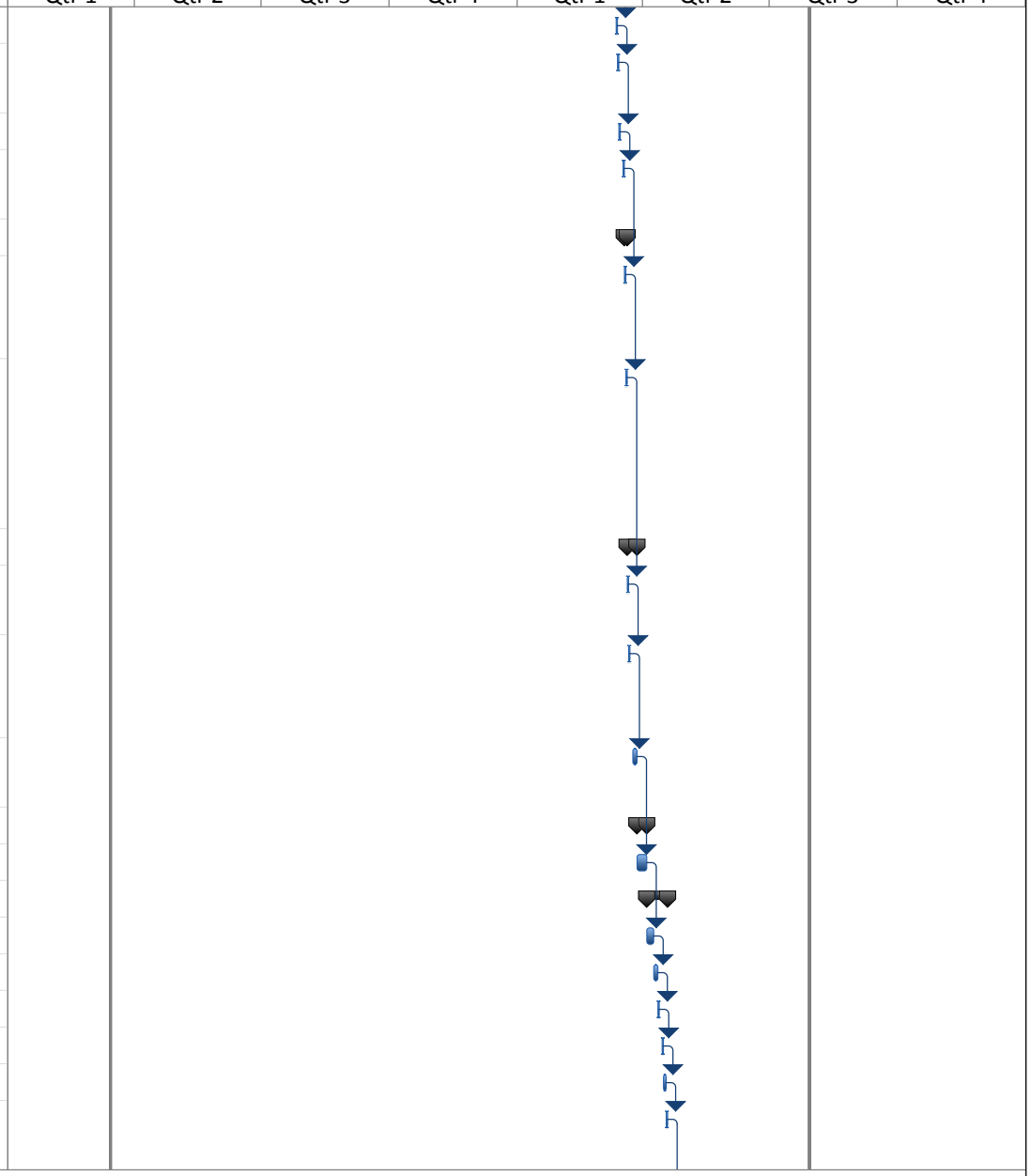
Ralph Green Retirement

ID	Task Name	Duration
1	**Ralph Green Retirement**	**150 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement**	**70 days**
6	**Project Management During Retirement**	**70 days**
7	Project Management During Retirement	70 days
8	**Retirement Activities**	**70 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Drawout Switchgear**	**6 days**
11	De-energize all buses at the source.	1 day
12	Open all circuit breakers.	1 day
13	Rack all circuit breakers into the fully withdrawn, disconnected	1 day
14	Verify that the closing/tripping springs are discharged.	2 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each	1 day
16	**Motor Control Centers**	**3 days**
17	De-energize all buses at the source.	1 day
18	Open all circuit breakers and disconnect switches.	1 day
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**2 days**
21	De-energize all buses at the source.	1 day
22	Open all circuit breakers and disconnect switches.	1 day
23	**Oil-Filled Power Transformers**	**4 days**



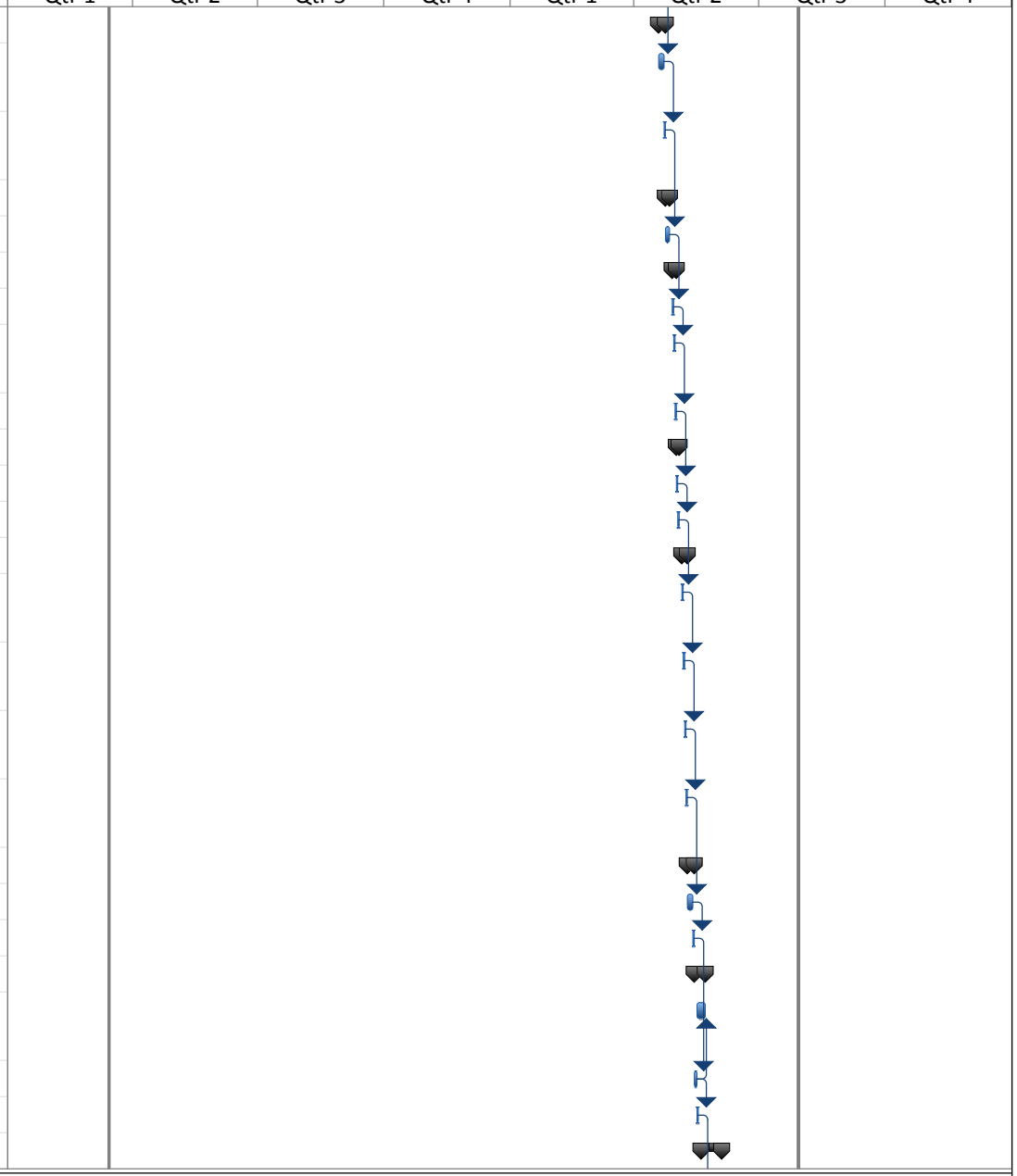
Ralph Green Retirement

ID	Task Name	Duration
24	De-energize all buses at the source.	1 day
25	Open all circuit breakers and disconnect switches.	1 day
26	De-energize all buses at the source.	1 day
27	Open all circuit breakers and disconnect switches.	1 day
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
31	**Motors**	**5 days**
32	De-energize all primary power at the source.	1 day
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	1 day
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Administration/Maintenance Building**	**5 days**
36	Secure Administration/Maintenance Bu	5 days
37	**Fuel Gas System**	**11 days**
38	Isolate Fuel Gas System	3 days
39	Vent Fuel Gas Piping and Equipment	3 days
40	Open and Vent Knock-Out Drum	1 day
41	Drain, Open and Vent the Drain Tank	1 day
42	Empty the Coalescing Filter	2 days
43	Open and Vent Equipment on the CT Gas Valve Module	1 day



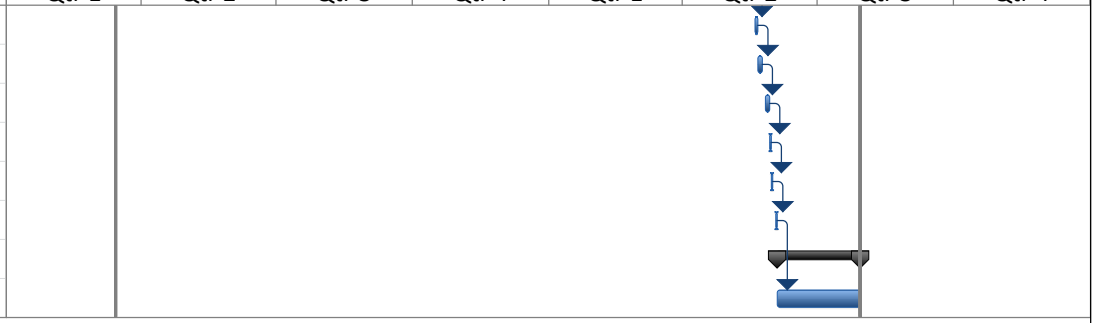
Ralph Green Retirement

ID	Task Name	Duration
44	**Lube Oil Cooling Water System**	**3 days**
45	Open and Drain the Water Side of the Lube Oil Coolers	2 days
46	Open and Vent the Coolers and Expansion Tank	1 day
47	**Oily Drain Tank**	**3 days**
48	Open and Pump Out the Oily Drain Tank	3 days
49	**Wash Water Skid**	**3 days**
50	Open and Drain the Detergent Tank	1 day
51	Open and Drain the Demineralized Water Tank	1 day
52	Empty the Demineralized Water Tank	1 day
53	**Compressed Air**	**2 days**
54	Empty Dessiccant Air Dryers and Vent	1 day
55	Open and Vent the Air Reciever	1 day
56	**Miscelleaneous Piping**	**4 days**
57	Open and Vent the Exhaust Frame Cooling Piping	1 day
58	Open and Vent the CT Air Processing Piping	1 day
59	Open and Vent the Inlet Air Heating Piping	1 day
60	Open and Vent the CT Air Processing Piping	1 day
61	**Fire Protection Piping**	**3 days**
62	Empty the CO2 Storage Tank	2 days
63	Open and Vent the Fire Protection Pipin	1 day
64	**Lube Oil System**	**6 days**
65	Empty and Remove from Site the Lubricating Oil	4 days
66	Drain Lubricating Oil Piping	2 days
67	Open and Vent Lubricating Oil Piping	1 day
68	**Water Treatment**	**11 days**



Ralph Green Retirement

ID	Task Name	Duration
69	Drain All Tanks and Vessels	2 days
70	Remove Resin from Vessels	3 days
71	Remove Chemicals	3 days
72	Open and Vent Vessels	1 day
73	Open and Vent the 2 Water Storage Tar	1 day
74	Clean Neutralization Basin	1 day
75	**Post Retirement Closure Activity**	**40 days**
76	Post Retirement Closure Activity	40 days



Ralph Green Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$748,631	
Post-Dismantlement Activities			$32,760	
Owner Costs Total*				$1,674,151
Demolition General Contractor (DGC) Costs				
Site Management			$408,084	
Equipment Rental			$694,855	
Consummables			$693,242	
Scrap Crew(s)			$182,507	
Dismantlement			$542,291	
Contractor Direct Cost*		$2,520,979		
Contractor Allowances				
DGC Insurance	2.00%		$50,420	
Contingency/Profit	15.00%		$385,710	
Performance Bond	2.00%		$59,142.17	
Contractor Costs Total:				$3,016,251
Total:				$4,690,402
Owner Internal Costs:	5.00%			$234,520
Owner Contingency:	25.00%			$1,231,230
Ralph Green Dismantlement Opinion of Probable Cost:				$6,156,152

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $4,195,130

Ralph Green Dismantlement

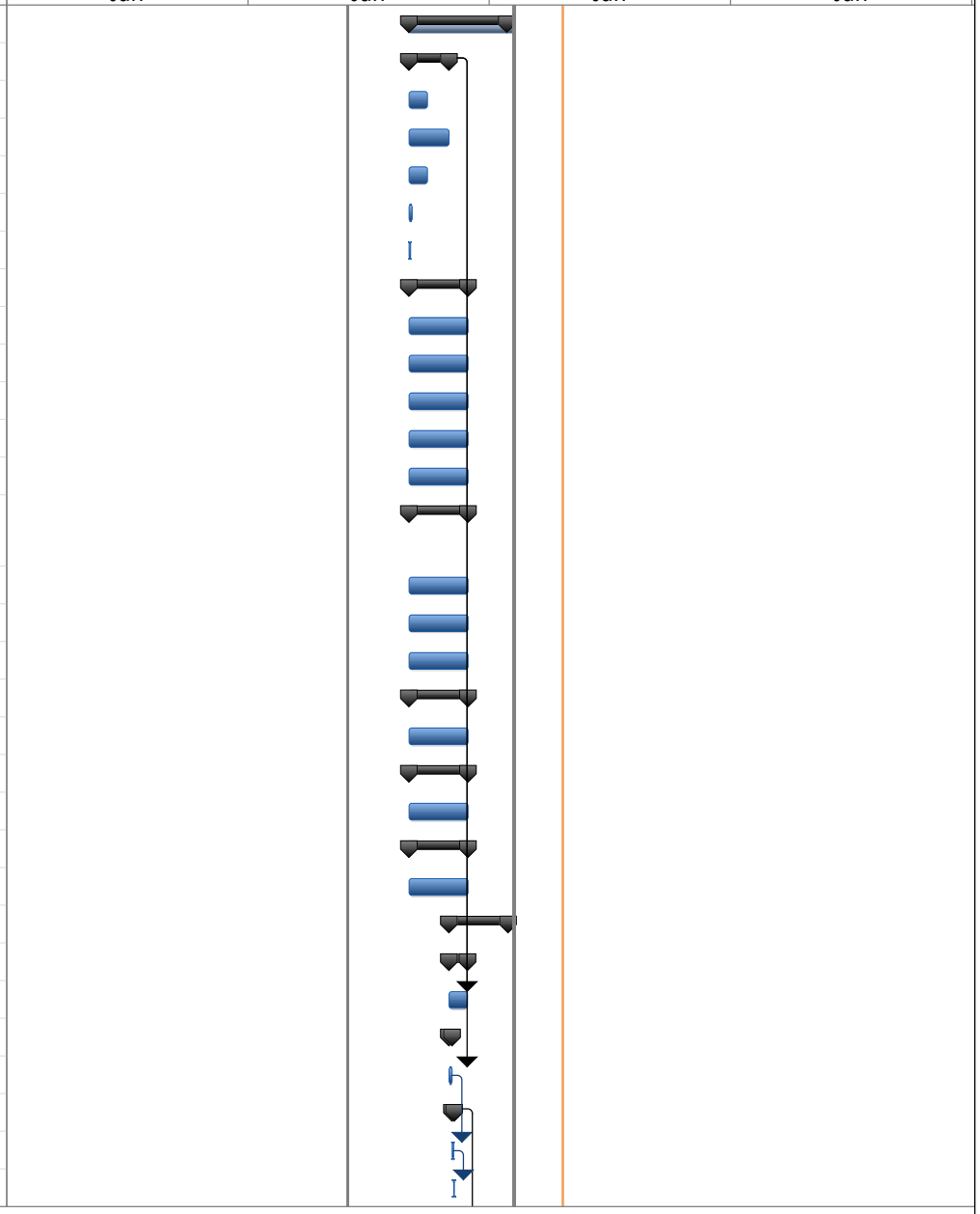
ID	Task Name	Cost
1	**Ralph Green Dismantlement**	**$4,195,133.68**
2	**Pre-Demolition Activities**	**$892,760.32**
3	Detailed Planning & Hire Owner's Engineer	$104,441.28
4	Detailed Site Characterization Study	$610,335.44
5	Hire Demolition general Contractor	$167,184.00
6	KCP&L Prepares Unit for Dismantlement	$10,799.60
7	Demolition Contractor Mobilizes on Sit	$0.00
8	**KCP&L Overhead during Dismantlement**	**$748,631.04**
9	KCP&L Project Manager	$118,963.20
10	KCP&L Administrative Support	$43,991.04
11	KCP&L Engineer	$195,532.80
12	Owners Engineer Project Manager	$58,368.00
13	Owners Engineer - Engineer	$331,776.00
14	**Demolition Contractor Overhead during Dismantlement**	**$408,084.48**
15	Demolition Contractor Project Manager	$115,461.12
16	Demolition Contractor Safety Manager	$102,804.48
17	Demolition Contractor Superintendent	$189,818.88
18	**Demolition Contractor Equipment Rental Cost**	**$694,855.68**
19	Equipment Rental	$694,855.68
20	**Demolition Contractor Consumables**	**$693,242.88**
21	Consumables	$693,242.88
22	**Scrap Crews**	**$182,507.52**
23	Crew to Handle Scrap Material(s)	$182,507.52
24	**Dismantlement**	**$542,291.76**
25	**Electrical**	**$107,481.60**
26	Electrical Demolition of Equipment	$107,481.60
27	**Buildings**	**$17,913.60**
28	Remove Administration/Maintenance Building	$17,913.60
29	**Fuel Gas System**	**$8,445.28**
30	Remove all above grade fuel gas piping.	$3,071.20
31	Gas Filter Skid	$5,374.08
32	**Lube Oil System**	**$17,913.60**
33	Lube Oil Piping	$5,374.08
34	Lube Oil Pumps	$5,374.08
35	Lube Oil Tanks	$7,165.44
36	**Compressed Air System**	**$23,287.68**
37	Compressed Air Piping	$5,374.08
38	Compressors	$8,956.80
39	Air Receiver	$3,582.72
40	Dryer	$5,374.08
41	**Fire Protection**	**$26,870.40**
42	Fire Protection Piping	$10,748.16
43	Firewater Tank	$8,956.80
44	CO2 Storage Tank	$7,165.44

Ralph Green Dismantlement

ID	Task Name	Cost
45	**Wash Water Skid**	**$14,330.88**
46	Detergent Tank	$7,165.44
47	Demineralized Water Tank	$7,165.44
48	**Miscellaneous Piping**	**$25,079.04**
49	Exhaust Frame Cooling Piping	$7,165.44
50	CT Air Processing Piping	$8,956.80
51	Inlet Air Heating Piping	$8,956.80
52	**Generator**	**$0.00**
53	Generator	$0.00
54	**Combustion Turbine**	**$93,150.72**
55	Inlet Heater	$5,374.08
56	Inlet duct	$10,748.16
57	Exhaust duct	$14,330.88
58	Combustion Turbine	$28,661.76
59	Combustion Turbine Foundation	$16,122.24
60	Enclosure	$17,913.60
61	**CEMS**	**$14,330.88**
62	CEMS Building	$7,165.44
63	CEMS Building Foundation	$7,165.44
64	**Stack**	**$26,870.40**
65	Stack	$26,870.40
66	**Demineralizer**	**$23,287.68**
67	Remove demineralizer vessels	$3,582.72
68	Remove acid and caustic tanks	$7,165.44
69	Remove hot water tank	$3,582.72
70	Remove misc. demineralizer piping.	$3,582.72
71	Remove 2 Demin. Water Storage Tanks	$5,374.08
72	**Site Prep**	**$143,330.00**
73	Final Grading and Drainage	$143,330.00
74	**Post Dismantlement Activities**	**$32,760.00**
75	Post Dismantlement Activities	$32,760.00

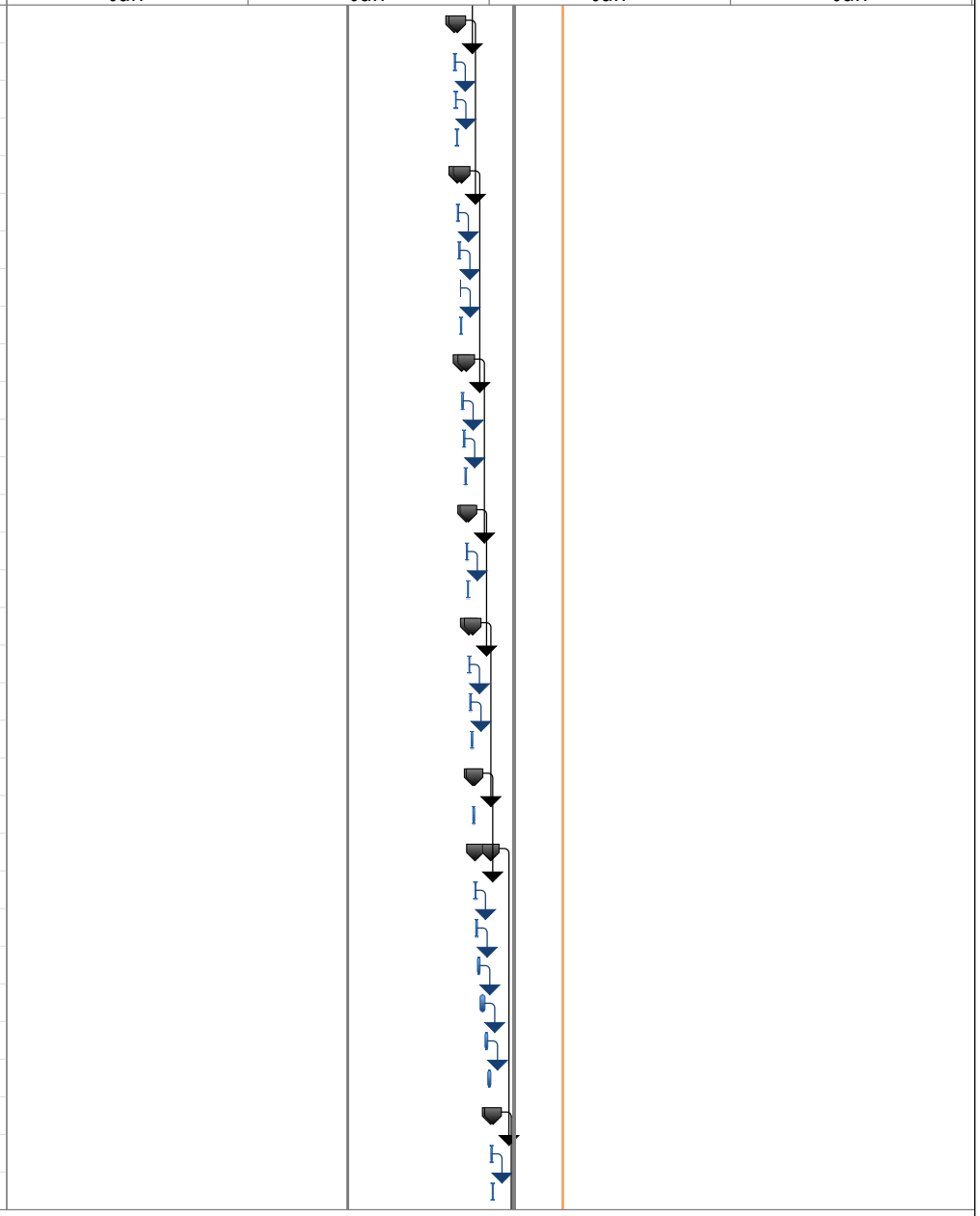
Ralph Green Dismantlement

ID	Task Name	Duration
1	**Ralph Green Dismantlement**	**319 days**
2	**Pre-Demolition Activities**	**130 days**
3	Detailed Planning & Hire Owner's Engineer	3 mons
4	Detailed Site Characterization Study	130 days
5	Hire Demolition general Contractor	3 mons
6	KCP&L Prepares Unit for Dismantlement	2 wks
7	Demolition Contractor Mobilizes on Sit	5 days
8	**KCP&L Overhead during Dismantlement**	**192 days**
9	KCP&L Project Manager	192 days
10	KCP&L Administrative Support	192 days
11	KCP&L Engineer	192 days
12	Owners Engineer Project Manager	192 days
13	Owners Engineer - Engineer	192 days
14	**Demolition Contractor Overhead during Dismantlement**	**192 days**
15	Demolition Contractor Project Manager	192 days
16	Demolition Contractor Safety Manager	192 days
17	Demolition Contractor Superintendent	192 days
18	**Demolition Contractor Equipment Rental Cost**	**192 days**
19	Equipment Rental	192 days
20	**Demolition Contractor Consumables**	**192 days**
21	Consumables	192 days
22	**Scrap Crews**	**192 days**
23	Crew to Handle Scrap Material(s)	192 days
24	**Dismantlement**	**192 days**
25	**Electrical**	**60 days**
26	Electrical Demolition of Equipment	60 days
27	**Buildings**	**10 days**
28	Remove Administration/Maintenance Building	10 days
29	**Fuel Gas System**	**8 days**
30	Remove all above grade fuel gas piping.	5 days
31	Gas Filter Skid	3 days



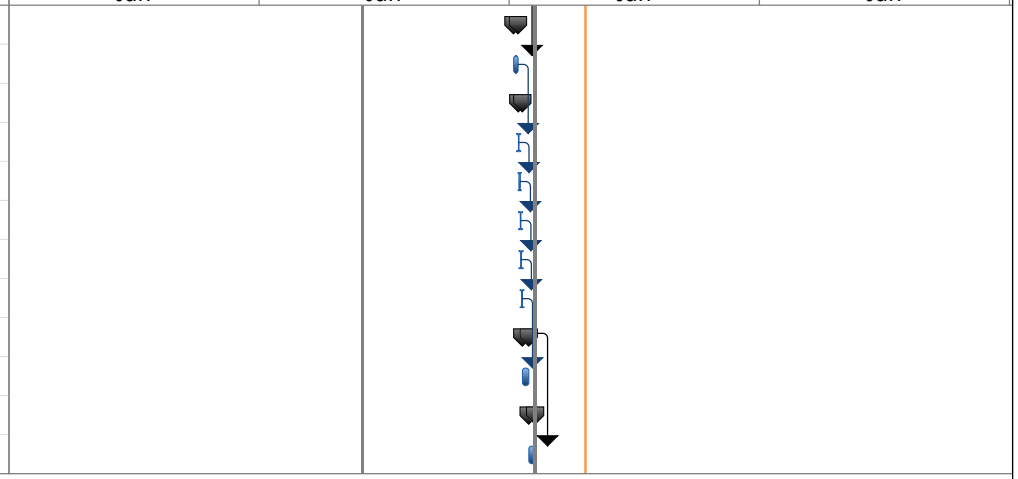
Ralph Green Dismantlement

ID	Task Name	Duration
32	**Lube Oil System**	**10 days**
33	Lube Oil Piping	3 days
34	Lube Oil Pumps	3 days
35	Lube Oil Tanks	4 days
36	**Compressed Air System**	**13 days**
37	Compressed Air Piping	3 days
38	Compressors	5 days
39	Air Receiver	2 days
40	Dryer	3 days
41	**Fire Protection**	**15 days**
42	Fire Protection Piping	6 days
43	Firewater Tank	5 days
44	CO2 Storage Tank	4 days
45	**Wash Water Skid**	**8 days**
46	Detergent Tank	4 days
47	Demineralized Water Tank	4 days
48	**Miscellaneous Piping**	**14 days**
49	Exhaust Frame Cooling Piping	4 days
50	CT Air Processing Piping	5 days
51	Inlet Air Heating Piping	5 days
52	**Generator**	**6 days**
53	Generator	6 days
54	**Combustion Turbine**	**52 days**
55	Inlet Heater	3 days
56	Inlet duct	6 days
57	Exhaust duct	8 days
58	Combustion Turbine	16 days
59	Combustion Turbine Foundation	9 days
60	Enclosure	10 days
61	**CEMS**	**8 days**
62	CEMS Building	4 days
63	CEMS Building Foundation	4 days



Ralph Green Dismantlement

ID	Task Name	Duration
64	**Stack**	**15 days**
65	Stack	15 days
66	**Demineralizer**	**13 days**
67	Remove demineralizer vessels	2 days
68	Remove acid and caustic tanks	4 days
69	Remove hot water tank	2 days
70	Remove misc. demineralizer piping.	2 days
71	Remove 2 Demin. Water Storage Tanks	3 days
72	**Site Prep**	**20 days**
73	Final Grading and Drainage	20 days
74	**Post Dismantlement Activities**	**20 days**
75	Post Dismantlement Activities	20 days



LAKE ROAD

LAKE ROAD STATION

The Lake Road Generating Station is a multi-unit facility that generates electricity from four steam turbine generators that receive steam from seven different boilers. These boilers burn either gas, distillate, or coal. These same boilers also produce steam that is sold to local steam customers. Lake Road also includes three combustion turbines that fire distillate (CTGs 5, 6, and 7) or natural gas (CTG 5).

Lake Road Boilers 1 and 2 are both package boilers rated at 85,000 lb/hr each. These boilers fire either natural gas or distillate and were placed into service in 1962.

Lake Road Boiler 3 is rated at 130,000 lb/hr, fires natural gas, and was placed into service in 1936.

Lake Road Boiler 4 is rated at 200,000 lb/hr, fires either natural gas or distillate, and was placed into service in 1951.

Lake Road Boiler 5 is rated at 250,000 lb/hr, fires either natural gas or coal, and was placed into service in 1959. This boiler has a precipitator for particulate control.

Lake Road Boiler 8 is rated at 250,000 lb/hr, fires either natural gas or distillate, and was placed into service in 2006.

Lake Road 4/6 has an SPP-accredited unit rating of 99 MW and was placed into service in 1967. This unit can fire either coal (using cyclone burners) or natural gas and has an electrostatic precipitator for particulate removal. River water is used for condenser cooling.

Lake Road Turbine Generator 1 has an SPP-accredited rating of 21.7 MW and was placed into service in 1951. This unit has a condensing turbine that uses a three-cell cooling tower for heat rejection.

Lake Road Turbine Generator 2 has an SPP-accredited rating of 27.3 MW and was placed into service in 1957. This unit has a condensing turbine that uses a four-cell cooling tower for heat rejection.

Lake Road Turbine Generator 3 has an SPP-accredited rating of 11.2 MW and was placed into service in 1962.

Lake Road Combustion Turbine (CT) 5 has an SPP-accredited rating of 63 MW and was placed into service in 1973. Lake Road CT 5 is comprised of a Westinghouse Model 501B combustion turbine set with a generator step-up transformer and auxiliary power transformer.

Lake Road Combustion Turbines 6 and 7 have an SPP-accredited rating of 42.7 MW and was placed into service in 1989 and 1990, respectively. Lake Road CTs 6 and 7 are comprised of P&W Model GG4A-7 combustion turbine set with a generator step-up transformer and auxiliary power transformer.

The Lake Road fuel yard has a main car unloading facility, a fuel storage and reclaim system, and a coal crusher facility that supplies coal to the units that can fire coal.

A detailed listing of the different equipment and systems included in each unit described above can be found in the attached retirement and dismantlement schedules included in this Appendix. The following is a detailed listing of the systems and equipment that are considered common to the Lake Road facilities.

COMMON

1. Administration building.
2. Fuel yard office building.
3. Butler building.
4. Dozer building.

5. Laboratory.
6. Guard shack.
4. Warehouses.
5. Non-Potable/Fire protection water tank.
6. Wells and low side water treatment.
8. Common fuel handling equipment.
9. 900 lb and 200 lb steam header system.
10. Fire water systems.
11. Stacks.
13. Low side feedwater system.

BOILER 1

Lake Road Boiler 1 Retirement

Owner Costs			
Pre-Retirement Activities		$25,969	
Retirement Activities		$52,440	
Post-Retirement Activities		$13,282	
Owner Direct Total			$91,691
Owner Internal Costs	5.00%		$4,585
Owner Contingency:	25.00%		$24,069

Lake Road Boiler 1 Retirement Opinion of Probable Cost: $120,344

Lake Road Boiler 1 Retirement

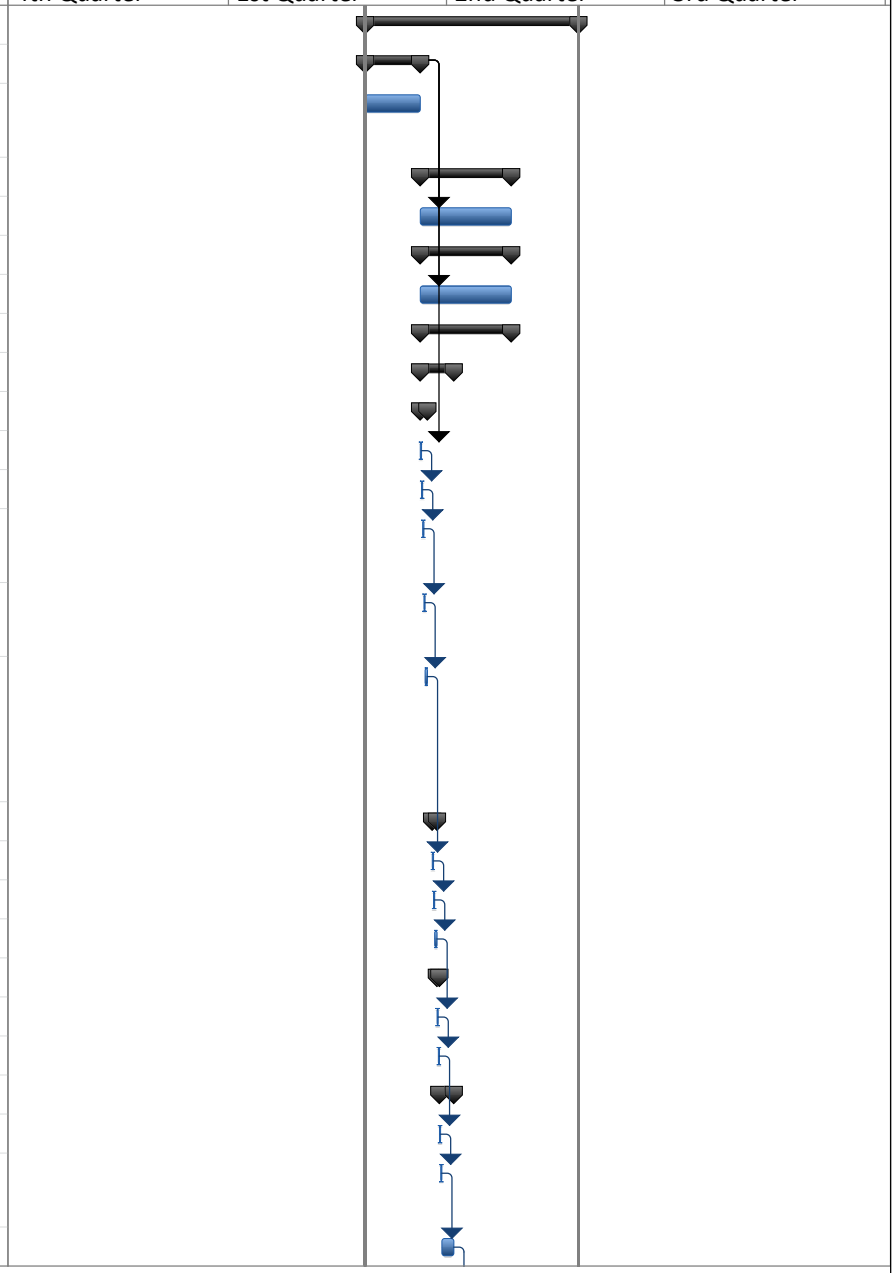
ID	Task Name	Cost
1	**Lake Road Boiler 1 Retirement**	**$91,691.28**
2	**Pre-Engineering**	**$25,969.20**
3	Permit review and engineering analysis and establish isolation points.	$25,969.20
4	**KCL&L Overhead Costs**	**$17,348.80**
5	KCP&L Retirement Manager	$17,348.80
6	**Equipment Rentals**	**$5,877.76**
7	Vacuum truck	$5,877.76
8	**Retirement**	**$29,213.52**
9	**Electrical**	**$10,037.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Motors**	**$4,677.36**
24	De-energize all primary power at the source.	$446.64
25	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$446.64
26	Drain lube oil system (if applicable) and dispose of oil.	$3,784.08
27	**Fuel Systems**	**$3,784.08**
28	Isolate gas lines from source, open and vent.	$1,261.36
29	Isolate fuel oil lines from source, drain, open and vent.	$2,522.72
30	**Boiler Chemical Feed**	**$1,261.36**
31	Drain all chemical feed tanks.	$1,261.36
32	**Boiler**	**$7,084.64**
33	Open boiler doors.	$880.96
34	Gas side - perform cleaning of the boiler and bottom ash system.	$4,480.00
35	Drain boiler, drum, downcomers and headers.	$842.72
36	Open drum doors.	$880.96
37	**Ductwork**	**$5,360.96**
38	Open ductwork doors.	$880.96
39	Perform extensive cleaning of the ductwork.	$4,480.00
40	**Feedwater Piping**	**$842.72**

Lake Road Boiler 1 Retirement

ID	Task Name	Cost
41	Drain water from the system.	$421.36
42	Leave open vents and drains.	$421.36
43	**Compressed Air System**	**$842.72**
44	Open vents and drains.	$842.72
45	**Post Retirement Activities**	**$13,282.00**
46	Post Retirement Activities	$13,282.00

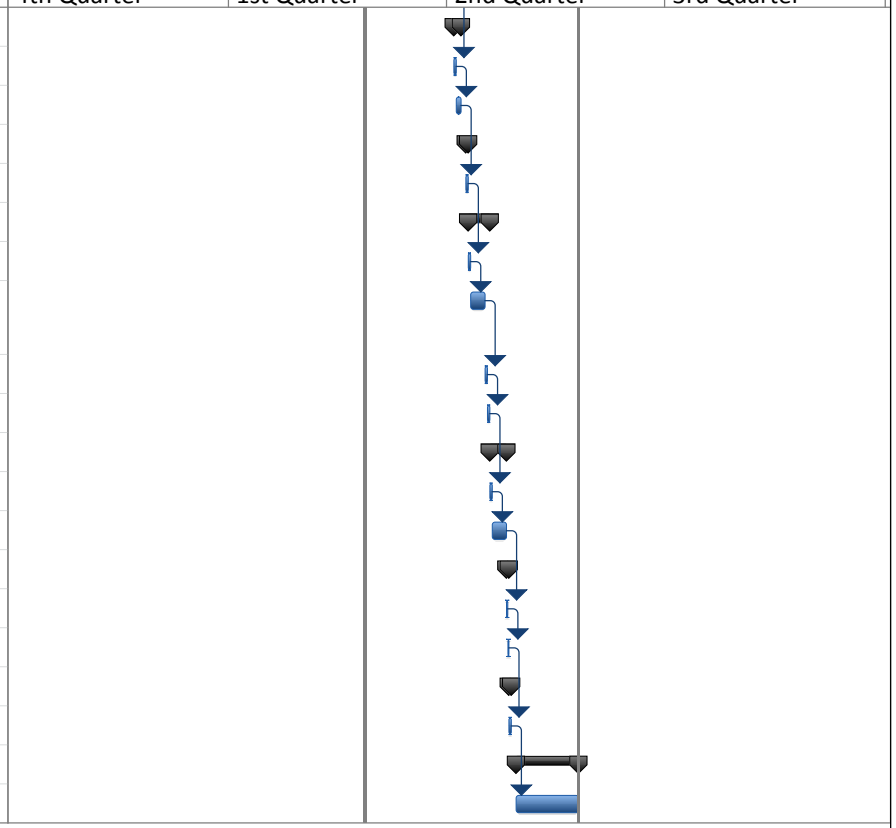
Lake Road Boiler 1 Retirement

ID	Task Name	Duration
1	**Lake Road Boiler 1 Retirement**	**65 days**
2	**Pre-Engineering**	**17 days**
3	Permit review and engineering analysis and establish isolation points.	17 days
4	**KCL&L Overhead Costs**	**28 days**
5	KCP&L Retirement Manager	28 days
6	**Equipment Rentals**	**28 days**
7	Vacuum truck	28 days
8	**Retirement**	**28 days**
9	**Electrical**	**10 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Motors**	**4 days**
24	De-energize all primary power at the source.	0.5 days
25	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	0.5 days
26	Drain lube oil system (if applicable) and dispose of oil.	3 days



Lake Road Boiler 1 Retirement

ID	Task Name	Duration
27	**Fuel Systems**	**3 days**
28	Isolate gas lines from source, open and vent.	1 day
29	Isolate fuel oil lines from source, drain, open and vent.	2 days
30	**Boiler Chemical Feed**	**1 day**
31	Drain all chemical feed tanks.	1 day
32	**Boiler**	**7 days**
33	Open boiler doors.	1 day
34	Gas side - perform cleaning of the boiler and bottom ash system.	4 days
35	Drain boiler, drum, downcomers and headers.	1 day
36	Open drum doors.	1 day
37	**Ductwork**	**5 days**
38	Open ductwork doors.	1 day
39	Perform extensive cleaning of the ductwork.	4 days
40	**Feedwater Piping**	**1 day**
41	Drain water from the system.	0.5 days
42	Leave open vents and drains.	0.5 days
43	**Compressed Air System**	**1 day**
44	Open vents and drains.	1 day
45	**Post Retirement Activities**	**20 days**
46	Post Retirement Activities	20 days



Lake Road Boiler 1 Dismantlement

Owner Costs					
	Pre-Dismantlement Activities			$412,728	
	Overhead During Dismantlement			$86,564	
	Post-Dismantlement Activities			$16,380	
		Owner Costs Total*			$515,672
Demolition General Contractor (DGC) Costs					
	Site Management			$129,546	
	Equipment Rental			$307,618	
	Consummables			$306,904	
	Scrap Crew(s)			$304,531	
	Dismantlement			$493,684	
		Contractor Direct Cost*	$1,542,283		
	Contractor Allowances				
	DGC Insurance	2.00%		$30,846	
	Contingency/Profit	15.00%		$235,969	
	Performance Bond	2.00%		$36,181.96	
		Contractor Costs Total:			$1,845,280
Total:					$2,360,952
Owner Internal Costs:		5.00%			$118,048
Owner Contingency:		25.00%			$619,750
Lake Road Boiler 1 Dismantlement Opinion of Probable Cost:					$3,098,749

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $2,057,955

Lake Road Boiler 1 Dismantlement

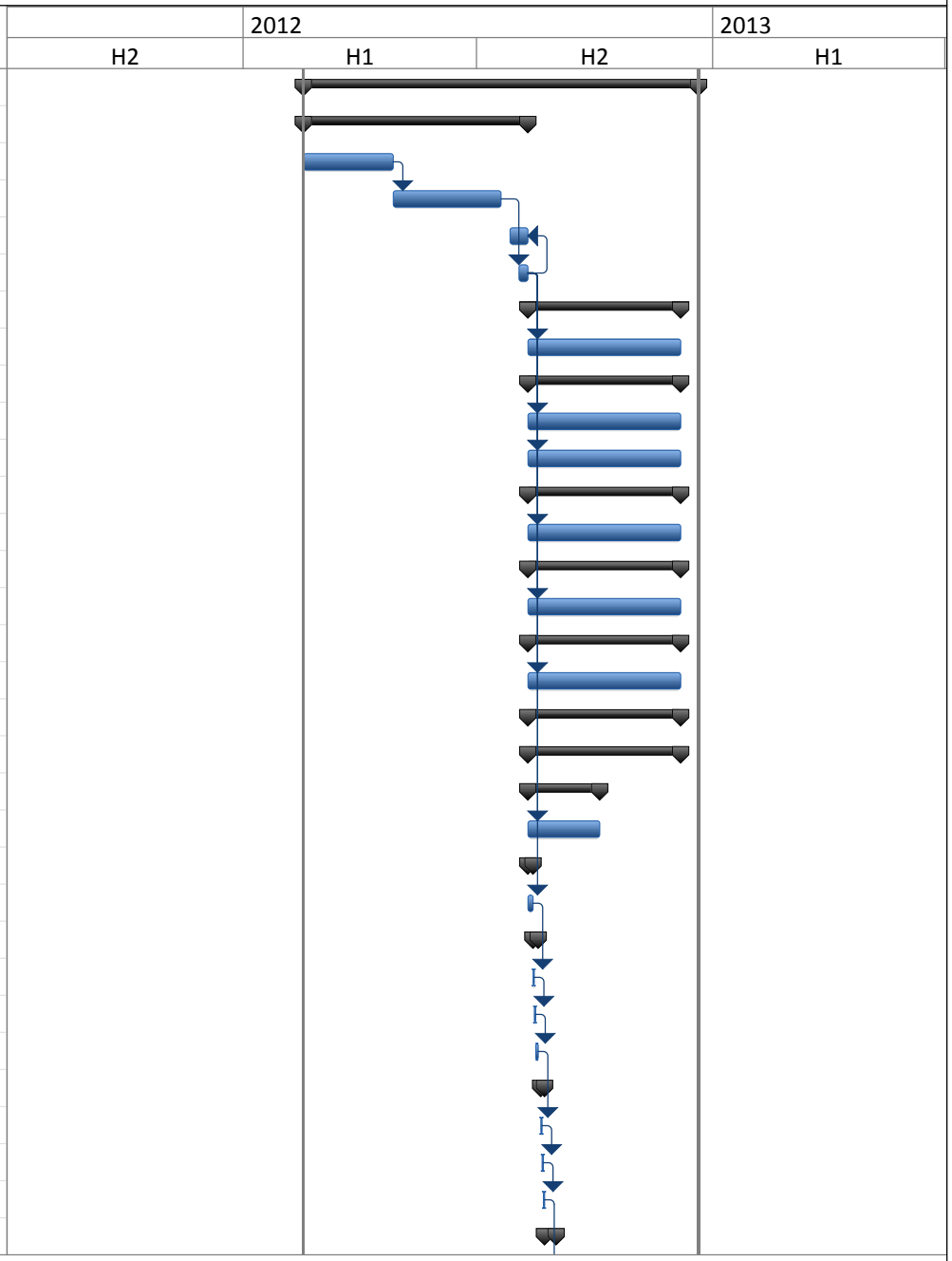
ID	Task Name	Cost
1	**Lake Road Boiler 1 Dismantlement**	**$2,057,957.12**
2	**Pre-Dismantlement Activities**	**$412,728.00**
3	Detailed Characterization Study	$234,744.40
4	Hire Demolition General Contractor	$167,184.00
5	KCP&L Prepares Unit for Dismantlement	$10,799.60
6	Demolition Contractor Mobilizes on Site	$0.00
7	**KCP&L Overhead during Dismantlement**	**$86,564.00**
8	KCP&L Engineer	$86,564.00
9	**Demoliton Contractor Overhead during Dismantlement**	**$129,546.80**
10	Demolition Contractor Safety Manager	$45,512.40
11	Demolition Contractor Superintendent	$84,034.40
12	**Demolition Contractor Equipment Rental Costs**	**$307,618.40**
13	Equipment Rental	$307,618.40
14	**Demolition Contractor Consummables**	**$306,904.40**
15	Consummables	$306,904.40
16	**Scrap Crew(s)**	**$304,531.20**
17	Crew to Handle Scrap Material(s)	$304,531.20
18	**Dismantlement Directs**	**$493,684.32**
19	**Phase 1 Demolition**	**$493,684.32**
20	**Electrical Demolition**	**$71,654.40**
21	Electrical Demolition Equipment	$71,654.40
22	**Critical Piping**	**$3,582.72**
23	Main Steam Piping	$3,582.72
24	**Fuel Systems (plant side)**	**$7,165.44**
25	Gas Piping and Valves	$1,791.36
26	Fuel Oil Piping and Valves	$1,791.36
27	Igniters	$3,582.72
28	**Chemical Feed Systems**	**$5,374.08**
29	Tanks	$1,791.36
30	Pumps	$1,791.36
31	Piping	$1,791.36
32	**Sampling Systems**	**$10,017.12**
33	Field Mounted Heat Exchangers	$3,582.72
34	Piping	$2,851.68
35	Sample Panel	$3,582.72
36	**Miscellaneous Equipment**	**$8,956.80**
37	Miscellaneous Equipment (including Fire Protection)	$8,956.80
38	**Boiler Equipment**	**$71,654.40**
39	Fans	$17,913.60
40	Drums	$17,913.60
41	Ductwork	$35,827.20
42	**Boiler Removal**	**$143,308.80**
43	Furnace	$143,308.80
44	**Boiler Steel Framing**	**$100,316.16**

Lake Road Boiler 1 Dismantlement

ID	Task Name	Cost
45	Framing	$35,827.20
46	Bracing and Girts	$35,827.20
47	Columns	$28,661.76
48	**Boiler Foundations**	**$71,654.40**
49	Equipment Foundation Demolition to Grade	$71,654.40
50	**Project Close-Out**	**$16,380.00**
51	Project Close-Out Activities	$16,380.00

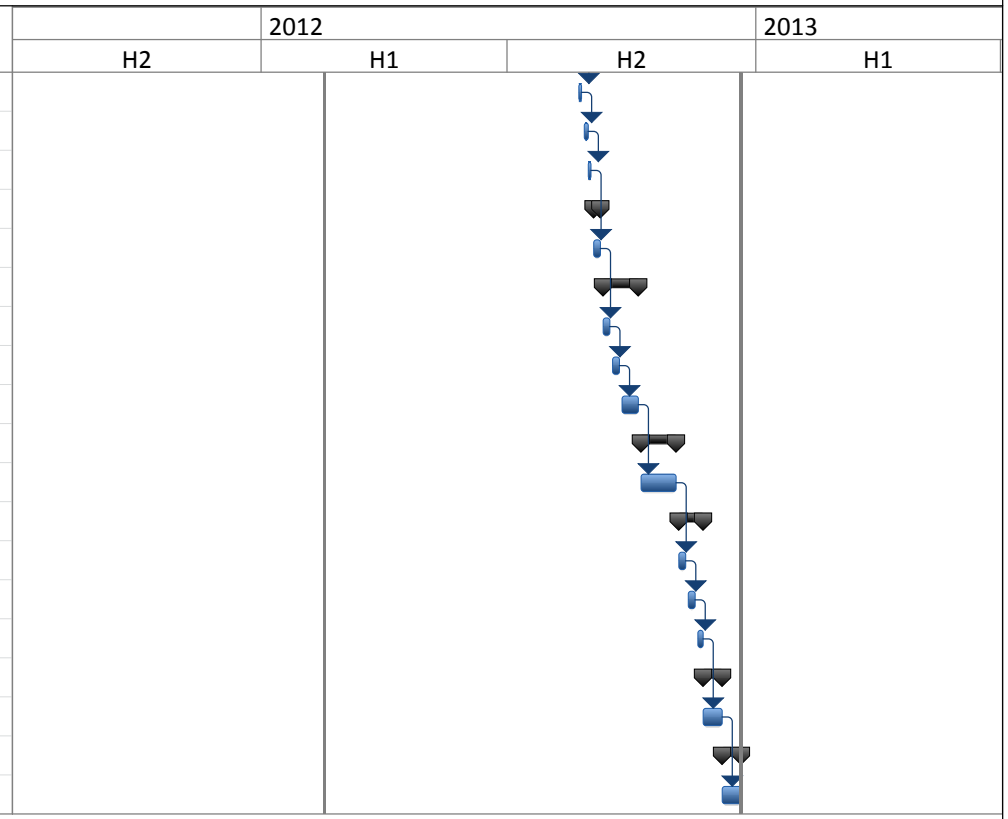
Lake Road Boiler 1 Dismantlement

ID	Task Name	Duration
1	**Lake Road Boiler 1 Dismantlement**	**220 days**
2	**Pre-Dismantlement Activities**	**125 days**
3	Detailed Characterization Study	50 days
4	Hire Demolition General Contractor	3 mons
5	KCP&L Prepares Unit for Dismantlement	2 wks
6	Demolition Contractor Mobilizes on Site	5 days
7	**KCP&L Overhead during Dismantlement**	**85 days**
8	KCP&L Engineer	85 days
9	**Demoliton Contractor Overhead during Dismantlemen**	**85 days**
10	Demolition Contractor Safety Manager	85 days
11	Demolition Contractor Superintendent	85 days
12	**Demolition Contractor Equipment Rental Costs**	**85 days**
13	Equipment Rental	85 days
14	**Demolition Contractor Consummables**	**85 days**
15	Consummables	85 days
16	**Scrap Crew(s)**	**85 days**
17	Crew to Handle Scrap Material(s)	85 days
18	**Dismantlement Directs**	**85 days**
19	**Phase 1 Demolition**	**85 days**
20	**Electrical Demolition**	**40 days**
21	Electrical Demolition Equipment	40 days
22	**Critical Piping**	**2 days**
23	Main Steam Piping	2 days
24	**Fuel Systems (plant side)**	**4 days**
25	Gas Piping and Valves	1 day
26	Fuel Oil Piping and Valves	1 day
27	Igniters	2 days
28	**Chemical Feed Systems**	**3 days**
29	Tanks	1 day
30	Pumps	1 day
31	Piping	1 day
32	**Sampling Systems**	**7 days**



Lake Road Boiler 1 Dismantlement

ID	Task Name	Duration
33	Field Mounted Heat Exchangers	2 days
34	Piping	3 days
35	Sample Panel	2 days
36	**Miscellaneous Equipment**	**5 days**
37	Miscellaneous Equipment (including Fire Protec	5 days
38	**Boiler Equipment**	**20 days**
39	Fans	5 days
40	Drums	5 days
41	Ductwork	10 days
42	**Boiler Removal**	**20 days**
43	Furnace	20 days
44	**Boiler Steel Framing**	**14 days**
45	Framing	5 days
46	Bracing and Girts	5 days
47	Columns	4 days
48	**Boiler Foundations**	**10 days**
49	Equipment Foundation Demolition to Grade	10 days
50	**Project Close-Out**	**10 days**
51	Project Close-Out Activities	10 days



BOILER 2

Lake Road Boiler 2 Retirement

Owner Costs			
Pre-Retirement Activities		$25,969	
Retirement Activities		$52,440	
Post-Retirement Activities		$13,282	
Owner Direct Total			$91,691
Owner Internal Costs	5.00%		$4,585
Owner Contingency:	25.00%		$24,069
Lake Road Boiler 2 Retirement Opinion of Probable Cost:			$120,344

Lake Road Boiler 2 Retirement

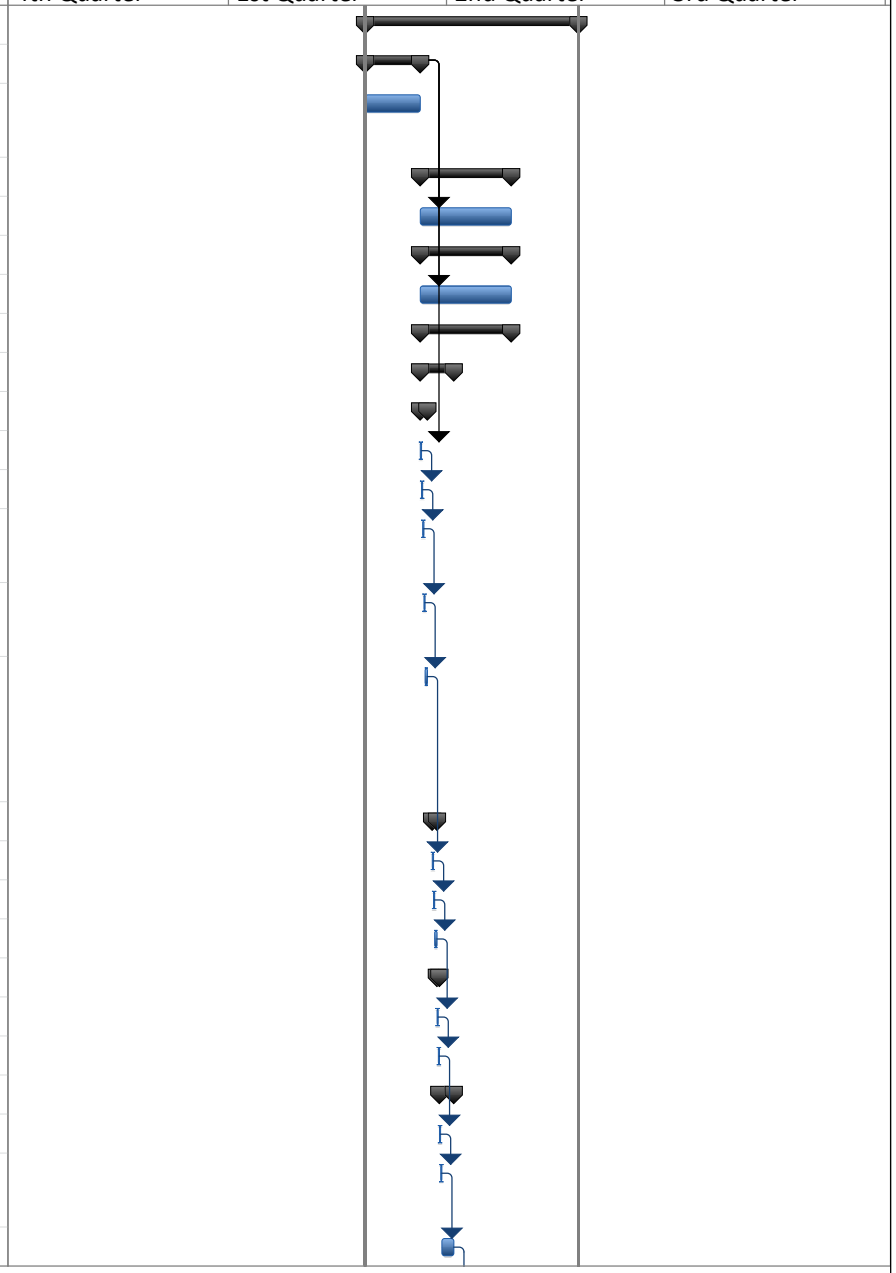
ID	Task Name	Cost
1	**Lake Road Boiler 2 Retirement**	**$91,691.28**
2	**Pre-Engineering**	**$25,969.20**
3	Permit review and engineering analysis and establish isolation points.	$25,969.20
4	**KCL&L Overhead Costs**	**$17,348.80**
5	KCP&L Retirement Manager	$17,348.80
6	**Equipment Rentals**	**$5,877.76**
7	Vacuum truck	$5,877.76
8	**Retirement**	**$29,213.52**
9	**Electrical**	**$10,037.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Motors**	**$4,677.36**
24	De-energize all primary power at the source.	$446.64
25	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$446.64
26	Drain lube oil system (if applicable) and dispose of oil.	$3,784.08
27	**Fuel Systems**	**$3,784.08**
28	Isolate gas lines from source, open and vent.	$1,261.36
29	Isolate fuel oil lines from source, drain, open and vent.	$2,522.72
30	**Boiler Chemical Feed**	**$1,261.36**
31	Drain all chemical feed tanks.	$1,261.36
32	**Boiler**	**$7,084.64**
33	Open boiler doors.	$880.96
34	Gas side - perform cleaning of the boiler and bottom ash system.	$4,480.00
35	Drain boiler, drum, downcomers and headers.	$842.72
36	Open drum doors.	$880.96
37	**Ductwork**	**$5,360.96**
38	Open ductwork doors.	$880.96
39	Perform extensive cleaning of the ductwork.	$4,480.00
40	**Feedwater Piping**	**$842.72**

Lake Road Boiler 2 Retirement

ID	Task Name	Cost
41	Drain water from the system.	$421.36
42	Leave open vents and drains.	$421.36
43	**Compressed Air System**	**$842.72**
44	Open vents and drains.	$842.72
45	**Post Retirement Activities**	**$13,282.00**
46	Post Retirement Activities	$13,282.00

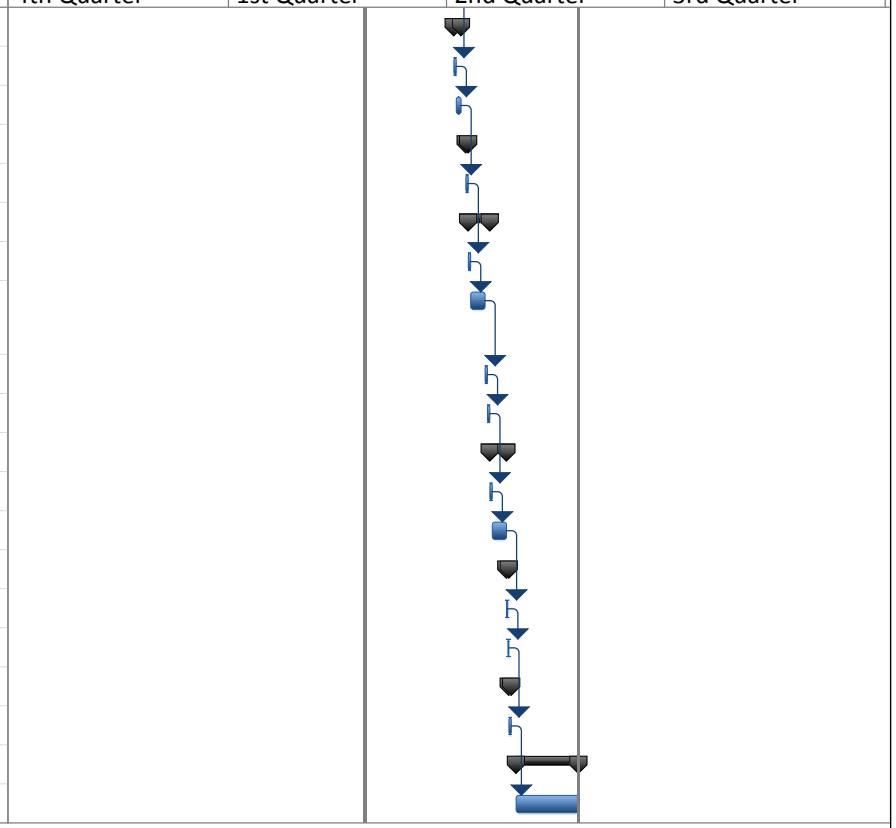
Lake Road Boiler 2 Retirement

ID	Task Name	Duration
1	**Lake Road Boiler 2 Retirement**	**65 days**
2	**Pre-Engineering**	**17 days**
3	Permit review and engineering analysis and establish isolation points.	17 days
4	**KCL&L Overhead Costs**	**28 days**
5	KCP&L Retirement Manager	28 days
6	**Equipment Rentals**	**28 days**
7	Vacuum truck	28 days
8	**Retirement**	**28 days**
9	**Electrical**	**10 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Motors**	**4 days**
24	De-energize all primary power at the source.	0.5 days
25	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	0.5 days
26	Drain lube oil system (if applicable) and dispose of oil.	3 days



Lake Road Boiler 2 Retirement

ID	Task Name	Duration
27	**Fuel Systems**	**3 days**
28	Isolate gas lines from source, open and vent.	1 day
29	Isolate fuel oil lines from source, drain, open and vent.	2 days
30	**Boiler Chemical Feed**	**1 day**
31	Drain all chemical feed tanks.	1 day
32	**Boiler**	**7 days**
33	Open boiler doors.	1 day
34	Gas side - perform cleaning of the boiler and bottom ash system.	4 days
35	Drain boiler, drum, downcomers and headers.	1 day
36	Open drum doors.	1 day
37	**Ductwork**	**5 days**
38	Open ductwork doors.	1 day
39	Perform extensive cleaning of the ductwork.	4 days
40	**Feedwater Piping**	**1 day**
41	Drain water from the system.	0.5 days
42	Leave open vents and drains.	0.5 days
43	**Compressed Air System**	**1 day**
44	Open vents and drains.	1 day
45	**Post Retirement Activities**	**20 days**
46	Post Retirement Activities	20 days



Lake Road Boiler 2 Dismantlement

Owner Costs					
	Pre-Dismantlement Activities			$412,728	
	Overhead During Dismantlement			$86,564	
	Post-Dismantlement Activities			$16,380	
		Owner Costs Total*			$515,672
Demolition General Contractor (DGC) Costs					
	Site Management			$129,546	
	Equipment Rental			$307,618	
	Consummables			$306,904	
	Scrap Crew(s)			$304,531	
	Dismantlement			$493,684	
		Contractor Direct Cost*	$1,542,283		
	Contractor Allowances				
	DGC Insurance	2.00%		$30,846	
	Contingency/Profit	15.00%		$235,969	
	Performance Bond	2.00%		$36,181.96	
		Contractor Costs Total:			$1,845,280
Total:					$2,360,952
Owner Internal Costs:		5.00%			$118,048
Owner Contingency:		25.00%			$619,750
Lake Road Boiler 2 Dismantlement Opinion of Probable Cost:					$3,098,749

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $2,057,955

Lake Road Boiler 2 Dismantlement

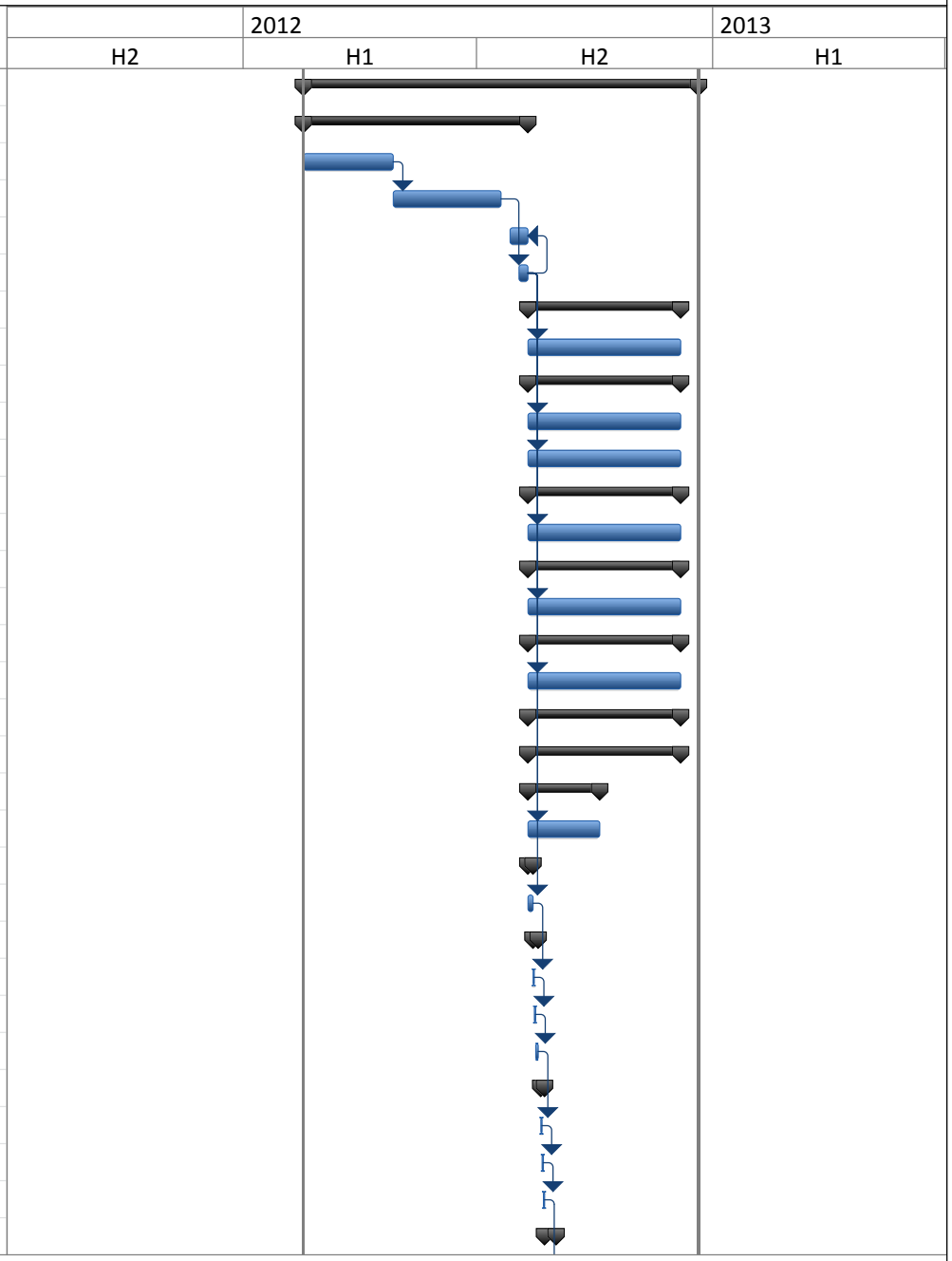
ID	Task Name	Cost
1	**Lake Road Boiler 2 Dismantlement**	**$2,057,957.12**
2	**Pre-Dismantlement Activities**	**$412,728.00**
3	Detailed Characterization Study	$234,744.40
4	Hire Demolition General Contractor	$167,184.00
5	KCP&L Prepares Unit for Dismantlement	$10,799.60
6	Demolition Contractor Mobilizes on Site	$0.00
7	**KCP&L Overhead during Dismantlement**	**$86,564.00**
8	KCP&L Engineer	$86,564.00
9	**Demoliton Contractor Overhead during Dismantlement**	**$129,546.80**
10	Demolition Contractor Safety Manager	$45,512.40
11	Demolition Contractor Superintendent	$84,034.40
12	**Demolition Contractor Equipment Rental Costs**	**$307,618.40**
13	Equipment Rental	$307,618.40
14	**Demolition Contractor Consummables**	**$306,904.40**
15	Consummables	$306,904.40
16	**Scrap Crew(s)**	**$304,531.20**
17	Crew to Handle Scrap Material(s)	$304,531.20
18	**Dismantlement Directs**	**$493,684.32**
19	**Phase 1 Demolition**	**$493,684.32**
20	**Electrical Demolition**	**$71,654.40**
21	Electrical Demolition Equipment	$71,654.40
22	**Critical Piping**	**$3,582.72**
23	Main Steam Piping	$3,582.72
24	**Fuel Systems (plant side)**	**$7,165.44**
25	Gas Piping and Valves	$1,791.36
26	Fuel Oil Piping and Valves	$1,791.36
27	Igniters	$3,582.72
28	**Chemical Feed Systems**	**$5,374.08**
29	Tanks	$1,791.36
30	Pumps	$1,791.36
31	Piping	$1,791.36
32	**Sampling Systems**	**$10,017.12**
33	Field Mounted Heat Exchangers	$3,582.72
34	Piping	$2,851.68
35	Sample Panel	$3,582.72
36	**Miscellaneous Equipment**	**$8,956.80**
37	Miscellaneous Equipment (including Fire Protection)	$8,956.80
38	**Boiler Equipment**	**$71,654.40**
39	Fans	$17,913.60
40	Drums	$17,913.60
41	Ductwork	$35,827.20
42	**Boiler Removal**	**$143,308.80**
43	Furnace	$143,308.80
44	**Boiler Steel Framing**	**$100,316.16**

Lake Road Boiler 2 Dismantlement

ID	Task Name	Cost
45	Framing	$35,827.20
46	Bracing and Girts	$35,827.20
47	Columns	$28,661.76
48	**Boiler Foundations**	**$71,654.40**
49	Equipment Foundation Demolition to Grade	$71,654.40
50	**Project Close-Out**	**$16,380.00**
51	Project Close-Out Activities	$16,380.00

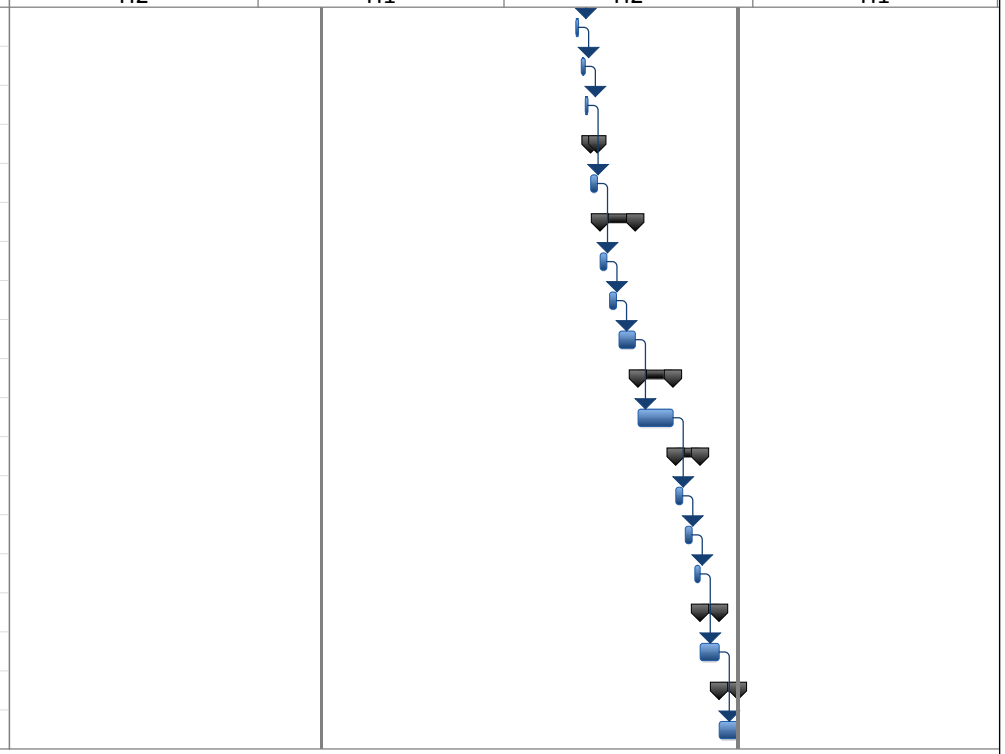
Lake Road Boiler 2 Dismantlement

ID	Task Name	Duration
1	**Lake Road Boiler 2 Dismantlement**	**220 days**
2	**Pre-Dismantlement Activities**	**125 days**
3	Detailed Characterization Study	50 days
4	Hire Demolition General Contractor	3 mons
5	KCP&L Prepares Unit for Dismantlement	2 wks
6	Demolition Contractor Mobilizes on Site	5 days
7	**KCP&L Overhead during Dismantlement**	**85 days**
8	KCP&L Engineer	85 days
9	**Demoliton Contractor Overhead during Dismantlemen**	**85 days**
10	Demolition Contractor Safety Manager	85 days
11	Demolition Contractor Superintendent	85 days
12	**Demolition Contractor Equipment Rental Costs**	**85 days**
13	Equipment Rental	85 days
14	**Demolition Contractor Consummables**	**85 days**
15	Consummables	85 days
16	**Scrap Crew(s)**	**85 days**
17	Crew to Handle Scrap Material(s)	85 days
18	**Dismantlement Directs**	**85 days**
19	**Phase 1 Demolition**	**85 days**
20	**Electrical Demolition**	**40 days**
21	Electrical Demolition Equipment	40 days
22	**Critical Piping**	**2 days**
23	Main Steam Piping	2 days
24	**Fuel Systems (plant side)**	**4 days**
25	Gas Piping and Valves	1 day
26	Fuel Oil Piping and Valves	1 day
27	Igniters	2 days
28	**Chemical Feed Systems**	**3 days**
29	Tanks	1 day
30	Pumps	1 day
31	Piping	1 day
32	**Sampling Systems**	**7 days**



Lake Road Boiler 2 Dismantlement

ID	Task Name	Duration
33	Field Mounted Heat Exchangers	2 days
34	Piping	3 days
35	Sample Panel	2 days
36	**Miscellaneous Equipment**	**5 days**
37	Miscellaneous Equipment (including Fire Protec	5 days
38	**Boiler Equipment**	**20 days**
39	Fans	5 days
40	Drums	5 days
41	Ductwork	10 days
42	**Boiler Removal**	**20 days**
43	Furnace	20 days
44	**Boiler Steel Framing**	**14 days**
45	Framing	5 days
46	Bracing and Girts	5 days
47	Columns	4 days
48	**Boiler Foundations**	**10 days**
49	Equipment Foundation Demolition to Grade	10 days
50	**Project Close-Out**	**10 days**
51	Project Close-Out Activities	10 days



BOILER 3

Lake Road Boiler 3 Retirement

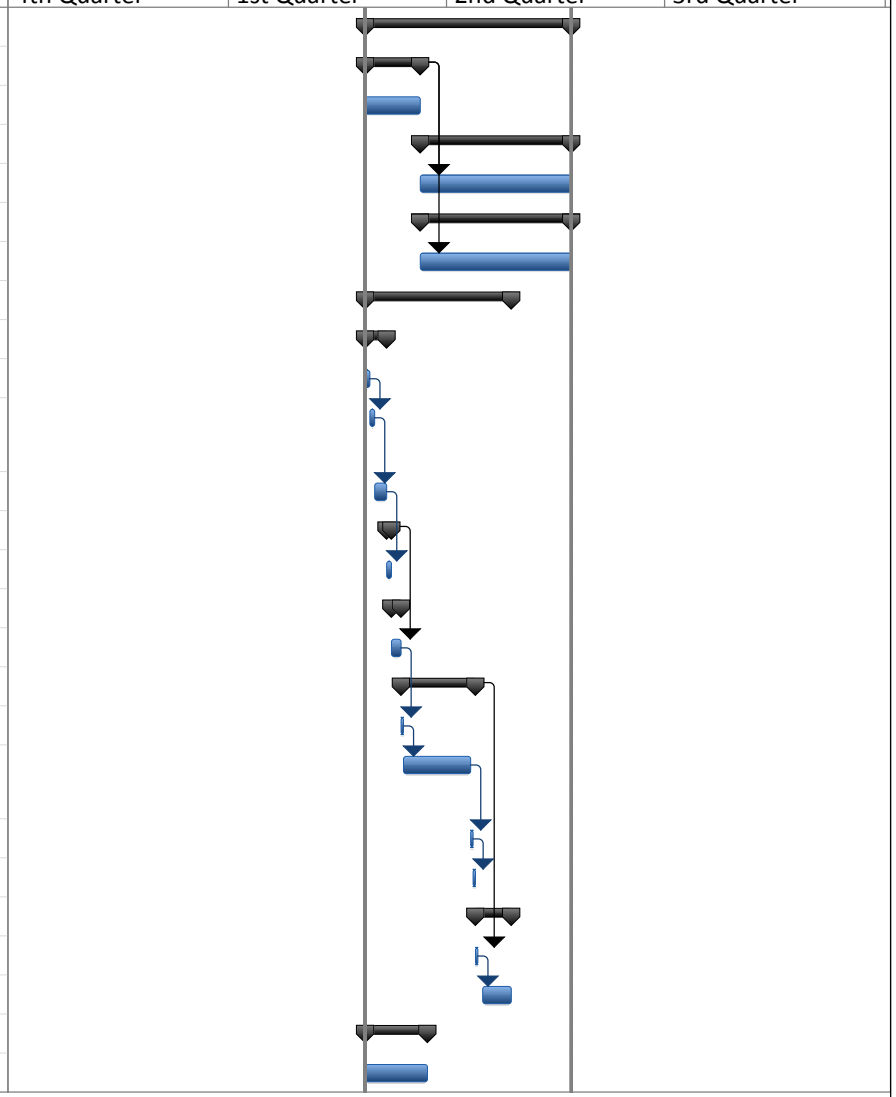
Owner Costs			
Pre-Retirement Activities		$25,969	
Retirement Activities		$84,001	
Post-Retirement Activities		$13,282	
Owner Direct Total			$123,252
Owner Internal Costs	5.00%		$6,163
Owner Contingency:	25.00%		$32,354
Lake Road Boiler 3 Retirement Opinion of Probable Cost:			$161,768

Lake Road Boiler 3 Retirement

ID	Task Name	Cost
1	**Lake Road Boiler 3 Retirement**	**$123,252.08**
2	**Pre-Engineering**	**$25,969.20**
3	Engineering analysis and establish isolation points.	$0.00
4	**KCL&L Overhead Costs**	**$27,882.00**
5	KCP&L Retirement Manager	$27,882.00
6	**Equipment Rentals**	**$9,446.40**
7	Vacuum truck	$9,446.40
8	**Retirement**	**$59,954.48**
9	**Motors**	**$6,216.00**
10	De-energize all primary power at the source.	$1,786.56
11	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
12	Drain lube oil system (if applicable) and dispose of oil.	$2,642.88
13	**Fuel Gas Systems**	**$1,685.44**
14	Vent the Fuel Gas Systems	$1,685.44
15	**Boiler Chemical Feed**	**$1,685.44**
16	Drain all chemical feed tanks and piping	$1,685.44
17	**Boiler**	**$25,004.64**
18	Open boiler doors.	$880.96
19	Gas side - perform cleaning of the boiler.	$22,400.00
20	Drain boiler, drum, downcomers and headers.	$842.72
21	Open drum doors.	$880.96
22	**Ductwork**	**$12,080.96**
23	Open ductwork doors.	$880.96
24	Perform extensive cleaning of the ductwork.	$11,200.00
25	**Post Retirement Activities**	**$13,282.00**
26	Post Retirement Activities	$13,282.00

Lake Road Boiler 3 Retirement

ID	Task Name	Duration
1	**Lake Road Boiler 3 Retirement**	**62 days**
2	**Pre-Engineering**	**17 days**
3	Engineering analysis and establish isolation points.	17 days
4	**KCL&L Overhead Costs**	**45 days**
5	KCP&L Retirement Manager	45 days
6	**Equipment Rentals**	**45 days**
7	Vacuum truck	45 days
8	**Retirement**	**45 days**
9	**Motors**	**7 days**
10	De-energize all primary power at the source.	2 days
11	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
12	Drain lube oil system (if applicable) and dispose of oil.	3 days
13	**Fuel Gas Systems**	**2 days**
14	Vent the Fuel Gas Systems	2 days
15	**Boiler Chemical Feed**	**2 days**
16	Drain all chemical feed tanks and piping	2 days
17	**Boiler**	**23 days**
18	Open boiler doors.	1 day
19	Gas side - perform cleaning of the boiler.	20 days
20	Drain boiler, drum, downcomers and headers.	1 day
21	Open drum doors.	1 day
22	**Ductwork**	**11 days**
23	Open ductwork doors.	1 day
24	Perform extensive cleaning of the ductwork.	10 days
25	**Post Retirement Activities**	**20 days**
26	Post Retirement Activities	20 days



Lake Road Boiler 3 Dismantlement

Owner Costs					
	Pre-Dismantlement Activities			$186,483	
	Overhead During Dismantlement			$298,939	
	Post-Dismantlement Activities			$16,380	
		Owner Costs Total*			$501,802
Demolition General Contractor (DGC) Costs					
	Site Management			$149,359	
	Equipment Rental			$354,665	
	Consummables			$353,842	
	Scrap Crew(s)			$351,016	
	Dismantlement			$671,358	
		Contractor Direct Cost*	$1,880,240		
	Contractor Allowances				
	DGC Insurance	2.00%		$37,605	
	Contingency/Profit	15.00%		$287,677	
	Performance Bond	2.00%		$44,110.43	
		Contractor Costs Total:			$2,249,632
Total:					$2,751,434
Owner Internal Costs:		5.00%			$137,572
Owner Contingency:		25.00%			$722,251
Lake Road Boiler 3 Dismantlement Opinion of Probable Cost:					$3,611,257

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $2,382,042

Lake Road Boiler 3 Dismantlement

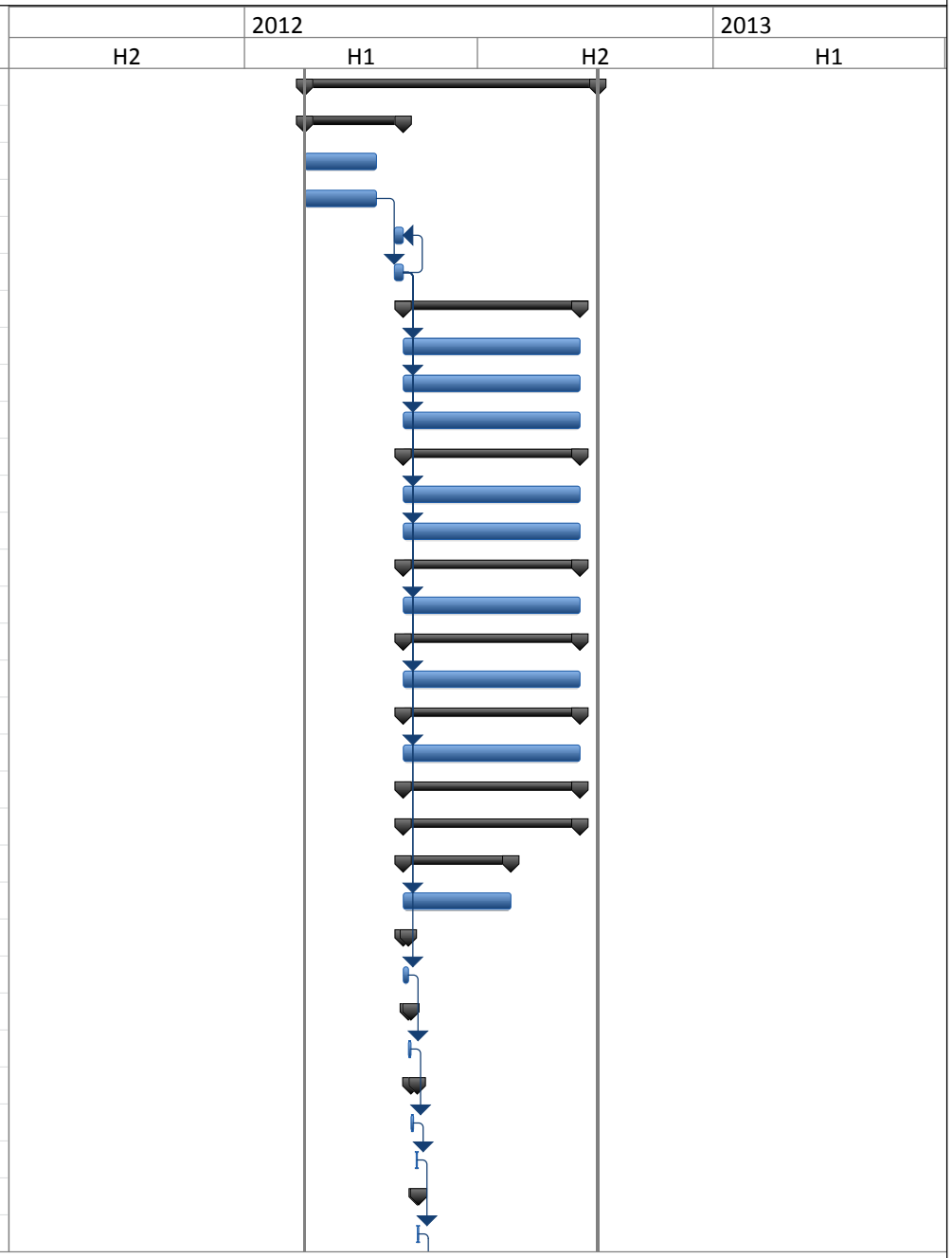
ID	Task Name	Cost
1	**Lake Road Boiler 3 Dismantlement**	**$2,382,135.80**
2	**Pre-Dismantlement Activities**	**$186,483.32**
3	Detailed Planning & Hire Owner's Engineer	$69,627.52
4	Hire Demolition General Contractor	$111,456.00
5	KCP&L Prepares Unit for Dismantlement	$5,399.80
6	Demolition Contractor Mobilizes on Site	$0.00
7	**KCP&L Overhead during Dismantlement**	**$298,939.20**
8	KCP&L Engineer	$99,803.20
9	Owners Engineer Project Manager	$29,792.00
10	Owners Engineer - Engineer	$169,344.00
11	**Demoliton Contractor Overhead during Dismantlement**	**$149,359.84**
12	Demolition Contractor Safety Manager	$52,473.12
13	Demolition Contractor Superintendent	$96,886.72
14	**Demolition Contractor Equipment Rental Costs**	**$354,665.92**
15	Equipment Rental	$354,665.92
16	**Demolition Contractor Consummables**	**$353,842.72**
17	Consummables	$353,842.72
18	**Scrap Crew(s)**	**$351,106.56**
19	Crew to Handle Scrap Material(s)	$351,106.56
20	**Dismantlement Directs**	**$671,358.24**
21	**Phase 1 Demolition**	**$671,358.24**
22	**Electrical Demolition**	**$107,481.60**
23	Electrical Demolition Equipment	$107,481.60
24	**Boiler Feed System**	**$3,582.72**
25	Feedwater piping	$3,582.72
26	**Critical Piping**	**$3,582.72**
27	Main Steam Piping	$3,582.72
28	**Fuel Systems (Plant Side)**	**$5,374.08**
29	Gas Piping and Equipment	$3,582.72
30	Igniters	$1,791.36
31	**Air Preheat System**	**$1,791.36**
32	Steam Coil Air Heater Piping	$1,791.36
33	**Miscellaneous Equipment**	**$8,956.80**
34	Miscellaneous Equipment (including Fire Protection)	$8,956.80
35	**Boiler Equipment**	**$67,669.92**
36	Fans	$17,913.60
37	Steam Drum	$28,661.76
38	Soot Blowers	$3,180.96
39	Ductwork	$17,913.60
40	**Boiler Removal**	**$114,647.04**
41	Furnace	$57,323.52
42	Back Pass	$57,323.52
43	**Boiler Steel Framing**	**$250,790.40**
44	Hanger Girders at Top	$35,827.20

Lake Road Boiler 3 Dismantlement

ID	Task Name	Cost
45	All Other Framing	$71,654.40
46	Bracing and Girts	$71,654.40
47	Columns	$71,654.40
48	**Boiler Foundations**	**$107,481.60**
49	Equipment Foundation Demolition to Grade	$107,481.60
50	**Project Close-Out**	**$16,380.00**
51	Project Close-Out Activities	$16,380.00

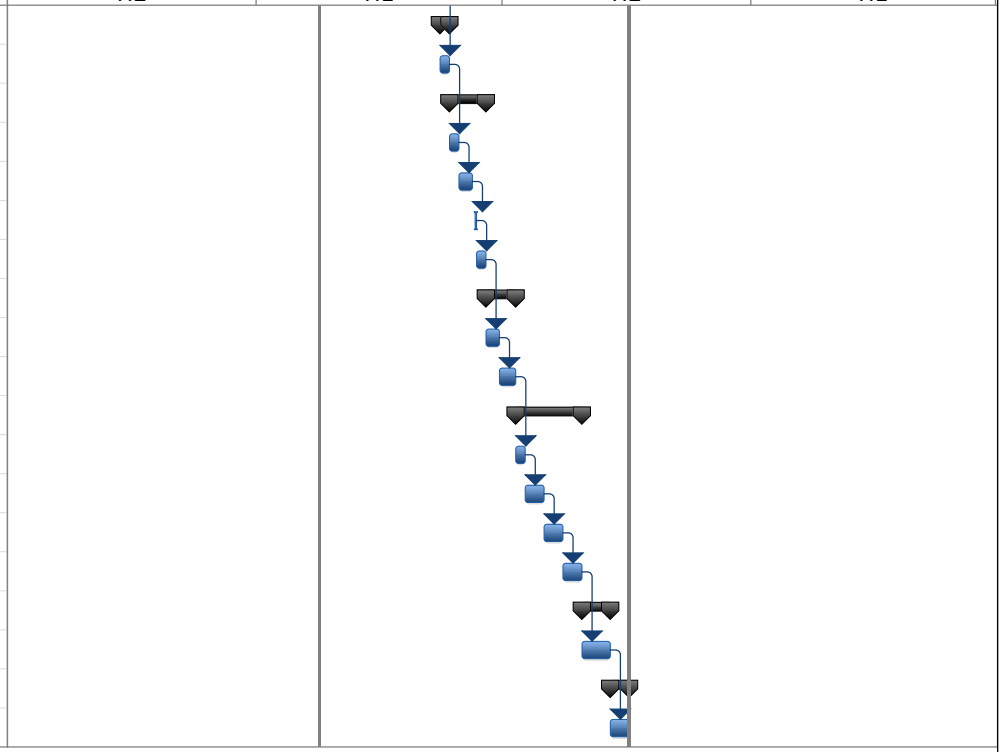
Lake Road Boiler 3 Dismantlement

ID	Task Name	Duration
1	**Lake Road Boiler 3 Dismantlement**	**163 days**
2	**Pre-Dismantlement Activities**	**55 days**
3	Detailed Planning & Hire Owner's Engineer	2 mons
4	Hire Demolition General Contractor	2 mons
5	KCP&L Prepares Unit for Dismantlement	1 wk
6	Demolition Contractor Mobilizes on Site	5 days
7	**KCP&L Overhead during Dismantlement**	**98 days**
8	KCP&L Engineer	98 days
9	Owners Engineer Project Manager	98 days
10	Owners Engineer - Engineer	98 days
11	**Demoliton Contractor Overhead during Dismantlemen**	**98 days**
12	Demolition Contractor Safety Manager	98 days
13	Demolition Contractor Superintendent	98 days
14	**Demolition Contractor Equipment Rental Costs**	**98 days**
15	Equipment Rental	98 days
16	**Demolition Contractor Consummables**	**98 days**
17	Consummables	98 days
18	**Scrap Crew(s)**	**98 days**
19	Crew to Handle Scrap Material(s)	98 days
20	**Dismantlement Directs**	**98 days**
21	**Phase 1 Demolition**	**98 days**
22	**Electrical Demolition**	**60 days**
23	Electrical Demolition Equipment	60 days
24	**Boiler Feed System**	**2 days**
25	Feedwater piping	2 days
26	**Critical Piping**	**2 days**
27	Main Steam Piping	2 days
28	**Fuel Systems (Plant Side)**	**3 days**
29	Gas Piping and Equipment	2 days
30	Igniters	1 day
31	**Air Preheat System**	**1 day**
32	Steam Coil Air Heater Piping	1 day



Lake Road Boiler 3 Dismantlement

ID	Task Name	Duration
33	**Miscellaneous Equipment**	**5 days**
34	Miscellaneous Equipment (including Fire Protec	5 days
35	**Boiler Equipment**	**19 days**
36	Fans	5 days
37	Steam Drum	8 days
38	Soot Blowers	1 day
39	Ductwork	5 days
40	**Boiler Removal**	**16 days**
41	Furnace	8 days
42	Back Pass	8 days
43	**Boiler Steel Framing**	**35 days**
44	Hanger Girders at Top	5 days
45	All Other Framing	10 days
46	Bracing and Girts	10 days
47	Columns	10 days
48	**Boiler Foundations**	**15 days**
49	Equipment Foundation Demolition to Grade	15 days
50	**Project Close-Out**	**10 days**
51	Project Close-Out Activities	10 days



Lake Road Boiler 4 Retirement

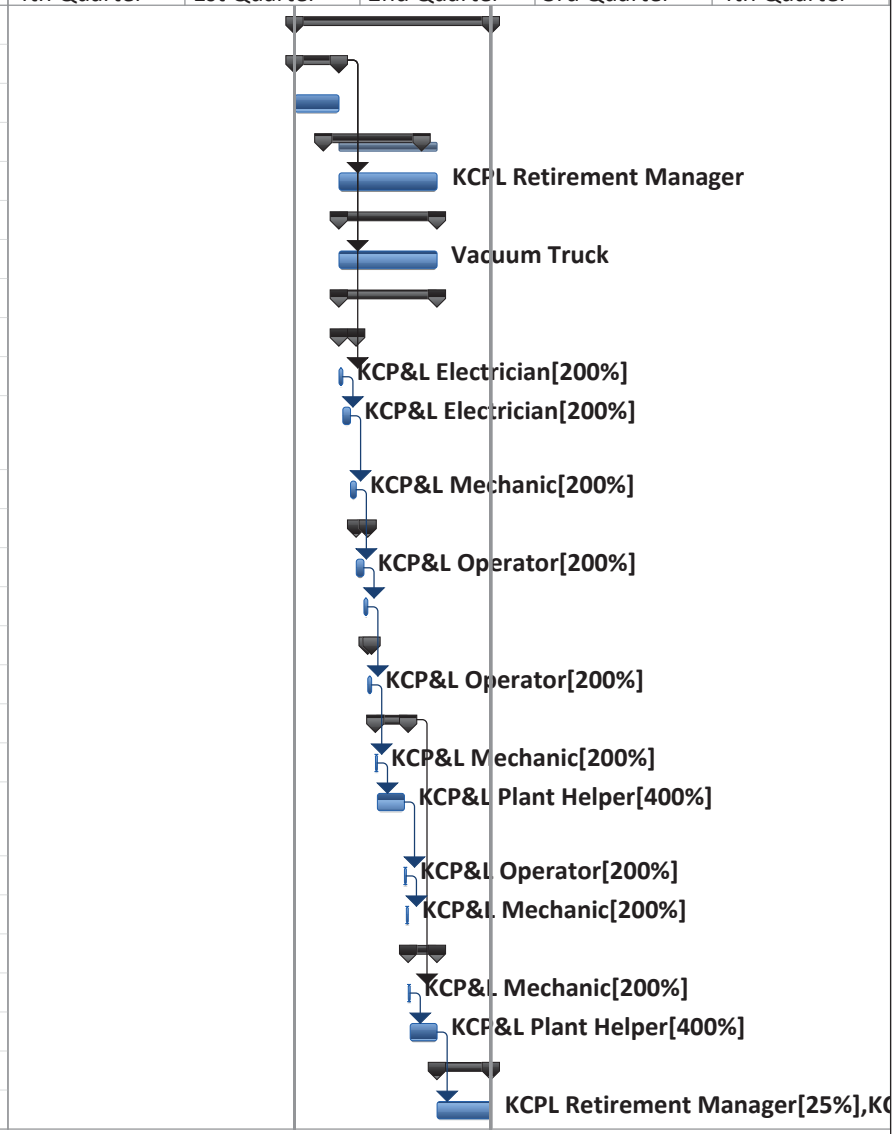
Owner Costs			
Pre-Retirement Activities		$25,969	
Retirement Activities		$66,164	
Post-Retirement Activities		$13,282	
Owner Direct Total			$105,415
Owner Internal Costs	5.00%		$5,271
Owner Contingency:	25.00%		$27,671
Lake Road Boiler 4 Retirement Opinion of Probable Cost:			$138,357

Lake Road Boiler 4 Retirement

ID	Task Name	Cost
1	**Lake Road Boiler 4 Retirement**	**$105,415.92**
2	**Pre-Engineering**	**$25,969.20**
3	Engineering analysis and establish isolation points.	$0.00
4	**KCL&L Overhead Costs**	**$22,925.20**
5	KCP&L Retirement Manager	$22,925.20
6	**Equipment Rentals**	**$7,767.04**
7	Vacuum truck	$7,767.04
8	**Retirement**	**$35,472.48**
9	**Motors**	**$6,216.00**
10	De-energize all primary power at the source.	$1,786.56
11	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
12	Drain lube oil system (if applicable) and dispose of oil.	$2,642.88
13	**Fuel Systems**	**$1,685.44**
14	Isolate and Vent the Fuel Gas Systems	$1,685.44
15	Isolate and Vent the Fuel Oil Systems	$0.00
16	**Boiler Chemical Feed**	**$1,685.44**
17	Drain all chemical feed tanks and piping	$1,685.44
18	**Boiler**	**$13,804.64**
19	Open boiler doors.	$880.96
20	Gas side - perform cleaning of the boiler.	$11,200.00
21	Drain boiler, drum, downcomers and headers.	$842.72
22	Open drum doors.	$880.96
23	**Ductwork**	**$12,080.96**
24	Open ductwork doors.	$880.96
25	Perform extensive cleaning of the ductwork.	$11,200.00
26	**Post Retirement Activities**	**$13,282.00**
27	Post Retirement Activities	$13,282.00

Lake Road Boiler 4 Retirement

ID	Task Name	Duration
1	**Lake Road Boiler 4 Retirement**	**74 days**
2	**Pre-Engineering**	**17 days**
3	Engineering analysis and establish isolation points.	17 days
4	**KCL&L Overhead Costs**	**37 days**
5	KCP&L Retirement Manager	37 days
6	**Equipment Rentals**	**37 days**
7	Vacuum truck	37 days
8	**Retirement**	**37 days**
9	**Motors**	**7 days**
10	De-energize all primary power at the source.	2 days
11	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
12	Drain lube oil system (if applicable) and dispose of oil.	3 days
13	**Fuel Systems**	**4 days**
14	Isolate and Vent the Fuel Gas Systems	2 days
15	Isolate and Vent the Fuel Oil Systems	2 days
16	**Boiler Chemical Feed**	**2 days**
17	Drain all chemical feed tanks and piping	2 days
18	**Boiler**	**13 days**
19	Open boiler doors.	1 day
20	Gas side - perform cleaning of the boiler.	10 days
21	Drain boiler, drum, downcomers and headers.	1 day
22	Open drum doors.	1 day
23	**Ductwork**	**11 days**
24	Open ductwork doors.	1 day
25	Perform extensive cleaning of the ductwork.	10 days
26	**Post Retirement Activities**	**20 days**
27	Post Retirement Activities	20 days



Lake Road Boiler 4 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$186,483	
Overhead During Dismantlement			$298,939	
Post-Dismantlement Activities			$16,380	
Owner Costs Total*				$501,802
Demolition General Contractor (DGC) Costs				
Site Management			$172,221	
Equipment Rental			$408,951	
Consummables			$408,002	
Scrap Crew(s)			$404,847	
Dismantlement			$762,717	
Contractor Direct Cost*		$2,156,738		
Contractor Allowances				
DGC Insurance	2.00%		$43,135	
Contingency/Profit	15.00%		$329,981	
Performance Bond	2.00%		$50,597.07	
Contractor Costs Total:				$2,580,451
Total:				$3,082,253
Owner Internal Costs:	5.00%			$154,113
Owner Contingency:	25.00%			$809,091

Lake Road Boiler 4 Dismantlement Opinion of Probable Cost: $4,045,457

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $2,658,540

Lake Road Boiler 4 Dismantlement

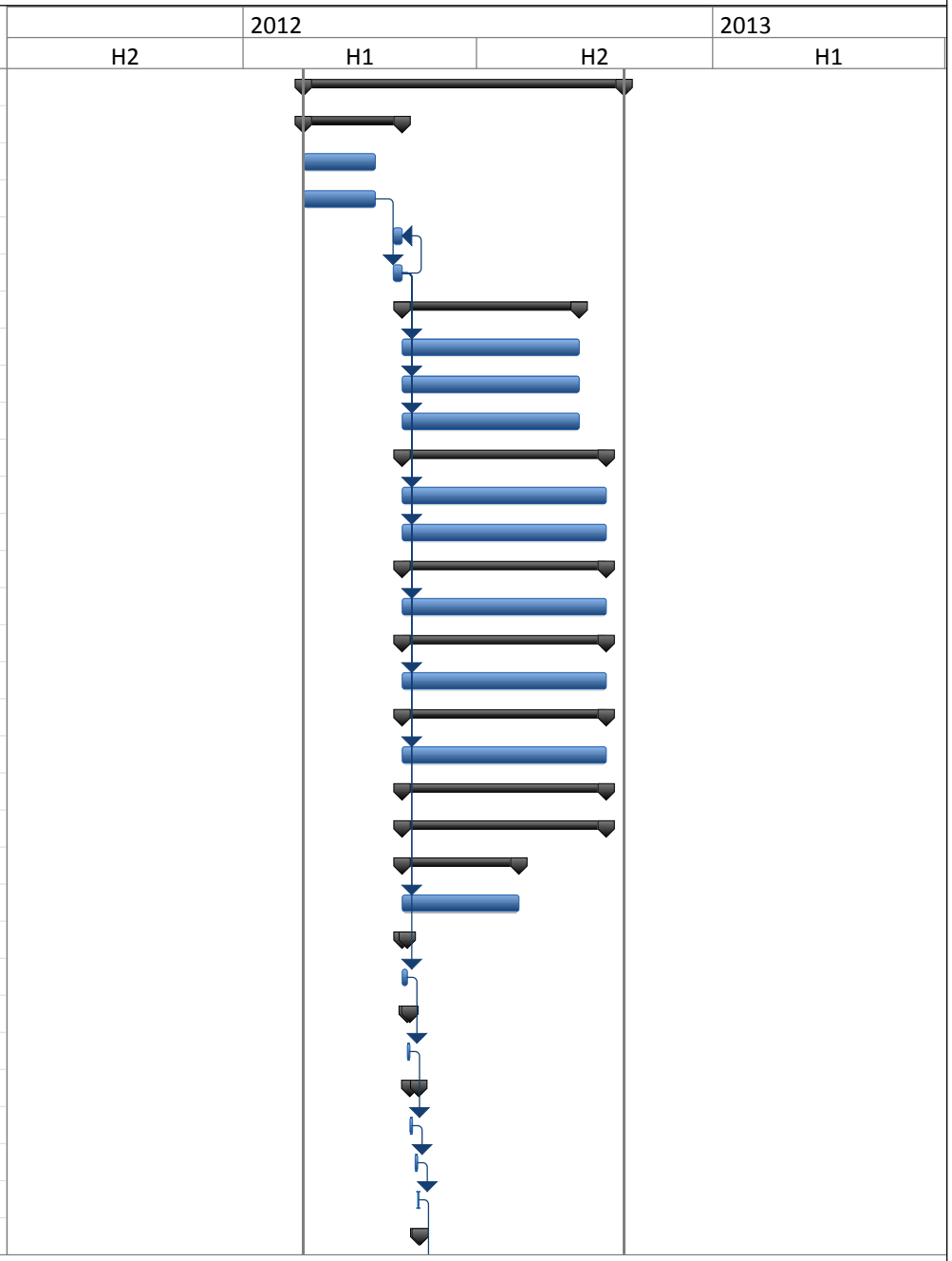
ID	Task Name	Cost
1	**Lake Road Boiler 4 Dismantlement**	**$2,658,542.36**
2	**Pre-Dismantlement Activities**	**$186,483.32**
3	Detailed Planning & Hire Owner's Engineer	$69,627.52
4	Hire Demolition General Contractor	$111,456.00
5	KCP&L Prepares Unit for Dismantlement	$5,399.80
6	Demolition Contractor Mobilizes on Site	$0.00
7	**KCP&L Overhead during Dismantlement**	**$298,939.20**
8	KCP&L Engineer	$99,803.20
9	Owners Engineer Project Manager	$29,792.00
10	Owners Engineer - Engineer	$169,344.00
11	**Demoliton Contractor Overhead during Dismantlement**	**$172,221.04**
12	Demolition Contractor Safety Manager	$60,504.72
13	Demolition Contractor Superintendent	$111,716.32
14	**Demolition Contractor Equipment Rental Costs**	**$408,951.52**
15	Equipment Rental	$408,951.52
16	**Demolition Contractor Consummables**	**$408,002.32**
17	Consummables	$408,002.32
18	**Scrap Crew(s)**	**$404,847.36**
19	Crew to Handle Scrap Material(s)	$404,847.36
20	**Dismantlement Directs**	**$762,717.60**
21	**Phase 1 Demolition**	**$762,717.60**
22	**Electrical Demolition**	**$116,438.40**
23	Electrical Demolition Equipment	$116,438.40
24	**Boiler Feed System**	**$3,582.72**
25	Feedwater piping	$3,582.72
26	**Critical Piping**	**$3,582.72**
27	Main Steam Piping	$3,582.72
28	**Fuel Systems (Plant Side)**	**$5,374.08**
29	Gas Piping and Equipment	$3,582.72
30	Fuel Oil Piping and Equipment	$0.00
31	Igniters	$1,791.36
32	**Air Preheat System**	**$1,791.36**
33	Steam Coil Air Heater Piping	$1,791.36
34	**Miscellaneous Equipment**	**$8,956.80**
35	Miscellaneous Equipment (including Fire Protection)	$8,956.80
36	**Boiler Equipment**	**$78,418.08**
37	Fans	$17,913.60
38	Steam Drum	$32,244.48
39	Soot Blowers	$3,180.96
40	Ductwork	$17,913.60
41	Old Coal Bunkers	$7,165.44
42	**Boiler Removal**	**$143,308.80**
43	Furnace	$71,654.40
44	Back Pass	$71,654.40

Lake Road Boiler 4 Dismantlement

ID	Task Name	Cost
45	**Boiler Steel Framing**	**$279,452.16**
46	Hanger Girders at Top	$42,992.64
47	All Other Framing	$78,819.84
48	Bracing and Girts	$78,819.84
49	Columns	$78,819.84
50	**Boiler Foundations**	**$121,812.48**
51	Equipment Foundation Demolition to Grade	$121,812.48
52	**Project Close-Out**	**$16,380.00**
53	Project Close-Out Activities	$16,380.00

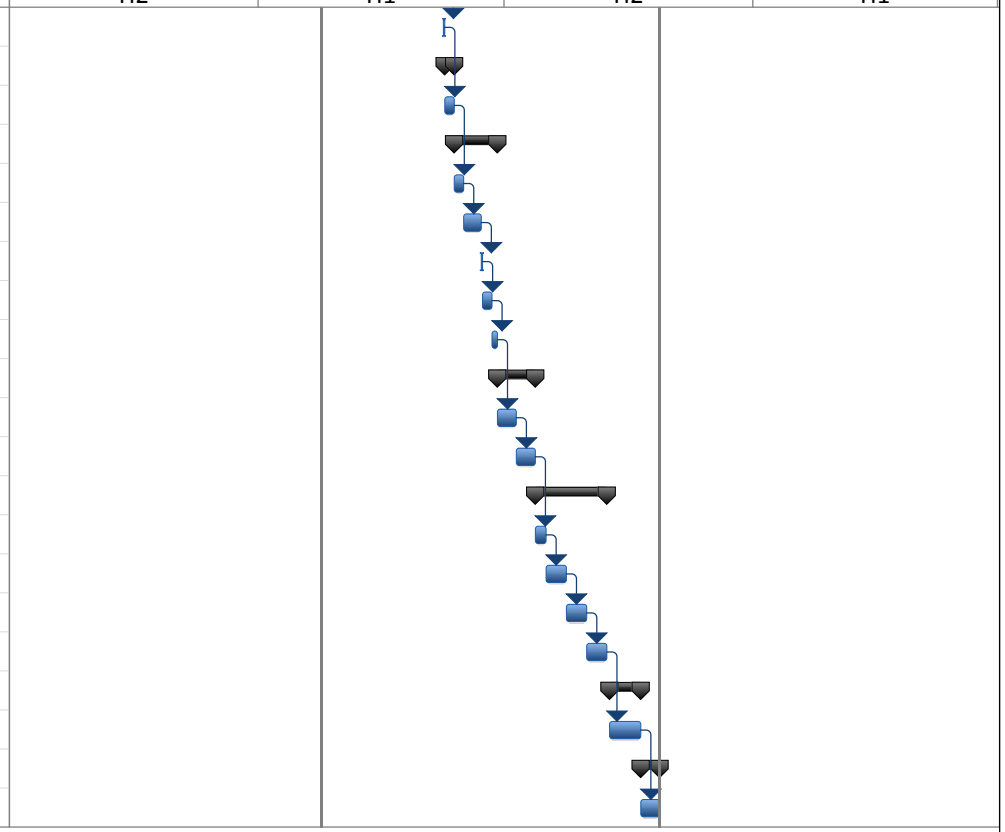
Lake Road Boiler 4 Dismantlement

ID	Task Name	Duration
1	**Lake Road Boiler 4 Dismantlement**	**178 days**
2	**Pre-Dismantlement Activities**	**55 days**
3	Detailed Planning & Hire Owner's Engineer	2 mons
4	Hire Demolition General Contractor	2 mons
5	KCP&L Prepares Unit for Dismantlement	1 wk
6	Demolition Contractor Mobilizes on Site	5 days
7	**KCP&L Overhead during Dismantlement**	**98 days**
8	KCP&L Engineer	98 days
9	Owners Engineer Project Manager	98 days
10	Owners Engineer - Engineer	98 days
11	**Demoliton Contractor Overhead during Dismantlemen**	**113 days**
12	Demolition Contractor Safety Manager	113 days
13	Demolition Contractor Superintendent	113 days
14	**Demolition Contractor Equipment Rental Costs**	**113 days**
15	Equipment Rental	113 days
16	**Demolition Contractor Consummables**	**113 days**
17	Consummables	113 days
18	**Scrap Crew(s)**	**113 days**
19	Crew to Handle Scrap Material(s)	113 days
20	**Dismantlement Directs**	**113 days**
21	**Phase 1 Demolition**	**113 days**
22	**Electrical Demolition**	**65 days**
23	Electrical Demolition Equipment	65 days
24	**Boiler Feed System**	**2 days**
25	Feedwater piping	2 days
26	**Critical Piping**	**2 days**
27	Main Steam Piping	2 days
28	**Fuel Systems (Plant Side)**	**5 days**
29	Gas Piping and Equipment	2 days
30	Fuel Oil Piping and Equipment	2 days
31	Igniters	1 day
32	**Air Preheat System**	**1 day**



Lake Road Boiler 4 Dismantlement

ID	Task Name	Duration
33	Steam Coil Air Heater Piping	1 day
34	**Miscellaneous Equipment**	**5 days**
35	Miscellaneous Equipment (including Fire Protec	5 days
36	**Boiler Equipment**	**22 days**
37	Fans	5 days
38	Steam Drum	9 days
39	Soot Blowers	1 day
40	Ductwork	5 days
41	Old Coal Bunkers	2 days
42	**Boiler Removal**	**20 days**
43	Furnace	10 days
44	Back Pass	10 days
45	**Boiler Steel Framing**	**39 days**
46	Hanger Girders at Top	6 days
47	All Other Framing	11 days
48	Bracing and Girts	11 days
49	Columns	11 days
50	**Boiler Foundations**	**17 days**
51	Equipment Foundation Demolition to Grade	17 days
52	**Project Close-Out**	**10 days**
53	Project Close-Out Activities	10 days



BOILER 5

Lake Road Boiler 5 Retirement

Owner Costs			
Pre-Retirement Activities		$25,969	
Retirement Activities		$100,380	
Post-Retirement Activities		$13,282	
Owner Direct Total			$139,631
Owner Internal Costs	5.00%		$6,982
Owner Contingency:	25.00%		$36,653
Lake Road Boiler 5 Retirement Opinion of Probable Cost:			$183,266

<u>Activities Required by Permit or Regulation</u>

Lake Road 5 Pond	$58,349	
Lake Road Ash Pond Closure	$1,117,000	
Activities Required by Permit or Regulation:		$1,175,349

Lake Road Boiler 5 Retirement

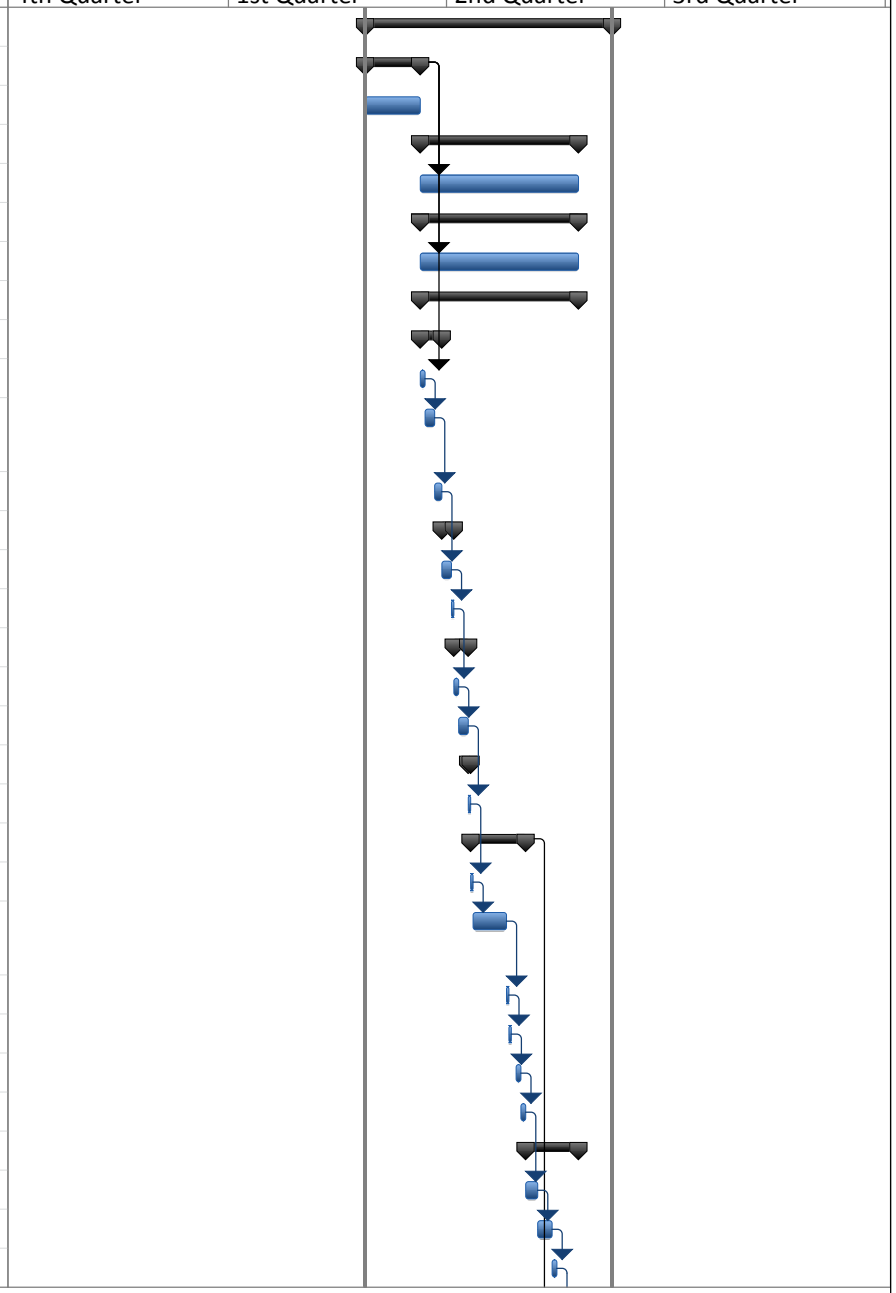
ID	Task Name	Cost
1	**Lake Road Boiler 5 Retirement**	**$139,631.92**
2	**Pre-Engineering**	**$25,969.20**
3	Engineering analysis and establish isolation points.	$0.00
4	**KCL&L Overhead Costs**	**$29,740.80**
5	KCP&L Retirement Manager	$29,740.80
6	**Equipment Rentals**	**$10,076.16**
7	Vacuum truck	$10,076.16
8	**Retirement**	**$60,563.76**
9	**Motors**	**$6,216.00**
10	De-energize all primary power at the source.	$1,786.56
11	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
12	Drain lube oil system (if applicable) and dispose of oil.	$2,642.88
13	**Sulfur Injection System**	**$2,522.72**
14	Empty, Clean and Vent the Storage Tank	$2,522.72
15	Drain and Flush the Sulfur Injection System Piping and Vent	$0.00
16	**Fuel Systems**	**$4,208.16**
17	Open and Clean the Boiler 5 Bunker	$1,685.44
18	Isolate and Vent the Gas Systems	$2,522.72
19	**Boiler Chemical Feed**	**$842.72**
20	Drain all chemical feed tanks and piping	$842.72
21	**Boiler**	**$13,804.64**
22	Open boiler doors.	$880.96
23	Gas side - perform cleaning of the boiler.	$11,200.00
24	Drain boiler, drum, downcomers and headers.	$842.72
25	Open drum doors.	$880.96
26	Open and Clean the Pulverizers	$0.00
27	Open and Vent the Coal Piping	$0.00
28	**Precipitator**	**$20,181.76**
29	Multiple cleaning cycles for collection plates.	$3,784.08
30	Clear hoppers of all ash	$5,045.44
31	Disconnect tranformers.	$2,522.72
32	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$1,261.36
33	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,261.36
34	Install bird screens across hopper ash outlet and ash line flanges.	$1,261.36
35	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$1,261.36
36	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$3,784.08
37	**Ductwork**	**$6,480.96**
38	Open ductwork doors.	$880.96

Lake Road Boiler 5 Retirement

ID	Task Name	Cost
39	Perform extensive cleaning of the ductwork.	$5,600.00
40	**Ash Handling**	**$6,306.80**
41	Open and Vacuum the Ash Silo	$5,045.44
42	Open and Clean Ash Handling Equipment	$1,261.36
43	**Post Retirement Activities**	**$13,282.00**
44	Post Retirement Activities	$13,282.00

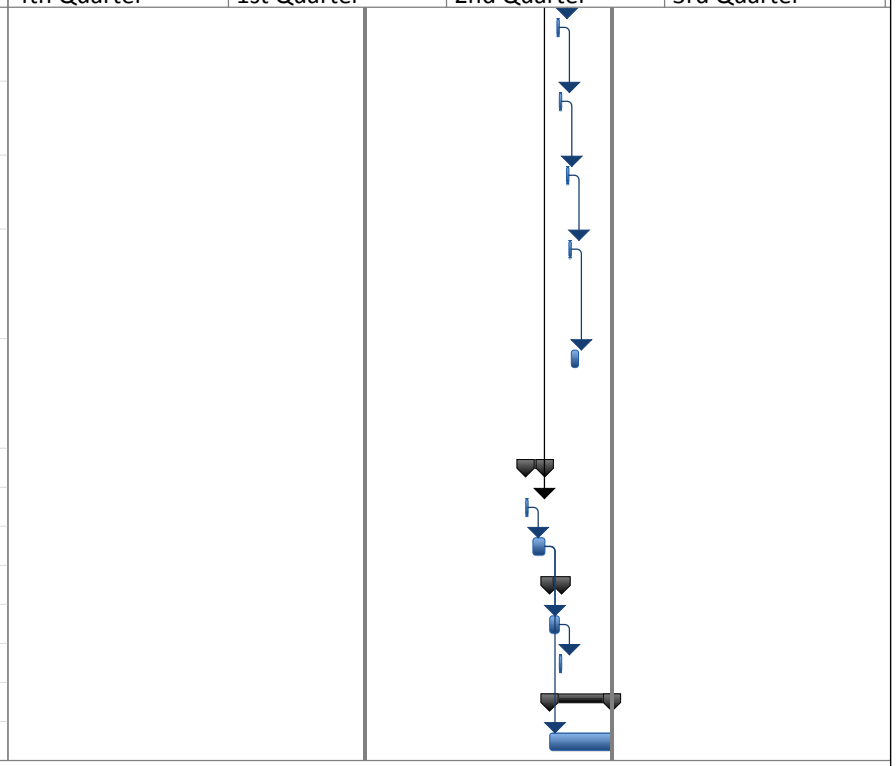
Lake Road Boiler 5 Retirement

ID	Task Name	Duration
1	**Lake Road Boiler 5 Retirement**	**75 days**
2	**Pre-Engineering**	**17 days**
3	Engineering analysis and establish isolation points.	17 days
4	**KCL&L Overhead Costs**	**48 days**
5	KCP&L Retirement Manager	48 days
6	**Equipment Rentals**	**48 days**
7	Vacuum truck	48 days
8	**Retirement**	**48 days**
9	**Motors**	**7 days**
10	De-energize all primary power at the source.	2 days
11	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
12	Drain lube oil system (if applicable) and dispose of oil.	3 days
13	**Sulfur Injection System**	**3 days**
14	Empty, Clean and Vent the Storage Tank	2 days
15	Drain and Flush the Sulfur Injection System Piping and Vent	1 day
16	**Fuel Systems**	**4 days**
17	Open and Clean the Boiler 5 Bunker	2 days
18	Isolate and Vent the Gas Systems	2 days
19	**Boiler Chemical Feed**	**1 day**
20	Drain all chemical feed tanks and piping	1 day
21	**Boiler**	**17 days**
22	Open boiler doors.	1 day
23	Gas side - perform cleaning of the boiler.	10 days
24	Drain boiler, drum, downcomers and headers.	1 day
25	Open drum doors.	1 day
26	Open and Clean the Pulverizers	2 days
27	Open and Vent the Coal Piping	2 days
28	**Precipitator**	**16 days**
29	Multiple cleaning cycles for collection plates.	3 days
30	Clear hoppers of all ash	4 days
31	Disconnect tranformers.	2 days



Lake Road Boiler 5 Retirement

ID	Task Name	Duration
32	Mechanically secure all compartment dampers and hopper outlet valves in open position.	1 day
33	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	1 day
34	Install bird screens across hopper ash outlet and ash line flanges.	1 day
35	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	1 day
36	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
37	**Ductwork**	**6 days**
38	Open ductwork doors.	1 day
39	Perform extensive cleaning of the ductwork.	5 days
40	**Ash Handling**	**5 days**
41	Open and Vacuum the Ash Silo	4 days
42	Open and Clean Ash Handling Equipment	1 day
43	**Post Retirement Activities**	**20 days**
44	Post Retirement Activities	20 days



Lake Road Boiler 5 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$186,483	
Overhead During Dismantlement			$558,223	
Post-Dismantlement Activities			$16,380	
Owner Costs Total*				$761,086
Demolition General Contractor (DGC) Costs				
Site Management			$278,906	
Equipment Rental			$662,284	
Consummables			$660,747	
Scrap Crew(s)			$655,637	
Dismantlement			$1,174,730	
Contractor Direct Cost*		$3,432,304		
Contractor Allowances				
DGC Insurance	2.00%		$68,646	
Contingency/Profit	15.00%		$525,143	
Performance Bond	2.00%		$80,521.85	
Contractor Costs Total:				$4,106,614
Total:				$4,867,700
Owner Internal Costs:	5.00%			$243,385
Owner Contingency:	25.00%			$1,277,771
Lake Road Boiler 5 Dismantlement Opinion of Probable Cost:				$6,388,857

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $4,193,390

Lake Road Boiler 5 Dismantlement

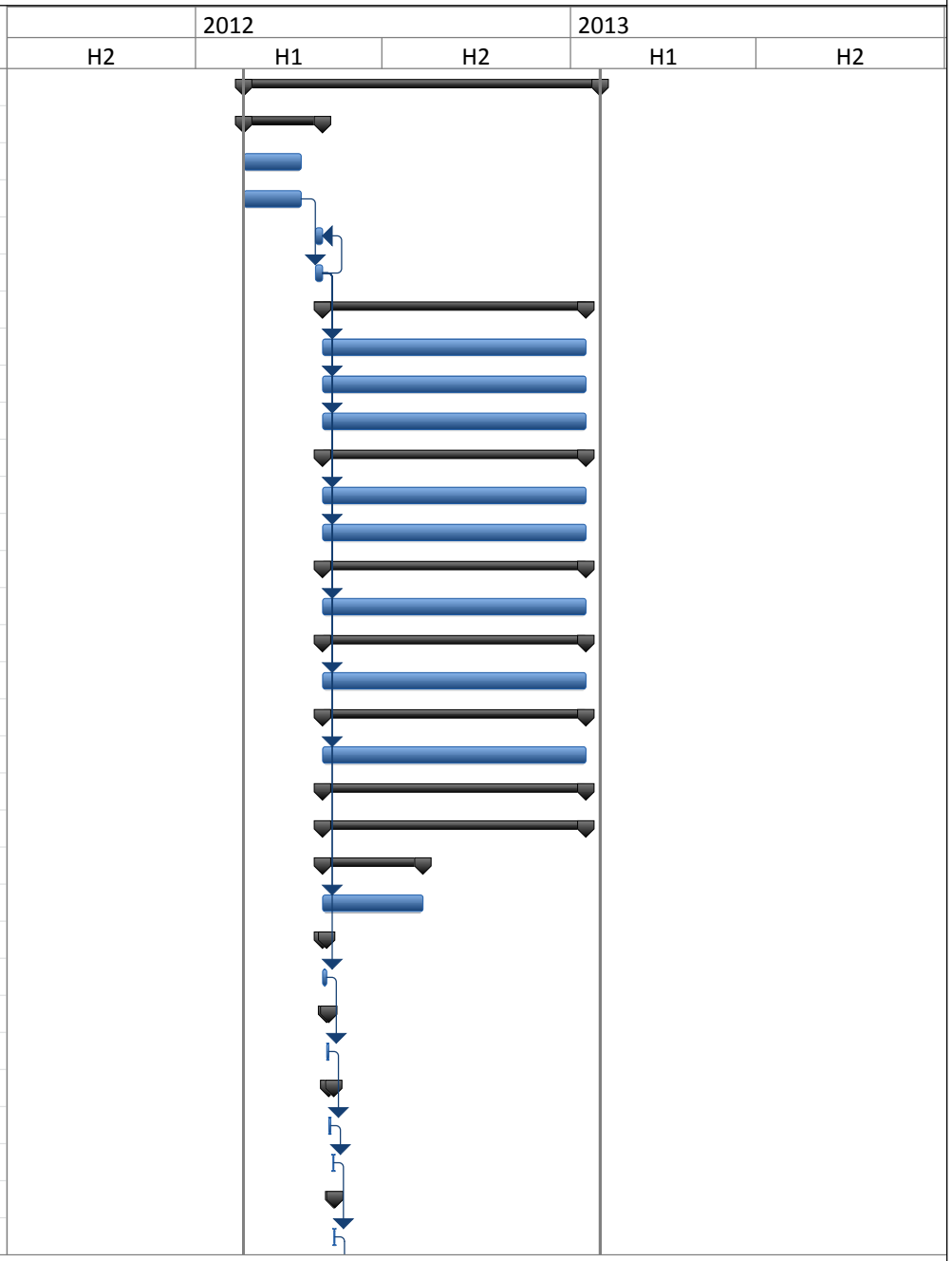
ID	Task Name	Cost
1	**Lake Road Boiler 5 Dismantlement**	**$4,193,392.76**
2	**Pre-Dismantlement Activities**	**$186,483.32**
3	Detailed Planning & Hire Owner's Engineer	$69,627.52
4	Hire Demolition General Contractor	$111,456.00
5	KCP&L Prepares Unit for Dismantlement	$5,399.80
6	Demolition Contractor Mobilizes on Site	$0.00
7	**KCP&L Overhead during Dismantlement**	**$558,223.20**
8	KCP&L Engineer	$186,367.20
9	Owners Engineer Project Manager	$55,632.00
10	Owners Engineer - Engineer	$316,224.00
11	**Demoliton Contractor Overhead during Dismantlement**	**$278,906.64**
12	Demolition Contractor Safety Manager	$97,985.52
13	Demolition Contractor Superintendent	$180,921.12
14	**Demolition Contractor Equipment Rental Costs**	**$662,284.32**
15	Equipment Rental	$662,284.32
16	**Demolition Contractor Consummables**	**$660,747.12**
17	Consummables	$660,747.12
18	**Scrap Crew(s)**	**$655,637.76**
19	Crew to Handle Scrap Material(s)	$655,637.76
20	**Dismantlement Directs**	**$1,174,730.40**
21	**Phase 1 Demolition**	**$1,174,730.40**
22	**Electrical Demolition**	**$125,395.20**
23	Electrical Demolition Equipment	$125,395.20
24	**Boiler Feed System**	**$3,582.72**
25	Feedwater piping	$3,582.72
26	**Critical Piping**	**$3,582.72**
27	Main Steam Piping	$3,582.72
28	**Gas Systems (Plant Side)**	**$5,374.08**
29	Gas Piping and Equipment	$3,582.72
30	Igniters	$1,791.36
31	**Air Preheat System**	**$1,791.36**
32	Steam Coil Air Heater Piping	$1,791.36
33	**Miscellaneous Equipment**	**$14,330.88**
34	Miscellaneous Equipment (including Fire Protection)	$14,330.88
35	**Boiler Equipment**	**$175,151.52**
36	Fans	$21,496.32
37	Steam Drum	$35,827.20
38	Soot Blowers	$3,180.96
39	Ductwork	$21,496.32
40	Pulverizers	$35,827.20
41	Coal Bunkers	$14,330.88
42	Feeders	$7,165.44
43	Ash Silo	$17,913.60
44	Ash Handling Equipment	$17,913.60

Lake Road Boiler 5 Dismantlement

ID	Task Name	Cost
45	**Boiler Removal**	**$207,797.76**
46	Furnace	$107,481.60
47	Back Pass	$100,316.16
48	**Boiler Steel Framing**	**$351,106.56**
49	Hanger Girders at Top	$71,654.40
50	All Other Framing	$100,316.16
51	Bracing and Girts	$100,316.16
52	Columns	$78,819.84
53	**Precipitator**	**$143,308.80**
54	Remove Precipitator	$143,308.80
55	**Boiler Foundations**	**$143,308.80**
56	Equipment Foundation Demolition to Grade	$143,308.80
57	**Project Close-Out**	**$16,380.00**
58	Project Close-Out Activities	$16,380.00

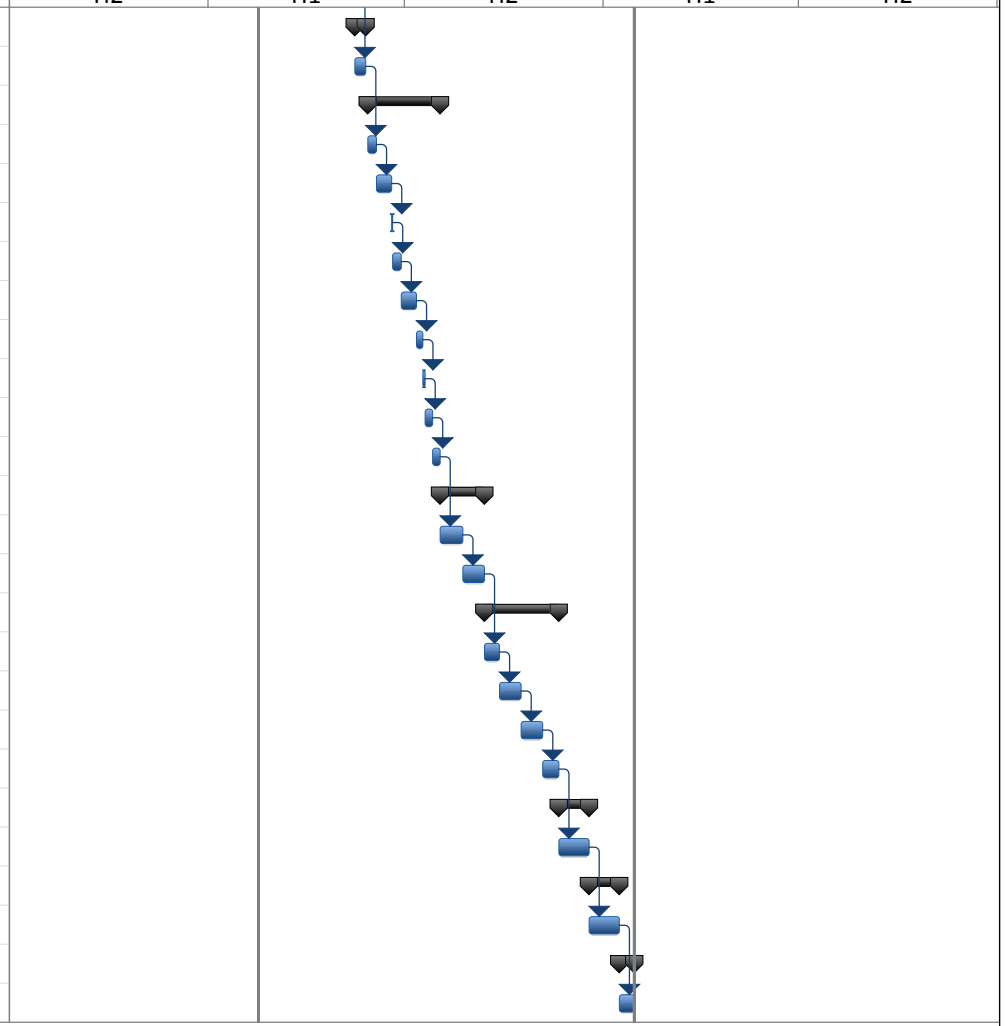
Lake Road Boiler 5 Dismantlement

ID	Task Name	Duration
1	**Lake Road Boiler 5 Dismantlement**	**248 days**
2	**Pre-Dismantlement Activities**	**55 days**
3	Detailed Planning & Hire Owner's Engineer	2 mons
4	Hire Demolition General Contractor	2 mons
5	KCP&L Prepares Unit for Dismantlement	1 wk
6	Demolition Contractor Mobilizes on Site	5 days
7	**KCP&L Overhead during Dismantlement**	**183 days**
8	KCP&L Engineer	183 days
9	Owners Engineer Project Manager	183 days
10	Owners Engineer - Engineer	183 days
11	**Demoliton Contractor Overhead during Dismantlemen**	**183 days**
12	Demolition Contractor Safety Manager	183 days
13	Demolition Contractor Superintendent	183 days
14	**Demolition Contractor Equipment Rental Costs**	**183 days**
15	Equipment Rental	183 days
16	**Demolition Contractor Consummables**	**183 days**
17	Consummables	183 days
18	**Scrap Crew(s)**	**183 days**
19	Crew to Handle Scrap Material(s)	183 days
20	**Dismantlement Directs**	**183 days**
21	**Phase 1 Demolition**	**183 days**
22	**Electrical Demolition**	**70 days**
23	Electrical Demolition Equipment	70 days
24	**Boiler Feed System**	**2 days**
25	Feedwater piping	2 days
26	**Critical Piping**	**2 days**
27	Main Steam Piping	2 days
28	**Gas Systems (Plant Side)**	**3 days**
29	Gas Piping and Equipment	2 days
30	Igniters	1 day
31	**Air Preheat System**	**1 day**
32	Steam Coil Air Heater Piping	1 day



Lake Road Boiler 5 Dismantlement

ID	Task Name	Duration
33	**Miscellaneous Equipment**	**8 days**
34	Miscellaneous Equipment (including Fire Protec	8 days
35	**Boiler Equipment**	**49 days**
36	Fans	6 days
37	Steam Drum	10 days
38	Soot Blowers	1 day
39	Ductwork	6 days
40	Pulverizers	10 days
41	Coal Bunkers	4 days
42	Feeders	2 days
43	Ash Silo	5 days
44	Ash Handling Equipment	5 days
45	**Boiler Removal**	**29 days**
46	Furnace	15 days
47	Back Pass	14 days
48	**Boiler Steel Framing**	**49 days**
49	Hanger Girders at Top	10 days
50	All Other Framing	14 days
51	Bracing and Girts	14 days
52	Columns	11 days
53	**Precipitator**	**20 days**
54	Remove Precipitator	20 days
55	**Boiler Foundations**	**20 days**
56	Equipment Foundation Demolition to Grade	20 days
57	**Project Close-Out**	**10 days**
58	Project Close-Out Activities	10 days



BOILER 8

Lake Road Boiler 8 Retirement

Owner Costs			
Pre-Retirement Activities		$22,914	
Retirement Activities		$44,223	
Post-Retirement Activities		$13,282	
Owner Direct Total			$80,419
Owner Internal Costs	5.00%		$4,021
Owner Contingency:	25.00%		$21,110
Lake Road Boiler 8 Retirement Opinion of Probable Cost:			$105,550

Lake Road Boiler 8 Retirement

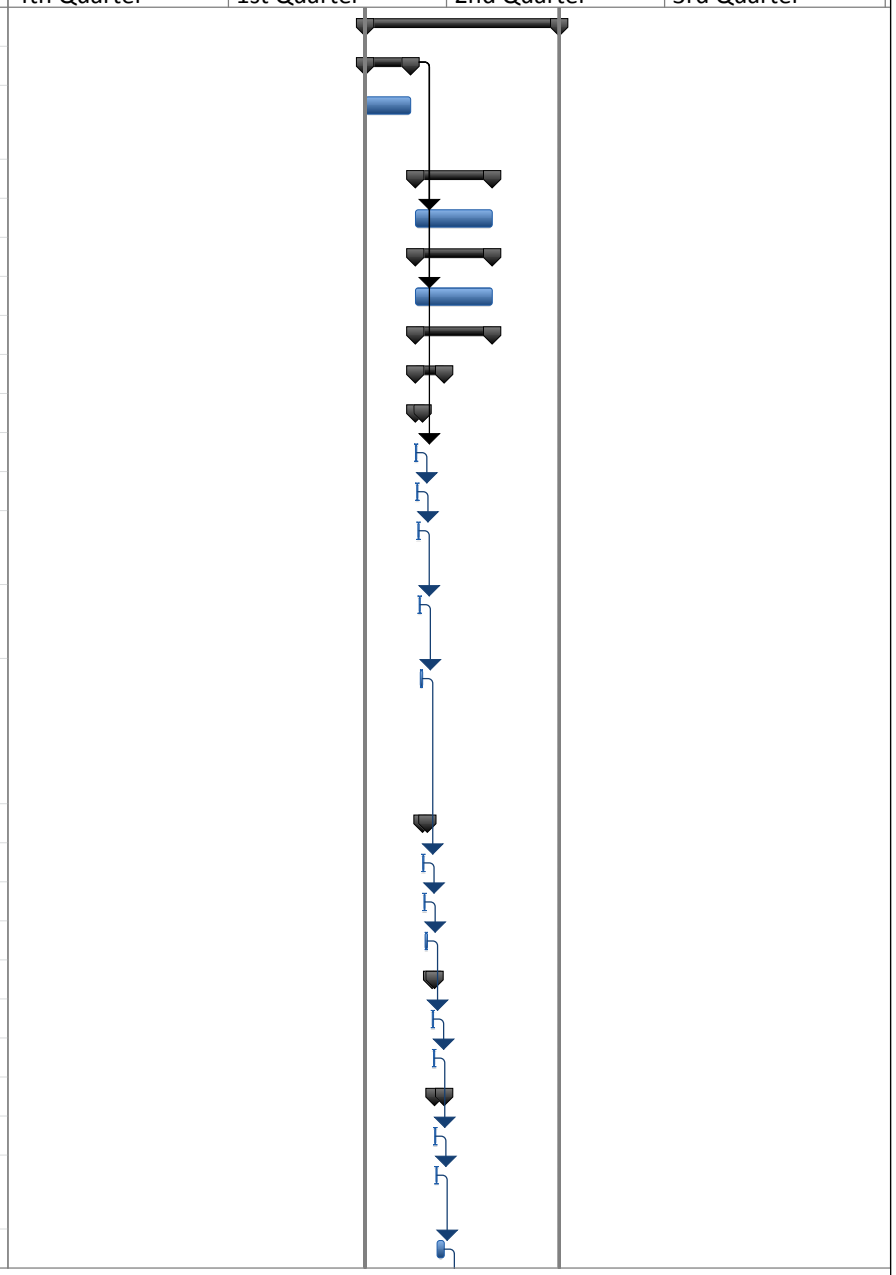
ID	Task Name	Cost
1	**Lake Road Boiler 8 Retirement**	**$80,419.36**
2	**Pre-Engineering**	**$22,914.00**
3	Permit review and engineering analysis and establish isolation points.	$22,914.00
4	**KCL&L Overhead Costs**	**$14,870.40**
5	KCP&L Retirement Manager	$14,870.40
6	**Equipment Rentals**	**$5,038.08**
7	Vacuum truck	$5,038.08
8	**Retirement**	**$24,314.88**
9	**Electrical**	**$10,037.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Motors**	**$4,677.36**
24	De-energize all primary power at the source.	$446.64
25	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$446.64
26	Drain lube oil system (if applicable) and dispose of oil.	$3,784.08
27	**Fuel Systems**	**$2,522.72**
28	Isolate gas lines from source, open and vent.	$1,261.36
29	Isolate fuel oil lines from source, drain, open and vent.	$1,261.36
30	**Boiler Chemical Feed**	**$1,261.36**
31	Drain all chemical feed tanks.	$1,261.36
32	**Boiler**	**$4,844.64**
33	Open boiler doors.	$880.96
34	Gas side - perform cleaning of the boiler and bottom ash system.	$2,240.00
35	Drain boiler, drum, downcomers and headers.	$842.72
36	Open drum doors.	$880.96
37	**Ductwork**	**$3,120.96**
38	Open ductwork doors.	$880.96
39	Perform extensive cleaning of the ductwork.	$2,240.00
40	**Feedwater Piping**	**$842.72**

Lake Road Boiler 8 Retirement

ID	Task Name	Cost
41	Drain water from the system.	$421.36
42	Leave open vents and drains.	$421.36
43	**Deaerator and Deaerator Storage Tank**	**$842.72**
44	Drain Deaerator and Storage	$421.36
45	Leave open vents and drains.	$421.36
46	**Compressed Air System**	**$842.72**
47	Open vents and drains.	$842.72
48	**Post Retirement Activities**	**$13,282.00**
49	Post Retirement Activities	$13,282.00

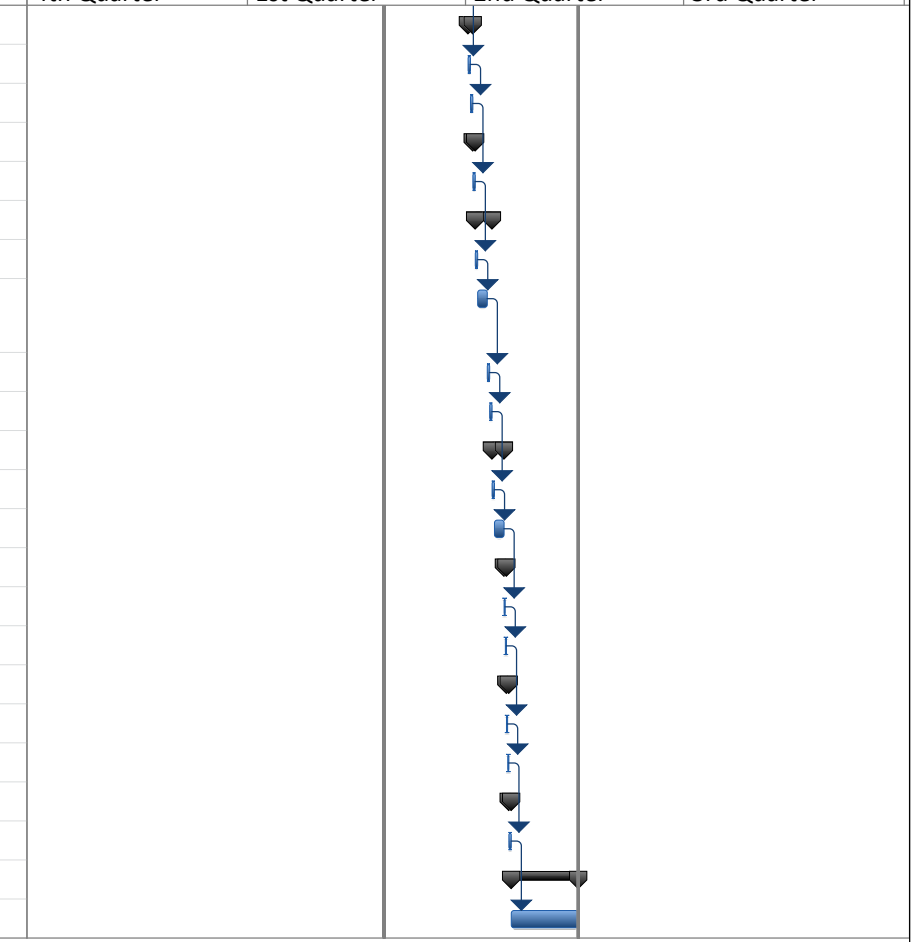
Lake Road Boiler 8 Retirement

ID	Task Name	Duration
1	**Lake Road Boiler 8 Retirement**	**59 days**
2	**Pre-Engineering**	**15 days**
3	Permit review and engineering analysis and establish isolation points.	15 days
4	**KCL&L Overhead Costs**	**24 days**
5	KCP&L Retirement Manager	24 days
6	**Equipment Rentals**	**24 days**
7	Vacuum truck	24 days
8	**Retirement**	**24 days**
9	**Electrical**	**10 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Motors**	**4 days**
24	De-energize all primary power at the source.	0.5 days
25	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	0.5 days
26	Drain lube oil system (if applicable) and dispose of oil.	3 days



Lake Road Boiler 8 Retirement

ID	Task Name	Duration
27	**Fuel Systems**	**2 days**
28	Isolate gas lines from source, open and vent.	1 day
29	Isolate fuel oil lines from source, drain, open and vent.	1 day
30	**Boiler Chemical Feed**	**1 day**
31	Drain all chemical feed tanks.	1 day
32	**Boiler**	**5 days**
33	Open boiler doors.	1 day
34	Gas side - perform cleaning of the boiler and bottom ash system.	2 days
35	Drain boiler, drum, downcomers and headers.	1 day
36	Open drum doors.	1 day
37	**Ductwork**	**3 days**
38	Open ductwork doors.	1 day
39	Perform extensive cleaning of the ductwork.	2 days
40	**Feedwater Piping**	**1 day**
41	Drain water from the system.	0.5 days
42	Leave open vents and drains.	0.5 days
43	**Deaerator and Deaerator Storage Tank**	**1 day**
44	Drain Deaerator and Storage	0.5 days
45	Leave open vents and drains.	0.5 days
46	**Compressed Air System**	**1 day**
47	Open vents and drains.	1 day
48	**Post Retirement Activities**	**20 days**
49	Post Retirement Activities	20 days



Lake Road Boiler 8 Dismantlement

Owner Costs					
	Pre-Dismantlement Activities			$177,983	
	Overhead During Dismantlement			$67,214	
	Post-Dismantlement Activities			$16,380	
		Owner Costs Total*			$261,577
Demolition General Contractor (DGC) Costs					
	Site Management			$140,279	
	Equipment Rental			$238,856	
	Consummables			$238,302	
	Scrap Crew(s)			$236,459	
	Dismantlement			$360,502	
		Contractor Direct Cost*	$1,214,398		
	Contractor Allowances				
	DGC Insurance	2.00%		$24,288	
	Contingency/Profit	15.00%		$185,803	
	Performance Bond	2.00%		$28,489.78	
		Contractor Costs Total:			$1,452,979
Total:					$1,714,556
Owner Internal Costs:		5.00%			$85,728
Owner Contingency:		25.00%			$450,071

Lake Road Boiler 8 Dismantlement Opinion of Probable Cost: $2,250,354

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $1,475,975

Lake Road Boiler 8 Dismantlement

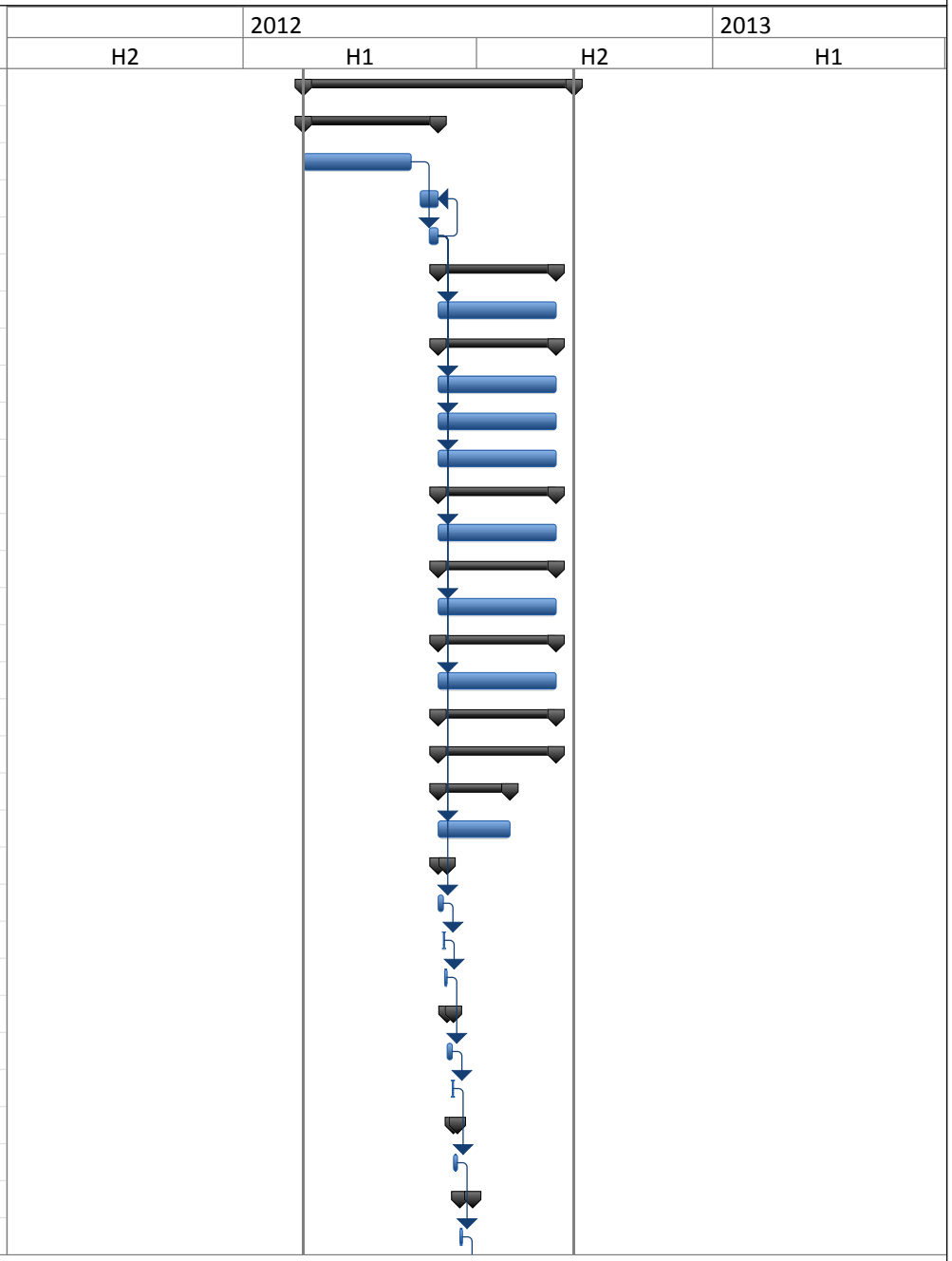
ID	Task Name	Cost
1	**Lake Road Boiler 8 Dismantlement**	**$1,475,977.84**
2	**Pre-Dismantlement Activities**	**$177,983.60**
3	Hire Demolition General Contractor	$167,184.00
4	KCP&L Prepares Unit for Dismantlement	$10,799.60
5	Demolition Contractor Mobilizes on Site	$0.00
6	**KCP&L Overhead during Dismantlement**	**$67,214.40**
7	KCP&L Engineer	$67,214.40
8	**Demoliton Contractor Overhead during Dismantlement**	**$140,279.04**
9	Demolition Contractor Project Manager	$39,689.76
10	Demolition Contractor Safety Manager	$35,339.04
11	Demolition Contractor Superintendent	$65,250.24
12	**Demolition Contractor Equipment Rental Costs**	**$238,856.64**
13	Equipment Rental	$238,856.64
14	**Demolition Contractor Consummables**	**$238,302.24**
15	Consummables	$238,302.24
16	**Scrap Crew(s)**	**$236,459.52**
17	Crew to Handle Scrap Material(s)	$236,459.52
18	**Dismantlement Directs**	**$360,502.40**
19	**Phase 1 Demolition**	**$360,502.40**
20	**Electrical Demolition**	**$71,654.40**
21	Electrical Demolition Equipment	$71,654.40
22	**Condensate System**	**$8,956.80**
23	Deaerator	$3,582.72
24	Deaerator Storage Tank	$1,791.36
25	Condensate Piping	$3,582.72
26	**Boiler Feed System**	**$11,187.20**
27	Boiler Feed Pumps	$4,021.76
28	Feedwater piping	$7,165.44
29	**Critical Piping**	**$5,374.08**
30	Main Steam Piping	$5,374.08
31	**Fuel Systems**	**$14,330.88**
32	Fuel Oil Piping	$3,582.72
33	Gas Piping	$1,791.36
34	Igniters	$8,956.80
35	**Chemical Feed Systems**	**$7,165.44**
36	Tanks	$1,791.36
37	Pumps	$1,791.36
38	Piping	$3,582.72
39	**Sampling Systems**	**$5,374.08**
40	Field Mounted Heat Exchangers	$1,791.36
41	Piping	$1,791.36
42	Sample Panel	$1,791.36
43	**Miscellaneous Equipment**	**$7,165.44**
44	Miscellaneous Equipment (including Fire Protection)	$7,165.44

Lake Road Boiler 8 Dismantlement

ID	Task Name	Cost
45	**Boiler Equipment**	**$28,661.76**
46	Fans	$3,582.72
47	Steam Drum	$14,330.88
48	Ductwork	$10,748.16
49	**Boiler Removal**	**$71,654.40**
50	Furnace	$71,654.40
51	**Boiler Steel Framing**	**$71,654.40**
52	Framing and Supports	$71,654.40
53	**Boiler Building**	**$21,496.32**
54	Remove Boiler Building	$21,496.32
55	**Boiler Foundations**	**$35,827.20**
56	Equipment Foundation Demolition to Grade	$35,827.20
57	**Project Close-Out**	**$16,380.00**
58	Project Close-Out Activities	$16,380.00

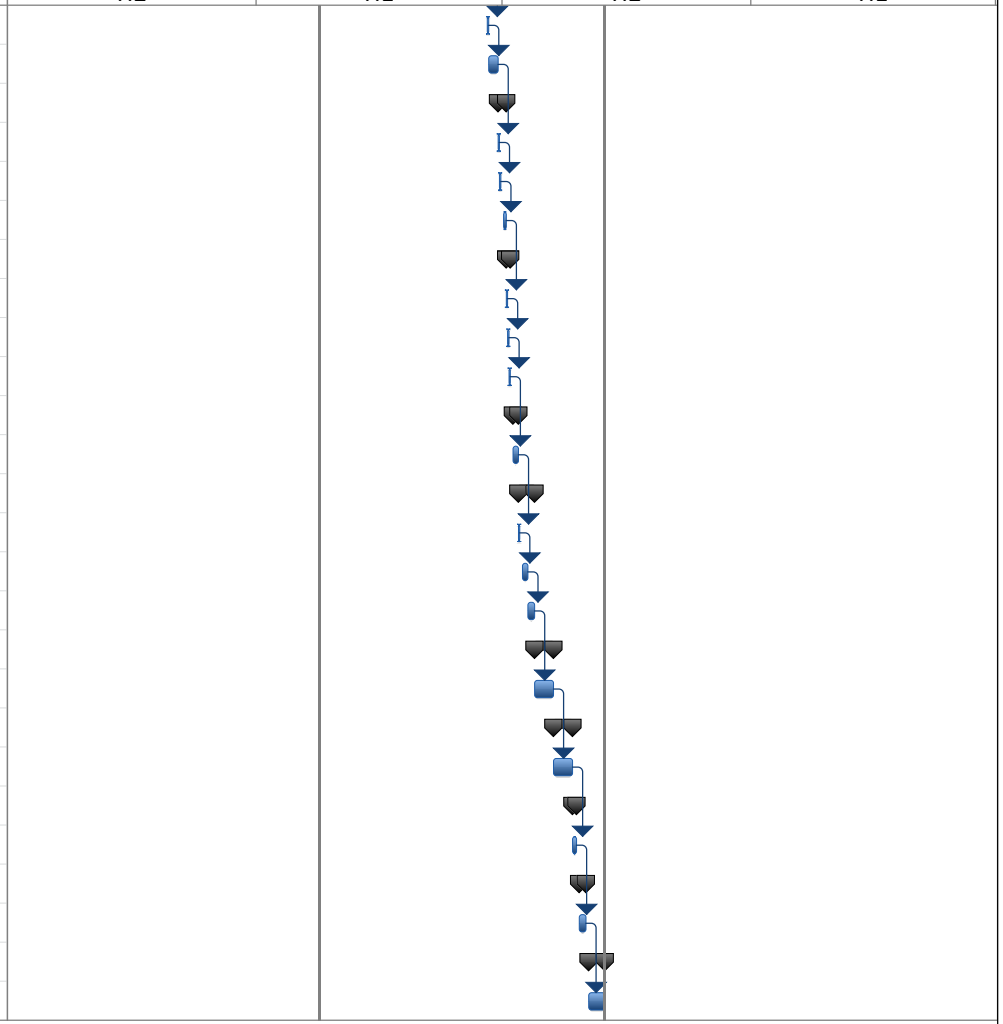
Lake Road Boiler 8 Dismantlement

ID	Task Name	Duration
1	**Lake Road Boiler 8 Dismantlement**	**151 days**
2	**Pre-Dismantlement Activities**	**75 days**
3	Hire Demolition General Contractor	3 mons
4	KCP&L Prepares Unit for Dismantlement	2 wks
5	Demolition Contractor Mobilizes on Site	5 days
6	**KCP&L Overhead during Dismantlement**	**66 days**
7	KCP&L Engineer	66 days
8	**Demoliton Contractor Overhead during Dismantlemen**	**66 days**
9	Demolition Contractor Project Manager	66 days
10	Demolition Contractor Safety Manager	66 days
11	Demolition Contractor Superintendent	66 days
12	**Demolition Contractor Equipment Rental Costs**	**66 days**
13	Equipment Rental	66 days
14	**Demolition Contractor Consummables**	**66 days**
15	Consummables	66 days
16	**Scrap Crew(s)**	**66 days**
17	Crew to Handle Scrap Material(s)	66 days
18	**Dismantlement Directs**	**66 days**
19	**Phase 1 Demolition**	**66 days**
20	**Electrical Demolition**	**40 days**
21	Electrical Demolition Equipment	40 days
22	**Condensate System**	**5 days**
23	Deaerator	2 days
24	Deaerator Storage Tank	1 day
25	Condensate Piping	2 days
26	**Boiler Feed System**	**3 days**
27	Boiler Feed Pumps	2 days
28	Feedwater piping	1 day
29	**Critical Piping**	**3 days**
30	Main Steam Piping	3 days
31	**Fuel Systems**	**8 days**
32	Fuel Oil Piping	2 days



Lake Road Boiler 8 Dismantlement

ID	Task Name	Duration
33	Gas Piping	1 day
34	Igniters	5 days
35	**Chemical Feed Systems**	**4 days**
36	Tanks	1 day
37	Pumps	1 day
38	Piping	2 days
39	**Sampling Systems**	**3 days**
40	Field Mounted Heat Exchangers	1 day
41	Piping	1 day
42	Sample Panel	1 day
43	**Miscellaneous Equipment**	**4 days**
44	Miscellaneous Equipment (including Fire Protec	4 days
45	**Boiler Equipment**	**8 days**
46	Fans	1 day
47	Steam Drum	4 days
48	Ductwork	3 days
49	**Boiler Removal**	**10 days**
50	Furnace	10 days
51	**Boiler Steel Framing**	**10 days**
52	Framing and Supports	10 days
53	**Boiler Building**	**3 days**
54	Remove Boiler Building	3 days
55	**Boiler Foundations**	**5 days**
56	Equipment Foundation Demolition to Grade	5 days
57	**Project Close-Out**	**10 days**
58	Project Close-Out Activities	10 days



Lake Road 4/6 Retirement

Owner Costs				
	Pre-Retirement Activities		$61,104	
	Retirement Activities		$206,732	
	Post-Retirement Activities		$26,564	
Owner Direct Total			$294,400	
Owner Internal Costs		5.00%	$14,720	
Owner Contingency:		25.00%	$77,280	
Lake Road 4/6 Retirement Opinion of Probable Cost:				$386,400
<u>Activities Required by Permit or Regulation</u>				
	Lake Road 4 River Intake		$637,591	
	Activities Required by Permit or Regulation:			$637,591

Lake Road 4/6 Retirement

ID	Task Name	Cost
1	**Lake Road 4/6 Retirement**	**$294,400.77**
2	**Pre-Engineering**	**$61,104.00**
3	Permit review and engineering analysis and establish isolation points.	$61,104.00
4	**KCL&L Overhead Costs**	**$73,732.40**
5	KCP&L Retirement Manager	$73,732.40
6	**Equipment Rentals**	**$24,980.48**
7	Vacuum truck	$24,980.48
8	**Retirement**	**$108,019.89**
9	**Electrical**	**$20,052.88**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Oil-Filled Power Transformers**	**$5,549.44**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
26	Drain and dispose of oil.	$2,642.88
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,120.00
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
31	**Motors**	**$7,357.20**
32	De-energize all primary power at the source.	$1,786.56
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56

Lake Road 4/6 Retirement

ID	Task Name	Cost
34	Drain lube oil system (if applicable) and dispose of oil.	$3,784.08
35	**Coal Handling**	**$5,466.80**
36	Empty both coal silos.	$1,682.72
37	Confirm conveyors are run out of fuel.	$1,261.36
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from area.	$2,522.72
39	**Gas System**	**$2,522.72**
40	Isolate lines from source, open and vent.	$2,522.72
41	**Boiler Chemical Feed**	**$2,522.72**
42	Drain all chemical feed tanks.	$2,522.72
43	**Demineralizer**	**$5,371.84**
44	Drain water from system.	$842.72
45	Drain acid and caustic tanks.	$1,685.44
46	Open tanks and vessels.	$880.96
47	Remove resin.	$1,120.00
48	Drain and Vent the Demineralized Water Storage Tank	$842.72
49	**Boiler**	**$26,508.85**
50	Open boiler doors.	$880.96
51	Gas side - perform cleaning of the boiler and bottom ash system.	$16,800.00
52	Drain boiler, drum, downcomers and headers.	$842.72
53	Open drum doors.	$880.96
54	Drain, vent and clean the fly ash, slag and transport systems	$2,480.13
55	Drain and vent the steam coil air heaters and piping	$1,541.36
56	Drain and vent the steam coil air heater drain tanks	$1,541.36
57	Drain and vent boiler sampling system panel and piping	$1,541.36
58	**Precipitator**	**$8,357.60**
59	Multiple cleaning cycles for collection plates.	$1,685.44
60	Clear hoppers of all ash	$1,402.72
61	Disconnect transformers.	$1,786.56
62	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$720.48
63	Disconnect ash transport piping and washdown hoppers and interior of casing.	$1,000.48
64	Install bird screens across hopper ash outlet and ash line flanges.	$880.96
65	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$880.96
66	**Ductwork**	**$9,840.96**
67	Open ductwork doors.	$880.96
68	Perform extensive cleaning of the ductwork.	$8,960.00
69	Isolate ductwork at tie to common ductwork.	$0.00
70	**Condensate and Feedwater Piping**	**$1,685.44**
71	Drain water from the system.	$842.72
72	Leave open vents and drains.	$842.72

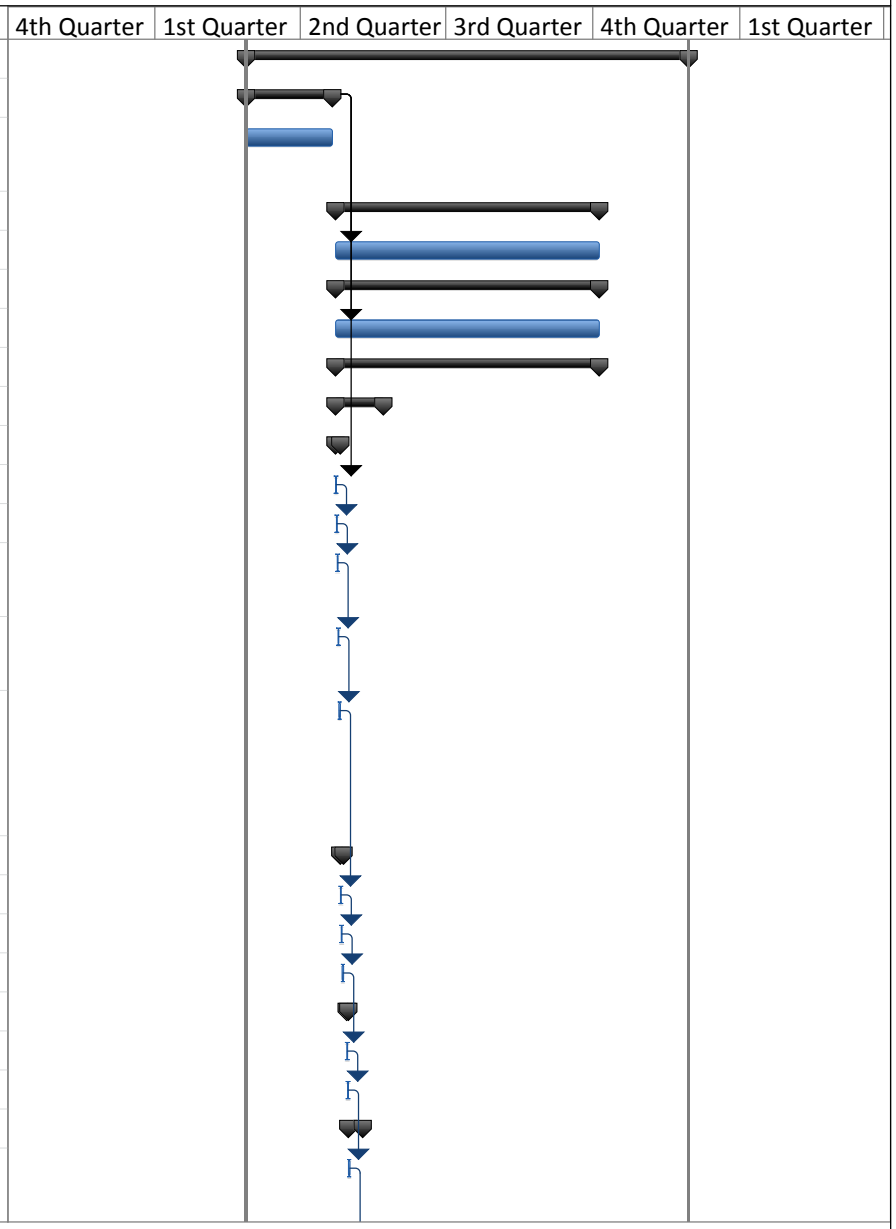
ID	Task Name	Cost
73	**Feedwater heaters**	**$3,370.88**
74	Drain feedwater heaters	$842.72
75	Leave open vents and drains.	$1,685.44
76	Drain and vent the heater drain piping.	$842.72
77	**Deaerator and Deaerator Storage Tank**	**$1,685.44**
78	Drain Deaerator and Storage	$842.72
79	Leave open vents and drains.	$842.72
80	**Turbine(s) and Condenser**	**$3,504.72**
81	Drain hotwell and leave doors open.	$861.84
82	Open main turbine doors.	$880.96
83	Remove lube oil.	$1,761.92
84	**Generator**	**$6,095.76**
85	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$446.64
86	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
87	De-energize power supplies to generator excitation system at the source.	$446.64
88	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	$446.64
89	Drain generator and exciter cooling water systems (if applicable).	$861.84
90	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,685.44
91	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,761.92
92	**Circulation Water and Turbine Cooling Water System**	**$2,566.40**
93	Drain.	$842.72
94	Open water box doors.	$880.96
95	Drain any circulating water chemical feed tanks.	$842.72
96	**Compressed Air System**	**$842.72**
97	Open vents and drains.	$842.72
98	**Auxiliary Steam System**	**$842.72**
99	Drain water from system.	$842.72
100	**Closed Cooling Water System**	**$1,685.44**
101	Drain water from system.	$842.72
102	Vent piping.	$842.72
103	**Condenser Air Extraction**	**$842.72**
104	Drain water from system.	$842.72
105	**Battery System**	**$4,253.28**
106	De-energize all battery chargers from the source.	$446.64
107	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$446.64
108	Remove and dispose of battery electrolyte.	$1,680.00

Lake Road 4/6 Retirement

ID	Task Name	Cost
109	Remove and dispose of battery cells.	$1,120.00
110	Clean up and dispose of electrolyte on surface areas around batteries.	$560.00
111	**Post Retirement Activities**	**$26,564.00**
112	Post Retirement Activities	$26,564.00

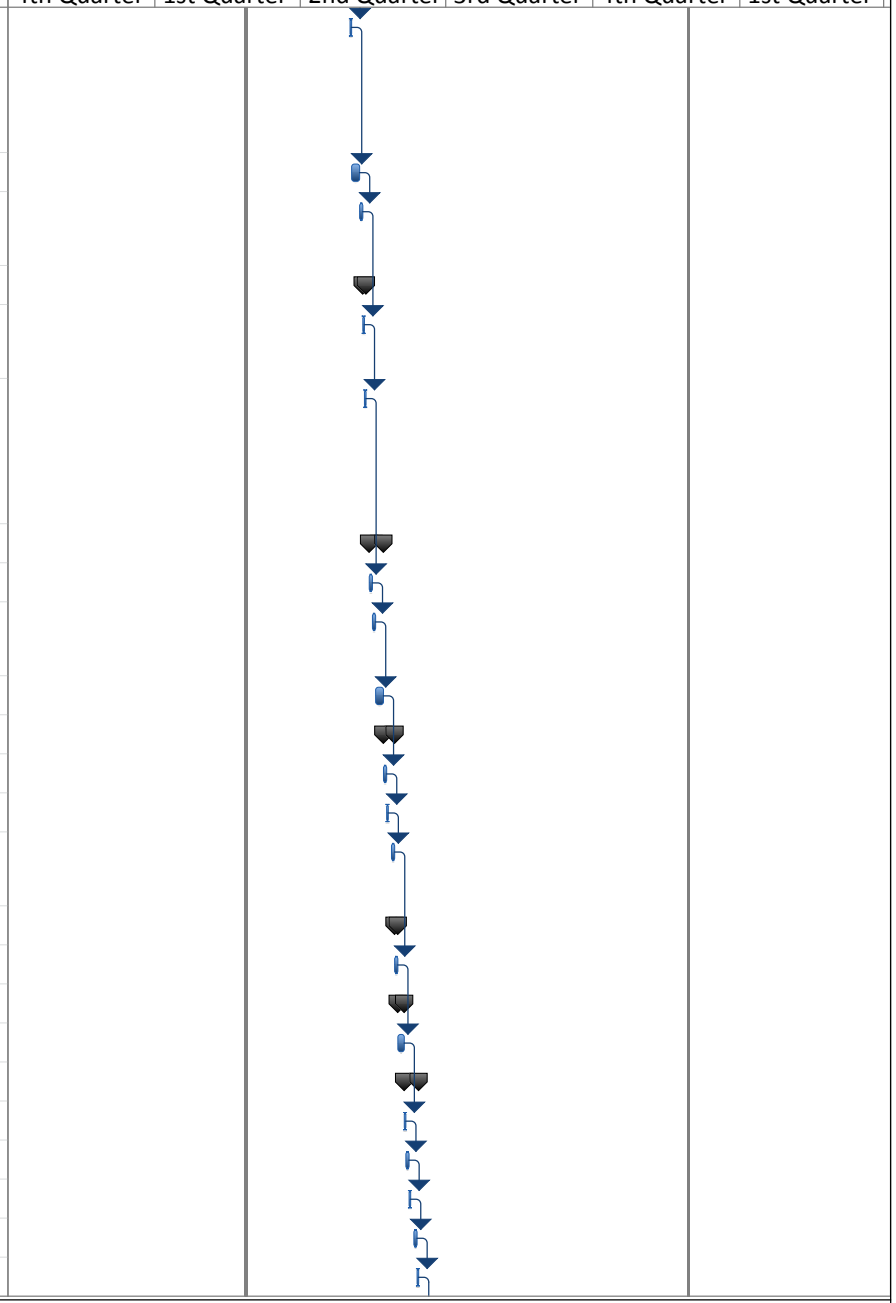
Lake Road 4/6 Retirement

ID	Task Name	Duration
1	**Lake Road 4/6 Retirement**	**199 days**
2	**Pre-Engineering**	**40 days**
3	Permit review and engineering analysis and establish isolation points.	40 days
4	**KCL&L Overhead Costs**	**119 days**
5	KCP&L Retirement Manager	119 days
6	**Equipment Rentals**	**119 days**
7	Vacuum truck	119 days
8	**Retirement**	**119 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Oil-Filled Power Transformers**	**7 days**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day



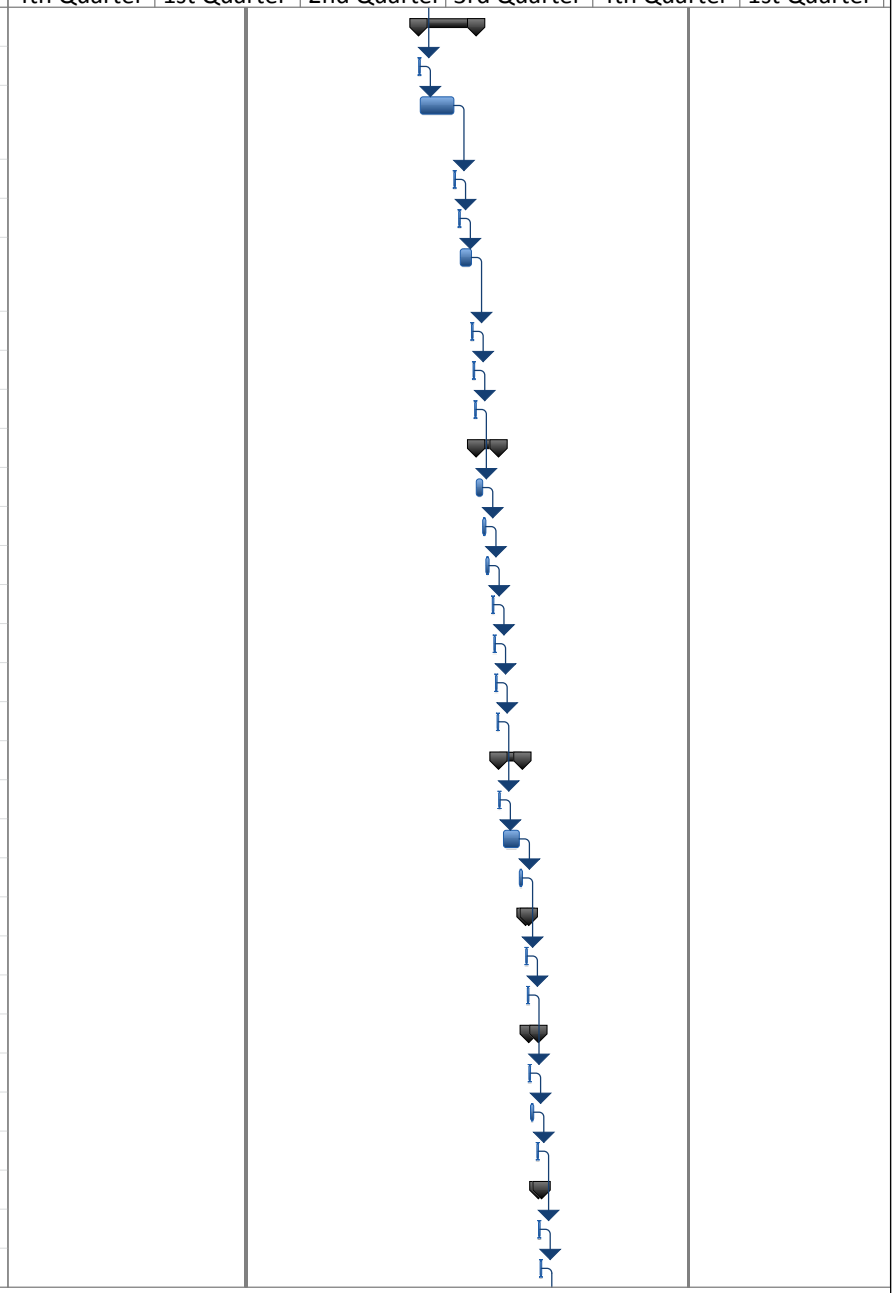
Lake Road 4/6 Retirement

ID	Task Name	Duration
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
26	Drain and dispose of oil.	3 days
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	2 days
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Coal Handling**	**5 days**
36	Empty both coal silos.	2 days
37	Confirm conveyors are run out of fuel.	1 day
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from area.	2 days
39	**Gas System**	**2 days**
40	Isolate lines from source, open and vent.	2 days
41	**Boiler Chemical Feed**	**2 days**
42	Drain all chemical feed tanks.	2 days
43	**Demineralizer**	**7 days**
44	Drain water from system.	1 day
45	Drain acid and caustic tanks.	2 days
46	Open tanks and vessels.	1 day
47	Remove resin.	2 days
48	Drain and Vent the Demineralized Water Storage Tank	1 day



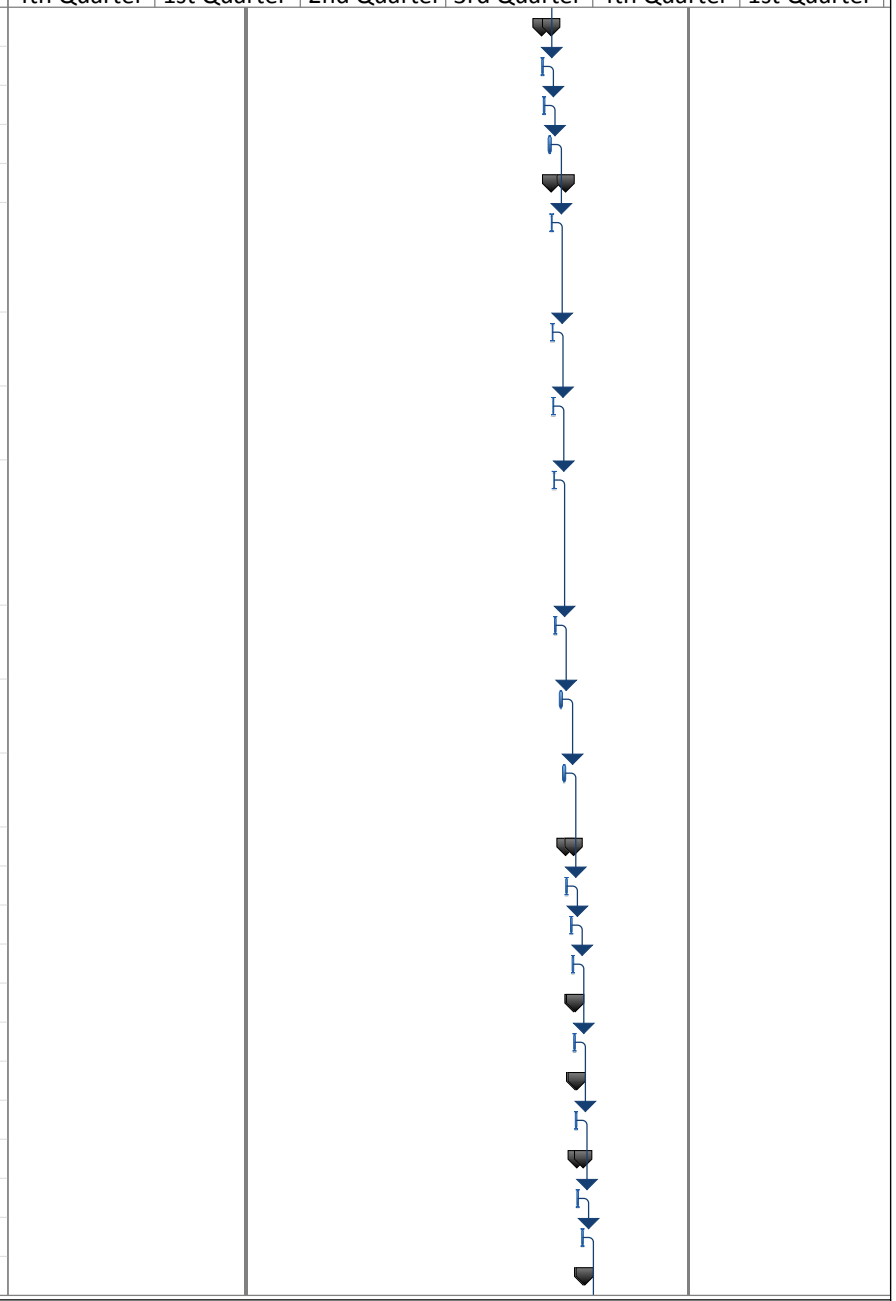
Lake Road 4/6 Retirement

ID	Task Name	Duration
49	**Boiler**	**26 days**
50	Open boiler doors.	1 day
51	Gas side - perform cleaning of the boiler and bottom ash system.	15 days
52	Drain boiler, drum, downcomers and headers.	1 day
53	Open drum doors.	1 day
54	Drain, vent and clean the fly ash, slag and transport systems	5 days
55	Drain and vent the steam coil air heaters and piping	1 day
56	Drain and vent the steam coil air heater drain tanks	1 day
57	Drain and vent boiler sampling system panel and piping	1 day
58	**Precipitator**	**10 days**
59	Multiple cleaning cycles for collection plates.	2 days
60	Clear hoppers of all ash	2 days
61	Disconnect transformers.	2 days
62	Mechanically secure all compartment dampers and hopper	1 day
63	Disconnect ash transport piping and washdown hoppers ar	1 day
64	Install bird screens across hopper ash outlet and ash line fl	1 day
65	Padlock or tack weld all hopper doors shut. (note: if ash ho	1 day
66	**Ductwork**	**11 days**
67	Open ductwork doors.	1 day
68	Perform extensive cleaning of the ductwork.	8 days
69	Isolate ductwork at tie to common ductwork.	2 days
70	**Condensate and Feedwater Piping**	**2 days**
71	Drain water from the system.	1 day
72	Leave open vents and drains.	1 day
73	**Feedwater heaters**	**4 days**
74	Drain feedwater heaters	1 day
75	Leave open vents and drains.	2 days
76	Drain and vent the heater drain piping.	1 day
77	**Deaerator and Deaerator Storage Tank**	**2 days**
78	Drain Deaerator and Storage	1 day
79	Leave open vents and drains.	1 day



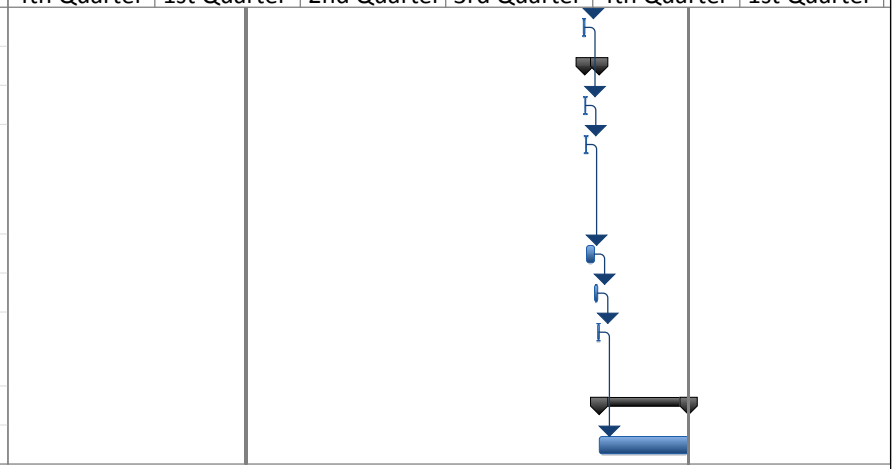
Lake Road 4/6 Retirement

ID	Task Name	Duration
80	**Turbine(s) and Condenser**	**4 days**
81	Drain hotwell and leave doors open.	1 day
82	Open main turbine doors.	1 day
83	Remove lube oil.	2 days
84	**Generator**	**7 days**
85	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
86	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
87	De-energize power supplies to generator excitation system at the source.	0.5 days
88	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	0.5 days
89	Drain generator and exciter cooling water systems (if applicable).	1 day
90	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
91	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
92	**Circulation Water and Turbine Cooling Water System**	**3 days**
93	Drain.	1 day
94	Open water box doors.	1 day
95	Drain any circulating water chemical feed tanks.	1 day
96	**Compressed Air System**	**1 day**
97	Open vents and drains.	1 day
98	**Auxiliary Steam System**	**1 day**
99	Drain water from system.	1 day
100	**Closed Cooling Water System**	**2 days**
101	Drain water from system.	1 day
102	Vent piping.	1 day
103	**Condenser Air Extraction**	**1 day**



Lake Road 4/6 Retirement

ID	Task Name	Duration
104	Drain water from system.	1 day
105	**Battery System**	**7 days**
106	De-energize all battery chargers from the source.	0.5 days
107	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
108	Remove and dispose of battery electrolyte.	3 days
109	Remove and dispose of battery cells.	2 days
110	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
111	**Post Retirement Activities**	**40 days**
112	Post Retirement Activities	40 days



Lake Road 4-6 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$733,959	
Post-Dismantlement Activities			$49,140	
Owner Costs Total*				$1,675,859
Demolition General Contractor (DGC) Costs				
Site Management			$400,086	
Equipment Rental			$681,238	
Consummables			$679,657	
Scrap Crew(s)			$674,401	
Dismantlement			$1,500,720	
Contractor Direct Cost*		$3,936,101		
Contractor Allowances				
DGC Insurance	2.00%		$78,722	
Contingency/Profit	15.00%		$602,224	
Performance Bond	2.00%		$92,340.94	
Contractor Costs Total:				$4,709,388
Total:				$6,385,247
Owner Internal Costs:	5.00%			$319,262
Owner Contingency:	25.00%			$1,676,127
Lake Road 4-6 Dismantlement Opinion of Probable Cost:				$8,380,637

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $5,611,960

TURBINE GENERATOR 1

Lake Road T/G 1 Retirement

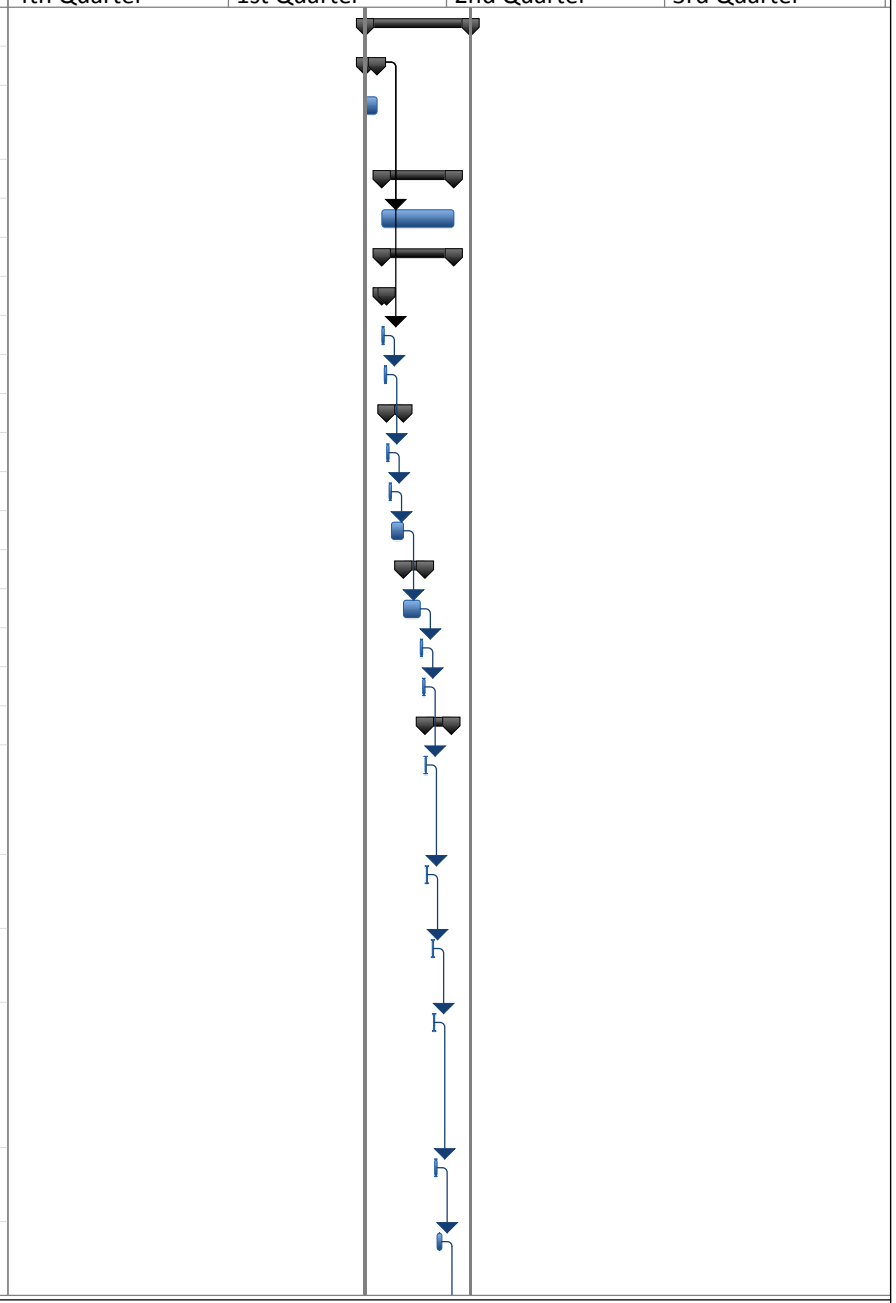
Owner Costs			
Pre-Retirement Activities		$7,638	
Retirement Activities		$26,641	
Post-Retirement Activities		$3,320	
Owner Direct Total			$37,599
Owner Internal Costs	5.00%		$1,880
Owner Contingency:	25.00%		$9,870
Lake Road T/G 1 Retirement Opinion of Probable Cost:			$49,349

Lake Road Turbine Generator 1 Retirement

ID	Task Name	Cost
1	**Lake Road Turbine Generator 1 Retirement**	**$37,599.30**
2	**Pre-Engineering**	**$7,638.00**
3	Engineering analysis and establish isolation points.	$7,638.00
4	**KCL&L Overhead Costs**	**$13,631.20**
5	KCP&L Retirement Manager	$13,631.20
6	**Retirement**	**$13,009.60**
7	**Feedwater Piping**	**$1,685.44**
8	Drain water from the system and isolate from system.	$842.72
9	Leave open vents and drains.	$842.72
10	**Turbine(s) and Condenser**	**$4,385.68**
11	Drain hotwell and leave doors open.	$861.84
12	Open main turbine doors.	$880.96
13	Remove lube oil.	$2,642.88
14	**Circulating Water System**	**$0.00**
15	Drain and Clean the Cooling Tower	$0.00
16	Drain and Vent the Circulating Water Pipe	$0.00
17	Drain, Clean and Vent the Cooling Tower Chemical Systems	$0.00
18	**Generator**	**$6,095.76**
19	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$446.64
20	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
21	De-energize power supplies to generator excitation system at the source.	$446.64
22	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	$446.64
23	Drain generator and exciter cooling water systems (if applicable).	$861.84
24	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,685.44
25	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,761.92
26	**Condenser Air Extraction**	**$842.72**
27	Drain water from system.	$842.72
28	**Post Retirement Activities**	**$3,320.50**
29	Post Retirement Activities	$3,320.50

Lake Road Turbine Generator 1 Retirement

ID	Task Name	Duration
1	**Lake Road Turbine Generator 1 Retirement**	**32 days**
2	**Pre-Engineering**	**5 days**
3	Engineering analysis and establish isolation points.	5 days
4	**KCL&L Overhead Costs**	**22 days**
5	KCP&L Retirement Manager	22 days
6	**Retirement**	**22 days**
7	**Feedwater Piping**	**2 days**
8	Drain water from the system and isolate from system.	1 day
9	Leave open vents and drains.	1 day
10	**Turbine(s) and Condenser**	**5 days**
11	Drain hotwell and leave doors open.	1 day
12	Open main turbine doors.	1 day
13	Remove lube oil.	3 days
14	**Circulating Water System**	**7 days**
15	Drain and Clean the Cooling Tower	5 days
16	Drain and Vent the Circulating Water Pipe	1 day
17	Drain, Clean and Vent the Cooling Tower Chemical Systems	1 day
18	**Generator**	**7 days**
19	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
20	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
21	De-energize power supplies to generator excitation system at the source.	0.5 days
22	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	0.5 days
23	Drain generator and exciter cooling water systems (if applicable).	1 day
24	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days



Lake Road Turbine Generator 1 Retirement

ID	Task Name	Duration	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter
25	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days				
26	**Condenser Air Extraction**	**1 day**				
27	Drain water from system.	1 day				
28	**Post Retirement Activities**	**5 days**				
29	Post Retirement Activities	5 days				

Lake Road T/G 1 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$172,583	
Overhead During Dismantlement			$92,674	
Post-Dismantlement Activities			$8,190	
Owner Costs Total*				$273,447
Demolition General Contractor (DGC) Costs				
Site Management			$89,966	
Equipment Rental			$329,332	
Consummables			$328,568	
Scrap Crew(s)			$326,027	
Dismantlement			$210,518	
Contractor Direct Cost*		$1,284,411		
Contractor Allowances				
DGC Insurance	2.00%		$25,688	
Contingency/Profit	15.00%		$196,515	
Performance Bond	2.00%		$30,132.28	
Contractor Costs Total:				$1,536,746
Total:				$1,810,193
Owner Internal Costs:	5.00%			$90,510
Owner Contingency:	25.00%			$475,176
Lake Road T/G 1 Dismantlement Opinion of Probable Cost:				$2,375,879

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $1,557,858

Lake Road Turbine Generator 1 Dismantlement

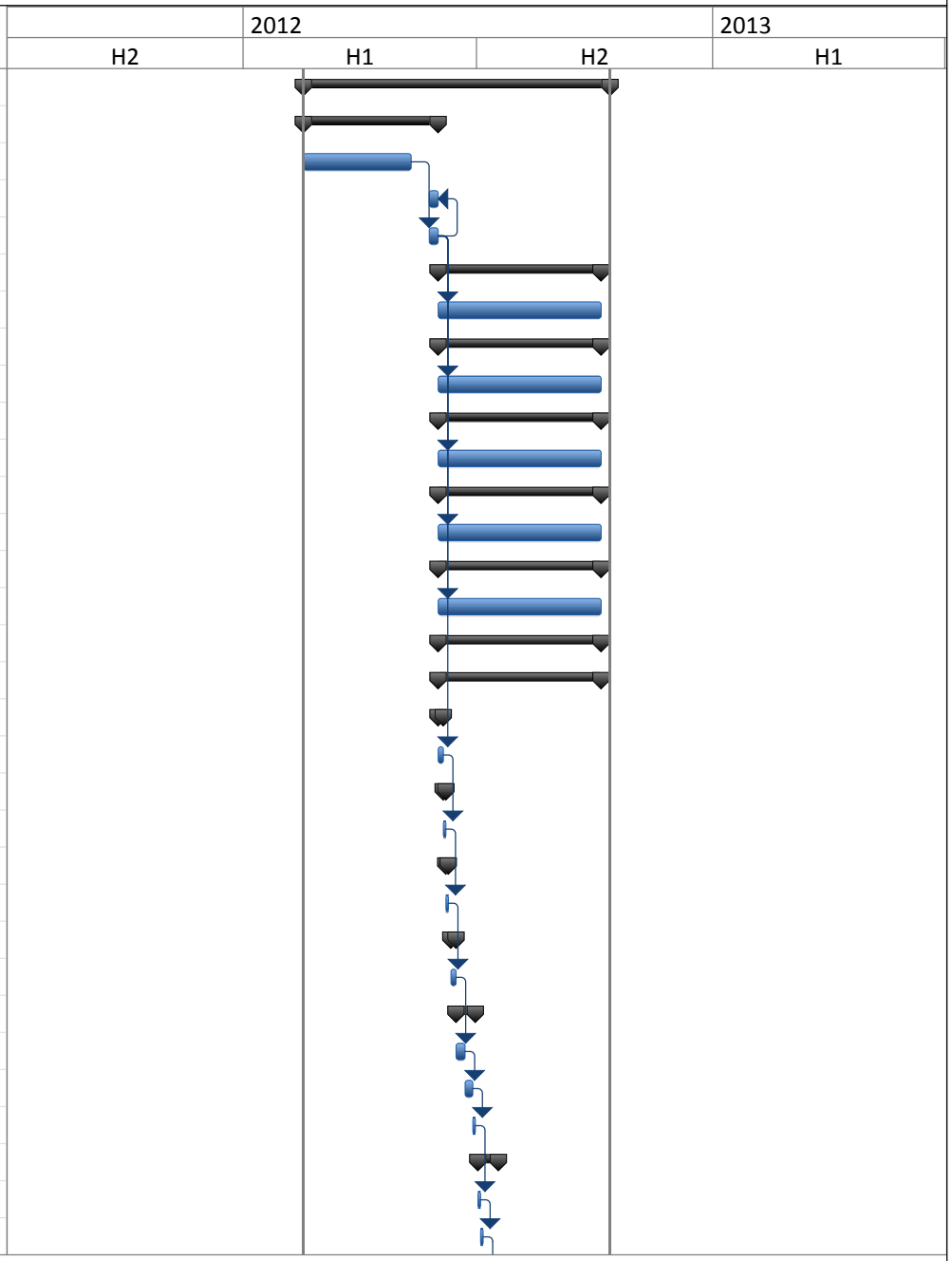
ID	Task Name	Cost
1	**Lake Road T/G 1 Removal**	**$1,557,861.80**
2	**Pre-Dismantlement Activities**	**$172,583.80**
3	Hire Demolition General Contractor	$167,184.00
4	KCP&L Prepares Unit for Dismantlement	$5,399.80
5	Demolition Contractor Mobilizes on Site	$0.00
6	**KCP&L Overhead during Dismantlement**	**$92,674.40**
7	KCP&L Engineer	$92,674.40
8	**Demoliton Contractor Overhead during Dismantlement**	**$89,966.24**
9	Demolition Contractor Superintendent	$89,966.24
10	**Demolition Contractor Equipment Rental Costs**	**$329,332.64**
11	Equipment Rental	$329,332.64
12	**Demolition Contractor Consummables**	**$328,568.24**
13	Consummables	$328,568.24
14	**Scrap Crew(s)**	**$326,027.52**
15	Crew to Handle Scrap Material(s)	$326,027.52
16	**Dismantlement Directs**	**$210,518.96**
17	**Phase 1 Demolition**	**$210,518.96**
18	**Critical Piping**	**$3,582.72**
19	Remove Main Steam Piping to the Turbine	$3,582.72
20	**Circulating Water (plant side)**	**$3,582.72**
21	Waterboxes	$3,582.72
22	**Condenser Air Extraction System**	**$3,582.72**
23	Vacuum Pumps	$3,582.72
24	**Turbine Seals and Drains**	**$7,165.44**
25	Piping	$7,165.44
26	**Turbine Lube Oil System**	**$18,443.76**
27	Turbine Lube Oil Tank	$7,695.60
28	Turbine Lube Oil Pumps	$7,165.44
29	Turbine Oil Mist Eliminator	$3,582.72
30	**Generator Auxiliary Systems**	**$21,496.32**
31	Hydrogen Cooler Skid and Piping	$3,582.72
32	Stator Cooling Water Skid and Piping	$3,582.72
33	Isophase Bus Duct	$7,165.44
34	Exciter Heat Exchanger	$3,582.72
35	EHC Coolers	$3,582.72
36	**Remove Turbine**	**$126,343.68**
37	Remove Turbine	$26,321.60
38	Remove Generator	$39,482.40
39	Remove Condenser Neck Heat Exchanger	$7,896.48
40	Remove Condenser	$13,160.80
41	Remove Misc. Auxiliary Turbine Equipment	$39,482.40
42	**Cooling Tower 1**	**$26,321.60**
43	Remove Cooling Tower 1	$26,321.60
44	**Project Close-Out**	**$8,190.00**

Lake Road Turbine Generator 1 Dismantlement

ID	Task Name	Cost
45	Project Close-Out Activities	$8,190.00

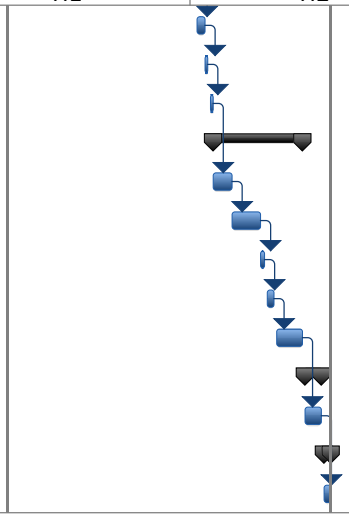
Lake Road Turbine Generator 1 Dismantlement

ID	Task Name	Duration
1	**Lake Road T/G 1 Removal**	**171 days**
2	**Pre-Dismantlement Activities**	**75 days**
3	Hire Demolition General Contractor	3 mons
4	KCP&L Prepares Unit for Dismantlement	1 wk
5	Demolition Contractor Mobilizes on Site	5 days
6	**KCP&L Overhead during Dismantlement**	**91 days**
7	KCP&L Engineer	91 days
8	**Demoliton Contractor Overhead during Dismantlemen**	**91 days**
9	Demolition Contractor Superintendent	91 days
10	**Demolition Contractor Equipment Rental Costs**	**91 days**
11	Equipment Rental	91 days
12	**Demolition Contractor Consummables**	**91 days**
13	Consummables	91 days
14	**Scrap Crew(s)**	**91 days**
15	Crew to Handle Scrap Material(s)	91 days
16	**Dismantlement Directs**	**91 days**
17	**Phase 1 Demolition**	**91 days**
18	**Critical Piping**	**2 days**
19	Remove Main Steam Piping to the Turbine	2 days
20	**Circulating Water (plant side)**	**2 days**
21	Waterboxes	2 days
22	**Condenser Air Extraction System**	**2 days**
23	Vacuum Pumps	2 days
24	**Turbine Seals and Drains**	**4 days**
25	Piping	4 days
26	**Turbine Lube Oil System**	**11 days**
27	Turbine Lube Oil Tank	5 days
28	Turbine Lube Oil Pumps	4 days
29	Turbine Oil Mist Eliminator	2 days
30	**Generator Auxiliary Systems**	**12 days**
31	Hydrogen Cooler Skid and Piping	2 days
32	Stator Cooling Water Skid and Piping	2 days



Lake Road Turbine Generator 1 Dismantlement

ID	Task Name	Duration
33	Isophase Bus Duct	4 days
34	Exciter Heat Exchanger	2 days
35	EHC Coolers	2 days
36	**Remove Turbine**	**48 days**
37	Remove Turbine	10 days
38	Remove Generator	15 days
39	Remove Condenser Neck Heat Exchanger	3 days
40	Remove Condenser	5 days
41	Remove Misc. Auxiliary Turbine Equipment	15 days
42	**Cooling Tower 1**	**10 days**
43	Remove Cooling Tower 1	10 days
44	**Project Close-Out**	**5 days**
45	Project Close-Out Activities	5 days



TURBINE GENERATOR 2

Lake Road T/G 2 Retirement

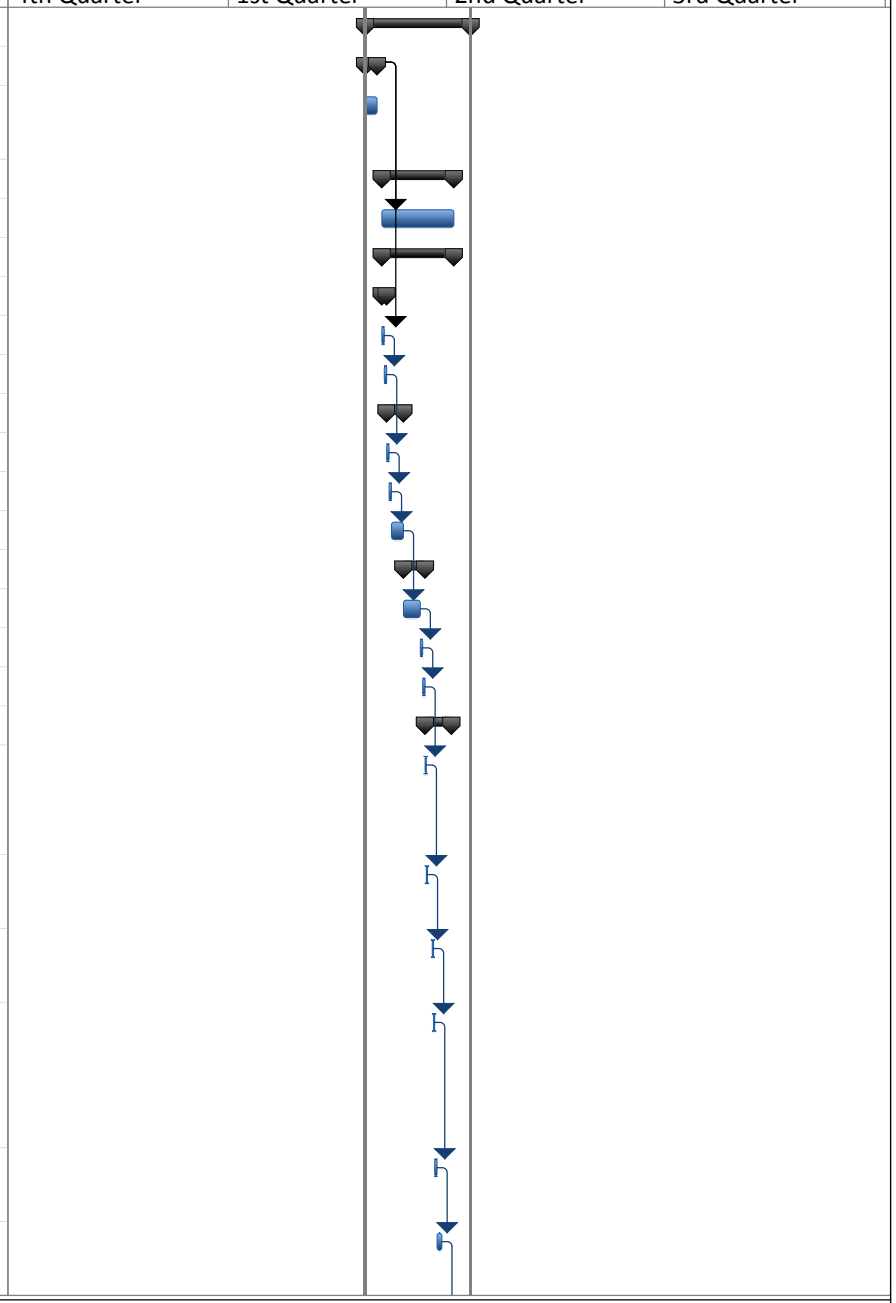
Owner Costs			
Pre-Retirement Activities		$7,638	
Retirement Activities		$26,641	
Post-Retirement Activities		$3,320	
Owner Direct Total			$37,599
Owner Internal Costs	5.00%		$1,880
Owner Contingency:	25.00%		$9,870
Lake Road T/G 2 Retirement Opinion of Probable Cost:			$49,349

Lake Road Turbine Generator 2 Retirement

ID	Task Name	Cost
1	**Lake Road Turbine Generator 2 Retirement**	**$37,599.30**
2	**Pre-Engineering**	**$7,638.00**
3	Engineering analysis and establish isolation points.	$7,638.00
4	**KCL&L Overhead Costs**	**$13,631.20**
5	KCP&L Retirement Manager	$13,631.20
6	**Retirement**	**$13,009.60**
7	**Feedwater Piping**	**$1,685.44**
8	Drain water from the system and isolate from system.	$842.72
9	Leave open vents and drains.	$842.72
10	**Turbine(s) and Condenser**	**$4,385.68**
11	Drain hotwell and leave doors open.	$861.84
12	Open main turbine doors.	$880.96
13	Remove lube oil.	$2,642.88
14	**Circulating Water System**	**$0.00**
15	Drain and Clean the Cooling Tower	$0.00
16	Drain and Vent the Circulating Water Pipe	$0.00
17	Drain, Clean and Vent the Cooling Tower Chemical Systems	$0.00
18	**Generator**	**$6,095.76**
19	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$446.64
20	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
21	De-energize power supplies to generator excitation system at the source.	$446.64
22	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	$446.64
23	Drain generator and exciter cooling water systems (if applicable).	$861.84
24	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,685.44
25	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,761.92
26	**Condenser Air Extraction**	**$842.72**
27	Drain water from system.	$842.72
28	**Post Retirement Activities**	**$3,320.50**
29	Post Retirement Activities	$3,320.50

Lake Road Turbine Generator 2 Retirement

ID	Task Name	Duration
1	**Lake Road Turbine Generator 2 Retirement**	**32 days**
2	**Pre-Engineering**	**5 days**
3	Engineering analysis and establish isolation points.	5 days
4	**KCL&L Overhead Costs**	**22 days**
5	KCP&L Retirement Manager	22 days
6	**Retirement**	**22 days**
7	**Feedwater Piping**	**2 days**
8	Drain water from the system and isolate from system.	1 day
9	Leave open vents and drains.	1 day
10	**Turbine(s) and Condenser**	**5 days**
11	Drain hotwell and leave doors open.	1 day
12	Open main turbine doors.	1 day
13	Remove lube oil.	3 days
14	**Circulating Water System**	**7 days**
15	Drain and Clean the Cooling Tower	5 days
16	Drain and Vent the Circulating Water Pipe	1 day
17	Drain, Clean and Vent the Cooling Tower Chemical Systems	1 day
18	**Generator**	**7 days**
19	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
20	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
21	De-energize power supplies to generator excitation system at the source.	0.5 days
22	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	0.5 days
23	Drain generator and exciter cooling water systems (if applicable).	1 day
24	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days



Lake Road Turbine Generator 2 Retirement

ID	Task Name	Duration	4th Quarter	1st Quarter	2nd Quarter	3rd Quarter
25	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days				
26	**Condenser Air Extraction**	**1 day**				
27	Drain water from system.	1 day				
28	**Post Retirement Activities**	**5 days**				
29	Post Retirement Activities	5 days				

Lake Road T/G 2 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$172,583	
Overhead During Dismantlement			$102,858	
Post-Dismantlement Activities			$8,190	
Owner Costs Total*				$283,631
Demolition General Contractor (DGC) Costs				
Site Management			$99,852	
Equipment Rental			$365,523	
Consummables			$364,674	
Scrap Crew(s)			$361,854	
Dismantlement			$236,840	
Contractor Direct Cost*		$1,428,743		
Contractor Allowances				
DGC Insurance	2.00%		$28,575	
Contingency/Profit	15.00%		$218,598	
Performance Bond	2.00%		$33,518.31	
Contractor Costs Total:				$1,709,434
Total:				$1,993,065
Owner Internal Costs:	5.00%			$99,653
Owner Contingency:	25.00%			$523,180
Lake Road T/G 2 Dismantlement Opinion of Probable Cost:				$2,615,898

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $1,712,374

Lake Road Turbine Generator 2 Dismantlement

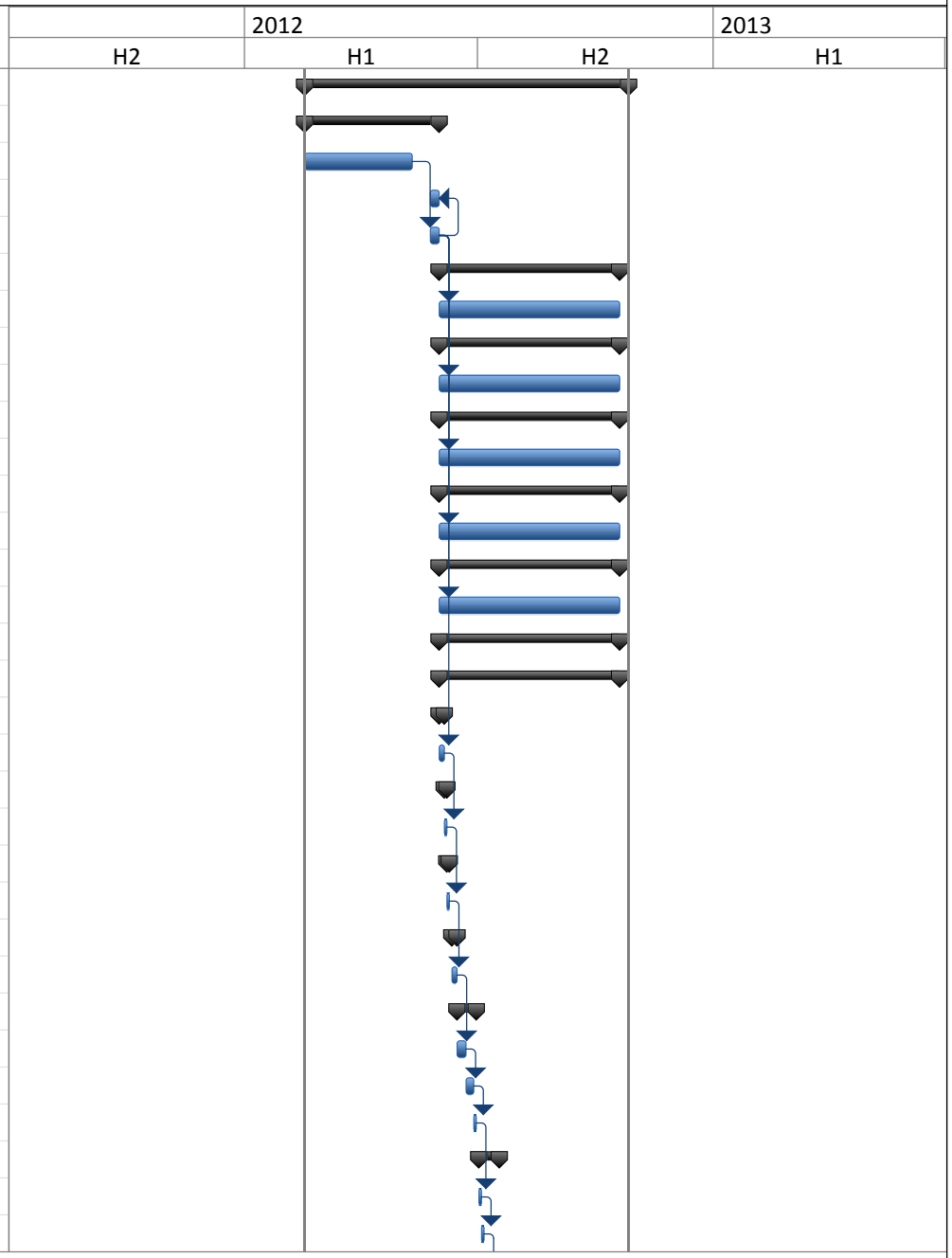
ID	Task Name	Cost
1	**Lake Road T/G 2 Removal**	**$1,712,377.80**
2	**Pre-Dismantlement Activities**	**$172,583.80**
3	Hire Demolition General Contractor	$167,184.00
4	KCP&L Prepares Unit for Dismantlement	$5,399.80
5	Demolition Contractor Mobilizes on Site	$0.00
6	**KCP&L Overhead during Dismantlement**	**$102,858.40**
7	KCP&L Engineer	$102,858.40
8	**Demoliton Contractor Overhead during Dismantlement**	**$99,852.64**
9	Demolition Contractor Superintendent	$99,852.64
10	**Demolition Contractor Equipment Rental Costs**	**$365,523.04**
11	Equipment Rental	$365,523.04
12	**Scrap Crew(s)**	**$361,854.72**
13	Crew to Handle Scrap Material(s)	$361,854.72
14	**Demolition Contractor Consummables**	**$364,674.64**
15	Consummables	$364,674.64
16	**Dismantlement Directs**	**$236,840.56**
17	**Phase 1 Demolition**	**$236,840.56**
18	**Critical Piping**	**$3,582.72**
19	Remove Main Steam Piping to the Turbine	$3,582.72
20	**Circulating Water (plant side)**	**$3,582.72**
21	Waterboxes	$3,582.72
22	**Condenser Air Extraction System**	**$3,582.72**
23	Vacuum Pumps	$3,582.72
24	**Turbine Seals and Drains**	**$7,165.44**
25	Piping	$7,165.44
26	**Turbine Lube Oil System**	**$18,443.76**
27	Turbine Lube Oil Tank	$7,695.60
28	Turbine Lube Oil Pumps	$7,165.44
29	Turbine Oil Mist Eliminator	$3,582.72
30	**Generator Auxiliary Systems**	**$21,496.32**
31	Hydrogen Cooler Skid and Piping	$3,582.72
32	Stator Cooling Water Skid and Piping	$3,582.72
33	Isophase Bus Duct	$7,165.44
34	Exciter Heat Exchanger	$3,582.72
35	EHC Coolers	$3,582.72
36	**Remove Turbine**	**$147,400.96**
37	Remove Turbine	$34,218.08
38	Remove Generator	$44,746.72
39	Remove Condenser Neck Heat Exchanger	$7,896.48
40	Remove Condenser	$15,792.96
41	Remove Misc. Auxiliary Turbine Equipment	$44,746.72
42	**Cooling Tower 2**	**$31,585.92**
43	Remove Cooling Tower 2	$31,585.92
44	**Project Close-Out**	**$8,190.00**

Lake Road Turbine Generator 2 Dismantlement

ID	Task Name	Cost
45	Project Close-Out Activities	$8,190.00

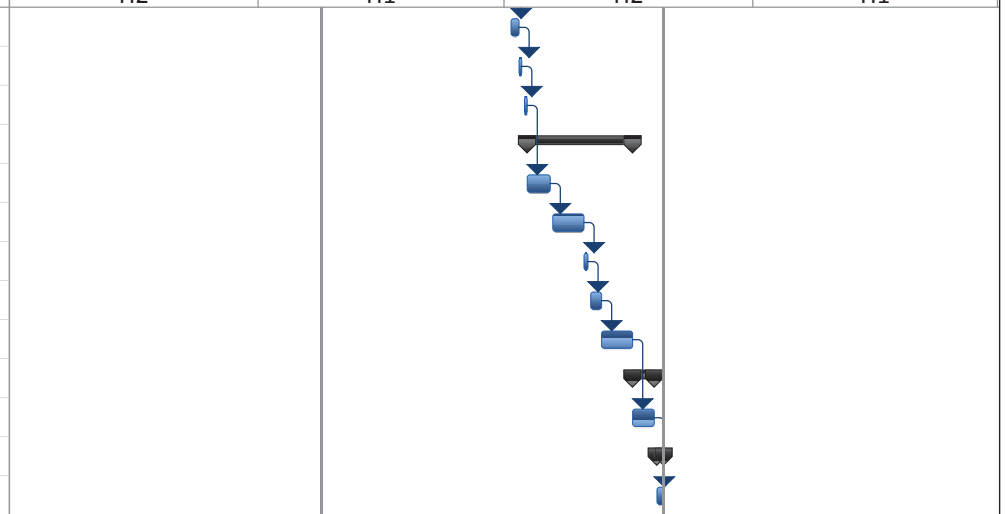
Lake Road Turbine Generator 2 Dismantlement

ID	Task Name	Duration
1	**Lake Road T/G 2 Removal**	**181 days**
2	**Pre-Dismantlement Activities**	**75 days**
3	Hire Demolition General Contractor	3 mons
4	KCP&L Prepares Unit for Dismantlement	1 wk
5	Demolition Contractor Mobilizes on Site	5 days
6	**KCP&L Overhead during Dismantlement**	**101 days**
7	KCP&L Engineer	101 days
8	**Demoliton Contractor Overhead during Dismantlemen**	**101 days**
9	Demolition Contractor Superintendent	101 days
10	**Demolition Contractor Equipment Rental Costs**	**101 days**
11	Equipment Rental	101 days
12	**Scrap Crew(s)**	**101 days**
13	Crew to Handle Scrap Material(s)	101 days
14	**Demolition Contractor Consummables**	**101 days**
15	Consummables	101 days
16	**Dismantlement Directs**	**101 days**
17	**Phase 1 Demolition**	**101 days**
18	**Critical Piping**	**2 days**
19	Remove Main Steam Piping to the Turbine	2 days
20	**Circulating Water (plant side)**	**2 days**
21	Waterboxes	2 days
22	**Condenser Air Extraction System**	**2 days**
23	Vacuum Pumps	2 days
24	**Turbine Seals and Drains**	**4 days**
25	Piping	4 days
26	**Turbine Lube Oil System**	**11 days**
27	Turbine Lube Oil Tank	5 days
28	Turbine Lube Oil Pumps	4 days
29	Turbine Oil Mist Eliminator	2 days
30	**Generator Auxiliary Systems**	**12 days**
31	Hydrogen Cooler Skid and Piping	2 days
32	Stator Cooling Water Skid and Piping	2 days



Lake Road Turbine Generator 2 Dismantlement

ID	Task Name	Duration
33	Isophase Bus Duct	4 days
34	Exciter Heat Exchanger	2 days
35	EHC Coolers	2 days
36	**Remove Turbine**	**56 days**
37	Remove Turbine	13 days
38	Remove Generator	17 days
39	Remove Condenser Neck Heat Exchanger	3 days
40	Remove Condenser	6 days
41	Remove Misc. Auxiliary Turbine Equipment	17 days
42	**Cooling Tower 2**	**12 days**
43	Remove Cooling Tower 2	12 days
44	**Project Close-Out**	**5 days**
45	Project Close-Out Activities	5 days



TURBINE GENERATOR 3

Lake Road T/G 3 Retirement

Owner Costs			
Pre-Retirement Activities		$7,638	
Retirement Activities		$22,304	
Post-Retirement Activities		$3,320	
Owner Direct Total			$33,262
Owner Internal Costs	5.00%		$1,663
Owner Contingency:	25.00%		$8,731

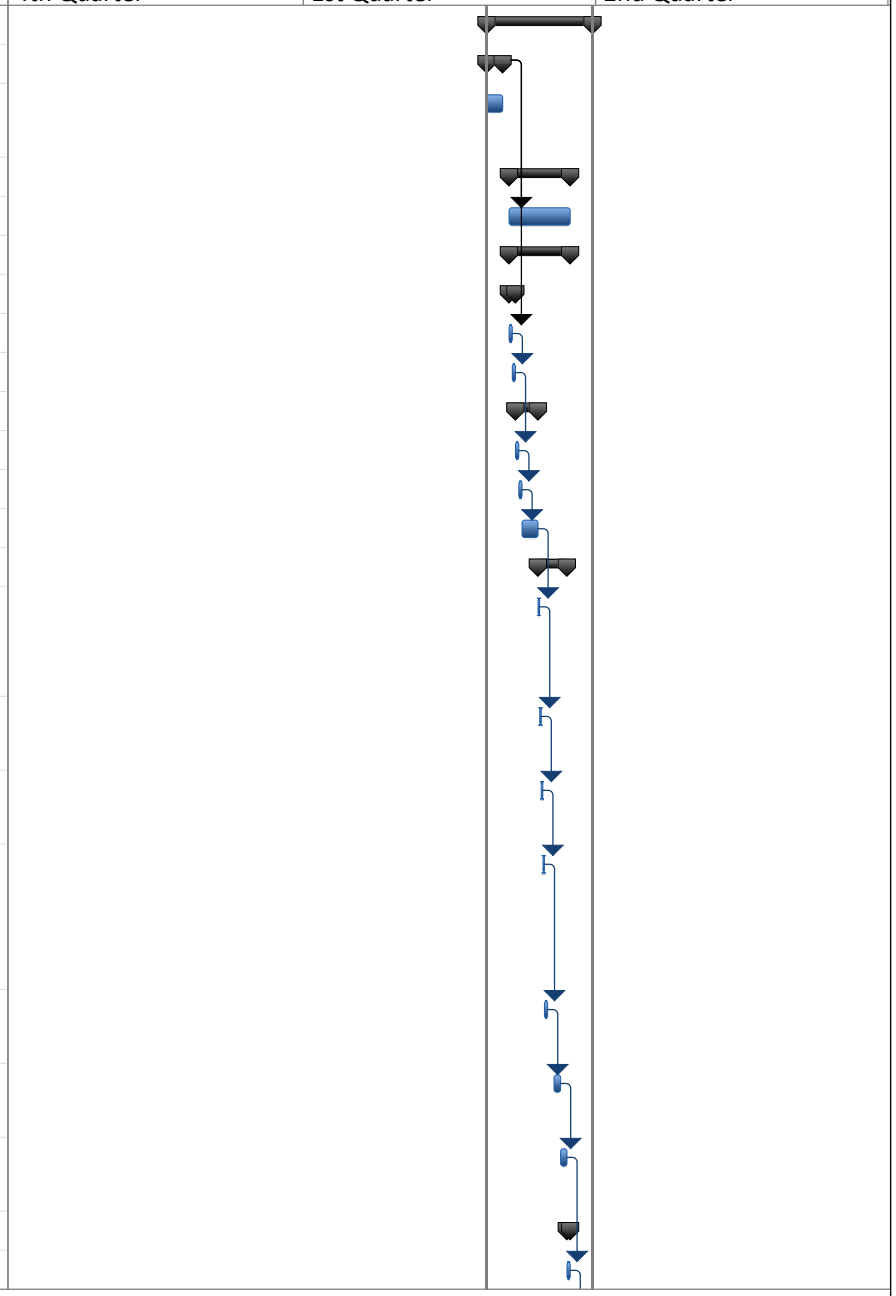
Lake Road T/G 3 Retirement Opinion of Probable Cost: $43,656

Lake Road Turbine Generator 3 Retirement

ID	Task Name	Cost
1	**Lake RoadTurbine Generator 3 Retirement**	**$33,262.10**
2	**Pre-Engineering**	**$7,638.00**
3	Engineering analysis and establish isolation points.	$7,638.00
4	**KCL&L Overhead Costs**	**$9,294.00**
5	KCP&L Retirement Manager	$9,294.00
6	**Retirement**	**$13,009.60**
7	**Feedwater Piping**	**$1,685.44**
8	Drain water from the system and isolate from system.	$842.72
9	Leave open vents and drains.	$842.72
10	**Turbine(s) and Condenser**	**$4,385.68**
11	Drain hotwell and leave doors open.	$861.84
12	Open main turbine doors.	$880.96
13	Remove lube oil.	$2,642.88
14	**Generator**	**$6,095.76**
15	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$446.64
16	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
17	De-energize power supplies to generator excitation system at the source.	$446.64
18	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	$446.64
19	Drain generator and exciter cooling water systems (if applicable).	$861.84
20	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,685.44
21	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,761.92
22	**Condenser Air Extraction**	**$842.72**
23	Drain water from system.	$842.72
24	**Post Retirement Activities**	**$3,320.50**
25	Post Retirement Activities	$3,320.50

Lake Road Turbine Generator 3 Retirement

ID	Task Name	Duration
1	**Lake RoadTurbine Generator 3 Retirement**	**25 days**
2	**Pre-Engineering**	**5 days**
3	Engineering analysis and establish isolation points.	5 days
4	**KCL&L Overhead Costs**	**15 days**
5	KCP&L Retirement Manager	15 days
6	**Retirement**	**15 days**
7	**Feedwater Piping**	**2 days**
8	Drain water from the system and isolate from system.	1 day
9	Leave open vents and drains.	1 day
10	**Turbine(s) and Condenser**	**5 days**
11	Drain hotwell and leave doors open.	1 day
12	Open main turbine doors.	1 day
13	Remove lube oil.	3 days
14	**Generator**	**7 days**
15	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
16	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
17	De-energize power supplies to generator excitation system at the source.	0.5 days
18	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	0.5 days
19	Drain generator and exciter cooling water systems (if applicable).	1 day
20	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
21	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
22	**Condenser Air Extraction**	**1 day**
23	Drain water from system.	1 day



Lake Road Turbine Generator 3 Retirement

ID	Task Name	Duration	4th Quarter	1st Quarter	2nd Quarter
24	**Post Retirement Activities**	**5 days**			
25	Post Retirement Activities	5 days			

Lake Road T/G 3 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$172,583	
Overhead During Dismantlement			$71,288	
Post-Dismantlement Activities			$8,190	
Owner Costs Total*				$252,061
Demolition General Contractor (DGC) Costs				
Site Management			$69,204	
Equipment Rental			$253,332	
Consummables			$252,744	
Scrap Crew(s)			$250,790	
Dismantlement			$156,925	
Contractor Direct Cost*		$982,995		
Contractor Allowances				
DGC Insurance	2.00%		$19,660	
Contingency/Profit	15.00%		$150,398	
Performance Bond	2.00%		$23,061	
Contractor Costs Total:				$1,176,114
Total:				$1,428,175
Owner Internal Costs:	5.00%			$71,409
Owner Contingency:	25.00%			$374,896
Lake Road T/G 3 Dismantlement Opinion of Probable Cost:				$1,874,480

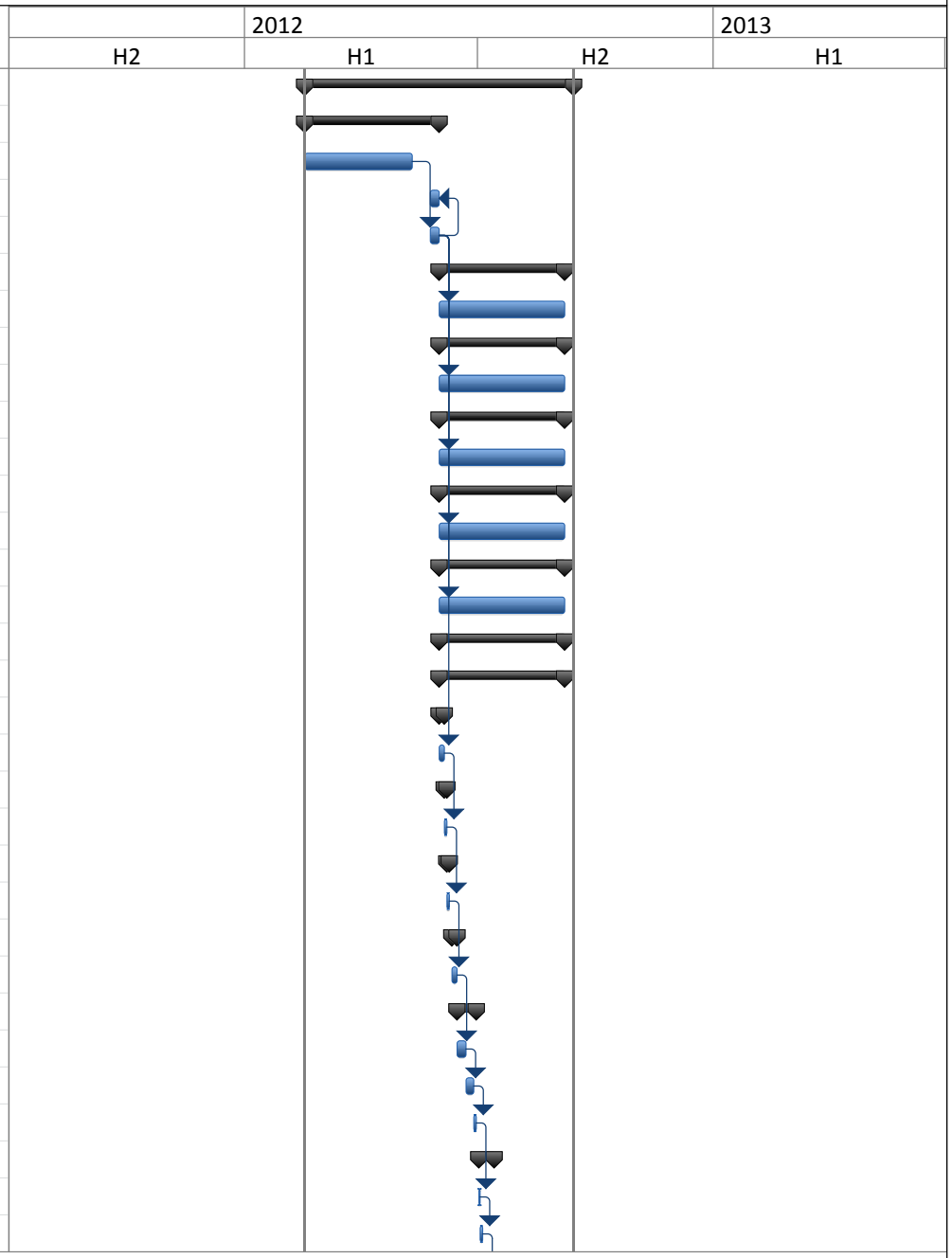
*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $1,235,056

Lake Road Turbine Generator 3 Dismantlement

ID	Task Name	Cost
1	**Lake Road T/G 3 Removal**	**$1,235,059.80**
2	**Pre-Dismantlement Activities**	**$172,583.80**
3	Hire Demolition General Contractor	$167,184.00
4	KCP&L Prepares Unit for Dismantlement	$5,399.80
5	Demolition Contractor Mobilizes on Site	$0.00
6	**KCP&L Overhead during Dismantlement**	**$71,288.00**
7	KCP&L Engineer	$71,288.00
8	**Demoliton Contractor Overhead during Dismantlement**	**$69,204.80**
9	Demolition Contractor Superintendent	$69,204.80
10	**Demolition Contractor Equipment Rental Costs**	**$253,332.80**
11	Equipment Rental	$253,332.80
12	**Demolition Contractor Consummables**	**$252,744.80**
13	Consummables	$252,744.80
14	**Scrap Crew(s)**	**$250,790.40**
15	Crew to Handle Scrap Material(s)	$250,790.40
16	**Dismantlement Directs**	**$156,925.20**
17	**Phase 1 Demolition**	**$156,925.20**
18	**Critical Piping**	**$3,582.72**
19	Remove Main Steam Piping to the Turbine	$3,582.72
20	**Circulating Water (plant side)**	**$3,582.72**
21	Waterboxes	$3,582.72
22	**Condenser Air Extraction System**	**$3,582.72**
23	Vacuum Pumps	$3,582.72
24	**Turbine Seals and Drains**	**$7,165.44**
25	Piping	$7,165.44
26	**Turbine Lube Oil System**	**$18,443.76**
27	Turbine Lube Oil Tank	$7,695.60
28	Turbine Lube Oil Pumps	$7,165.44
29	Turbine Oil Mist Eliminator	$3,582.72
30	**Generator Auxiliary Systems**	**$17,913.60**
31	Hydrogen Cooler Skid and Piping	$1,791.36
32	Stator Cooling Water Skid and Piping	$3,582.72
33	Isophase Bus Duct	$5,374.08
34	Exciter Heat Exchanger	$3,582.72
35	EHC Coolers	$3,582.72
36	**Remove Turbine**	**$102,654.24**
37	Remove Turbine	$21,057.28
38	Remove Generator	$34,218.08
39	Remove Condenser Neck Heat Exchanger	$7,896.48
40	Remove Condenser	$13,160.80
41	Remove Misc. Auxiliary Turbine Equipment	$26,321.60
42	**Project Close-Out**	**$8,190.00**
43	Project Close-Out Activities	$8,190.00

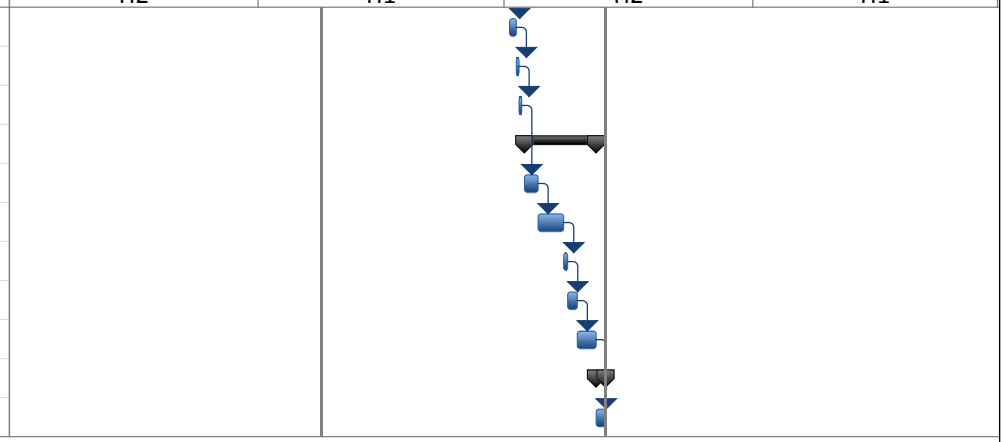
Lake Road Turbine Generator 3 Dismantlement

ID	Task Name	Duration
1	**Lake Road T/G 3 Removal**	**150 days**
2	**Pre-Dismantlement Activities**	**75 days**
3	Hire Demolition General Contractor	3 mons
4	KCP&L Prepares Unit for Dismantlement	1 wk
5	Demolition Contractor Mobilizes on Site	5 days
6	**KCP&L Overhead during Dismantlement**	**70 days**
7	KCP&L Engineer	70 days
8	**Demoliton Contractor Overhead during Dismantlemen**	**70 days**
9	Demolition Contractor Superintendent	70 days
10	**Demolition Contractor Equipment Rental Costs**	**70 days**
11	Equipment Rental	70 days
12	**Demolition Contractor Consummables**	**70 days**
13	Consummables	70 days
14	**Scrap Crew(s)**	**70 days**
15	Crew to Handle Scrap Material(s)	70 days
16	**Dismantlement Directs**	**70 days**
17	**Phase 1 Demolition**	**70 days**
18	**Critical Piping**	**2 days**
19	Remove Main Steam Piping to the Turbine	2 days
20	**Circulating Water (plant side)**	**2 days**
21	Waterboxes	2 days
22	**Condenser Air Extraction System**	**2 days**
23	Vacuum Pumps	2 days
24	**Turbine Seals and Drains**	**4 days**
25	Piping	4 days
26	**Turbine Lube Oil System**	**11 days**
27	Turbine Lube Oil Tank	5 days
28	Turbine Lube Oil Pumps	4 days
29	Turbine Oil Mist Eliminator	2 days
30	**Generator Auxiliary Systems**	**10 days**
31	Hydrogen Cooler Skid and Piping	1 day
32	Stator Cooling Water Skid and Piping	2 days



Lake Road Turbine Generator 3 Dismantlement

ID	Task Name	Duration
33	Isophase Bus Duct	3 days
34	Exciter Heat Exchanger	2 days
35	EHC Coolers	2 days
36	**Remove Turbine**	**39 days**
37	Remove Turbine	8 days
38	Remove Generator	13 days
39	Remove Condenser Neck Heat Exchanger	3 days
40	Remove Condenser	5 days
41	Remove Misc. Auxiliary Turbine Equipment	10 days
42	**Project Close-Out**	**5 days**
43	Project Close-Out Activities	5 days



COMBUSTION TURBINE 5

Lake Road CT 5 Retirement

Owner Costs			
Pre-Retirement Activities		$43,834	
Retirement Activities		$93,370	
Post-Retirement Activities		$22,576	
Owner Direct Total			$159,780
Owner Internal Costs	5.00%		$7,989
Owner Contingency:	25.00%		$41,942

Lake Road CT 5 Retirement Opinion of Probable Cost: $209,711

Lake Road CT 5 Retirement

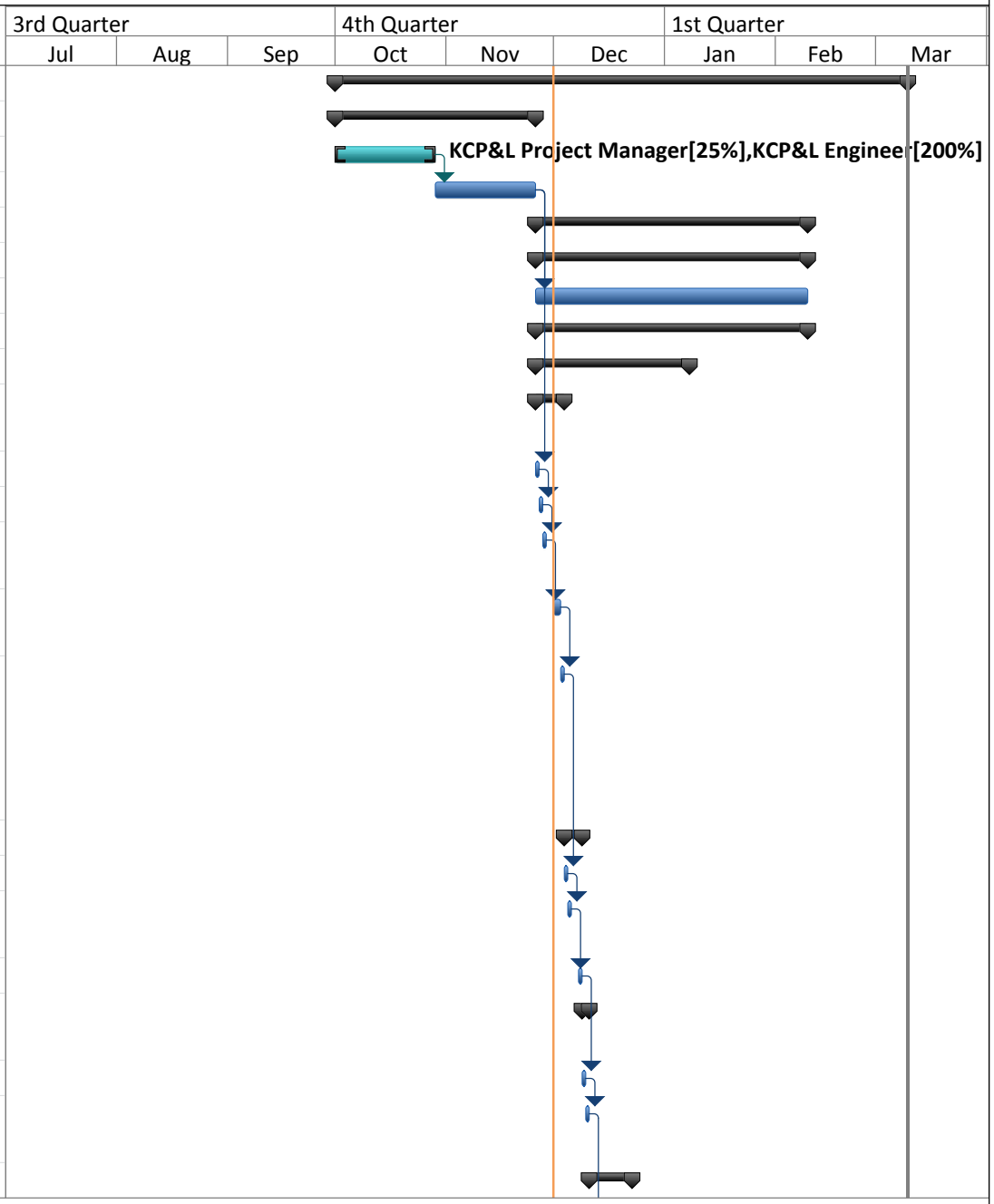
ID	Task Name	Cost
1	**Lake Road CT 5 Retirement**	**$159,780.68**
2	**Pre-Retirement Activities**	**$43,834.00**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Retirement**	**$93,370.68**
6	**Project Management During Retirement**	**$43,309.08**
7	Project Management During Retirement	$43,309.08
8	**Retirement Activities**	**$50,061.60**
9	**Electrical**	**$27,691.68**
10	**Medium and Low Voltage Drawout Switchgear**	**$5,359.68**
11	De-energize all buses at the source.	$893.28
12	Open all circuit breakers.	$893.28
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$893.28
14	Verify that the closing/tripping springs are discharged.	$1,786.56
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$2,679.84**
17	De-energize all buses at the source.	$893.28
18	Open all circuit breakers and disconnect switches.	$893.28
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$1,786.56**
21	De-energize all buses at the source.	$893.28
22	Open all circuit breakers and disconnect switches.	$893.28
23	**Oil-Filled Power Transformers**	**$7,146.24**
24	De-energize all buses at the source.	$893.28
25	Open all circuit breakers and disconnect switches.	$893.28
26	De-energize all buses at the source.	$893.28
27	Open all circuit breakers and disconnect switches.	$4,466.40
28	**Dry-type Power Transformers**	**$4,466.40**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$3,573.12
31	**Motors**	**$6,252.96**
32	De-energize all primary power at the source.	$893.28
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$893.28
34	Drain lube oil system (if applicable) and dispose of oil.	$4,466.40
35	**Fuel System**	**$3,466.80**

Lake Road CT 5 Retirement

ID	Task Name	Cost
36	Isolate Fuel Oil System	$2,604.96
37	Drain and Vent Fuel Oil Piping	$861.84
38	Open and vent gas piping.	$0.00
39	**Lube Oil Cooling Water System**	**$2,585.52**
40	Open and Drain the Water Side of the Lube Oil Coolers	$1,723.68
41	Open and Vent the Coolers and Expansion Tank	$861.84
42	**Miscelleaneous Piping**	**$4,309.20**
43	Open and Vent the Exhaust Frame Cooling Piping	$861.84
44	Open & Vent the CT Air Process Piping	$861.84
45	Open and Vent the CT Air Processing Piping	$2,585.52
46	**Fire Protection Piping**	**$3,428.24**
47	Empty the CO2 Storage Tank	$2,566.40
48	Open and Vent the Fire Protection Piping	$861.84
49	**Lube Oil System**	**$8,580.16**
50	Empty and Remove from Site the Lubricating Oil	$5,132.80
51	Drain Lubricating Oil Piping	$1,723.68
52	Open and Vent Lubricating Oil Piping	$1,723.68
53	**Post Retirement Closure Activity**	**$22,576.00**
54	Post Retirement Closure Activity	$22,576.00

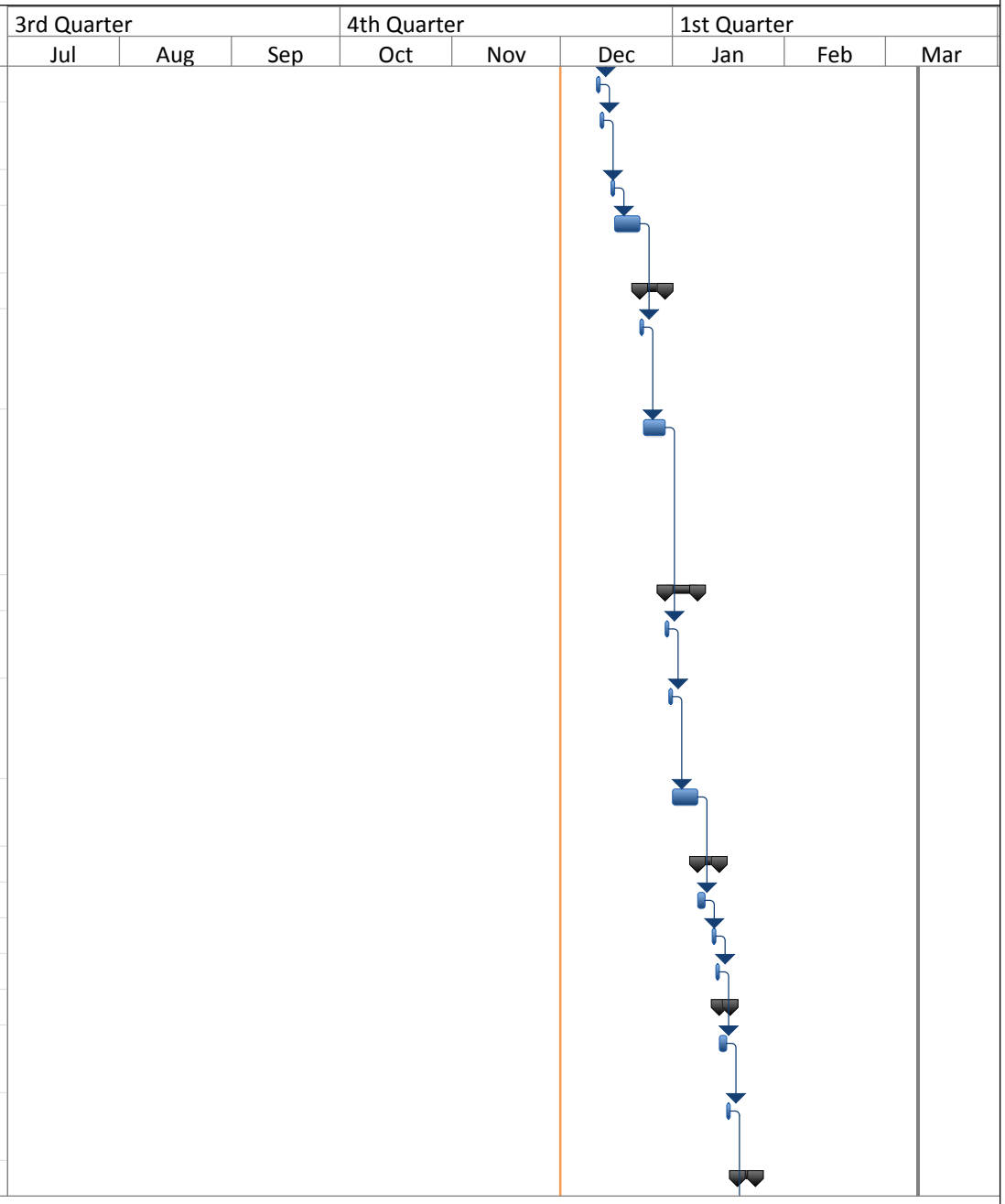
Lake Road CT 5 Retirement

ID	Task Name	Duration
1	**Lake Road CT 5 Retirement**	**114 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement**	**54 days**
6	**Project Management During Retirement**	**54 days**
7	Project Management During Retirement	54 days
8	**Retirement Activities**	**54 days**
9	**Electrical**	**31 days**
10	**Medium and Low Voltage Drawout Switchgear**	**6 days**
11	De-energize all buses at the source.	1 day
12	Open all circuit breakers.	1 day
13	Rack all circuit breakers into the fully withdrawn, disconnected	1 day
14	Verify that the closing/tripping springs are discharged.	2 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each	1 day
16	**Motor Control Centers**	**3 days**
17	De-energize all buses at the source.	1 day
18	Open all circuit breakers and disconnect switches.	1 day
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**2 days**
21	De-energize all buses at the source.	1 day
22	Open all circuit breakers and disconnect switches.	1 day
23	**Oil-Filled Power Transformers**	**8 days**



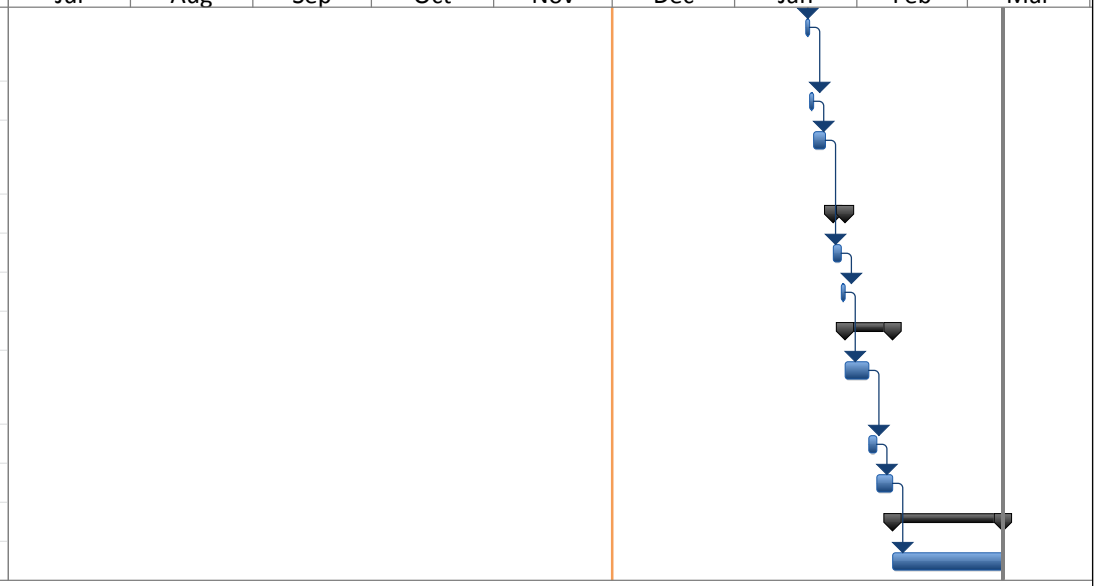
Lake Road CT 5 Retirement

ID	Task Name	Duration
24	De-energize all buses at the source.	1 day
25	Open all circuit breakers and disconnect switches.	1 day
26	De-energize all buses at the source.	1 day
27	Open all circuit breakers and disconnect switches.	5 days
28	**Dry-type Power Transformers**	**5 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	4 days
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	1 day
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	1 day
34	Drain lube oil system (if applicable) and dispose of oil.	5 days
35	**Fuel System**	**4 days**
36	Isolate Fuel Oil System	2 days
37	Drain and Vent Fuel Oil Piping	1 day
38	Open and vent gas piping.	1 day
39	**Lube Oil Cooling Water System**	**3 days**
40	Open and Drain the Water Side of the Lube Oil Coolers	2 days
41	Open and Vent the Coolers and Expansion Tank	1 day
42	**Miscelleaneous Piping**	**5 days**



Lake Road CT 5 Retirement

ID	Task Name	Duration
43	Open and Vent the Exhaust Frame Cooling Piping	1 day
44	Open & Vent the CT Air Process Piping	1 day
45	Open and Vent the CT Air Processing Piping	3 days
46	**Fire Protection Piping**	**3 days**
47	Empty the CO2 Storage Tank	2 days
48	Open and Vent the Fire Protection Pipin	1 day
49	**Lube Oil System**	**8 days**
50	Empty and Remove from Site the Lubricating Oil	4 days
51	Drain Lubricating Oil Piping	2 days
52	Open and Vent Lubricating Oil Piping	2 days
53	**Post Retirement Closure Activity**	**20 days**
54	Post Retirement Closure Activity	20 days



Lake Road CT 5 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$242,211	
Overhead During Dismantlement			$95,729	
Post-Dismantlement Activities			$16,380	
Owner Costs Total*				$354,320
Demolition General Contractor (DGC) Costs				
Site Management			$199,791	
Equipment Rental			$340,189	
Consummables			$339,400	
Scrap Crew(s)			$89,352	
Dismantlement			$272,506	
Contractor Direct Cost*		$1,241,238		
Contractor Allowances				
DGC Insurance	2.00%		$24,825	
Contingency/Profit	15.00%		$189,909	
Performance Bond	2.00%		$29,119	
Contractor Costs Total:				$1,485,092
Total:				$1,839,412
Owner Internal Costs:	5.00%			$91,971
Owner Contingency:	25.00%			$482,846
Lake Road CT 5 Dismantlement Opinion of Probable Cost:				$2,414,228

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances

= $1,595,558

Lake Road CTG 5 Dismantlement

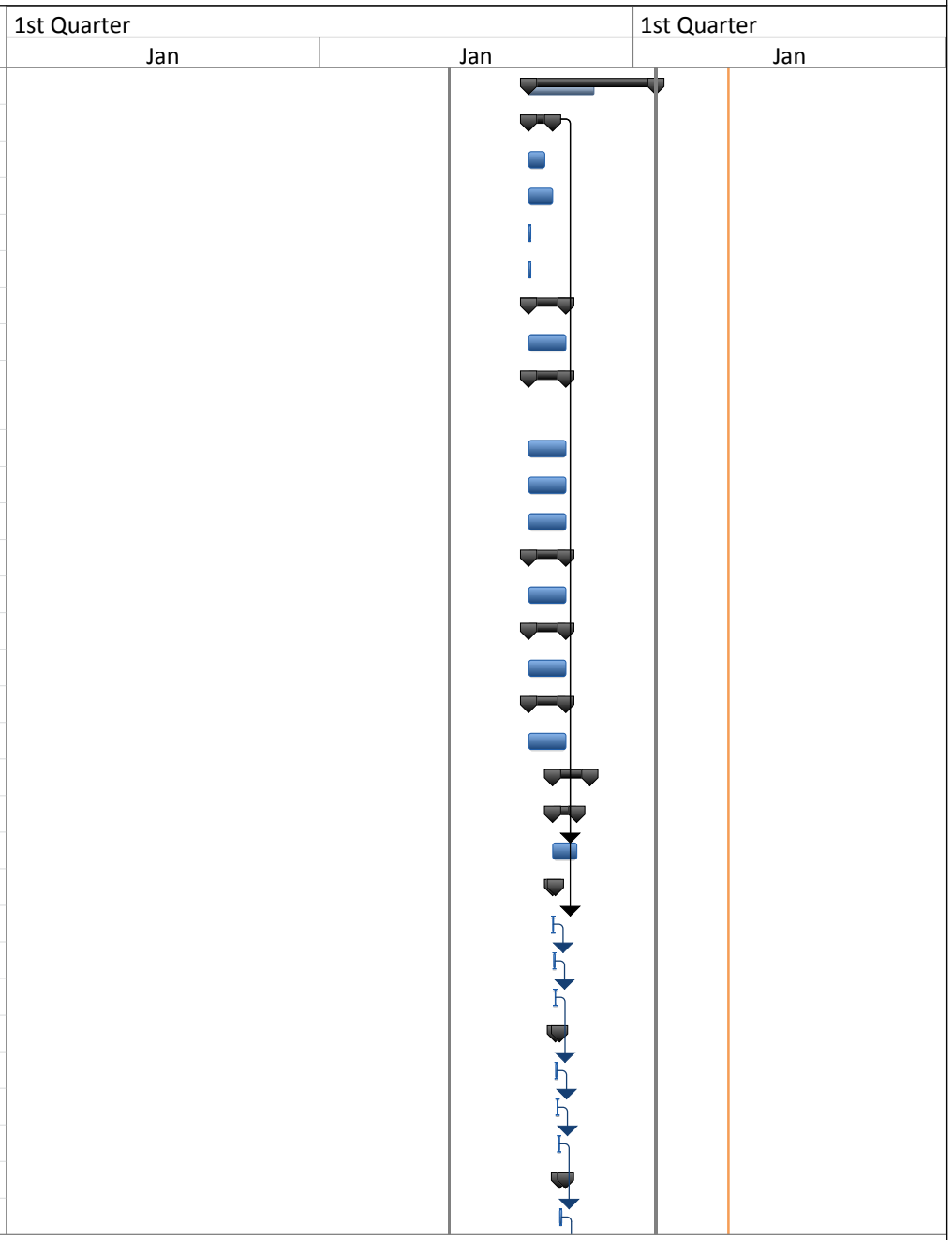
ID	Task Name	Cost
1	**Lake Road CTG 5 Dismantlement**	**$1,595,561.08**
2	**Pre-Demolition Activities**	**$242,211.32**
3	Detailed Planning & Hire Owner's Engineer	$69,627.52
4	Hire Demolition general Contractor	$167,184.00
5	KCP&L Prepares Unit for Dismantlement	$5,399.80
6	Demolition Contractor Mobilizes on Sit	$0.00
7	**KCP&L Overhead during Dismantlement**	**$95,729.60**
8	KCP&L Engineer	$95,729.60
9	**Demolition Contractor Overhead during Dismantlement**	**$199,791.36**
10	Demolition Contractor Project Manager	$56,527.84
11	Demolition Contractor Safety Manager	$50,331.36
12	Demolition Contractor Superintendent	$92,932.16
13	**Demolition Contractor Equipment Rental Cost**	**$340,189.76**
14	Equipment Rental	$340,189.76
15	**Demolition Contractor Consumables**	**$339,400.16**
16	Consumables	$339,400.16
17	**Scrap Crews**	**$89,352.64**
18	Crew to Handle Scrap Material(s)	$89,352.64
19	**Dismantlement**	**$272,506.24**
20	**Electrical**	**$107,481.60**
21	Electrical Demolition of Equipment	$107,481.60
22	**Fuel Gas System**	**$10,967.68**
23	Remove all above grade fuel gas piping.	$2,010.88
24	Gas Filter Skid	$5,374.08
25	Remove all above grade fuel oil piping	$3,582.72
26	**Lube Oil System**	**$17,913.60**
27	Lube Oil Piping	$5,374.08
28	Lube Oil Pumps	$5,374.08
29	Lube Oil Tanks	$7,165.44
30	**Fire Protection**	**$26,870.40**
31	Fire Protection Piping	$10,748.16
32	Firewater Tank	$8,956.80
33	CO2 Storage Tank	$7,165.44
34	**Generator**	**$7,165.44**
35	Generator	$7,165.44
36	**Combustion Turbine**	**$75,237.12**
37	Inlet duct	$8,956.80
38	Exhaust duct	$12,539.52
39	Combustion Turbine	$28,661.76
40	Combustion Turbine Foundation	$16,122.24
41	Enclosure	$8,956.80
42	**Stack**	**$26,870.40**
43	Stack	$26,870.40
44	**Post Dismantlement Activities**	**$16,380.00**

Lake Road CTG 5 Dismantlement

ID	Task Name	Cost
45	Post Dismantlement Activities	$16,380.00

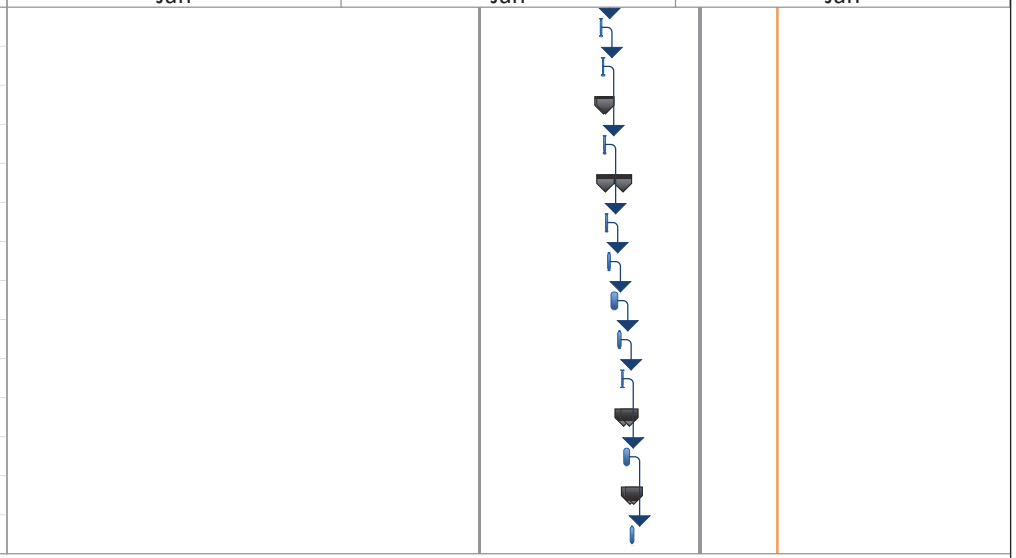
Lake Road CTG 5 Dismantlement

ID	Task Name	Duration
1	**Lake Road CTG 5 Dismantlement**	**319 days**
2	**Pre-Demolition Activities**	**60 days**
3	Detailed Planning & Hire Owner's Engineer	2 mons
4	Hire Demolition general Contractor	3 mons
5	KCP&L Prepares Unit for Dismantlement	1 wk
6	Demolition Contractor Mobilizes on Sit	5 days
7	**KCP&L Overhead during Dismantlement**	**94 days**
8	KCP&L Engineer	94 days
9	**Demolition Contractor Overhead during Dismantlement**	**94 days**
10	Demolition Contractor Project Manager	94 days
11	Demolition Contractor Safety Manager	94 days
12	Demolition Contractor Superintendent	94 days
13	**Demolition Contractor Equipment Rental Cost**	**94 days**
14	Equipment Rental	94 days
15	**Demolition Contractor Consumables**	**94 days**
16	Consumables	94 days
17	**Scrap Crews**	**94 days**
18	Crew to Handle Scrap Material(s)	94 days
19	**Dismantlement**	**94 days**
20	**Electrical**	**60 days**
21	Electrical Demolition of Equipment	60 days
22	**Fuel Gas System**	**8 days**
23	Remove all above grade fuel gas piping.	3 days
24	Gas Filter Skid	3 days
25	Remove all above grade fuel oil piping	2 days
26	**Lube Oil System**	**10 days**
27	Lube Oil Piping	3 days
28	Lube Oil Pumps	3 days
29	Lube Oil Tanks	4 days
30	**Fire Protection**	**15 days**
31	Fire Protection Piping	6 days



Lake Road CTG 5 Dismantlement

ID	Task Name	Duration
32	Firewater Tank	5 days
33	CO2 Storage Tank	4 days
34	**Generator**	**4 days**
35	Generator	4 days
36	**Combustion Turbine**	**42 days**
37	Inlet duct	5 days
38	Exhaust duct	7 days
39	Combustion Turbine	16 days
40	Combustion Turbine Foundation	9 days
41	Enclosure	5 days
42	**Stack**	**15 days**
43	Stack	15 days
44	**Post Dismantlement Activities**	**10 days**
45	Post Dismantlement Activities	10 days



COMBUSTION TURBINES 6 AND 7

Lake Road CT 6 & 7 Retirement

Owner Costs			
Pre-Retirement Activities		$69,498	
Retirement Activities		$29,491	
Post-Retirement Activities		$22,576	
Owner Direct Total			$121,565
Owner Internal Costs	5.00%		$6,078
Owner Contingency:	25.00%		$31,911

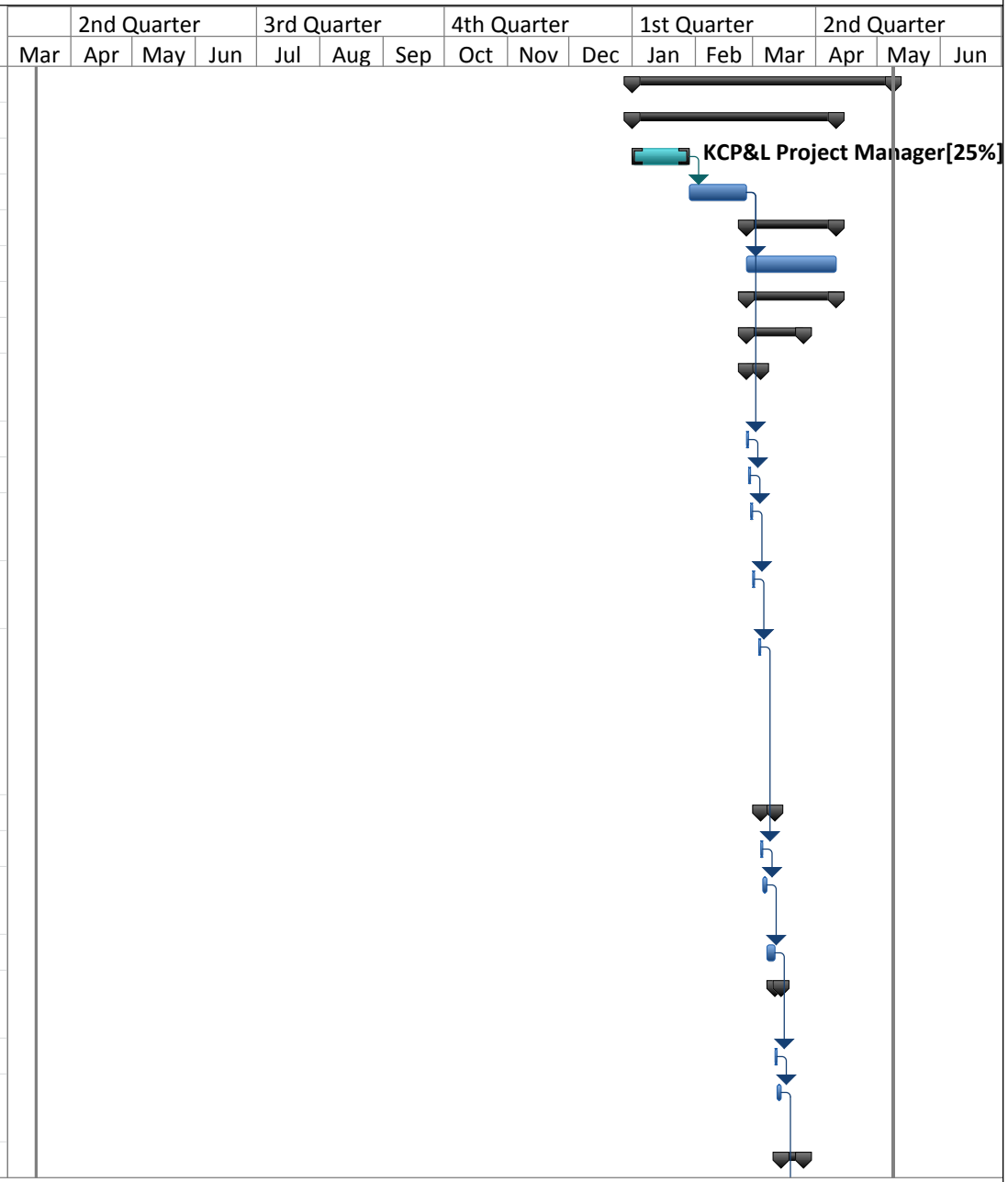
Lake Road CT 6 & 7 Retirement Opinion of Probable Cost: $159,554

Lake Road CTG 6 and 7 Retirement

ID	Task Name	Cost
1	**Lake Road CTG 6 and 7 Retirement**	**$121,565.68**
2	**Pre-Retirement Activities**	**$69,498.64**
3	Permitting Review	$23,466.00
4	Develop Detailed Retirement Plan	$20,368.00
5	**Project Management During Retirement**	**$25,664.64**
6	Project Management During Retirement	$25,664.64
7	**Retirement Activities**	**$29,491.04**
8	**Electrical**	**$17,865.60**
9	**Medium and Low Voltage Drawout Switchgear**	**$4,466.40**
10	De-energize all buses at the source.	$893.28
11	Open all circuit breakers.	$893.28
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	$893.28
13	Verify that the closing/tripping springs are discharged.	$893.28
14	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
15	**Motor Control Centers**	**$4,466.40**
16	De-energize all buses at the source.	$893.28
17	Open all circuit breakers and disconnect switches.	$1,786.56
18	Remove all fuses in control circuits.	$1,786.56
19	**Low-voltage Switchboards and Panelboards**	**$2,679.84**
20	De-energize all buses at the source.	$893.28
21	Open all circuit breakers and disconnect switches.	$1,786.56
22	**Motors**	**$6,252.96**
23	De-energize all primary power at the source.	$893.28
24	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$893.28
25	Drain lube oil system (if applicable) and dispose of oil.	$4,466.40
26	**Fuel Oil System**	**$3,026.16**
27	Isolate Fuel Oil System	$1,302.48
28	Drain and Vent Fuel Oil Piping	$1,723.68
29	**Lube Oil Cooling Water System**	**$2,585.52**
30	Open and Drain the Water Side of the Lube Oil Coolers	$1,723.68
31	Open and Vent the Coolers and Expansion Tank	$861.84
32	**Lube Oil System**	**$6,013.76**
33	Empty and Remove from Site the Lubricating Oil	$2,566.40
34	Drain Lubricating Oil Piping	$2,585.52
35	Open and Vent Lubricating Oil Piping	$861.84
36	**Post Retirement Closure Activity**	**$22,576.00**
37	Post Retirement Closure Activity	$22,576.00

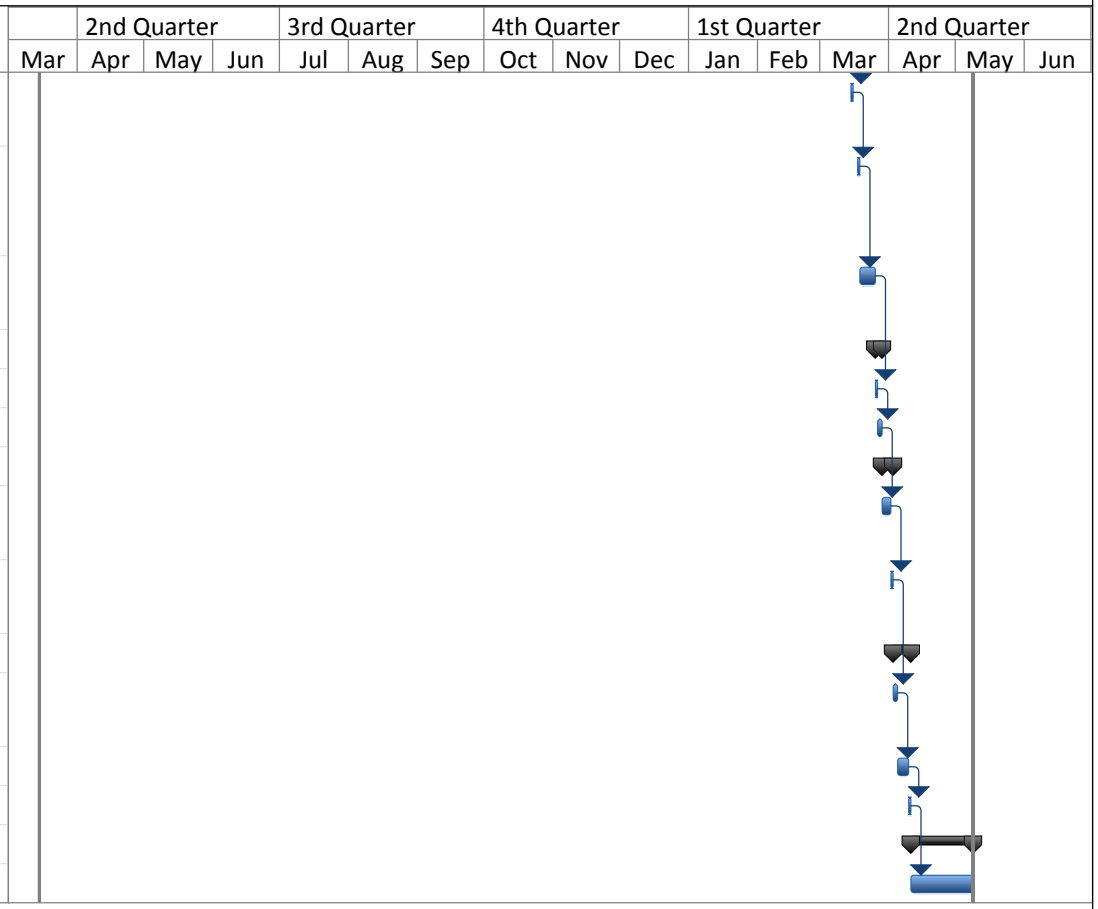
Lake Road CTG 6 and 7 Retirement

ID	Task Name	Duration
1	**Lake Road CTG 6 and 7 Retirement**	**92 days**
2	**Pre-Retirement Activities**	**72 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Project Management During Retirement**	**32 days**
6	Project Management During Retirement	32 days
7	**Retirement Activities**	**32 days**
8	**Electrical**	**20 days**
9	**Medium and Low Voltage Drawout Switchgear**	**5 days**
10	De-energize all buses at the source.	1 day
11	Open all circuit breakers.	1 day
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	1 day
13	Verify that the closing/tripping springs are discharged.	1 day
14	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
15	**Motor Control Centers**	**5 days**
16	De-energize all buses at the source.	1 day
17	Open all circuit breakers and disconnect switches.	2 days
18	Remove all fuses in control circuits.	2 days
19	**Low-voltage Switchboards and Panelboards**	**3 days**
20	De-energize all buses at the source.	1 day
21	Open all circuit breakers and disconnect switches.	2 days
22	**Motors**	**7 days**



Lake Road CTG 6 and 7 Retirement

ID	Task Name	Duration
23	De-energize all primary power at the source.	1 day
24	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	1 day
25	Drain lube oil system (if applicable) and dispose of oil.	5 days
26	**Fuel Oil System**	**3 days**
27	Isolate Fuel Oil System	1 day
28	Drain and Vent Fuel Oil Piping	2 days
29	**Lube Oil Cooling Water System**	**3 days**
30	Open and Drain the Water Side of the Lube Oil Coolers	2 days
31	Open and Vent the Coolers and Expansion Tank	1 day
32	**Lube Oil System**	**6 days**
33	Empty and Remove from Site the Lubricating Oil	2 days
34	Drain Lubricating Oil Piping	3 days
35	Open and Vent Lubricating Oil Piping	1 day
36	**Post Retirement Closure Activity**	**20 days**
37	Post Retirement Closure Activity	20 days



Lake Road CT 6 & 7 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$191,883	
Overhead During Dismantlement			$99,918	
Post-Dismantlement Activities			$32,760	
Owner Costs Total*				$324,561
Demolition General Contractor (DGC) Costs				
Site Management			$129,651	
Equipment Rental			$220,761	
Consummables			$220,249	
Scrap Crew(s)			$57,984	
Dismantlement			$160,911	
Contractor Direct Cost*		$789,556		
Contractor Allowances				
DGC Insurance	2.00%		$15,791	
Contingency/Profit	15.00%		$120,802	
Performance Bond	2.00%		$18,523	
Contractor Costs Total:				$944,672
Total:				$1,269,233
Owner Internal Costs:	5.00%			$63,462
Owner Contingency:	25.00%			$333,174
Lake Road CT 6 & 7 Dismantlement Opinion of Probable Cost:				$1,665,869

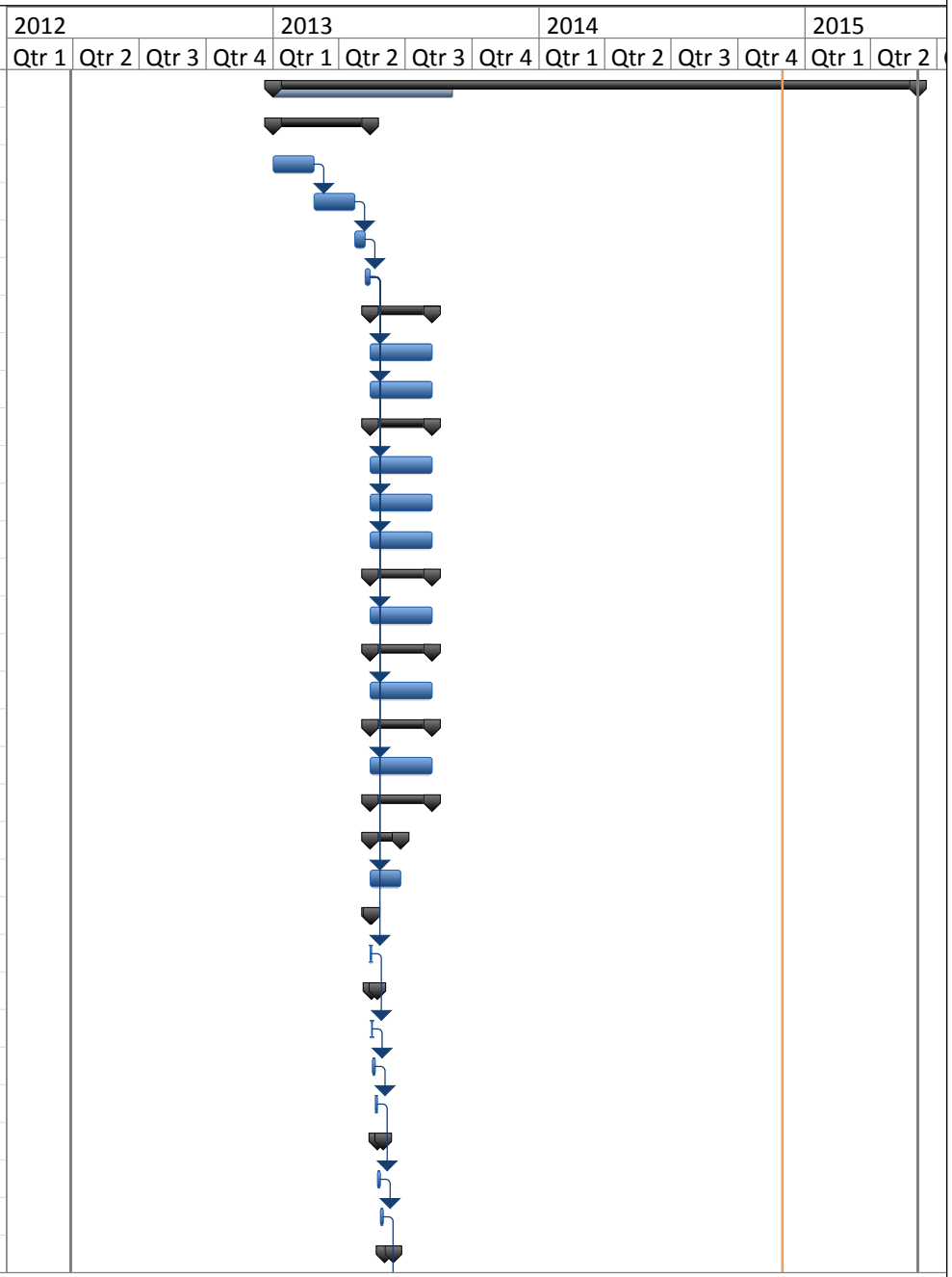
*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $1,114,117

Lake Road CT 6 and 7 Dismantlement

ID	Task Name	Cost
1	**Lake Road CT 6 and 7 Dismantlement**	**$1,114,119.36**
2	**Pre-Demolition Activities**	**$191,883.12**
3	Detailed Planning	$69,627.52
4	Hire Demolition general Contractor	$111,456.00
5	KCP&L Prepares Unit for Dismantlement	$10,799.60
6	Demolition Contractor Mobilizes on Site	$0.00
7	**KCP&L Overhead during Dismantlement**	**$99,918.00**
8	KCP&L Project Manager	$37,795.60
9	KCP&L Engineer	$62,122.40
10	**Demolition Contractor Overhead during Dismantlement**	**$129,651.84**
11	Demolition Contractor Project Manager	$36,682.96
12	Demolition Contractor Safety Manager	$32,661.84
13	Demolition Contractor Superintendent	$60,307.04
14	**Demolition Contractor Equipment Rental Cost**	**$220,761.44**
15	Equipment Rental	$220,761.44
16	**Demolition Contractor Consumables**	**$220,249.04**
17	Consumables	$220,249.04
18	**Scrap Crews**	**$57,984.16**
19	Crew to Handle Scrap Material(s)	$57,984.16
20	**Dismantlement**	**$160,911.76**
21	**Electrical**	**$53,740.80**
22	Electrical Demolition of Equipment	$53,740.80
23	**Fuel Oil System**	**$1,480.72**
24	Remove all above grade fuel oil piping.	$1,480.72
25	**Lube Oil System**	**$10,748.16**
26	Lube Oil Piping	$1,791.36
27	Lube Oil Pumps	$3,582.72
28	Lube Oil Tanks	$5,374.08
29	**Fire Protection**	**$10,748.16**
30	Fire Protection Piping	$3,582.72
31	CO2 Storage Tank	$7,165.44
32	**Generator**	**$17,913.60**
33	Generators	$17,913.60
34	**Combustion Turbine**	**$62,697.60**
35	Inlet ducts	$7,165.44
36	Exhaust ducts	$7,165.44
37	Combustion Turbines	$17,913.60
38	Combustion Turbine Foundation	$21,496.32
39	Combustion Turbine Enclosure Building	$8,956.80
40	**Stack**	**$3,582.72**
41	Stacks	$3,582.72
42	**Post Dismantlement Activities**	**$32,760.00**
43	Post Dismantlement Activities	$32,760.00

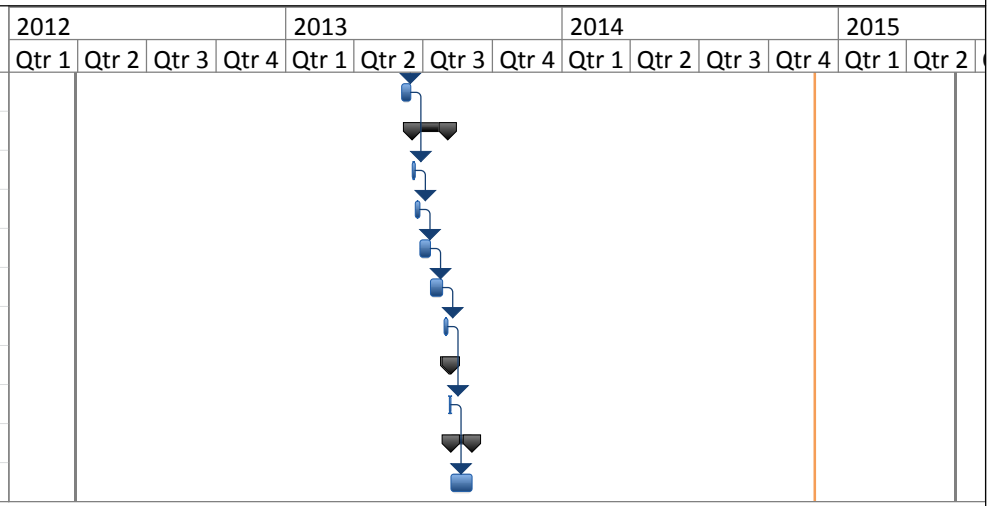
Lake Road CT 6 & 7 Dismantlement

ID	Task Name	Duration
1	**Lake Road CT 6 and 7 Dismantlement**	**633 days**
2	**Pre-Demolition Activities**	**95 days**
3	Detailed Planning	2 mons
4	Hire Demolition general Contractor	2 mons
5	KCP&L Prepares Unit for Dismantlement	2 wks
6	Demolition Contractor Mobilizes on Site	5 days
7	**KCP&L Overhead during Dismantlement**	**61 days**
8	KCP&L Project Manager	61 days
9	KCP&L Engineer	61 days
10	**Demolition Contractor Overhead during Dismantlemer**	**61 days**
11	Demolition Contractor Project Manager	61 days
12	Demolition Contractor Safety Manager	61 days
13	Demolition Contractor Superintendent	61 days
14	**Demolition Contractor Equipment Rental Cost**	**61 days**
15	Equipment Rental	61 days
16	**Demolition Contractor Consumables**	**61 days**
17	Consumables	61 days
18	**Scrap Crews**	**61 days**
19	Crew to Handle Scrap Material(s)	61 days
20	**Dismantlement**	**61 days**
21	**Electrical**	**30 days**
22	Electrical Demolition of Equipment	30 days
23	**Fuel Oil System**	**2 days**
24	Remove all above grade fuel oil piping.	2 days
25	**Lube Oil System**	**6 days**
26	Lube Oil Piping	1 day
27	Lube Oil Pumps	2 days
28	Lube Oil Tanks	3 days
29	**Fire Protection**	**6 days**
30	Fire Protection Piping	2 days
31	CO2 Storage Tank	4 days
32	**Generator**	**10 days**



Lake Road CT 6 & 7 Dismantlement

ID	Task Name	Duration
33	Generators	10 days
34	**Combustion Turbine**	**35 days**
35	Inlet ducts	4 days
36	Exhaust ducts	4 days
37	Combustion Turbines	10 days
38	Combustion Turbine Foundation	12 days
39	Combustion Turbine Enclosure Building	5 days
40	**Stack**	**2 days**
41	Stacks	2 days
42	**Post Dismantlement Activities**	**20 days**
43	Post Dismantlement Activities	20 days



COMMON

Lake Road Common Retirement

Owner Costs			
Pre-Retirement Activities		$52,448	
Retirement Activities		$588,014	
Post-Retirement Activities		$26,224	
Owner Direct Total			$666,686
Owner Internal Costs	5.00%		$33,334
Owner Contingency:	25.00%		$175,005
Lake Road Common Retirement Opinion of Probable Cost:			$875,025

Activities Required by Permit or Regulation

Lake Road 5 Tank	$31,069	
Lake Road 6 Tank	$71,610	
Lake Road 7 Tank	$71,610	
Activities Required by Permit or Regulation:		$174,289

Lake Road Common Retirement

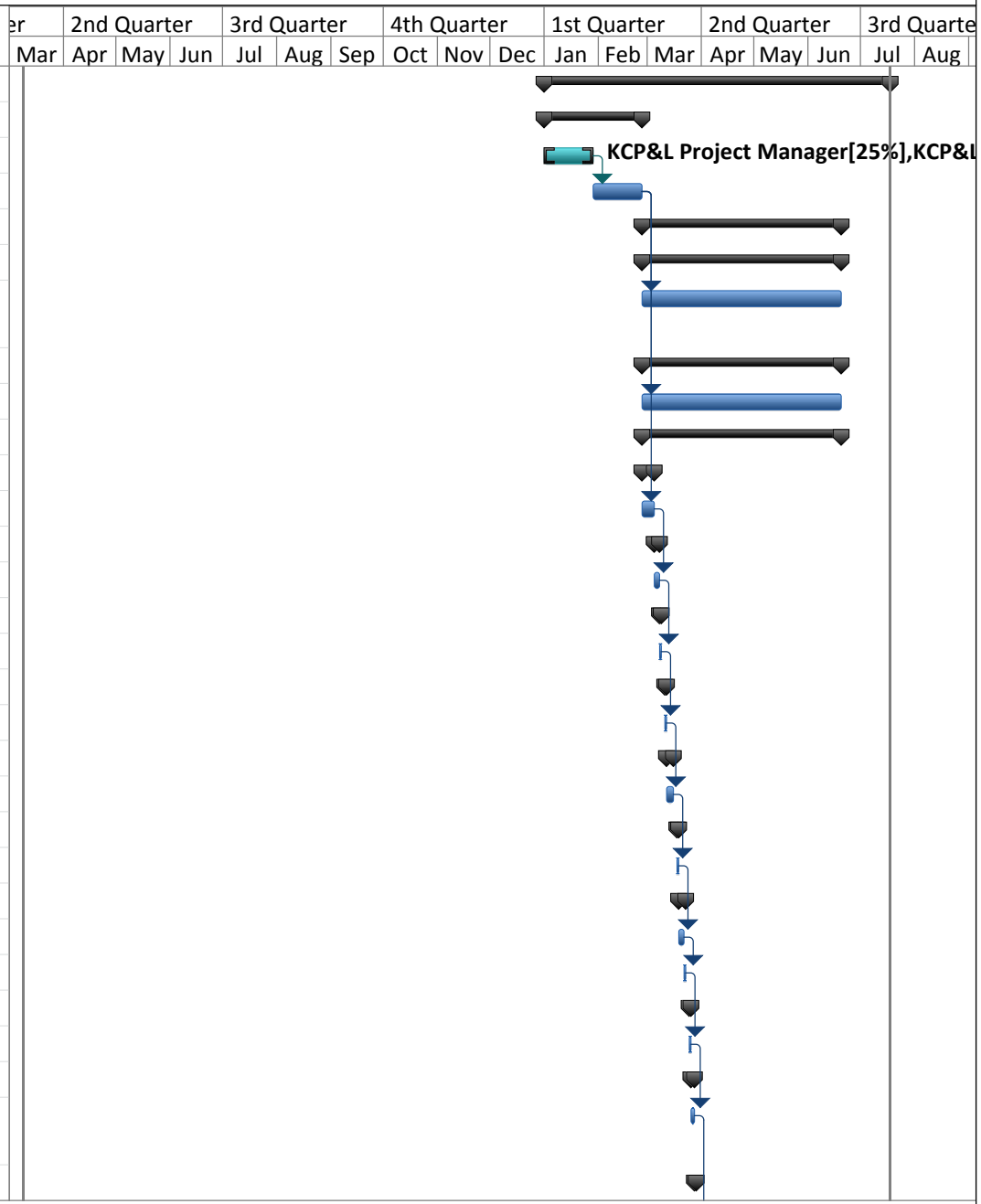
ID	Task Name	Cost
1	**Lake Road Common Retirement**	**$666,686.48**
2	**Pre-Retirement Activities**	**$52,448.80**
3	Permitting Review	$26,224.40
4	Develop Detailed Retirement Plan	$26,224.40
5	**Overheads**	**$137,346.72**
6	**Retirement Overheads**	**$120,133.28**
7	Added Overhead Staff for Common Retirement	$120,133.28
8	**Common Removal Equipment Rental**	**$17,213.44**
9	Common Removal Equipment Rental	$17,213.44
10	**Retirement Activities**	**$450,666.56**
11	**Administration Building**	**$9,342.40**
12	Secure Administration Building	$9,342.40
13	**Fuel Yard Office Building**	**$5,605.44**
14	Secure Fuel Yard Office Building	$5,605.44
15	**Butler Building**	**$1,868.48**
16	Secure Butler Building	$1,868.48
17	**Dozer Building**	**$1,868.48**
18	Secure Dozer Building	$1,868.48
19	**Laboratory**	**$9,260.48**
20	Secure Laboratory	$9,260.48
21	**Guard Shack**	**$1,868.48**
22	Secure Guard Shack	$1,868.48
23	**Gas Metering Station**	**$6,866.80**
24	Isolate Gas Metering Station at the Source	$5,605.44
25	Vent Piping	$1,261.36
26	**Propane Tanks**	**$1,261.36**
27	Open and Vent Propane Tanks	$1,261.36
28	**Non-Potable/Fire Protection Water Tank**	**$2,522.72**
29	Drain and Vent the Non-Potable/Fire Protection Water Tank	$2,522.72
30	**Condensate Storage Tank**	**$1,261.36**
31	Drain and Vent the Condensate Storage Tank	$1,261.36
32	**Fuel Yard**	**$26,690.80**
33	**Car Dumper**	**$8,829.52**
34	Empty Car Track Hoppers	$1,261.36
35	Clean Car Dumper	$3,784.08
36	Empty and Clean Belt Feeders 3A, 3B and 3C	$3,784.08
37	**West Yard Reclaim**	**$15,338.56**
38	Clean West Yard Reclaim Hoppers	$2,522.72
39	Clean the West Yard Reclaim Hopper Vibrating Feeders	$1,261.36
40	Clean the Frozen Coal Cracker	$1,261.36
41	**Boiler 4 and Boiler 5 Tripper**	**$2,522.72**
42	Clean the Boiler 4 and Boiler 5 Tripper	$2,522.72
43	**Coal Conveyors**	**$50,454.40**
44	Clean Conveyors - 5A, 5B, 6, 7, 8, 1, 2, and 3	$25,227.20

Lake Road Common Retirement

ID	Task Name	Cost
45	**Wells**	**$299,000.00**
46	Close 13 Wells	$299,000.00
47	**900 Lb. Steam Header System**	**$5,045.44**
48	Open and Vent the 900 Lb. Steam Header System	$2,522.72
49	Open and Vent the 200 Lb. and 3 Lb. Flash Tanks	$2,522.72
50	**200 Lb. Steam Header System**	**$2,522.72**
51	Open and Vent the 200 Lb. Steam Header System	$2,522.72
52	**Low Side Water Treatment**	**$22,704.48**
53	Open and Clean the Mixing Tanks	$1,261.36
54	Open and Clean the 4 Lime Softeners	$6,306.80
55	Open, Empty and Clean the Carbon Filters (11)	$3,784.08
56	Open, Empty and Clean the Zeolite Filters (4)	$3,784.08
57	Open and Vent the Low Side Deaerator	$1,261.36
58	Open and Vent the Feedwater Storage Tanks (4)	$1,261.36
59	Open and Vent the Desuperheater Storage Tank (1)	$1,261.36
60	Flush the Piping	$3,784.08
61	**Low Side Feedwater System**	**$2,522.72**
62	Open and Vent BFP Suction and Discharge Piping	$1,261.36
63	Open and Vent the Feedwater Heaters	$1,261.36
64	**Post Retirement Closure Activities**	**$26,224.40**
65	Post Retirement Closure Activities	$26,224.40

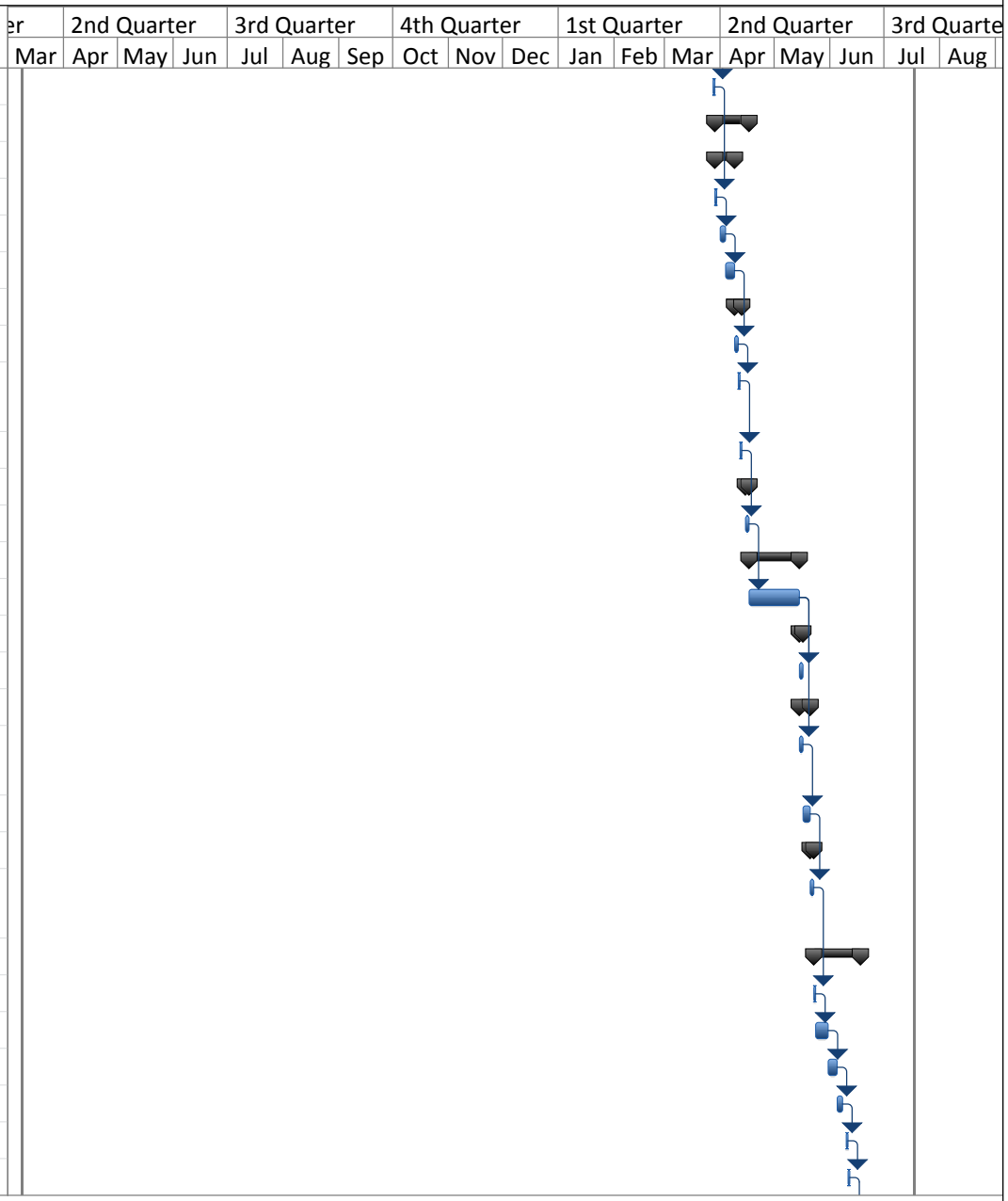
Lake Road Common Retirement

ID	Task Name	Duration
1	**Lake Road Common Retirement**	**142 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Overheads**	**82 days**
6	**Retirement Overheads**	**82 days**
7	Added Overhead Staff for Common Retirement	82 days
8	**Common Removal Equipment Rental**	**82 days**
9	Common Removal Equipment Rental	82 days
10	**Retirement Activities**	**82 days**
11	**Administration Building**	**5 days**
12	Secure Administration Building	5 days
13	**Fuel Yard Office Building**	**3 days**
14	Secure Fuel Yard Office Building	3 days
15	**Butler Building**	**1 day**
16	Secure Butler Building	1 day
17	**Dozer Building**	**1 day**
18	Secure Dozer Building	1 day
19	**Laboratory**	**4 days**
20	Secure Laboratory	4 days
21	**Guard Shack**	**1 day**
22	Secure Guard Shack	1 day
23	**Gas Metering Station**	**4 days**
24	Isolate Gas Metering Station at the Source	3 days
25	Vent Piping	1 day
26	**Propane Tanks**	**1 day**
27	Open and Vent Propane Tanks	1 day
28	**Non-Potable/Fire Protection Water Tank**	**2 days**
29	Drain and Vent the Non-Potable/Fire Protection Water Tank	2 days
30	**Condensate Storage Tank**	**1 day**



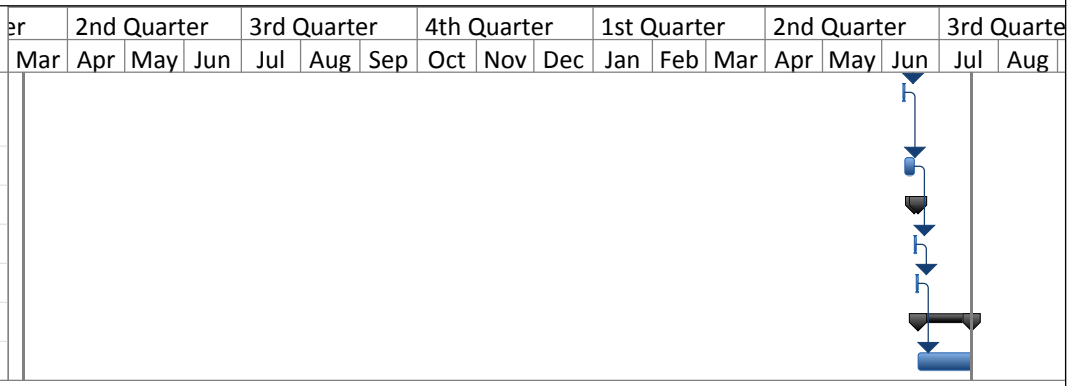
Lake Road Common Retirement

ID	Task Name	Duration
31	Drain and Vent the Condensate Storage Tank	1 day
32	**Fuel Yard**	**13 days**
33	**Car Dumper**	**7 days**
34	Empty Car Track Hoppers	1 day
35	Clean Car Dumper	3 days
36	Empty and Clean Belt Feeders 3A, 3B and	3 days
37	**West Yard Reclaim**	**4 days**
38	Clean West Yard Reclaim Hoppers	2 days
39	Clean the West Yard Reclaim Hopper Vibrating Feeders	1 day
40	Clean the Frozen Coal Cracker	1 day
41	**Boiler 4 and Boiler 5 Tripper**	**2 days**
42	Clean the Boiler 4 and Boiler 5 Tripper	2 days
43	**Coal Conveyors**	**20 days**
44	Clean Conveyors - 5A, 5B, 6, 7, 8, 1, 2, and 3	20 days
45	**Wells**	**2 days**
46	Close 13 Wells	2 days
47	**900 Lb. Steam Header System**	**4 days**
48	Open and Vent the 900 Lb. Steam Header System	2 days
49	Open and Vent the 200 Lb. and 3 Lb. Flash Ta	2 days
50	**200 Lb. Steam Header System**	**2 days**
51	Open and Vent the 200 Lb. Steam Header System	2 days
52	**Low Side Water Treatment**	**18 days**
53	Open and Clean the Mixing Tanks	1 day
54	Open and Clean the 4 Lime Softeners	5 days
55	Open, Empty and Clean the Carbon Filters (1	3 days
56	Open, Empty and Clean the Zeolite Filters (4)	3 days
57	Open and Vent the Low Side Deaerator	1 day
58	Open and Vent the Feedwater Storage Tanks	1 day



Lake Road Common Retirement

ID	Task Name	Duration
59	Open and Vent the Desuperheater Storage Tank (1)	1 day
60	Flush the Piping	3 days
61	**Low Side Feedwater System**	**2 days**
62	Open and Vent BFP Suction and Discharge Pi	1 day
63	Open and Vent the Feedwater Heaters	1 day
64	**Post Retirement Closure Activities**	**20 days**
65	Post Retirement Closure Activities	20 days



Lake Road Common Dismantlement

Owner Additional Costs				
Pre-Dismantlement Activities			$0	
Overhead During Dismantlement			$0	
Owner Costs Total*				$0
Demolition General Contractor (DGC) Costs				
Additional Site Management			$100,346	
Equipment Rental			$489,213	
Consummables			$732,959	
Scrap Crew(s)			$727,292	
Dismantlement			$532,207	
Contractor Direct Cost*		$2,582,017		
Contractor Allowances				
DGC Insurance	2.00%		$51,640	
Contingency/Profit	15.00%		$395,049	
Performance Bond	2.00%		$60,574	
Contractor Costs Total:				$3,089,280
Total:				$3,089,280
Owner Internal Costs:	5.00%			$154,464
Owner Contingency:	25.00%			$810,936
Lake Road Common Dismantlement Opinion of Probable Cost:				$4,054,680

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $2,582,017

Lake Road Common Dismantlement

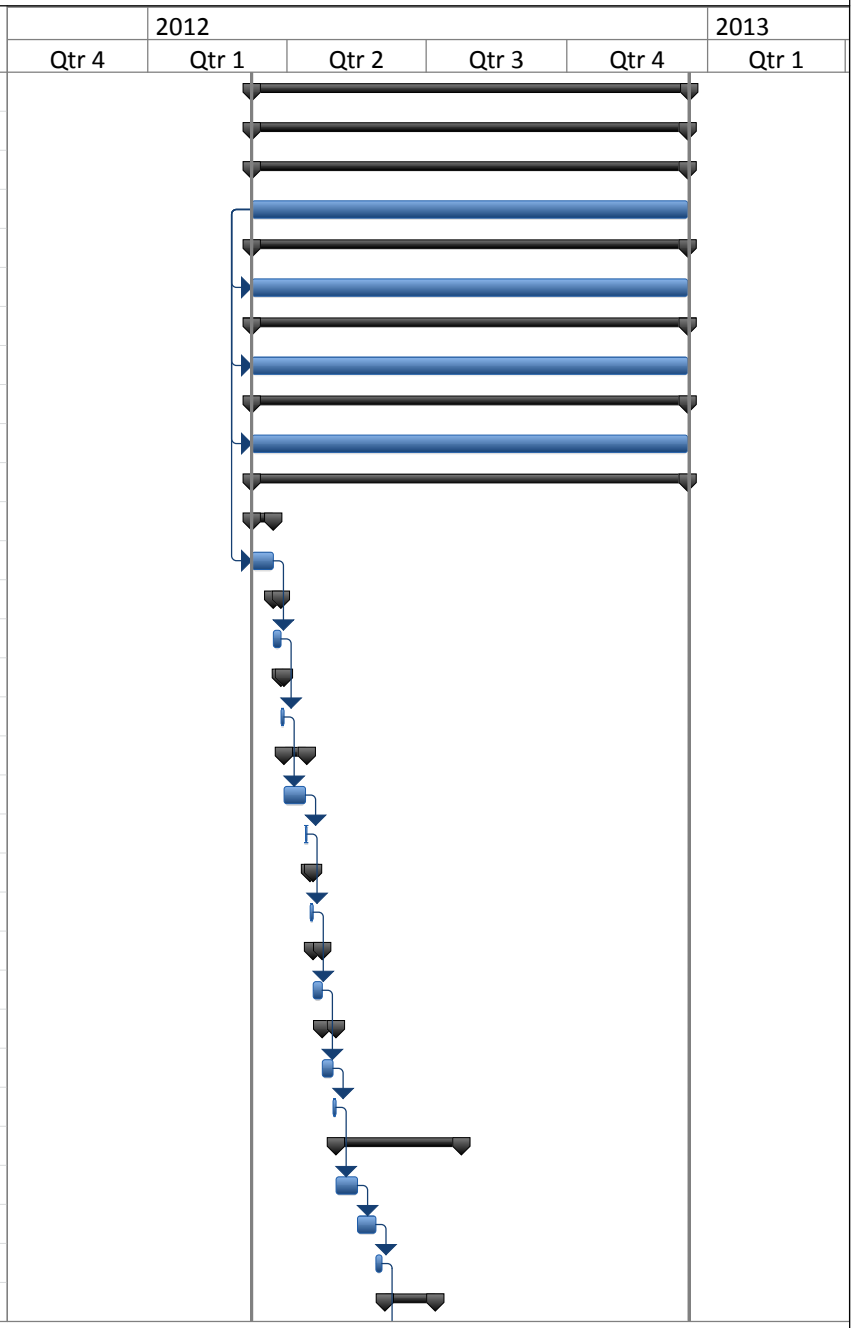
ID	Task Name	Cost
1	**Lake Road Common Dismantlement**	**$2,582,020.72**
2	**Overheads**	**$2,049,812.80**
3	**Common Removal Overheads**	**$100,346.96**
4	Added Overhead Staff for Common Removals	$100,346.96
5	**Common Removal Equipment Rental**	**$489,213.76**
6	Common Removal Equipment Rental	$489,213.76
7	**Demolition Contractor Consummables**	**$732,959.92**
8	Consummables	$732,959.92
9	**Scrap Crew**	**$727,292.16**
10	Crew(s) to Handle Scrap Material	$727,292.16
11	**Dismantlement Activities**	**$532,207.92**
12	**Administration Building**	**$35,827.20**
13	Administration Building	$35,827.20
14	**Fuel Yard Office Building**	**$10,748.16**
15	Remove Fuel Yard Office Building	$10,748.16
16	**Butler Building**	**$7,165.44**
17	Butler Building	$7,165.44
18	**Parking Lots and Plant Roads**	**$39,409.92**
19	Plant Roads and Parking Areas	$35,827.20
20	Guard Shack	$3,582.72
21	**Dozer Building**	**$7,165.44**
22	Dozer Building	$7,165.44
23	**Laboratory**	**$9,286.08**
24	Laboratory	$9,286.08
25	**Fuel Equipment**	**$11,607.60**
26	Remove Propane Tanks and above ground piping	$11,607.60
27	Remove Gas Metering Station and above ground piping	$0.00
28	**Fuel Yard**	**$147,260.16**
29	Remove Car Dumper	$23,215.20
30	Remove West Yard Reclaim	$18,572.16
31	Remove Boiler 4 and Boiler 5 Tripper	$9,286.08
32	**Conveyors**	**$58,038.00**
33	Remove Conveyors - 5A, 5B, 6, 7, 8, 1, 2, and 3	$58,038.00
34	Remove Dust Collectors	$2,321.52
35	Remove Miscellaneous Fuel Yard Equipment	$35,827.20
36	**Underground Circulating Water Piping between Condensers and Intake**	**$39,409.92**
37	Excavate Underground Circulating Water Piping	$10,748.16
38	Collapse Underground Circulating Water Piping	$7,165.44
39	Backfill and Compact Over Circulating Water Piping	$21,496.32
40	**Yard Fire Water Systems**	**$10,748.16**
41	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	$10,748.16
42	**Low Side Water Treatment**	**$60,359.52**
43	Remove Mixing Tanks	$4,643.04

Lake Road Common Dismantlement

ID	Task Name	Cost
44	Remove 4 Lime Softeners	$4,643.04
45	Remove 11 Carbon Filters	$16,250.64
46	Remove 4 Zeolite Filters	$6,964.56
47	Remove Deaerator	$4,643.04
48	Remove 4 Feedwater Storage Tanks	$9,286.08
49	Remove Desuperheater Storage Tanks	$2,321.52
50	Remove interconnecting piping and equipment	$11,607.60
51	**Low Side Feedwater System**	**$16,250.64**
52	Remove BFP Suction and Discharge Pipe	$2,321.52
53	Remove 3 Boiler Feed Pump/Motor Sets	$9,286.08
54	Remove the Active and Retired Feedwater Heaters	$2,321.52
55	Remove Low Side Sampling System	$2,321.52
56	**Boiler/Turbine Building**	**$23,215.20**
57	Remove the Common Boiler and Turbine Building	$23,215.20
58	**Water Storage Tanks**	**$16,250.64**
59	Remove the Non-Potable/Fire Protection Water Tank	$11,607.60
60	Remove the Condensate Storage Tank	$4,643.04
61	**Steam Header Systems**	**$13,929.12**
62	Remove 900 Lb. Steam Header Piping and Equipment	$11,607.60
63	Remove 200 Lb. Steam Header Piping and Equipment	$2,321.52
64	**Stacks**	**$83,574.72**
65	Remove #6 Stack to Grade	$32,501.28
66	Remove #5 Stack to Grade	$27,858.24
67	Remove #4 Stack to Grade	$23,215.20
68	**Final Site Grading and Drainage**	**$0.00**
69	Final Site Grading and Drainage	$0.00

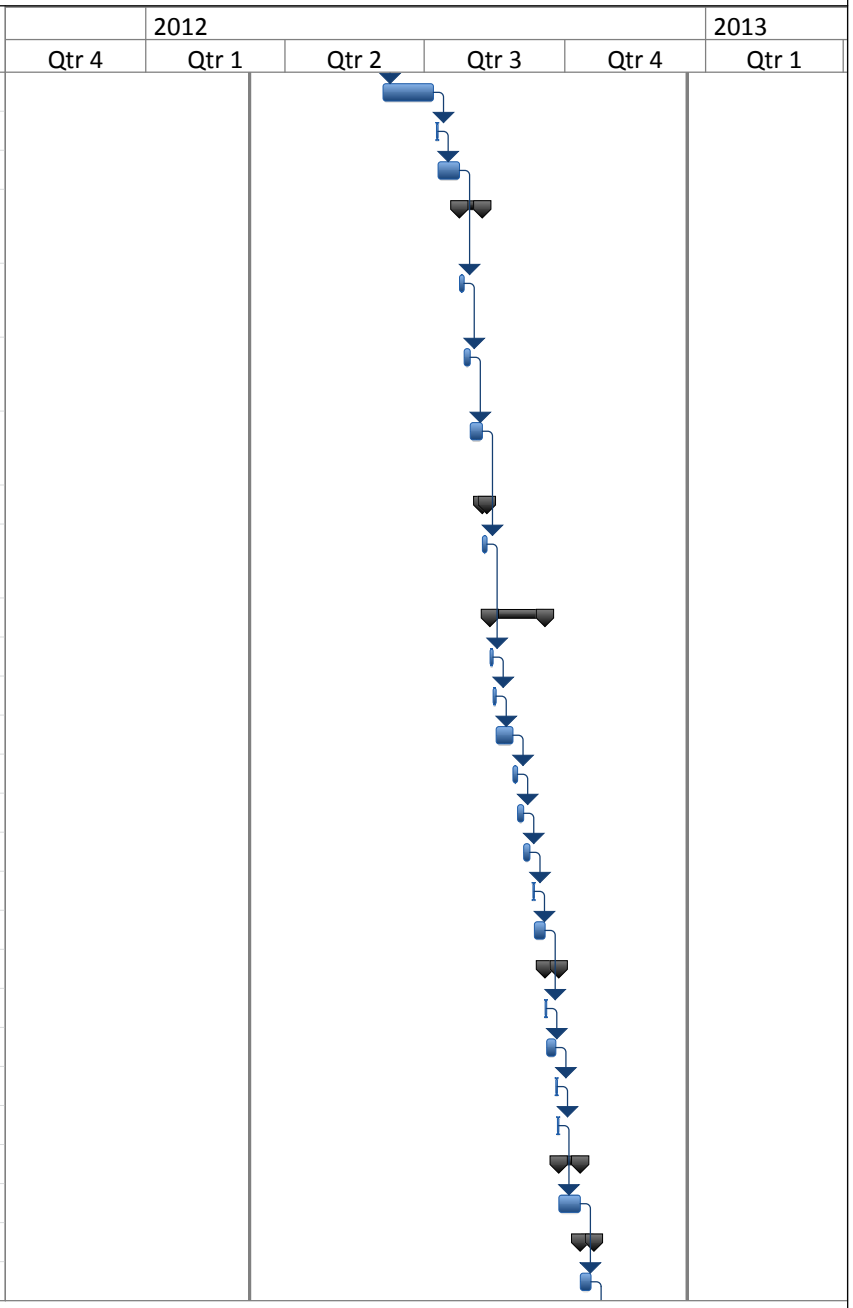
Lake Road Common Dismantlement

ID	Task Name	Duration
1	**Lake Road Common Dismantlement**	**204 days**
2	**Overheads**	**203 days**
3	**Common Removal Overheads**	**203 days**
4	Added Overhead Staff for Common Removals	203 days
5	**Common Removal Equipment Rental**	**203 days**
6	Common Removal Equipment Rental	203 days
7	**Demolition Contractor Consummables**	**203 days**
8	Consummables	203 days
9	**Scrap Crew**	**203 days**
10	Crew(s) to Handle Scrap Material	203 days
11	**Dismantlement Activities**	**203 days**
12	**Administration Building**	**10 days**
13	Administration Building	10 days
14	**Fuel Yard Office Building**	**3 days**
15	Remove Fuel Yard Office Building	3 days
16	**Butler Building**	**2 days**
17	Butler Building	2 days
18	**Parking Lots and Plant Roads**	**11 days**
19	Plant Roads and Parking Areas	10 days
20	Guard Shack	1 day
21	**Dozer Building**	**2 days**
22	Dozer Building	2 days
23	**Laboratory**	**4 days**
24	Laboratory	4 days
25	**Fuel Equipment**	**7 days**
26	Remove Propane Tanks and above ground piping	5 days
27	Remove Gas Metering Station and above ground piping	2 days
28	**Fuel Yard**	**58 days**
29	Remove Car Dumper	10 days
30	Remove West Yard Reclaim	8 days
31	Remove Boiler 4 and Boiler 5 Tripper	4 days
32	**Conveyors**	**25 days**



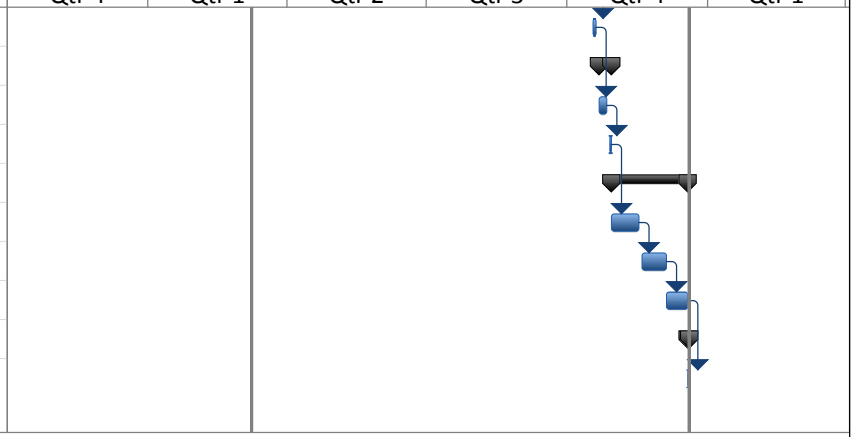
Lake Road Common Dismantlement

ID	Task Name	Duration
33	Remove Conveyors - 5A, 5B, 6, 7, 8, 1, 2, and 3	25 days
34	Remove Dust Collectors	1 day
35	Remove Miscellaneous Fuel Yard Equipment	10 days
36	**Underground Circulating Water Piping between Condensers and Intake and Cooling Towers**	**11 days**
37	Excavate Underground Circulating Water Piping	3 days
38	Collapse Underground Circulating Water Piping	2 days
39	Backfill and Compact Over Circulating Water Piping	6 days
40	**Yard Fire Water Systems**	**3 days**
41	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	3 days
42	**Low Side Water Treatment**	**26 days**
43	Remove Mixing Tanks	2 days
44	Remove 4 Lime Softeners	2 days
45	Remove 11 Carbon Filters	7 days
46	Remove 4 Zeolite Filters	3 days
47	Remove Deaerator	2 days
48	Remove 4 Feedwater Storage Tanks	4 days
49	Remove Desuperheater Storage Tanks	1 day
50	Remove interconnecting piping and equipment	5 days
51	**Low Side Feedwater System**	**7 days**
52	Remove BFP Suction and Discharge Pipe	1 day
53	Remove 3 Boiler Feed Pump/Motor Sets	4 days
54	Remove the Active and Retired Feedwater Heaters	1 day
55	Remove Low Side Sampling System	1 day
56	**Boiler/Turbine Building**	**10 days**
57	Remove the Common Boiler and Turbine Building	10 days
58	**Water Storage Tanks**	**7 days**
59	Remove the Non-Potable/Fire Protection Water Tank	5 days



Lake Road Common Dismantlement

ID	Task Name	Duration
60	Remove the Condensate Storage Tank	2 days
61	**Steam Header Systems**	**6 days**
62	Remove 900 Lb. Steam Header Piping and Equipment	5 days
63	Remove 200 Lb. Steam Header Piping and Equipment	1 day
64	**Stacks**	**36 days**
65	Remove #6 Stack to Grade	14 days
66	Remove #5 Stack to Grade	12 days
67	Remove #4 Stack to Grade	10 days
68	**Final Site Grading and Drainage**	**1 day**
69	Final Site Grading and Drainage	1 day



IATAN

IATAN STATION

The Iatan Generating Station consists of two coal-fired power plants.

Iatan Unit 1 has an SPP-accredited unit rating of 705 MW and was placed in service in 1980. Unit 1 has a sub-critical Babcock & Wilcox boiler and a General Electric turbine. Missouri River water is used for condenser cooling. Iatan Unit 1 was originally commissioned with a dedicated chimney and an electrostatic precipitator for flue gas particulate removal. In 2009, Iatan Unit 1 was retrofitted with an SCR, baghouse, and wet scrubber. The original electrostatic precipitator and stack were abandoned in place and the flue gas was redirected to a common Iatan Units 1 and 2 chimney with a dedicated Unit 1 flue.

Iatan Unit 2 has an SPP-accredited unit rated of 881 MW and was placed in service in 2010. Unit 2 has a super-critical Alstom boiler and a Toshiba turbine. A cooling tower is used for condenser cooling with well water for cooling tower makeup. Iatan Unit 2 has an SCR, baghouse, and wet scrubber. The flue gas is discharged through a common Iatan Units 1 and 2 chimney with a dedicated Unit 2 flue.

The Iatan fuel yard has a rotary car dumper to unload unit trains of coal. The coal is stored in a common fuel yard. Fuel is reclaimed from the common fuel yard via a stacker reclaimer or a series of reclaim pits and transferred to Units 1 and 2 through a common conveyor system. Coal is transferred from the common conveyor system to dedicated unit conveyors (located near the final coal transfer points for each unit).

Both Iatan Units 1 and 2 have a fuel oil igniter system. Both units are supplied with fuel oil from a common fuel oil unloading and storage facility.

Both Units 1 and 2 have a wet scrubber that utilizes a common reagent preparation and gypsum handling facility. This facility includes a limestone unloading and storage area, a limestone slurry preparation system, a gypsum preparation system, and a gypsum stack-out and storage system.

Both Units 1 and 2 beneficially use coal combustion products off site. Coal combustion products that are not beneficially used off site are disposed of in the on-site landfill.

The following are the major systems and equipment that were included in the retirement and dismantlement of each unit and the major systems and equipment that were considered common (additional details are listed in the attached retirement and dismantlement schedules included in this Appendix).

IATAN UNIT 1

1. Boiler, SCR, and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Precipitator (currently retired in place).
4. Baghouse and wet scrubber.
5. Waste oil system.
6. Dedicated Unit 1 fuel handling equipment.
7. Dedicated Unit 1 fuel oil equipment.
8. Circulating water intake structure, circulating water piping, and circulating water equipment.

IATAN UNIT 2

1. Boiler, SCR, and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Baghouse and wet scrubber.
4. Dedicated Unit 2 fuel handling equipment.
5. Dedicated Unit 2 fuel oil equipment.
6. Cooling tower and wells.

COMMON

1. Administration building.
2. Fuel yard office building.
3. Training building.
4. Warehouses.
5. Maintenance shops.
6. Common fuel handling equipment.
7. Sewage treatment.
8. Fuel oil storage and unloading.
9. Fire water systems.
10. Reagent preparation and gypsum handling.
11. Unit 1 stack (currently retired in place).
12. Units 1 and 2 common stack.
13. Landfill.
14. Clarifiers, clarifier storage tanks, and zero-liquid discharge equipment and auxiliaries.

UNIT 1

Iatan 1 Retirement

Owner Costs			
Pre-Retirement Activities		$100,822	
Retirement Activities		$661,769	
Post-Retirement Activities		$26,564	
Owner Direct Total			$789,155
Owner Internal Costs	5.00%		$39,458
Owner Contingency:	25.00%		$207,153
Iatan 1 Retirement Opinion of Probable Cost:			$1,035,765.41

Activities Required by Permit or Regulation

Iatan 1 Intake Removal	$613,077	
Iatan Unit 1 Ash Pond Closure	$36,357,000	
Activities Required by Permit or Regulation:		$36,970,077

Iatan 1 Retirement

ID	Task Name	Cost
1	**Iatan 1 Retirement**	**$789,156.31**
2	**Pre-Engineering**	**$100,821.60**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	$0.00
4	**KCL&L Overhead Costs**	**$115,245.60**
5	KCP&L Retirement Manager	$115,245.60
6	**Equipment Rentals**	**$39,070.50**
7	Vacuum truck	$39,070.50
8	**Retirement**	**$507,454.61**
9	**Electrical**	**$18,911.68**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Oil-Filled Power Transformers**	**$5,549.44**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
26	Drain and dispose of oil.	$2,642.88
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,120.00
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
31	**Motors**	**$6,216.00**
32	De-energize all primary power at the source.	$1,786.56

Iatan 1 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
34	Drian lube oil system (if applicable) and dispoe of oil.	$2,642.88
35	**Coal Handling**	**$27,475.44**
36	Empty all transfer hoppers.	$1,704.56
37	Burn out coal silos.	$1,685.44
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,685.44
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$22,400.00
40	**Fuel Oil and Igniter System**	**$2,528.16**
41	Drain fuel oil system	$2,528.16
42	**Waste Oil System**	**$1,685.44**
43	Drain all waste oil systems	$1,685.44
44	**Boiler Chemical Feed**	**$1,685.44**
45	Drain all chemical feed tanks.	$1,685.44
46	**Boiler**	**$27,484.77**
47	Open boiler doors.	$880.96
48	Gas side - perform cleaning of the boiler and bottom ash system.	$22,400.00
49	Drain boiler, drum, downcomers and headers.	$842.72
50	Open drum doors.	$880.96
51	Drain and clean the submerged flight conveyor system.	$2,480.13
52	**Stack and Ductwork**	**$326,961.04**
53	Open ductwork doors.	$880.96
54	Perform extensive cleaning of the ductwork.	$11,200.00
55	Place cap over stack opening to keep moisture out.	$314,880.08
56	**Condensate and Feedwater Piping**	**$1,685.44**
57	Drain water from the system.	$842.72
58	Leave open vents and drains.	$842.72
59	**Feedwater heaters**	**$2,528.16**
60	Drain feedwater heaters	$842.72
61	Leave open vents and drains.	$1,685.44
62	**Deaerator and Deaerator Storage Tank**	**$1,685.44**
63	Drain Deaerator and Storage	$842.72
64	Leave open vents and drains.	$842.72
65	**Baghouse**	**$17,351.92**
66	Multiple cleaning cycles for filter bags.	$2,528.16
67	Open all vent and drain lines on bag cleaning air and control air lines. Leave in open position or remove vent valves.	$842.72
68	Remove all filter bags and cages.	$880.96
69	Clear hoppers of all ash	$2,805.44
70	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$880.96
71	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,421.84

Iatan 1 Retirement

ID	Task Name	Cost
72	Install bird screens across hopper ash outlet and ash line flanges.	$880.96
73	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$880.96
74	If walk-in plenum, padlock or tack weld all outlet plenum doors and compartment ventilation dampers shut.	$880.96
75	If top-door plenum, close and secure top doors and remove/disable door lift hoist.	$1,723.68
76	If top-door plenum, establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in penthouse enclosure.	$945.44
77	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,679.84
78	**Wet FGD system**	**$23,908.00**
79	Multiple mist eliminator wash cycles. Remove ME's from absorber.	$2,145.04
80	Drain and flush all slurry and reclaim water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	$1,723.68
81	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	$4,624.08
82	Leave all tank drain valves open or remove. Install bird screens across openings.	$1,761.92
83	Drain all makeup and mist eliminator water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	$2,604.64
84	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	$1,761.92
85	Remove solids from all inlet and outlet ductwork as necessary	$2,240.00
86	Open all vent station air and control air lines. Leave in open position or remove vent valves	$1,723.68
87	Padlock or tack weld all access doors to modules and ductwork shut.	$1,762.24
88	Remove access doors to open-top tanks.	$880.96
89	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,679.84
90	**FGD Reagent Preparation-Limestone wet Scrubber**	**$10,262.88**
91	Remove limestone from day bins.	$1,402.72
92	Removed cartridges/bags from bin vent filters	$1,402.72
93	Padlock or tack weld all bin access doors shut. (note: if doors are indoors, they could be removed and the opening covered with bird screens.)	$881.12
94	Remove bin discharge isolation valve and install bird screen.	$440.48
95	Thoroughly wash and drain mills	$1,402.72
96	Remove balls from any ball mills	$1,120.00
97	Padlock or tack weld mill access doors closed.	$881.12

Iatan 1 Retirement

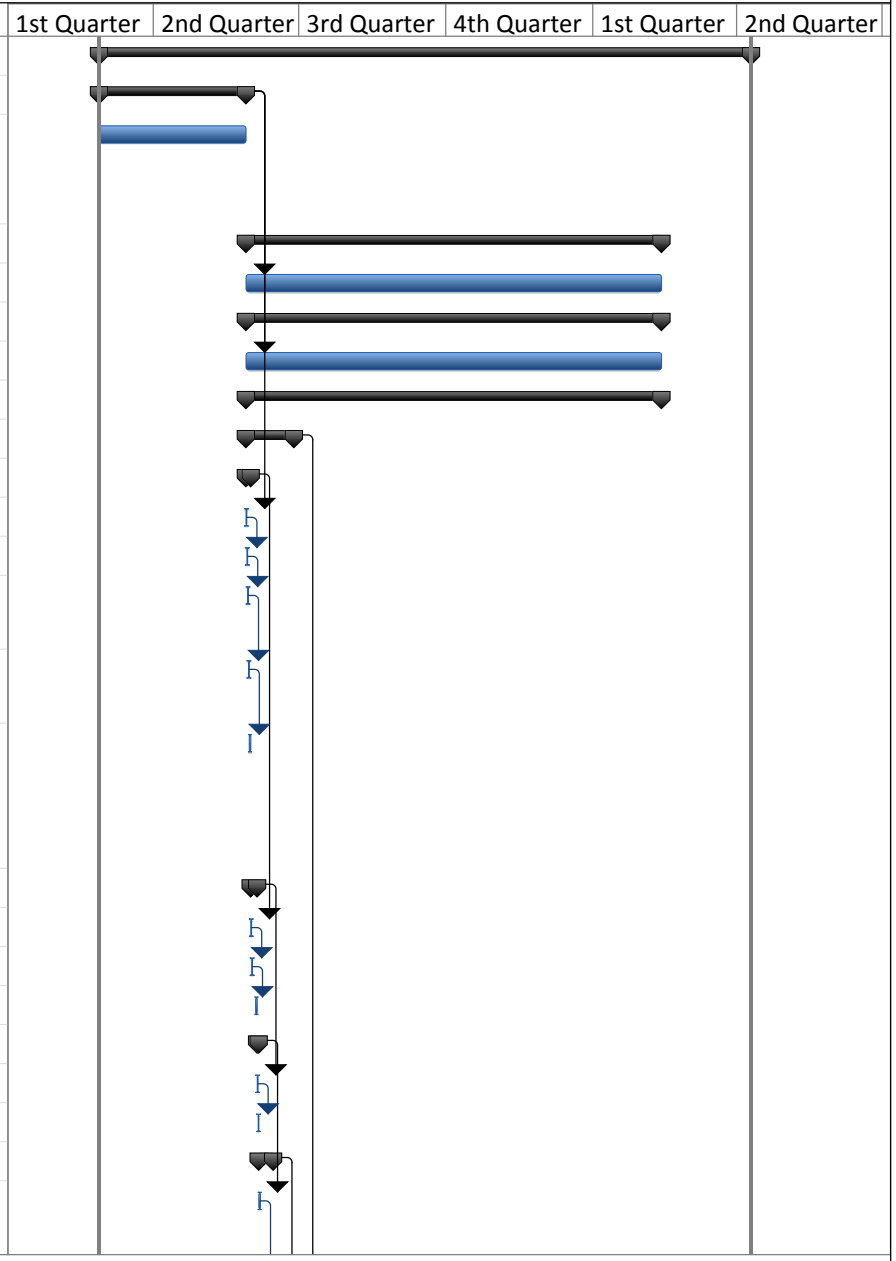
ID	Task Name	Cost
98	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$945.44
99	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,786.56
100	**FGD Byproduct Dewatering - Hydrocyclones and Vacuum Filters**	**$7,287.12**
101	Wash vacuum filter belt and remove all accumulated solids	$2,240.00
102	Wash out vacuum receiver, remove pressure relief valve and access door. Install bird screens.	$1,421.84
103	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$945.44
104	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,679.84
105	**SCR**	**$10,054.00**
106	Vacuum fly ash from catalyst.	$2,240.00
107	Remove catalyst of salvage or disposal.	$2,881.92
108	Padlock or tack weld access doors shut.	$880.96
109	Remove ammonia from storage tank for resale.	$701.36
110	Wash out and drain storage tank and supply piping.	$701.36
111	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$861.84
112	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,786.56
113	**Turbine(s) and Condenser**	**$5,266.64**
114	Drain hotwell and leave doors open.	$861.84
115	Open main turbine doors.	$880.96
116	Open bfp turbine doors.	$880.96
117	Remove lube oil.	$2,642.88
118	**Generator**	**$6,095.76**
119	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$446.64
120	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
121	De-energize power supplies to generator excitation system at the source.	$446.64
122	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	$446.64
123	Drain generator and exciter cooling water systems (if applicable).	$861.84
124	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,685.44
125	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,761.92
126	**Circulation Water and Turbine Cooling Water System**	**$3,409.12**
127	Drain.	$1,685.44

Iatan 1 Retirement

ID	Task Name	Cost
128	Open water box doors.	$880.96
129	Drain any circulating water chemical feed tanks.	$842.72
130	**Compressed Air System**	**$2,721.28**
131	Open vents and drains.	$842.72
132	Remove desiccant from desiccant dryers.	$1,878.56
133	**Auxiliary Steam System**	**$1,685.44**
134	Drain water from system.	$842.72
135	Remove aux boiler chemicals.	$842.72
136	**Auxiliary Cooling Water System**	**$842.72**
137	Drain water from system.	$842.72
138	**Condenser Air Extraction and Waterbox Priming System**	**$842.72**
139	Drain water from system.	$842.72
140	**Building Heating System**	**$842.72**
141	Drain water from system.	$842.72
142	**Battery System**	**$4,253.28**
143	De-energize all battery chargers from the source.	$446.64
144	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$446.64
145	Remove and dispose of battery electrolyte.	$1,680.00
146	Remove and dispose of battery cells.	$1,120.00
147	Clean up and dispose of electrolyte on surface areas around batteries.	$560.00
148	**Post Retirement Activities**	**$26,564.00**
149	Post Retirement Activities	$26,564.00

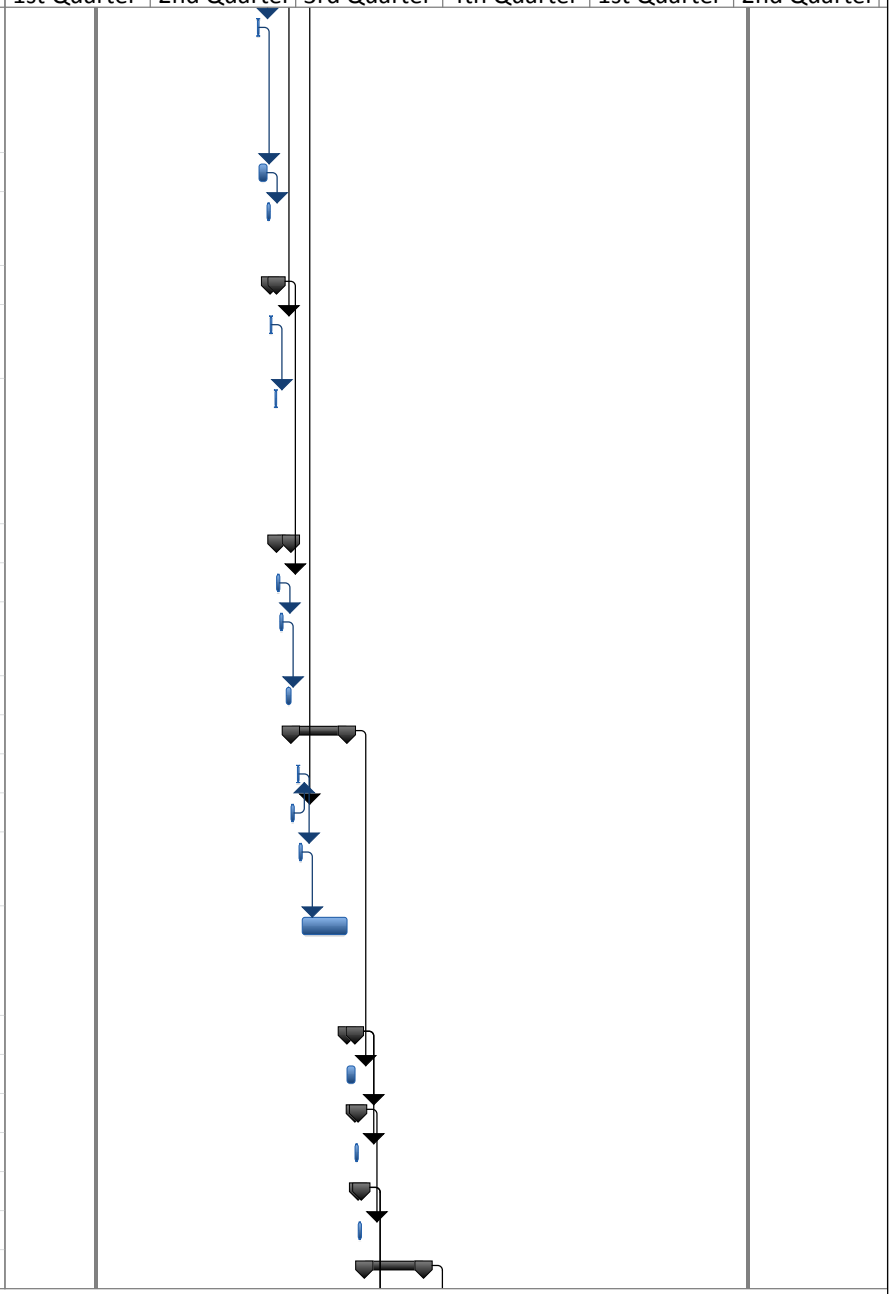
Iatan 1 Retirement

ID	Task Name	Duration
1	**Iatan 1 Retirement**	**292 days**
2	**Pre-Engineering**	**66 days**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	66 days
4	**KCL&L Overhead Costs**	**186 days**
5	KCP&L Retirement Manager	186 days
6	**Equipment Rentals**	**186 days**
7	Vacuum truck	186 days
8	**Retirement**	**186 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Oil-Filled Power Transformers**	**7 days**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day



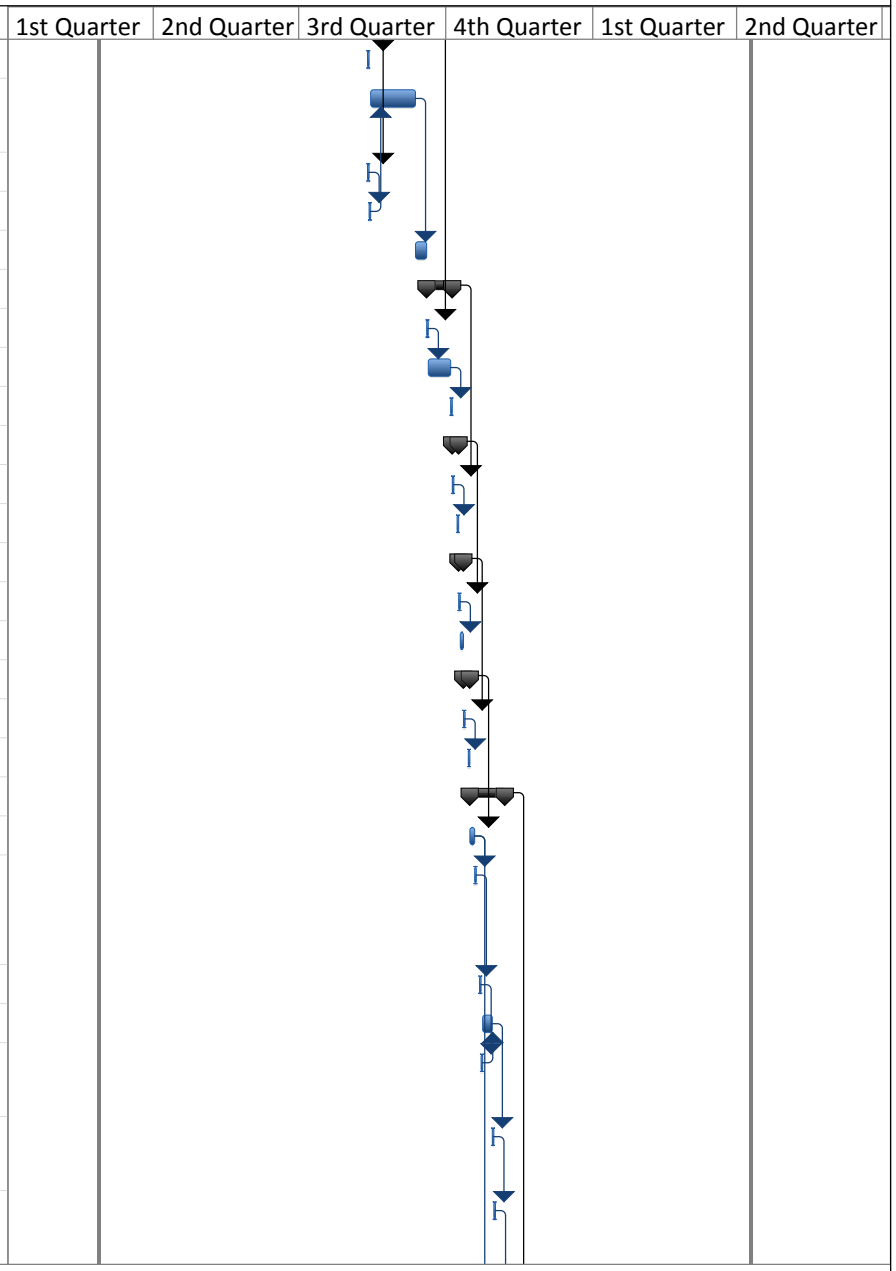
Iatan 1 Retirement

ID	Task Name	Duration
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
26	Drain and dispose of oil.	3 days
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	2 days
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drian lube oil system (if applicable) and dispoe of oil.	3 days
35	**Coal Handling**	**25 days**
36	Empty all transfer hoppers.	1 day
37	Burn out coal silos.	2 days
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	2 days
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	20 days
40	**Fuel Oil and Igniter System**	**3 days**
41	Drain fuel oil system	3 days
42	**Waste Oil System**	**2 days**
43	Drain all waste oil systems	2 days
44	**Boiler Chemical Feed**	**2 days**
45	Drain all chemical feed tanks.	2 days
46	**Boiler**	**27 days**

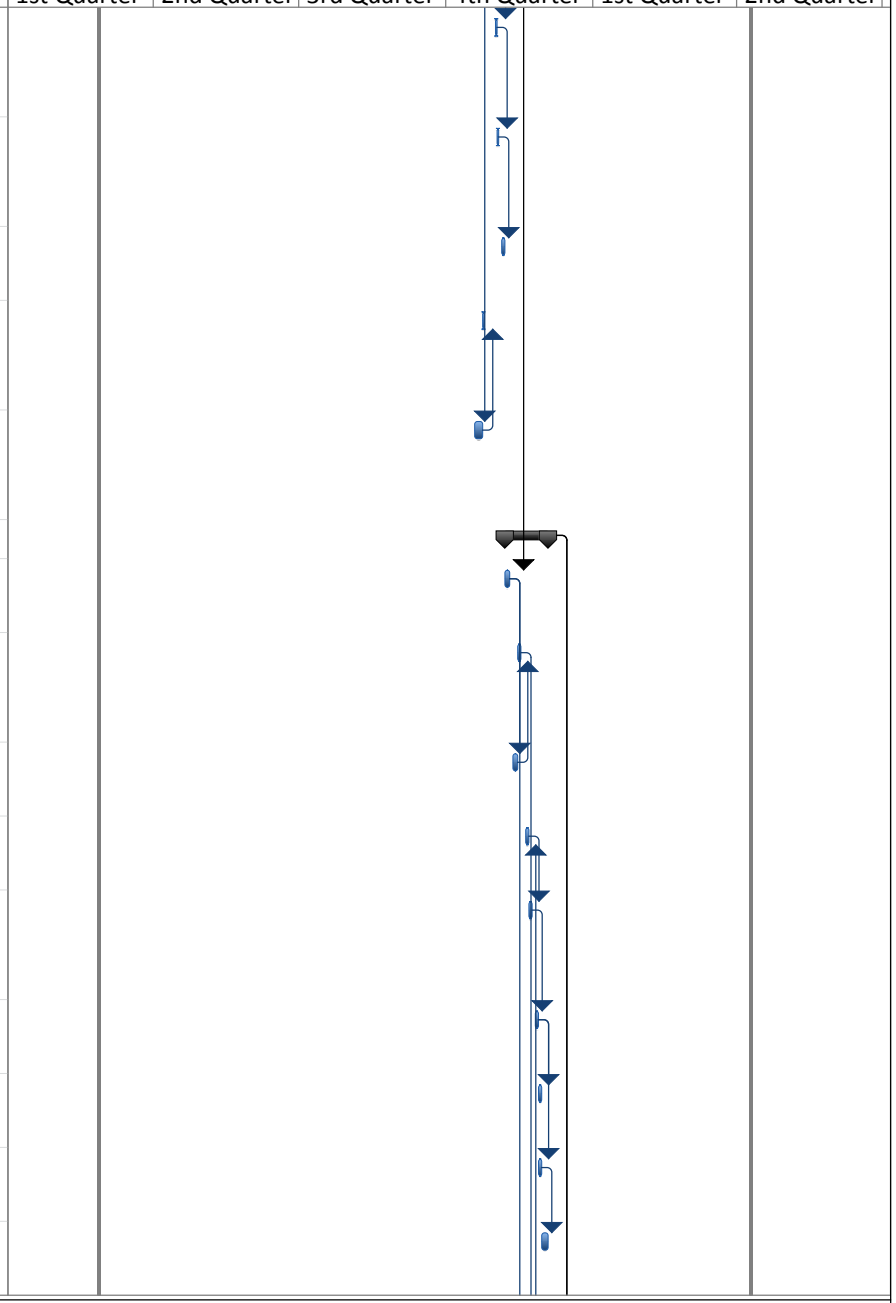


Iatan 1 Retirement

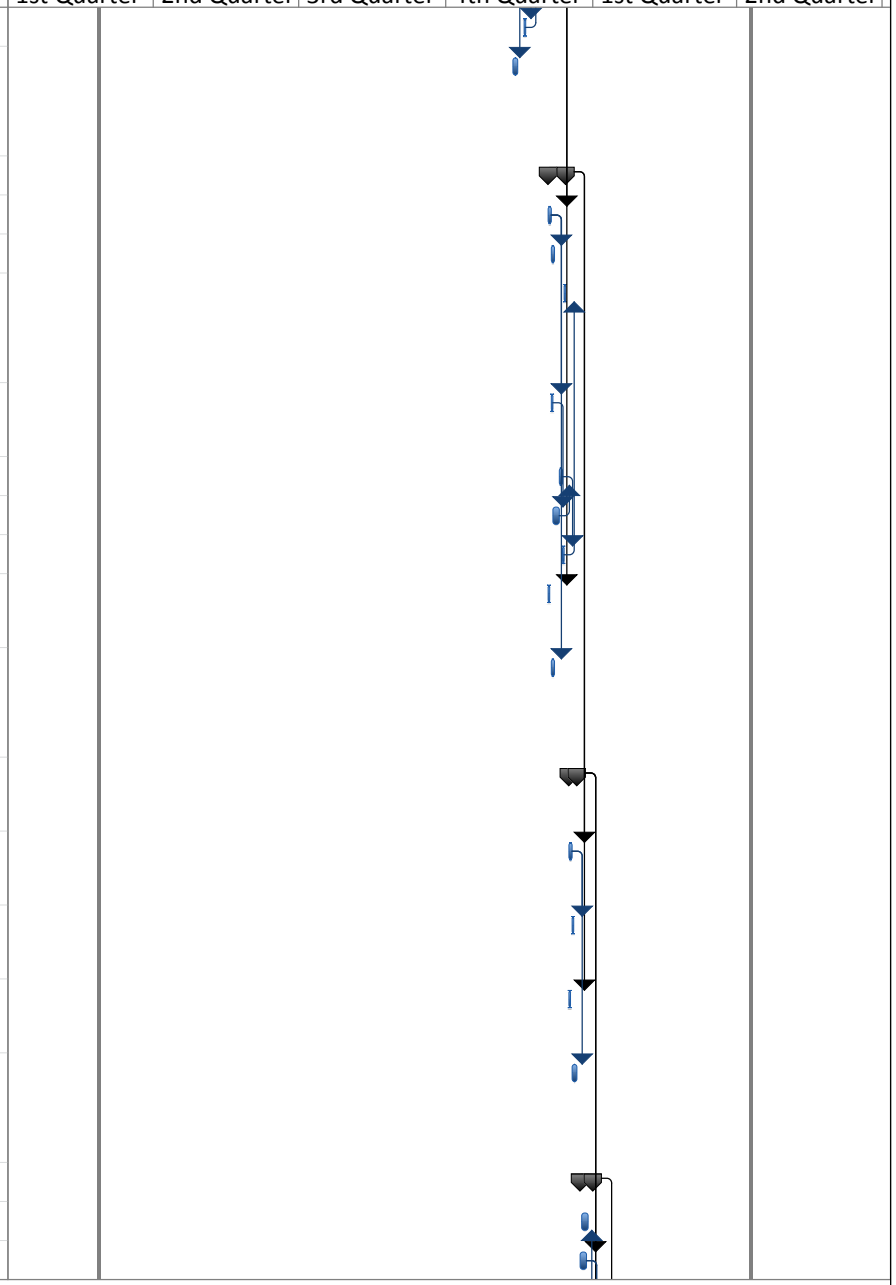
ID	Task Name	Duration
47	Open boiler doors.	1 day
48	Gas side - perform cleaning of the boiler and bottom ash system.	20 days
49	Drain boiler, drum, downcomers and headers.	1 day
50	Open drum doors.	1 day
51	Drain and clean the submerged flight conveyor system.	5 days
52	**Stack and Ductwork**	**12 days**
53	Open ductwork doors.	1 day
54	Perform extensive cleaning of the ductwork.	10 days
55	Place cap over stack opening to keep moisture out.	1 day
56	**Condensate and Feedwater Piping**	**2 days**
57	Drain water from the system.	1 day
58	Leave open vents and drains.	1 day
59	**Feedwater heaters**	**3 days**
60	Drain feedwater heaters	1 day
61	Leave open vents and drains.	2 days
62	**Deaerator and Deaerator Storage Tank**	**2 days**
63	Drain Deaerator and Storage	1 day
64	Leave open vents and drains.	1 day
65	**Baghouse**	**16 days**
66	Multiple cleaning cycles for filter bags.	3 days
67	Open all vent and drain lines on bag cleaning air and control air lines. Leave in open position or remove vent valves.	1 day
68	Remove all filter bags and cages.	1 day
69	Clear hoppers of all ash	4 days
70	Mechanically secure all compartment dampers and hopper outlet valves in open position.	1 day
71	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	1 day
72	Install bird screens across hopper ash outlet and ash line flanges.	1 day



ID	Task Name	Duration
73	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	1 day
74	If walk-in plenum, padlock or tack weld all outlet plenum doors and compartment ventilation dampers shut.	1 day
75	If top-door plenum, close and secure top doors and remove/disable door lift hoist.	2 days
76	If top-door plenum, establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in penthouse enclosure.	1 day
77	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
78	**Wet FGD system**	**19 days**
79	Multiple mist eliminator wash cycles. Remove ME's from absorber.	3 days
80	Drain and flush all slurry and reclaim water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	2 days
81	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	3 days
82	Leave all tank drain valves open or remove. Install bird screens across openings.	2 days
83	Drain all makeup and mist eliminator water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	2 days
84	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	2 days
85	Remove solids from all inlet and outlet ductwork as necessary	2 days
86	Open all vent station air and control air lines. Leave in open position or remove vent valves	2 days
87	Padlock or tack weld all access doors to modules and ductwork shut.	2 days

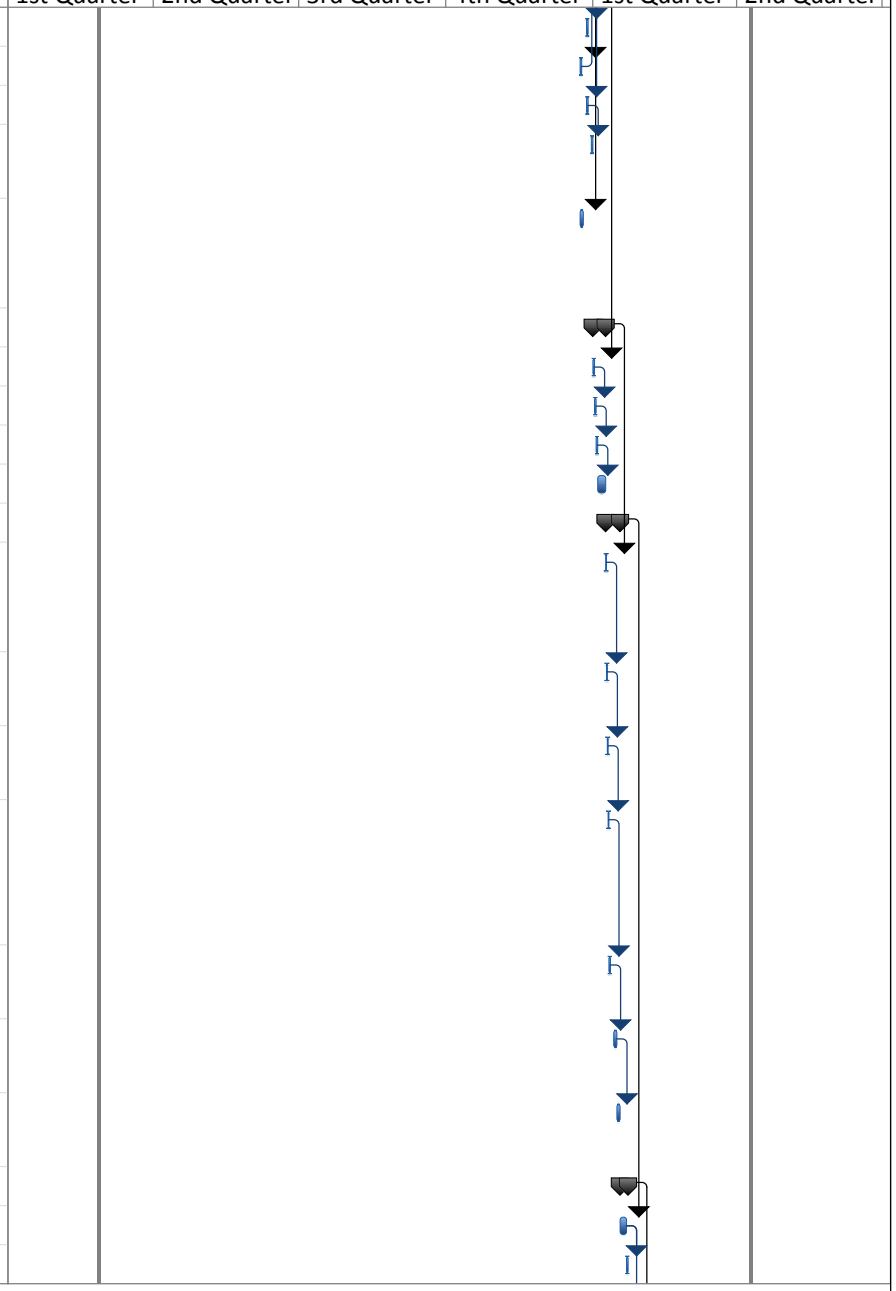


ID	Task Name	Duration
88	Remove access doors to open-top tanks.	1 day
89	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
90	**FGD Reagent Preparation-Limestone wet Scrubber**	**9 days**
91	Remove limestone from day bins.	2 days
92	Removed cartridges/bags from bin vent filters	2 days
93	Padlock or tack weld all bin access doors shut. (note: if doors are indoors, they could be removed and the opening covered with bird screens.)	1 day
94	Remove bin discharge isolation valve and install bird screen.	1 day
95	Thoroughly wash and drain mills	2 days
96	Remove balls from any ball mills	2 days
97	Padlock or tack weld mill access doors closed.	1 day
98	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	1 day
99	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
100	**FGD Byproduct Dewatering - Hydrocyclones and Vacuum Filters**	**5 days**
101	Wash vacuum filter belt and remove all accumulated solids	2 days
102	Wash out vacuum receiver, remove pressure relief valve and access door. Install bird screens.	1 day
103	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	1 day
104	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
105	**SCR**	**6 days**
106	Vacuum fly ash from catalyst.	4 days
107	Remove catalyst of salvage or disposal.	4 days



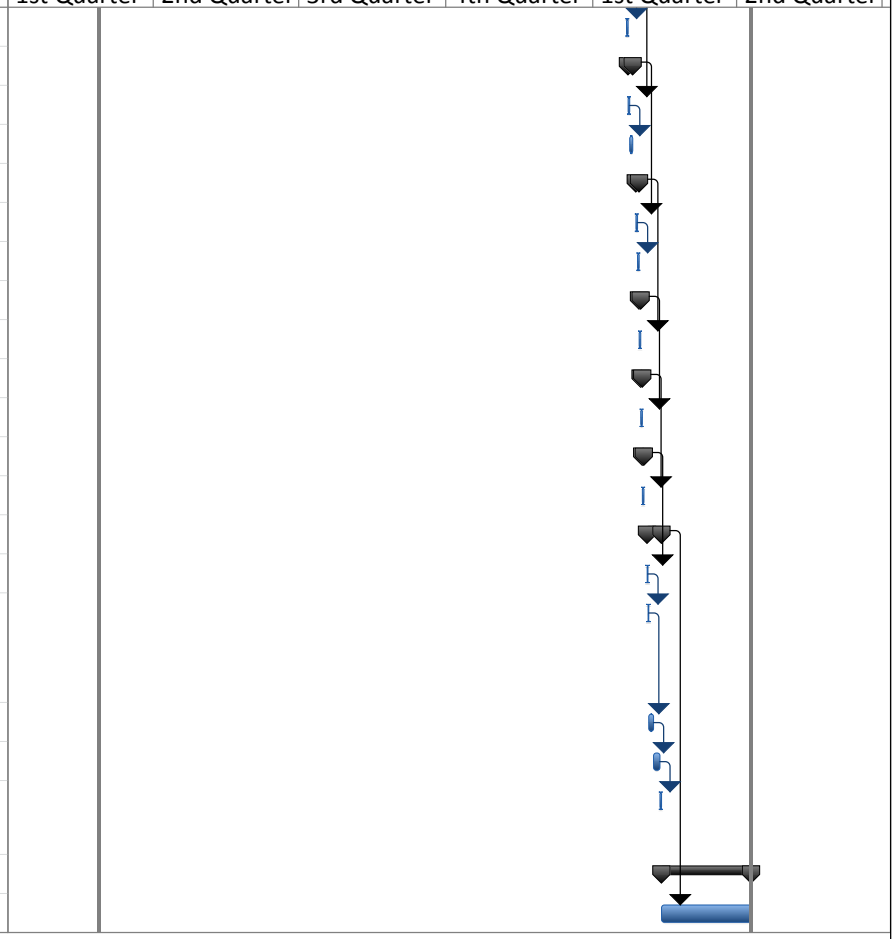
Iatan 1 Retirement

ID	Task Name	Duration
108	Padlock or tack weld access doors shut.	1 day
109	Remove ammonia from storage tank for resale.	1 day
110	Wash out and drain storage tank and supply piping.	1 day
111	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	1 day
112	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
113	**Turbine(s) and Condenser**	**6 days**
114	Drain hotwell and leave doors open.	1 day
115	Open main turbine doors.	1 day
116	Open bfp turbine doors.	1 day
117	Remove lube oil.	3 days
118	**Generator**	**7 days**
119	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
120	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
121	De-energize power supplies to generator excitation system at the source.	0.5 days
122	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	0.5 days
123	Drain generator and exciter cooling water systems (if applicable).	1 day
124	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
125	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
126	**Circulation Water and Turbine Cooling Water System**	**3 days**
127	Drain.	2 days
128	Open water box doors.	1 day



Iatan 1 Retirement

ID	Task Name	Duration
129	Drain any circulating water chemical feed tanks.	1 day
130	**Compressed Air System**	**3 days**
131	Open vents and drains.	1 day
132	Remove desiccant from desiccant dryers.	2 days
133	**Auxiliary Steam System**	**2 days**
134	Drain water from system.	1 day
135	Remove aux boiler chemicals.	1 day
136	**Auxiliary Cooling Water System**	**1 day**
137	Drain water from system.	1 day
138	**Condenser Air Extraction and Waterbox Priming System**	**1 day**
139	Drain water from system.	1 day
140	**Building Heating System**	**1 day**
141	Drain water from system.	1 day
142	**Battery System**	**7 days**
143	De-energize all battery chargers from the source.	0.5 days
144	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
145	Remove and dispose of battery electrolyte.	3 days
146	Remove and dispose of battery cells.	2 days
147	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
148	**Post Retirement Activities**	**40 days**
149	Post Retirement Activities	40 days



Iatan 1 Dismantlement

Owner Costs				
Pre-Dismantlement Activities			$892,760	
Overhead During Dismantlement			$1,676,621	
Post-Dismantlement Activities			$65,520	
Owner Costs Total*				$2,634,901
Demolition General Contractor (DGC) Costs				
Site Management			$1,255,135	
Equipment Rental			$2,172,838	
Consummables			$2,371,947	
Scrap Crew(s)			$2,149,631	
Dismantlement			$5,143,375	
Contractor Direct Cost*		$13,092,926		
Contractor Allowances				
DGC Insurance	2.00%		$261,859	
Contingency/Profit	15.00%		$2,003,218	
Performance Bond	2.00%		$307,160.04	
Contractor Costs Total:				$15,665,162
Total:				$18,300,063
Owner Internal Costs:	5.00%			$915,003
Owner Contingency:	25.00%			$4,803,767
Iatan Unit 1 Dismantlement Opinion of Probable Cost:				$24,018,833

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $15,727,827

Iatan 1 Dismantlement

ID	Task Name	Cost
1	**Iatan Unit 1 Dismantlement**	**$12,345,531.67**
2	**Pre-Demolition Activities**	**$892,760.32**
3	Detailed Planning & Hire Owner's Engineer	$104,441.28
4	Detailed Site Characterization Study	$610,335.44
5	Hire Demolition General Contractor	$167,184.00
6	KCP&L Prepares Unit for Dismantlement	$10,799.60
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,676,621.54**
9	KCP&L Project Manager	$266,427.98
10	KCP&L Administrative Support	$98,521.59
11	KCP&L Engineer	$437,911.97
12	Owners Engineer Project Manager	$130,720.00
13	Owners Engineer - Engineer	$743,040.00
14	**Demoliton Contractor Overhead during Dismantlement**	**$913,939.13**
15	Demolition Contractor Project Manager	$258,584.78
16	Demolition Contractor Safety Manager	$230,239.18
17	Demolition Contractor Superintendent	$425,115.17
18	**Demolition Contractor Equipment Rental Costs**	**$1,556,187.08**
19	Equipment Rental	$1,556,187.08
20	**Demolition Contractor Consummables**	**$1,552,575.20**
21	Consummables	$1,552,575.20
22	**Scrap Crew**	**$1,540,569.60**
23	Crew to Handle Scrap Material(s)	$1,540,569.60
24	**Dismantlement**	**$4,147,358.80**
25	**Phase 1 Demolition**	**$957,905.44**
26	**Phase 1 Electrical Demolition**	**$342,149.76**
27	Electrical Demolition of Phase 1 Equipment	$342,149.76
28	**Condensate System**	**$105,690.24**
29	Condensate Pumps	$3,582.72
30	Condensate Transfer Pumps	$1,791.36
31	Cycle Make-Up Pump	$1,791.36
32	Steam Packing Exhauster and Blower	$3,582.72
33	Low Pressure Heaters (except the condenser neck heat exchangers)	$53,740.80
34	Deaerator	$14,330.88
35	Deaerator Storage Tank	$8,956.80
36	Condensate Piping	$17,913.60
37	**Boiler Feed System**	**$67,816.96**
38	Boiler Feed Pump Turbine and Exhaust	$14,076.16
39	Boiler Feed Pump	$17,913.60
40	High Pressure Heaters	$35,827.20
41	**Critical Piping**	**$80,611.20**
42	Main Steam Piping	$26,870.40
43	Cold Reheat Piping	$26,870.40

Iatan 1 Dismantlement

ID	Task Name	Cost
44	Hot Reheat Piping	$26,870.40
45	**Extraction Steam System**	**$17,913.60**
46	Piping	$17,913.60
47	**Heater Drips**	**$14,330.88**
48	Piping	$14,330.88
49	**Auxiliary Steam**	**$25,079.04**
50	Auxiliary Boilers and Auxiliary Skids	$8,956.80
51	Auxiliary Steam Piping	$16,122.24
52	**Circulating Water (plant side)**	**$8,956.80**
53	Waterboxes	$8,956.80
54	**Bearing Cooling Water**	**$30,453.12**
55	Bearing Cooling Water Pumps	$3,582.72
56	Bearing Cooling Water Heat Exchanger	$8,956.80
57	Bearing Cooling Water Piping	$17,913.60
58	**Auxiliary Cooling Water**	**$28,661.76**
59	Auxiliary Cooling Water Heat Exchanger	$5,374.08
60	Auxiliary Cooling Water Pumps	$5,374.08
61	Auxiliary Cooling Water Piping	$17,913.60
62	**Service Water**	**$8,956.80**
63	Service Water Piping	$8,956.80
64	**Fuel Oil System (plant side)**	**$41,201.28**
65	Igniter Fuel Oil Pumps	$5,374.08
66	Igniter Fuel Oil and Atomizing Air Piping	$8,956.80
67	Igniters	$26,870.40
68	**Waste Oil System**	**$12,539.52**
69	Waste Oil Tank	$3,582.72
70	Waste Oil Transfer Pump	$3,582.72
71	Waste Oil Piping	$5,374.08
72	**Air Preheat System**	**$10,236.64**
73	Air Preheat Pumps	$3,582.72
74	Air Preheat Piping	$6,653.92
75	**Condenser Air Extraction System**	**$10,748.16**
76	Vacuum Pumps	$7,165.44
77	Extraction Piping	$3,582.72
78	**Turbine Seals and Drains**	**$12,539.52**
79	Piping	$12,539.52
80	**Turbine Lube Oil System**	**$20,363.52**
81	Turbine Lube Oil Tank	$11,406.72
82	Turbine Lube Oil Pumps	$7,165.44
83	Turbine Oil Mist Eliminator	$1,791.36
84	**Generator Auxiliary Systems**	**$32,244.48**
85	Hydrogen Cooler Skid and Piping	$8,956.80
86	Stator Cooling Water Skid and Piping	$8,956.80
87	Isophase Bus Duct	$7,165.44

Iatan 1 Dismantlement

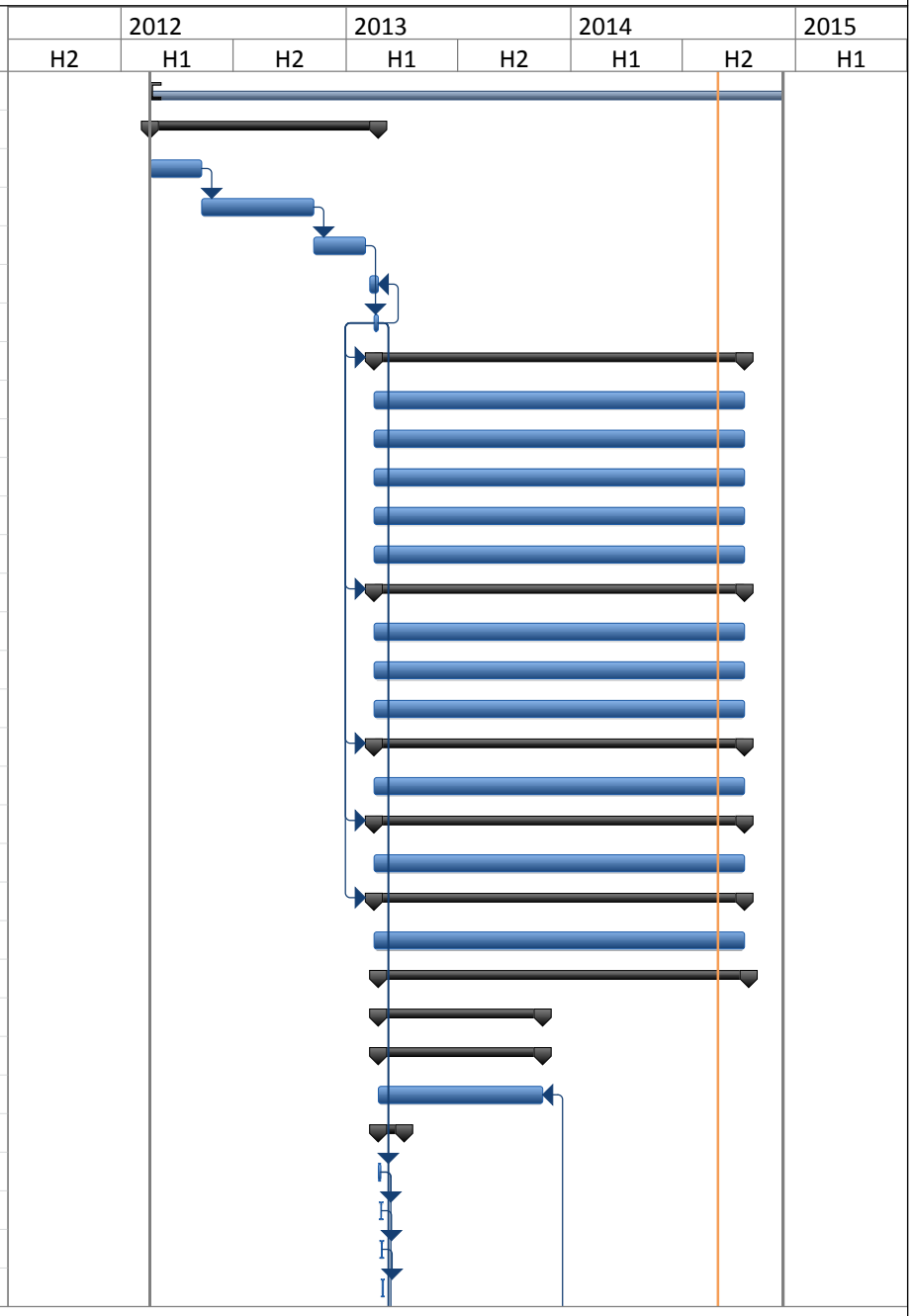
ID	Task Name	Cost
88	Exciter Heat Exchanger	$3,582.72
89	EHC Coolers	$3,582.72
90	**Chemical Feed Systems**	**$19,303.20**
91	Tanks	$8,555.04
92	Pumps	$5,374.08
93	Piping	$5,374.08
94	**Sampling Systems**	**$6,434.40**
95	Field Mounted Heat Exchangers	$3,582.72
96	Piping	$2,851.68
97	**Building Heating Systems**	**$13,307.84**
98	Steam Unit Heaters	$9,505.60
99	Steam Piping	$3,802.24
100	**Compressed Air System**	**$26,870.40**
101	Air Compressors	$7,165.44
102	Air Drying Equipment	$5,374.08
103	Air Reciever Tanks	$5,374.08
104	Compressed Air Piping	$8,956.80
105	**Miscellaneous Equipment**	**$21,496.32**
106	Miscellaneous Equipment (including Fire Protection)	$21,496.32
107	**Phase 2 Demolition**	**$2,929,157.36**
108	**Precipitator**	**$107,481.60**
109	Remove Precipitator	$107,481.60
110	**Boiler Equipment**	**$732,490.24**
111	Fans	$63,246.40
112	Pulverizers	$71,654.40
113	Bottom Ash	$16,451.52
114	Air Heater	$200,632.32
115	Steam Drum	$89,568.00
116	Coal Bunkers	$71,654.40
117	Coal Feeders	$46,575.36
118	Soot Blowers	$50,895.36
119	Ductwork	$100,316.16
120	Miscellaneous Other	$21,496.32
121	**Boiler Removal**	**$401,264.64**
122	Furnace	$229,294.08
123	Back Pass	$171,970.56
124	**Boiler Steel Framing**	**$723,709.44**
125	Hanger Girders at Top	$107,481.60
126	All Other Framing	$336,775.68
127	Bracing and Girts	$164,805.12
128	Columns	$114,647.04
129	**Boiler Foundations**	**$128,977.92**
130	Equipment Foundation Demolition to Grade	$128,977.92
131	**Remove Turbine**	**$835,233.52**

Iatan 1 Dismantlement

ID	Task Name	Cost
132	Remove HP Turbine	$26,321.60
133	Remove IP Turbine	$26,321.60
134	Remove LP Turbine	$26,321.60
135	Remove Generator	$52,643.20
136	Remove Condenser Neck Heat Exchanger	$26,321.60
137	Remove Condenser	$26,321.60
138	Remove Misc. Auxiliary Turbine Equipment	$39,482.40
139	**Turbine Pedestal Demolition to Grade**	**$268,480.32**
140	Top Slab and Beams	$105,286.40
141	Columns	$163,193.92
142	**Remove Turbine Building**	**$343,019.60**
143	Siding and Rooding	$108,682.80
144	All Framing Elevations	$157,929.60
145	Bracing and Girts	$52,643.20
146	Columns	$23,764.00
147	**Phase 3 Yard Demolition**	**$260,296.00**
148	**Circulating Water Pipe (yard)**	**$71,654.40**
149	Excavate Circulating Water Pipe	$17,913.60
150	Collapse Circulating Water Pipe	$35,827.20
151	Backfill Circulating Water Pipe	$17,913.60
152	**Remove Ash Handling Equipment and Piping**	**$35,827.20**
153	Remove Fly-Ash Silo and Scale	$26,870.40
154	Remove Ash Piping and Misc. Equipment	$8,956.80
155	Remove Laydown Equipment and Warehoused Equipment	$71,654.40
156	Remove Unit 1 Condensate Storage Tank and Pump	$9,505.60
157	Remove Unit 1 Make-Up Water Storage Tank	$17,913.60
158	Remove Unit 1 Water Treatment Equipment and Building	$53,740.80
159	**Post Dismantlement Activities**	**$65,520.00**
160	Post Dismantlement Activities	$65,520.00

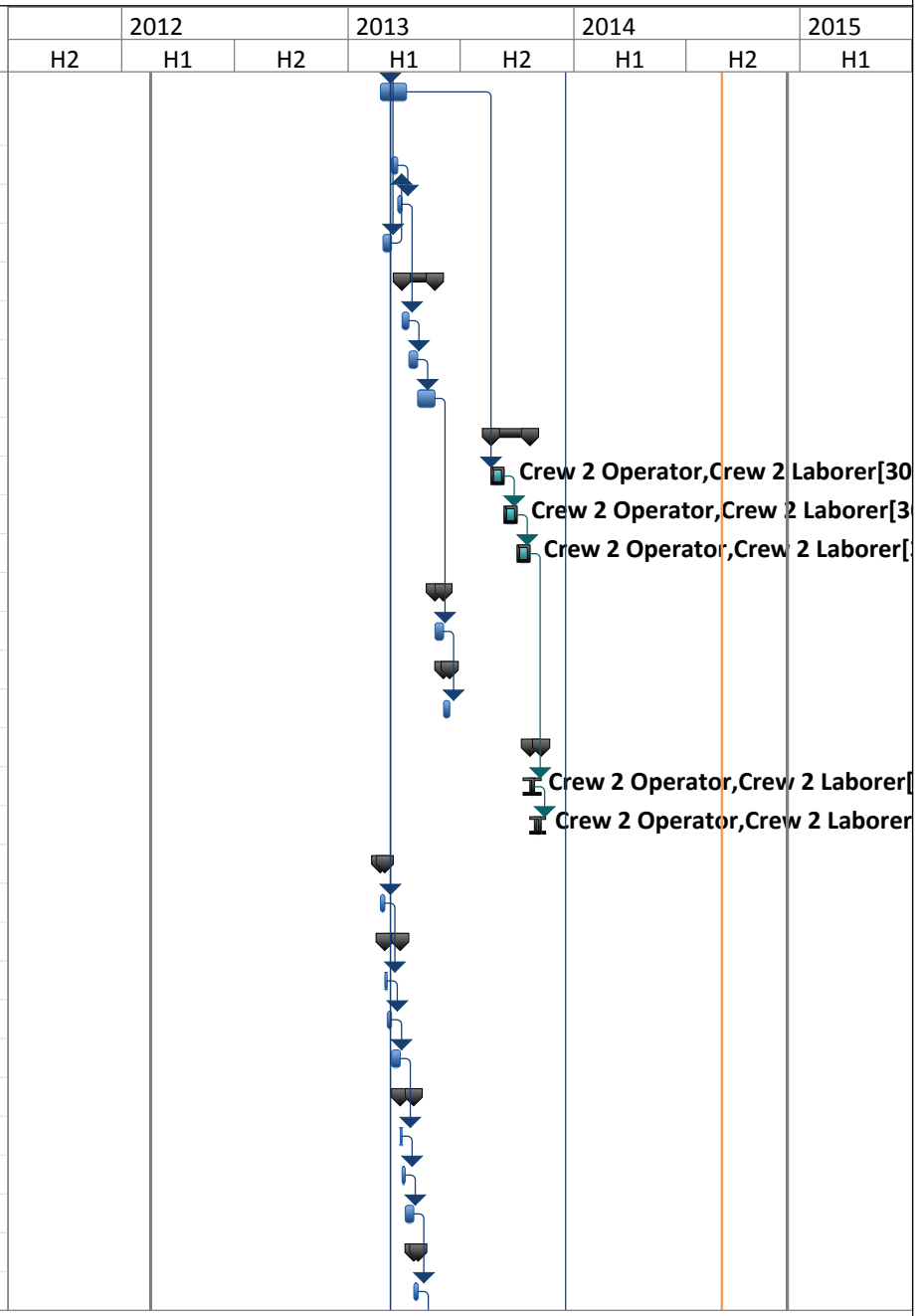
Iatan 1 Dismantlement

ID	Task Name	Duration
1	**Iatan Unit 1 Dismantlement**	
2	**Pre-Demolition Activities**	**265 days**
3	Detailed Planning & Hire Owner's Engineer	3 mons
4	Detailed Site Characterization Study	130 days
5	Hire Demolition General Contractor	3 mons
6	KCP&L Prepares Unit for Dismantlement	2 wks
7	Demolition Contractor Mobilizes on Site	5 days
8	**KCP&L Overhead during Dismantlement**	**430 days**
9	KCP&L Project Manager	430 days
10	KCP&L Administrative Support	430 days
11	KCP&L Engineer	430 days
12	Owners Engineer Project Manager	430 days
13	Owners Engineer - Engineer	430 days
14	**Demoliton Contractor Overhead during Dismantlement**	**430 days**
15	Demolition Contractor Project Manager	430 days
16	Demolition Contractor Safety Manager	430 days
17	Demolition Contractor Superintendent	430 days
18	**Demolition Contractor Equipment Rental Costs**	**430 days**
19	Equipment Rental	430 days
20	**Demolition Contractor Consummables**	**430 days**
21	Consummables	430 days
22	**Scrap Crew**	**430 days**
23	Crew to Handle Scrap Material(s)	430 days
24	**Dismantlement**	**430 days?**
25	**Phase 1 Demolition**	**191 days?**
26	**Phase 1 Electrical Demolition**	**191 days**
27	Electrical Demolition of Phase 1 Equipment	191 days
28	**Condensate System**	**30 days**
29	Condensate Pumps	2 days
30	Condensate Transfer Pumps	1 day
31	Cycle Make-Up Pump	1 day
32	Steam Packing Exhauster and Blower	2 days



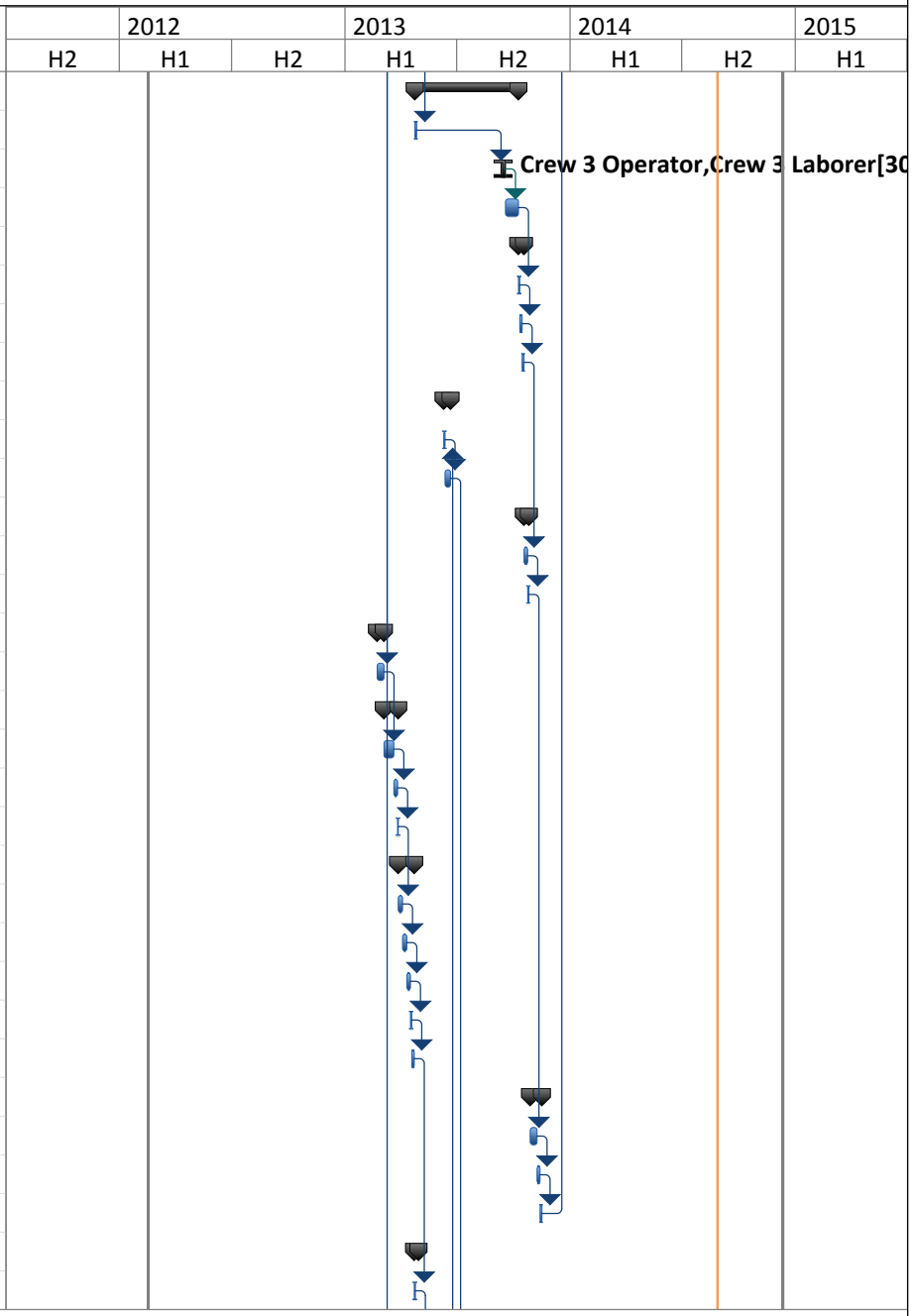
Iatan 1 Dismantlement

ID	Task Name	Duration
33	Low Pressure Heaters (except the condenser neck heat exchangers)	30 days
34	Deaerator	8 days
35	Deaerator Storage Tank	5 days
36	Condensate Piping	10 days
37	**Boiler Feed System**	**37 days**
38	Boiler Feed Pump Turbine and Exhaust	7 days
39	Boiler Feed Pump	10 days
40	High Pressure Heaters	20 days
41	**Critical Piping**	**45 days**
42	Main Steam Piping	15 days
43	Cold Reheat Piping	15 days
44	Hot Reheat Piping	15 days
45	**Extraction Steam System**	**10 days**
46	Piping	10 days
47	**Heater Drips**	**8 days**
48	Piping	8 days
49	**Auxiliary Steam**	**14 days**
50	Auxiliary Boilers and Auxiliary Skids	5 days
51	Auxiliary Steam Piping	9 days
52	**Circulating Water (plant side)**	**5 days**
53	Waterboxes	5 days
54	**Bearing Cooling Water**	**17 days**
55	Bearing Cooling Water Pumps	2 days
56	Bearing Cooling Water Heat Exchanger	5 days
57	Bearing Cooling Water Piping	10 days
58	**Auxiliary Cooling Water**	**16 days**
59	Auxiliary Cooling Water Heat Exchanger	3 days
60	Auxiliary Cooling Water Pumps	3 days
61	Auxiliary Cooling Water Piping	10 days
62	**Service Water**	**5 days**
63	Service Water Piping	5 days



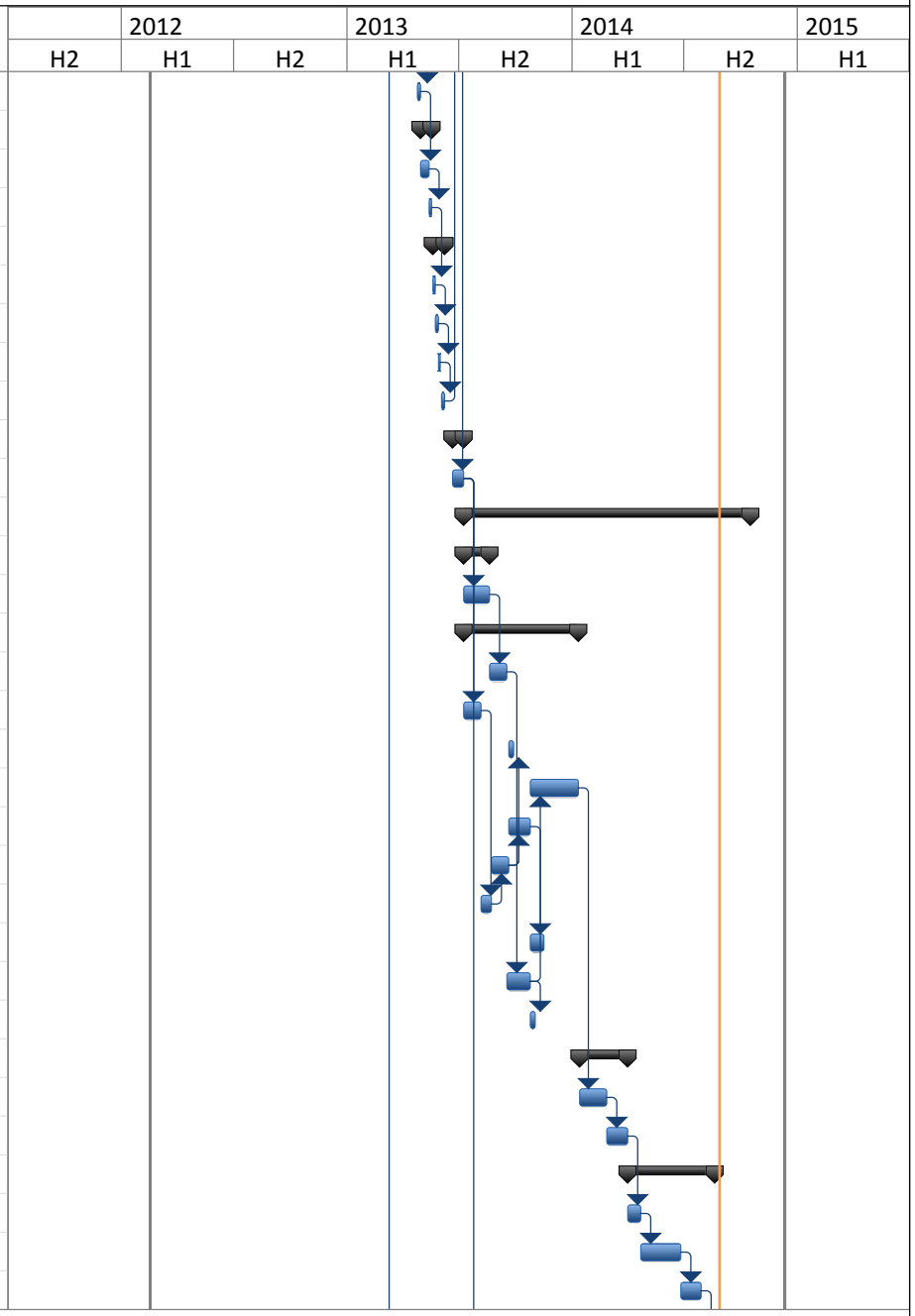
Iatan 1 Dismantlement

ID	Task Name	Duration
64	**Fuel Oil System (plant side)**	**120 days**
65	Igniter Fuel Oil Pumps	3 days
66	Igniter Fuel Oil and Atomizing Air Piping	5 days
67	Igniters	15 days
68	**Waste Oil System**	**7 days**
69	Waste Oil Tank	2 days
70	Waste Oil Transfer Pump	2 days
71	Waste Oil Piping	3 days
72	**Air Preheat System**	**9 days**
73	Air Preheat Pumps	2 days
74	Air Preheat Piping	7 days
75	**Condenser Air Extraction System**	**6 days**
76	Vacuum Pumps	4 days
77	Extraction Piping	2 days
78	**Turbine Seals and Drains**	**7 days**
79	Piping	7 days
80	**Turbine Lube Oil System**	**17 days?**
81	Turbine Lube Oil Tank	12 days
82	Turbine Lube Oil Pumps	4 days
83	Turbine Oil Mist Eliminator	1 day?
84	**Generator Auxiliary Systems**	**18 days**
85	Hydrogen Cooler Skid and Piping	5 days
86	Stator Cooling Water Skid and Piping	5 days
87	Isophase Bus Duct	4 days
88	Exciter Heat Exchanger	2 days
89	EHC Coolers	2 days
90	**Chemical Feed Systems**	**15 days**
91	Tanks	9 days
92	Pumps	3 days
93	Piping	3 days
94	**Sampling Systems**	**5 days**
95	Field Mounted Heat Exchangers	2 days



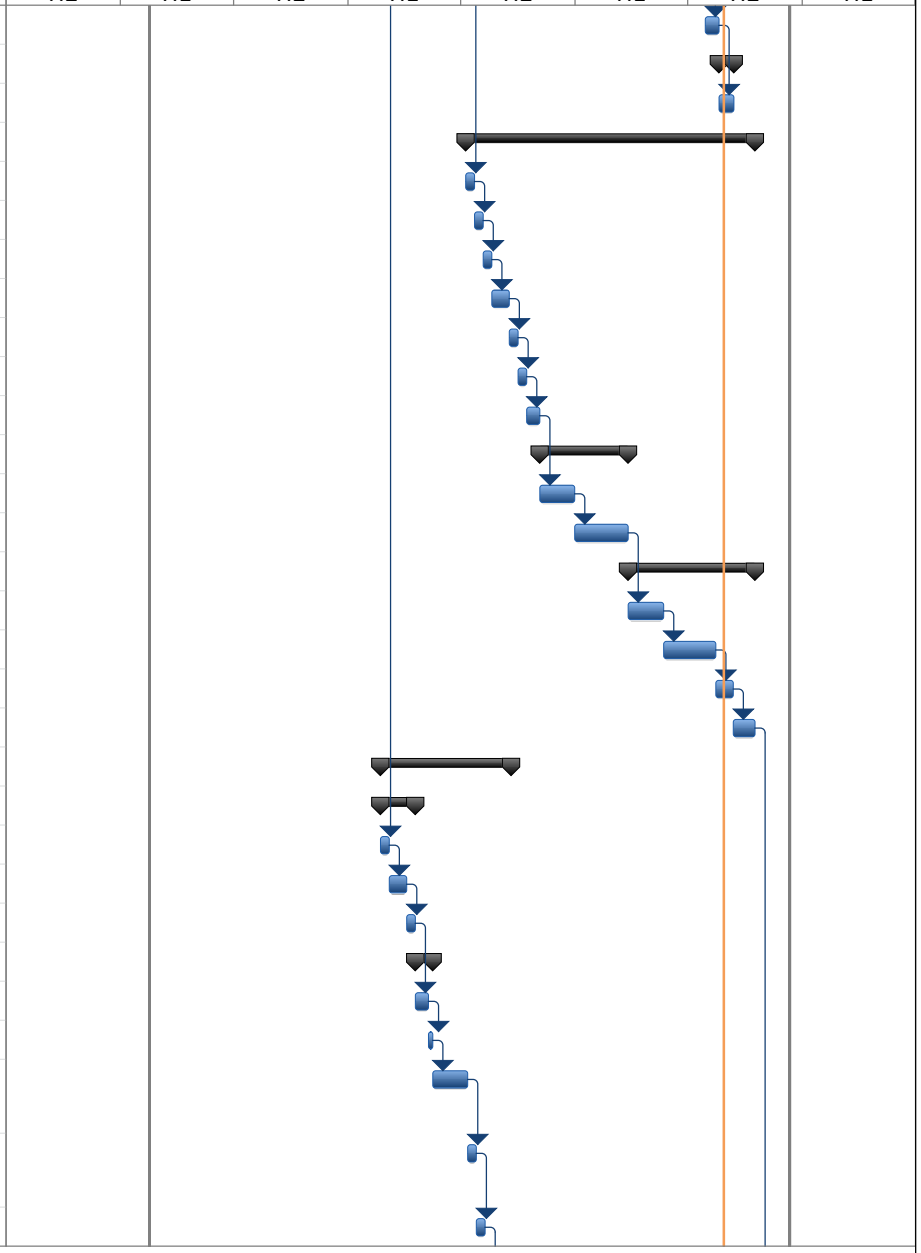
Iatan 1 Dismantlement

ID	Task Name	Duration
96	Piping	3 days
97	**Building Heating Systems**	**14 days**
98	Steam Unit Heaters	10 days
99	Steam Piping	4 days
100	**Compressed Air System**	**15 days**
101	Air Compressors	4 days
102	Air Drying Equipment	3 days
103	Air Reciever Tanks	3 days
104	Compressed Air Piping	5 days
105	**Miscellaneous Equipment**	**12 days**
106	Miscellaneous Equipment (including Fire Protection)	12 days
107	**Phase 2 Demolition**	**333 days**
108	**Precipitator**	**30 days**
109	Remove Precipitator	30 days
110	**Boiler Equipment**	**134 days**
111	Fans	20 days
112	Pulverizers	20 days
113	Bottom Ash	6 days
114	Air Heater	56 days
115	Steam Drum	25 days
116	Coal Bunkers	20 days
117	Coal Feeders	13 days
118	Soot Blowers	16 days
119	Ductwork	28 days
120	Miscellaneous Other	6 days
121	**Boiler Removal**	**56 days**
122	Furnace	32 days
123	Back Pass	24 days
124	**Boiler Steel Framing**	**101 days**
125	Hanger Girders at Top	15 days
126	All Other Framing	47 days
127	Bracing and Girts	23 days



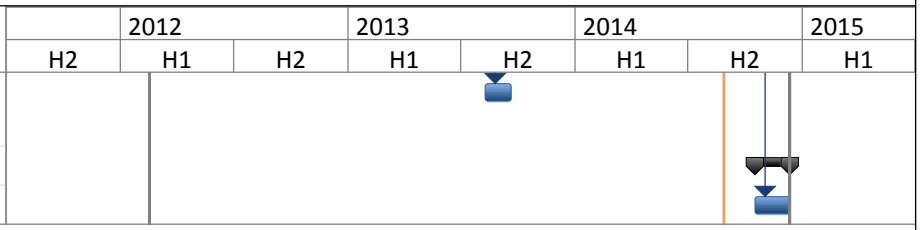
Iatan 1 Dismantlement

ID	Task Name	Duration
128	Columns	16 days
129	**Boiler Foundations**	**18 days**
130	Equipment Foundation Demolition to Grade	18 days
131	**Remove Turbine**	**333 days**
132	Remove HP Turbine	10 days
133	Remove IP Turbine	10 days
134	Remove LP Turbine	10 days
135	Remove Generator	20 days
136	Remove Condenser Neck Heat Exchanger	10 days
137	Remove Condenser	10 days
138	Remove Misc. Auxiliary Turbine Equipment	15 days
139	**Turbine Pedestal Demolition to Grade**	**102 days**
140	Top Slab and Beams	40 days
141	Columns	62 days
142	**Remove Turbine Building**	**146 days**
143	Siding and Rooding	41 days
144	All Framing Elevations	60 days
145	Bracing and Girts	20 days
146	Columns	25 days
147	**Phase 3 Yard Demolition**	**150 days**
148	**Circulating Water Pipe (yard)**	**40 days**
149	Excavate Circulating Water Pipe	10 days
150	Collapse Circulating Water Pipe	20 days
151	Backfill Circulating Water Pipe	10 days
152	**Remove Ash Handling Equipment and Piping**	**20 days**
153	Remove Fly-Ash Silo and Scale	15 days
154	Remove Ash Piping and Misc. Equipment	5 days
155	Remove Laydown Equipment and Warehoused Equipment	40 days
156	Remove Unit 1 Condensate Storage Tank and Pump	10 days
157	Remove Unit 1 Make-Up Water Storage Tank	10 days



Iatan 1 Dismantlement

ID	Task Name	Duration
158	Remove Unit 1 Water Treatment Equipment and Building	30 days
159	**Post Dismantlement Activities**	**40 days**
160	Post Dismantlement Activities	40 days



Iatan 1 AQCS

ID	Task Name	Cost
1	**Iatan Unit 1 AQCS Dismantlement**	**$3,382,301.12**
2	**Common Removal Overheads**	**$341,196.80**
3	Added Overhead Staff for Common Removals	$341,196.80
4	**Scrap Crew**	**$609,062.40**
5	Crew(s) to Handle Scrap Material	$609,062.40
6	**Demolition Contractor Consummables**	**$819,372.80**
7	Consummables	$819,372.80
8	**Demolition Contractor Equipment Rental Costs**	**$616,651.20**
9	Equipment Rental	$616,651.20
10	**Dismantlement**	**$996,017.92**
11	**Initial Structural**	**$130,313.68**
12	Remove SCR box & ductwork lagging & insulation	$17,913.60
13	Remove SCR expansion joints	$10,748.16
14	Remove ductwork lagging & insulation	$7,952.40
15	Remove ductwork expansion joints	$17,913.60
16	Remove ductwork access platforms & ladders	$17,913.60
17	Remove FF lagging, insulation, wall panel, & roof panels	$35,827.20
18	Remove ID fan lagging & insulation	$7,165.44
19	Removal all HVAC equipment located on FGD Bldg roof	$5,374.08
20	Remove FGD Bldg lagging, insulation, wall panel, & roof	$9,505.60
21	**General Electric**	**$202,423.68**
22	Remove breakers serving all FF equipment	$895.68
23	Remove breakers serving all FGD equipment	$1,791.36
24	Remove breakers serving all ID fan equipment	$895.68
25	Remove breakers serving all SCR equipment	$895.68
26	Remove breakers serving all comp air equipment	$895.68
27	Remove all ductwork primary instrumentation, controls & assoc'd cables, and conduit	$8,956.80
28	Remove all FGD primary instrumentation, controls & assoc'd cables, and conduit	$26,870.40
29	Remove all FF primary instrumentation, controls & assoc'd cables, and conduit	$17,913.60
30	Remove SCR primary instrumentation, controls, & assoc'd cable & conduit	$8,956.80
31	Remove NH3 supply primary instrumentation, controls, & assoc'd cable & conduit	$8,956.80
32	Remove wiring and conduit serving FGD equipment, HVAC, lighting and convenience outlets	$35,827.20
33	Remove wiring and conduit serving FF equipment, HVAC, lighting and convenience outlets	$17,913.60
34	Remove wiring and conduit serving the ID fans and assoc'd equipment	$21,496.32
35	Remove wiring & conduit serving SCR vaporization & injection equipment	$5,374.08

Iatan 1 AQCS

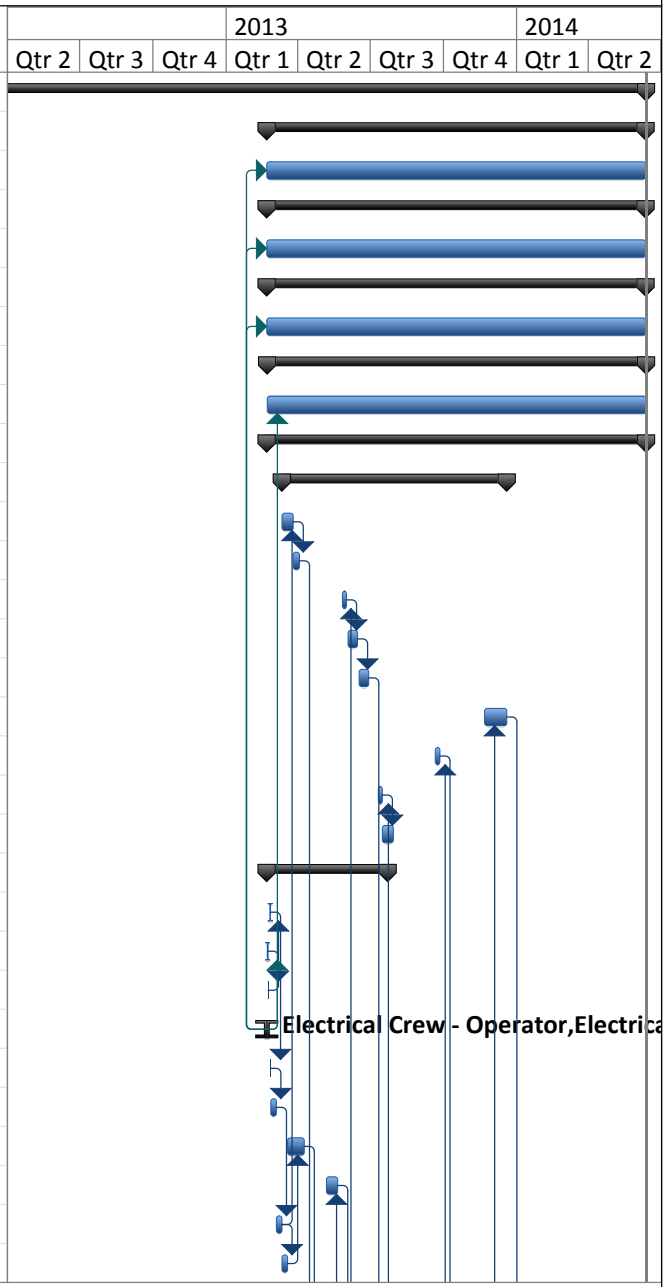
ID	Task Name	Cost
36	Remove wiring & conduit serving compressed air equipment	$5,374.08
37	Remove wiring & conduit serving comp air equipment	$3,582.72
38	Remove electrial control cabinets & switchgear	$17,913.60
39	Demolish electrical control room	$17,913.60
40	**FGD System**	**$201,109.68**
41	Remove ductwork between FGD module and chimney	$7,952.40
42	Remove support steel and access platforms between FGD and chimney	$5,374.08
43	Remove FGD elevator	$8,956.80
44	Remove all mechanical equipment, pumps, and motors and tanks in FGD Bldg	$35,827.20
45	Remove oxi air blowers	$895.68
46	Remove all FGD piping & valves other than recirc piping	$26,870.40
47	Remove ox air lines	$5,374.08
48	Remove FGD MEs panels	$9,542.88
49	Remove FGD outlet duct and top cone	$5,374.08
50	Remove FGD internal wash ME piping and ME supports	$5,374.08
51	Remove FGD internal spray header piping	$8,956.80
52	Remove FGD support steel, access provisions, stair tower, and recirc piping from top down	$35,827.20
53	Remove FGD module walls	$17,913.60
54	Remove FGD inlet duct	$5,374.08
55	Remove FGD reaction tank walls and floor	$17,913.60
56	Remove FGD Bldg trench floor grating	$3,582.72
57	**ID Fans**	**$78,819.84**
58	Remove ductwork between ID fan outlets and FGD module	$12,539.52
59	Remove support steel and access platforms between ID fan outlets and FGD module	$5,374.08
60	Remove ductwork between FF outlet and ID fan inlets	$12,539.52
61	Remove support steel between FF outlet and ID fan inlets	$5,374.08
62	Removed ID fan isolation dampers	$14,330.88
63	Removed ID fan drive motor	$7,165.44
64	Remove ID fan seal air system	$7,165.44
65	Remove fan casing & rotor	$14,330.88
66	**Fabric Filters**	**$309,905.28**
67	Remove ductwork between air heater and FF	$8,956.80
68	Remove ductwork structural steel between AH and FF	$5,374.08
69	Remove FF penthouse hoists and trolleys	$7,165.44
70	Remove FF hopper heaters, HVAC, lighting and convenience outlets	$17,913.60
71	Remove FF ash handling piping	$26,870.40
72	Remove compress air blower, dryers, and receivers, piping & valves	$17,913.60
73	Remove FF penthouse roof panels supporting steel	$17,913.60
74	Remove FF compartment roof hatches	$5,374.08

Iatan 1 AQCS

ID	Task Name	Cost
75	Remove FF compartment pulse air piping	$5,374.08
76	Remove FF compartment pulse air and compressed air supply piping	$10,748.16
77	Remove FF outlet poppet damper operators	$12,539.52
78	Remove FF bags & cages	$25,079.04
79	Remove FF bag support sheets	$25,079.04
80	Remove remaining FF roof	$7,165.44
81	Remove FF outlet dampers	$7,165.44
82	Remove ductwork between air heater and FF	$8,956.80
83	Remove FF wall panels to hopper level	$50,158.08
84	Remove ductwork structural steel between AH and FF	$5,374.08
85	Remove FF stair tower(s)	$17,913.60
86	Remove FF inlet dampers	$7,165.44
87	Remove FF hoppers	$12,539.52
88	Remove FF support steel	$7,165.44
89	**SCR and Ammonia Supply**	**$73,445.76**
90	Vacuum SCR catalyst	$3,582.72
91	Remove SCR catalyst	$16,122.24
92	Remove ammonia injection grid	$3,582.72
93	Remove NH3 piping between storage & injection	$3,582.72
94	Remove air horn air receiver & supply piping	$3,582.72
95	Remove SCR guillotine dampers	$7,165.44
96	Remove SCr muliti-louver dampers	$3,582.72
97	Remove SCR box, internal supports, & assoc'd ductwork	$26,870.40
98	Remove NH3 piping between storage & vaporizors	$5,374.08
99	**Site Preperation Work**	**$0.00**
100	<New Task>	$0.00

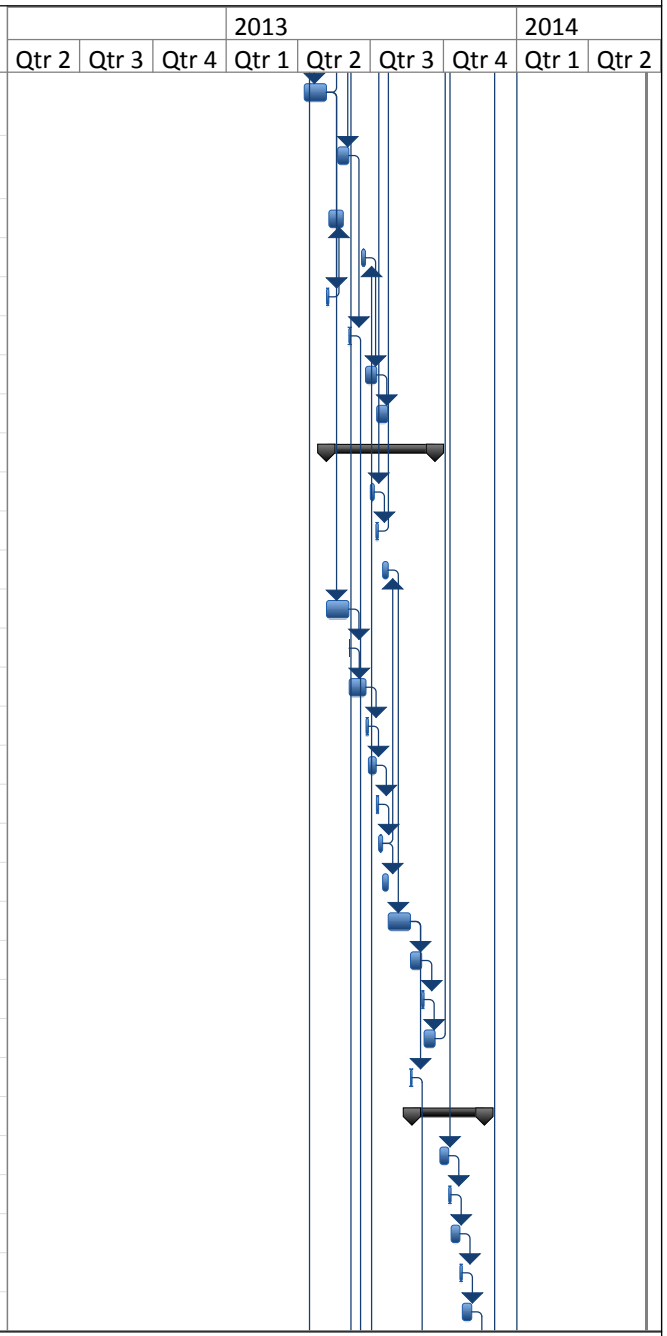
Iatan 1 AQCS Dismantlement

ID	Task Name	Duration
1	**Iatan Unit 1 AQCS Dismantlement**	**594.5 days**
2	**Common Removal Overheads**	**340 days**
3	Added Overhead Staff for Common Removals	340 days
4	**Scrap Crew**	**340 days**
5	Crew(s) to Handle Scrap Material	340 days
6	**Demolition Contractor Consummables**	**340 days**
7	Consummables	340 days
8	**Demolition Contractor Equipment Rental Costs**	**340 days**
9	Equipment Rental	340 days
10	**Dismantlement**	**340.5 days**
11	**Initial Structural**	**202.5 days**
12	Remove SCR box & ductwork lagging & insulation	10 days
13	Remove SCR expansion joints	6 days
14	Remove ductwork lagging & insulation	5 days
15	Remove ductwork expansion joints	10 days
16	Remove ductwork access platforms & ladders	10 days
17	Remove FF lagging, insulation, wall panel, & roof panels	20 days
18	Remove ID fan lagging & insulation	4 days
19	Removal all HVAC equipment located on FGD Bldg roof	3 days
20	Remove FGD Bldg lagging, insulation, wall panel, & roof	10 days
21	**General Electric**	**108 days**
22	Remove breakers serving all FF equipment	0.5 days
23	Remove breakers serving all FGD equipment	1 day
24	Remove breakers serving all ID fan equipment	0.5 days
25	Remove breakers serving all SCR equipment	0.5 days
26	Remove breakers serving all comp air equipment	0.5 days
27	Remove all ductwork primary instrumentation, controls & assoc'd cables, and c	5 days
28	Remove all FGD primary instrumentation, controls & assoc'd cables, and condu	15 days
29	Remove all FF primary instrumentation, controls & assoc'd cables, and conduit	10 days
30	Remove SCR primary instrumentation, controls, & assoc'd cable & conduit	5 days
31	Remove NH3 supply primary instrumentation, controls, & assoc'd cable & cond	5 days



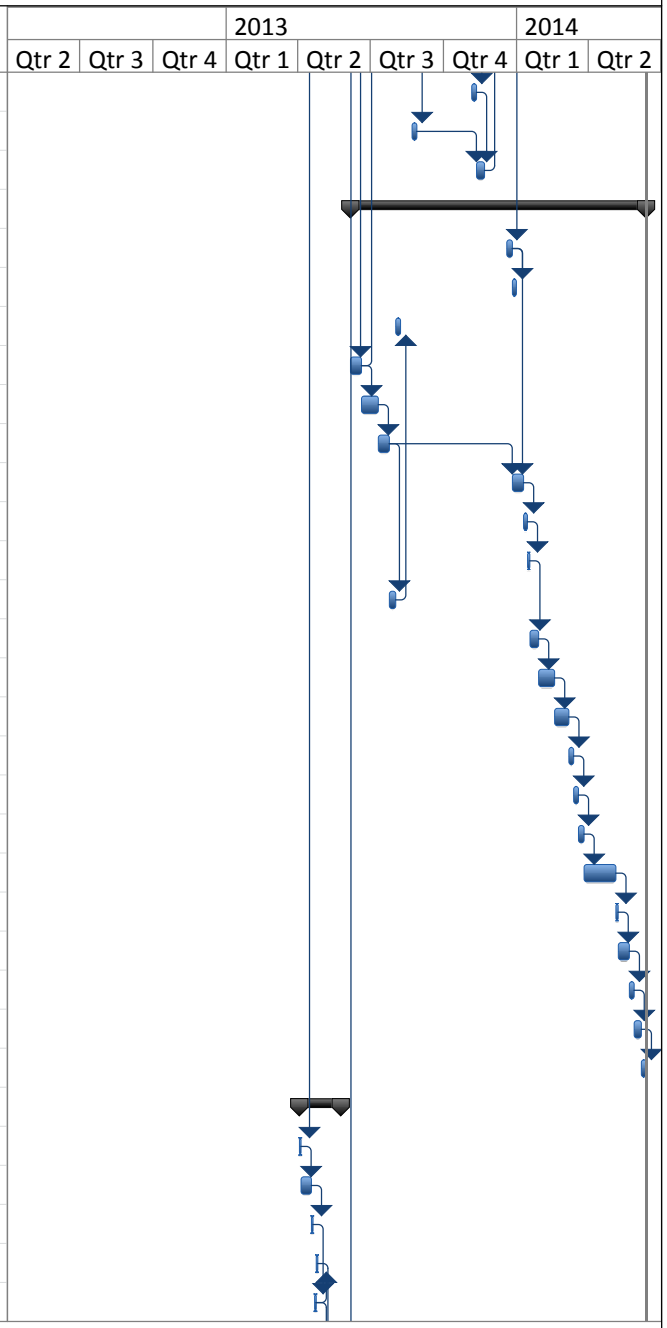
Iatan 1 AQCS Dismantlement

ID	Task Name	Duration
32	Remove wiring and conduit serving FGD equipment, HVAC, lighting and convenience outlets	20 days
33	Remove wiring and conduit serving FF equipment, HVAC, lighting and convenience outlets	10 days
34	Remove wiring and conduit serving the ID fans and assoc'd equipment	12 days
35	Remove wiring & conduit serving SCR vaporization & injection equipment	3 days
36	Remove wiring & conduit serving compressed air equipment	3 days
37	Remove wiring & conduit serving comp air equipment	2 days
38	Remove electrial control cabinets & switchgear	10 days
39	Demolish electrical control room	10 days
40	**FGD System**	**98.5 days**
41	Remove ductwork between FGD module and chimney	5 days
42	Remove support steel and access platforms between FGD and chimney	3 days
43	Remove FGD elevator	5 days
44	Remove all mechanical equipment, pumps, and motors and tanks in FGD Bldg	20 days
45	Remove oxi air blowers	0.5 days
46	Remove all FGD piping & valves other than recirc piping	15 days
47	Remove ox air lines	3 days
48	Remove FGD MEs panels	6 days
49	Remove FGD outlet duct and top cone	3 days
50	Remove FGD internal wash ME piping and ME supports	3 days
51	Remove FGD internal spray header piping	5 days
52	Remove FGD support steel, access provisions, stair tower, and recirc piping frc	20 days
53	Remove FGD module walls	10 days
54	Remove FGD inlet duct	3 days
55	Remove FGD reaction tank walls and floor	10 days
56	Remove FGD Bldg trench floor grating	2 days
57	**ID Fans**	**65 days**
58	Remove ductwork between ID fan outlets and FGD module	7 days
59	Remove support steel and access platforms between ID fan outlets and FGD m	3 days
60	Remove ductwork between FF outlet and ID fan inlets	7 days
61	Remove support steel between FF outlet and ID fan inlets	3 days
62	Removed ID fan isolation dampers	8 days



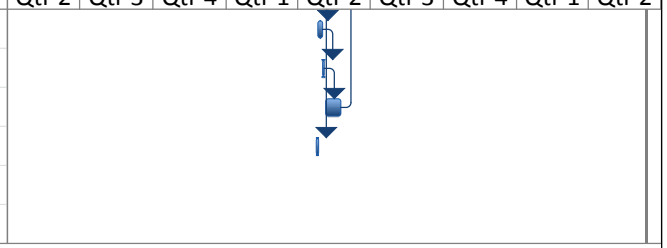
Iatan 1 AQCS Dismantlement

ID	Task Name	Duration
63	Removed ID fan drive motor	4 days
64	Remove ID fan seal air system	4 days
65	Remove fan casing & rotor	8 days
66	**Fabric Filters**	**265.5 days**
67	Remove ductwork between air heater and FF	5 days
68	Remove ductwork structural steel between AH and FF	3 days
69	Remove FF penthouse hoists and trolleys	4 days
70	Remove FF hopper heaters, HVAC, lighting and convenience outlets	10 days
71	Remove FF ash handling piping	15 days
72	Remove compress air blower, dryers, and receivers, piping & valves	10 days
73	Remove FF penthouse roof panels supporting steel	10 days
74	Remove FF compartment roof hatches	3 days
75	Remove FF compartment pulse air piping	3 days
76	Remove FF compartment pulse air and compressed air supply piping	6 days
77	Remove FF outlet poppet damper operators	7 days
78	Remove FF bags & cages	14 days
79	Remove FF bag support sheets	14 days
80	Remove remaining FF roof	4 days
81	Remove FF outlet dampers	4 days
82	Remove ductwork between air heater and FF	5 days
83	Remove FF wall panels to hopper level	28 days
84	Remove ductwork structural steel between AH and FF	3 days
85	Remove FF stair tower(s)	10 days
86	Remove FF inlet dampers	4 days
87	Remove FF hoppers	7 days
88	Remove FF support steel	4 days
89	**SCR and Ammonia Supply**	**38 days**
90	Vacuum SCR catalyst	2 days
91	Remove SCR catalyst	9 days
92	Remove ammonia injection grid	2 days
93	Remove NH3 piping between storage & injection	2 days
94	Remove air horn air receiver & supply piping	2 days



Iatan 1 AQCS Dismantlement

ID	Task Name	Duration
95	Remove SCR guillotine dampers	4 days
96	Remove SCr muliti-louver dampers	2 days
97	Remove SCR box, internal supports, & assoc'd ductwork	15 days
98	Remove NH3 piping between storage & vaporizors	3 days
99	**Site Preperation Work**	**1 day**
100	<New Task>	1 day



UNIT 2

Iatan 2 Retirement

Owner Costs			
Pre-Retirement Activities		$100,822	
Retirement Activities		$658,400	
Post-Retirement Activities		$26,564	
Owner Direct Total			$785,786
Owner Internal Costs	5.00%		$39,289
Owner Contingency:	25.00%		$206,269

Iatan 2 Retirement Opinion of Probable Cost: $1,031,343.60

Iatan 2 Retirement

ID	Task Name	Cost
1	**Iatan 2 Retirement**	**$785,786.45**
2	**Pre-Engineering**	**$100,821.60**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	$0.00
4	**KCL&L Overhead Costs**	**$114,006.40**
5	KCP&L Retirement Manager	$114,006.40
6	**Equipment Rentals**	**$38,625.28**
7	Vacuum truck	$38,625.28
8	**Retirement**	**$505,769.17**
9	**Electrical**	**$18,911.68**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,679.84**
11	De-energize all buses at the source.	$446.64
12	Open all circuit breakers.	$446.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$446.64
14	Verify that the closing/tripping springs are discharged.	$446.64
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	$893.28
16	**Motor Control Centers**	**$1,786.56**
17	De-energize all buses at the source.	$446.64
18	Open all circuit breakers and disconnect switches.	$446.64
19	Remove all fuses in control circuits.	$893.28
20	**Low-voltage Switchboards and Panelboards**	**$893.28**
21	De-energize all buses at the source.	$446.64
22	Open all circuit breakers and disconnect switches.	$446.64
23	**Oil-Filled Power Transformers**	**$5,549.44**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
26	Drain and dispose of oil.	$2,642.88
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,120.00
28	**Dry-type Power Transformers**	**$1,786.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$893.28
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	$893.28
31	**Motors**	**$6,216.00**
32	De-energize all primary power at the source.	$1,786.56

Iatan 2 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,786.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,642.88
35	**Coal Handling**	**$27,475.44**
36	Empty all transfer hoppers.	$1,704.56
37	Burn out coal silos.	$1,685.44
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,685.44
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$22,400.00
40	**Fuel Oil and Igniter System**	**$2,528.16**
41	Drain fuel oil system	$2,528.16
42	**Boiler Chemical Feed**	**$1,685.44**
43	Drain all chemical feed tanks.	$1,685.44
44	**Boiler**	**$27,484.77**
45	Open boiler doors.	$880.96
46	Gas side - perform cleaning of the boiler and bottom ash system.	$22,400.00
47	Drain boiler, drum, downcomers and headers.	$842.72
48	Open drum doors.	$880.96
49	Drain and clean the submerged flight conveyor system.	$2,480.13
50	**Stack and Ductwork**	**$326,961.04**
51	Open ductwork doors.	$880.96
52	Perform extensive cleaning of the ductwork.	$11,200.00
53	Place cap over stack opening to keep moisture out.	$314,880.08
54	**Condensate and Feedwater Piping**	**$1,685.44**
55	Drain water from the system.	$842.72
56	Leave open vents and drains.	$842.72
57	**Feedwater heaters**	**$2,528.16**
58	Drain feedwater heaters	$842.72
59	Leave open vents and drains.	$1,685.44
60	**Deaerator and Deaerator Storage Tank**	**$1,685.44**
61	Drain Deaerator and Storage	$842.72
62	Leave open vents and drains.	$842.72
63	**Baghouse**	**$17,351.92**
64	Multiple cleaning cycles for filter bags.	$2,528.16
65	Open all vent and drain lines on bag cleaning air and control air lines. Leave in open position or remove vent valves.	$842.72
66	Remove all filter bags and cages.	$880.96
67	Clear hoppers of all ash	$2,805.44
68	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$880.96
69	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,421.84
70	Install bird screens across hopper ash outlet and ash line flanges.	$880.96

Iatan 2 Retirement

ID	Task Name	Cost
71	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$880.96
72	If walk-in plenum, padlock or tack weld all outlet plenum doors and compartment ventilation dampers shut.	$880.96
73	If top-door plenum, close and secure top doors and remove/disable door lift hoist.	$1,723.68
74	If top-door plenum, establish natural ventilation or maintain HVAC fan tc provide minimum air changes per hour in penthouse enclosure.	$945.44
75	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,679.84
76	**Wet FGD system**	**$23,908.00**
77	Multiple mist eliminator wash cycles. Remove ME's from absorber.	$2,145.04
78	Drain and flush all slurry and reclaim water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	$1,723.68
79	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	$4,624.08
80	Leave all tank drain valves open or remove. Install bird screens across openings.	$1,761.92
81	Drain all makeup and mist eliminator water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	$2,604.64
82	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	$1,761.92
83	Remove solids from all inlet and outlet ductwork as necessary	$2,240.00
84	Open all vent station air and control air lines. Leave in open position or remove vent valves	$1,723.68
85	Padlock or tack weld all access doors to modules and ductwork shut.	$1,762.24
86	Remove access doors to open-top tanks.	$880.96
87	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,679.84
88	**FGD Reagent Preparation-Limestone wet Scrubber**	**$10,262.88**
89	Remove limestone from day bins.	$1,402.72
90	Removed cartridges/bags from bin vent filters	$1,402.72
91	Padlock or tack weld all bin access doors shut. (note: if doors are indoors, they could be removed and the opening covered with bird screens.)	$881.12
92	Remove bin discharge isolation valve and install bird screen.	$440.48
93	Thoroughly wash and drain mills	$1,402.72
94	Remove balls from any ball mills	$1,120.00
95	Padlock or tack weld mill access doors closed.	$881.12
96	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$945.44

Iatan 2 Retirement

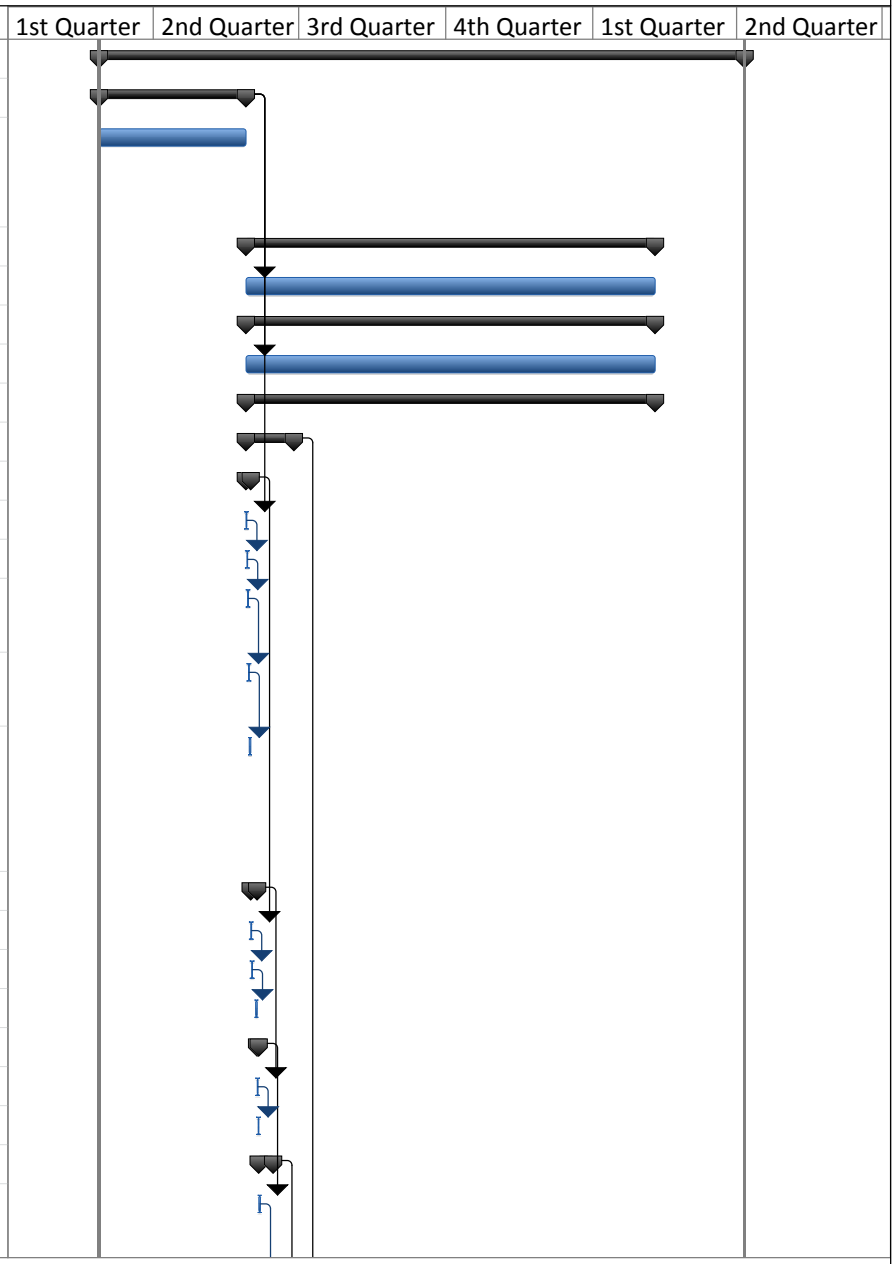
ID	Task Name	Cost
97	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,786.56
98	**FGD Byproduct Dewatering - Hydrocyclones and Vacuum Filters**	**$7,287.12**
99	Wash vacuum filter belt and remove all accumulated solids	$2,240.00
100	Wash out vacuum receiver, remove pressure relief valve and access door. Install bird screens.	$1,421.84
101	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$945.44
102	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,679.84
103	**SCR**	**$10,054.00**
104	Vacuum fly ash from catalyst.	$2,240.00
105	Remove catalyst of salvage or disposal.	$2,881.92
106	Padlock or tack weld access doors shut.	$880.96
107	Remove ammonia from storage tank for resale.	$701.36
108	Wash out and drain storage tank and supply piping.	$701.36
109	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$861.84
110	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,786.56
111	**Turbine(s) and Condenser**	**$5,266.64**
112	Drain hotwell and leave doors open.	$861.84
113	Open main turbine doors.	$880.96
114	Open bfp turbine doors.	$880.96
115	Remove lube oil.	$2,642.88
116	**Generator**	**$6,095.76**
117	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$446.64
118	Verify that generator field breaker or contactor (if applicable) is open.	$446.64
119	De-energize power supplies to generator excitation system at the source.	$446.64
120	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	$446.64
121	Drain generator and exciter cooling water systems (if applicable).	$861.84
122	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,685.44
123	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,761.92
124	**Circulation Water and Turbine Cooling Water System**	**$3,409.12**
125	Drain.	$1,685.44
126	Open water box doors.	$880.96
127	Drain any circulating water chemical feed tanks.	$842.72

Iatan 2 Retirement

ID	Task Name	Cost
128	**Compressed Air System**	**$2,721.28**
129	Open vents and drains.	$842.72
130	Remove desiccant from desiccant dryers.	$1,878.56
131	**Auxiliary Steam System**	**$1,685.44**
132	Drain water from system.	$842.72
133	Remove aux boiler chemicals.	$842.72
134	**Auxiliary Cooling Water System**	**$842.72**
135	Drain water from system.	$842.72
136	**Condenser Air Extraction and Waterbox Priming System**	**$842.72**
137	Drain water from system.	$842.72
138	**Building Heating System**	**$842.72**
139	Drain water from system.	$842.72
140	**Battery System**	**$4,253.28**
141	De-energize all battery chargers from the source.	$446.64
142	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$446.64
143	Remove and dispose of battery electrolyte.	$1,680.00
144	Remove and dispose of battery cells.	$1,120.00
145	Clean up and dispose of electrolyte on surface areas around batteries.	$560.00
146	**Post Retirement Activities**	**$26,564.00**
147	Post Retirement Activities	$26,564.00

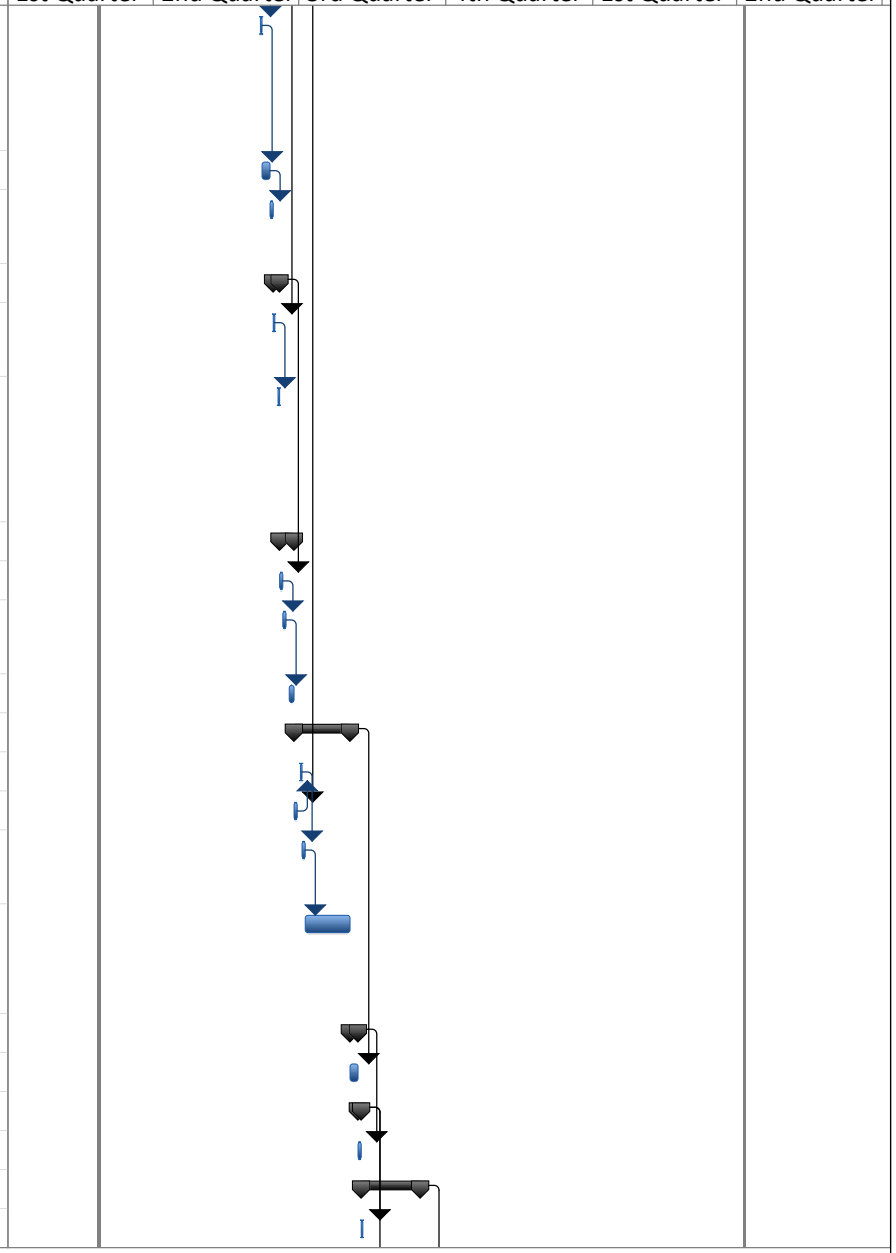
Iatan 2 Retirement

ID	Task Name	Duration
1	**Iatan 2 Retirement**	**290 days**
2	**Pre-Engineering**	**66 days**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	66 days
4	**KCL&L Overhead Costs**	**184 days**
5	KCP&L Retirement Manager	184 days
6	**Equipment Rentals**	**184 days**
7	Vacuum truck	184 days
8	**Retirement**	**184 days**
9	**Electrical**	**22 days**
10	**Medium and Low Voltage Draw out Switchgear**	**3 days**
11	De-energize all buses at the source.	0.5 days
12	Open all circuit breakers.	0.5 days
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	0.5 days
14	Verify that the closing/tripping springs are discharged.	0.5 days
15	De-energize control power and auxiliary power circuits of each circuit breaker at the source and by opening control power circuit breakers or removing fuses in each breaker cubicle.	1 day
16	**Motor Control Centers**	**2 days**
17	De-energize all buses at the source.	0.5 days
18	Open all circuit breakers and disconnect switches.	0.5 days
19	Remove all fuses in control circuits.	1 day
20	**Low-voltage Switchboards and Panelboards**	**1 day**
21	De-energize all buses at the source.	0.5 days
22	Open all circuit breakers and disconnect switches.	0.5 days
23	**Oil-Filled Power Transformers**	**7 days**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day



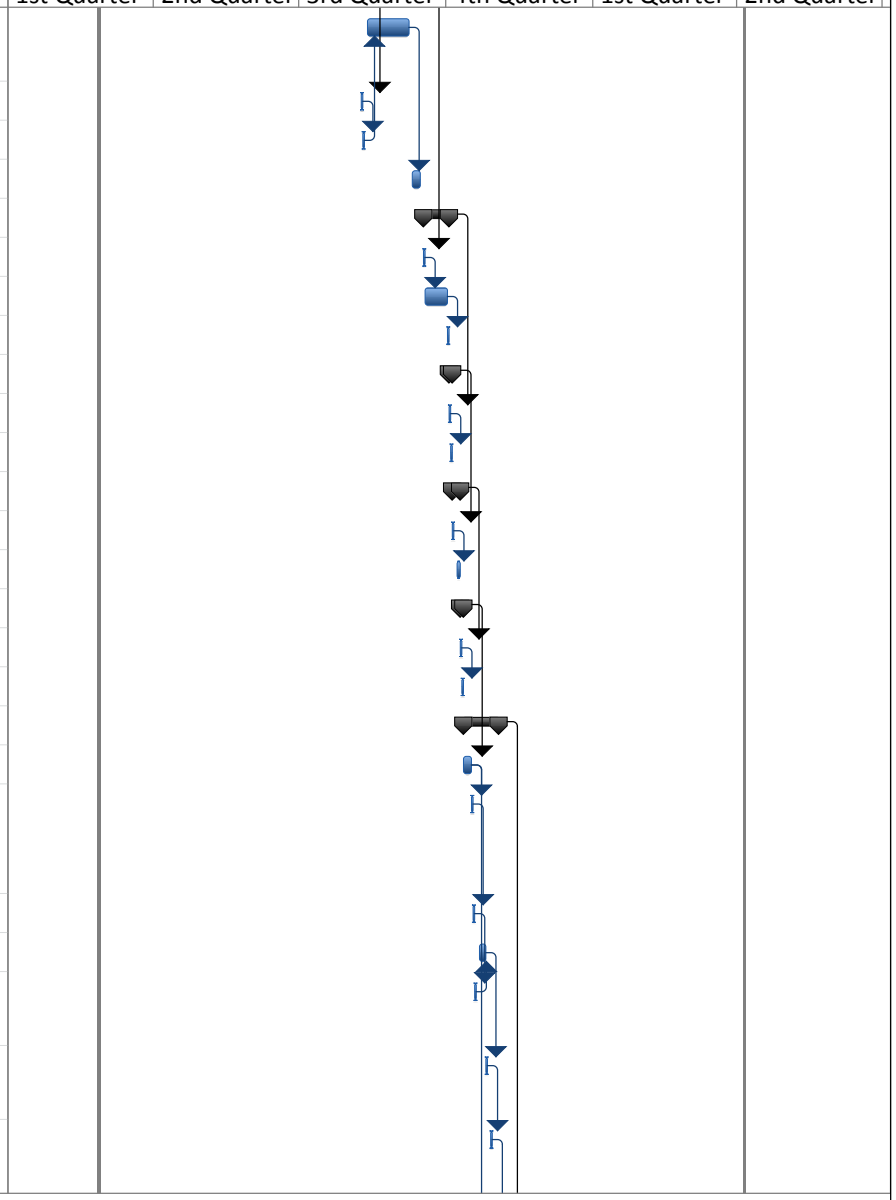
Iatan 2 Retirement

ID	Task Name	Duration
25	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
26	Drain and dispose of oil.	3 days
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	2 days
28	**Dry-type Power Transformers**	**2 days**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
30	De-energize all low-voltage AC or DC power sources for space heaters, cooling equipment, controls, etc. at the source and open circuit breakers or remove fuses at transformer end.	1 day
31	**Motors**	**7 days**
32	De-energize all primary power at the source.	2 days
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Coal Handling**	**25 days**
36	Empty all transfer hoppers.	1 day
37	Burn out coal silos.	2 days
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	2 days
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	20 days
40	**Fuel Oil and Igniter System**	**3 days**
41	Drain fuel oil system	3 days
42	**Boiler Chemical Feed**	**2 days**
43	Drain all chemical feed tanks.	2 days
44	**Boiler**	**27 days**
45	Open boiler doors.	1 day

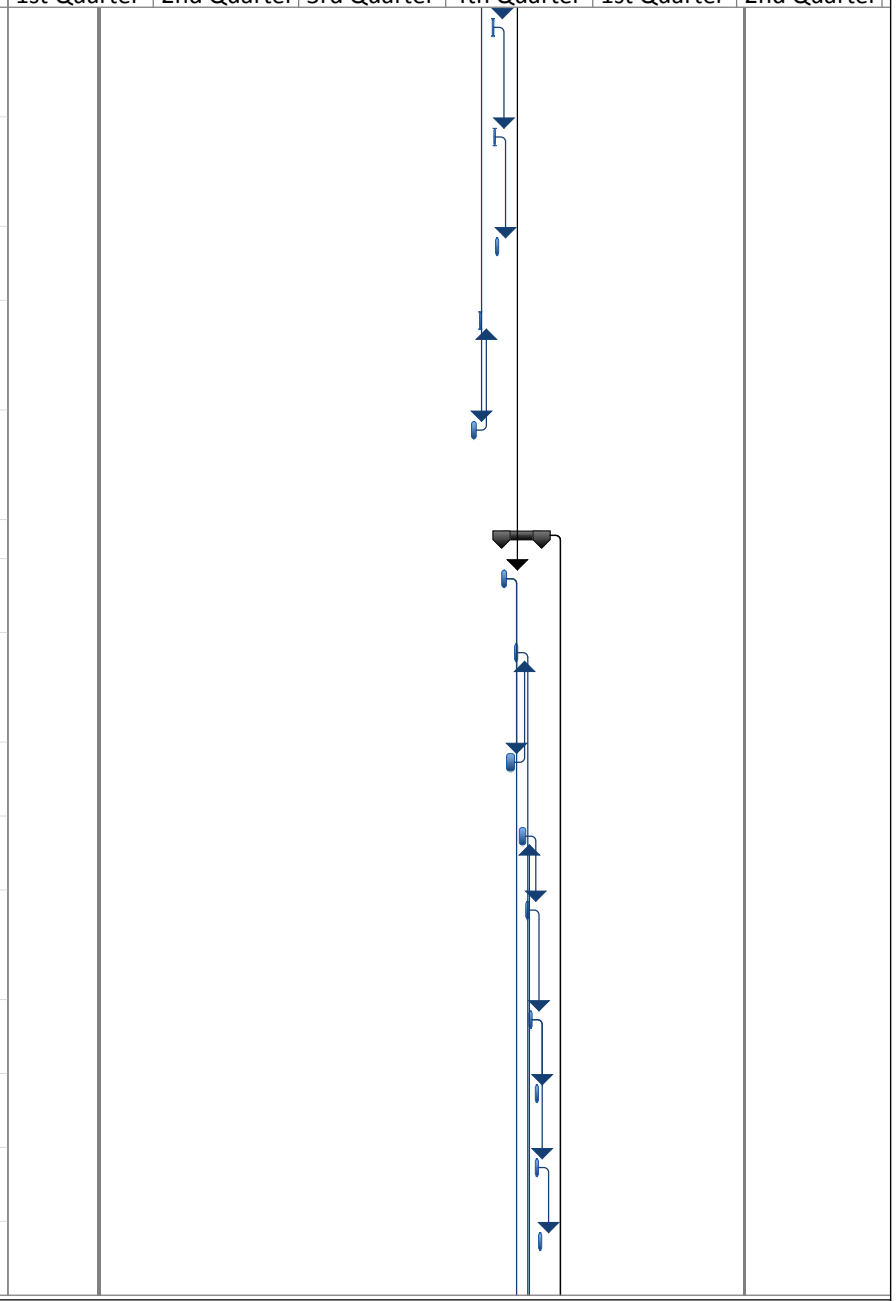


Iatan 2 Retirement

ID	Task Name	Duration
46	Gas side - perform cleaning of the boiler and bottom ash system.	20 days
47	Drain boiler, drum, downcomers and headers.	1 day
48	Open drum doors.	1 day
49	Drain and clean the submerged flight conveyor system.	5 days
50	**Stack and Ductwork**	**12 days**
51	Open ductwork doors.	1 day
52	Perform extensive cleaning of the ductwork.	10 days
53	Place cap over stack opening to keep moisture out.	1 day
54	**Condensate and Feedwater Piping**	**2 days**
55	Drain water from the system.	1 day
56	Leave open vents and drains.	1 day
57	**Feedwater heaters**	**3 days**
58	Drain feedwater heaters	1 day
59	Leave open vents and drains.	2 days
60	**Deaerator and Deaerator Storage Tank**	**2 days**
61	Drain Deaerator and Storage	1 day
62	Leave open vents and drains.	1 day
63	**Baghouse**	**16 days**
64	Multiple cleaning cycles for filter bags.	3 days
65	Open all vent and drain lines on bag cleaning air and control air lines. Leave in open position or remove vent valves.	1 day
66	Remove all filter bags and cages.	1 day
67	Clear hoppers of all ash	4 days
68	Mechanically secure all compartment dampers and hopper outlet valves in open position.	1 day
69	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	1 day
70	Install bird screens across hopper ash outlet and ash line flanges.	1 day

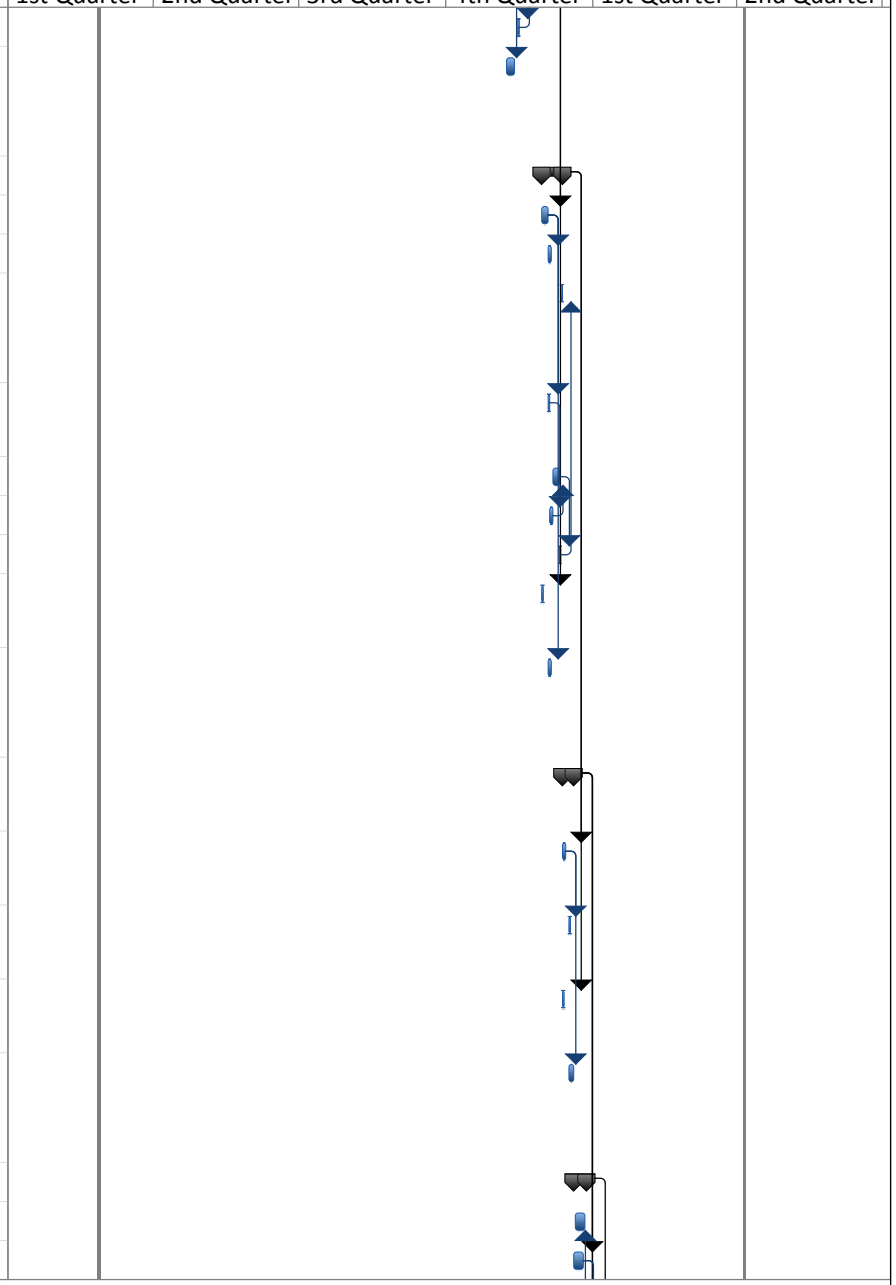


ID	Task Name	Duration
71	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	1 day
72	If walk-in plenum, padlock or tack weld all outlet plenum doors and compartment ventilation dampers shut.	1 day
73	If top-door plenum, close and secure top doors and remove/disable door lift hoist.	2 days
74	If top-door plenum, establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in penthouse enclosure.	1 day
75	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
76	**Wet FGD system**	**19 days**
77	Multiple mist eliminator wash cycles. Remove ME's from absorber.	3 days
78	Drain and flush all slurry and reclaim water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	2 days
79	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	3 days
80	Leave all tank drain valves open or remove. Install bird screens across openings.	2 days
81	Drain all makeup and mist eliminator water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	2 days
82	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	2 days
83	Remove solids from all inlet and outlet ductwork as necessary	2 days
84	Open all vent station air and control air lines. Leave in open position or remove vent valves	2 days
85	Padlock or tack weld all access doors to modules and ductwork shut.	2 days

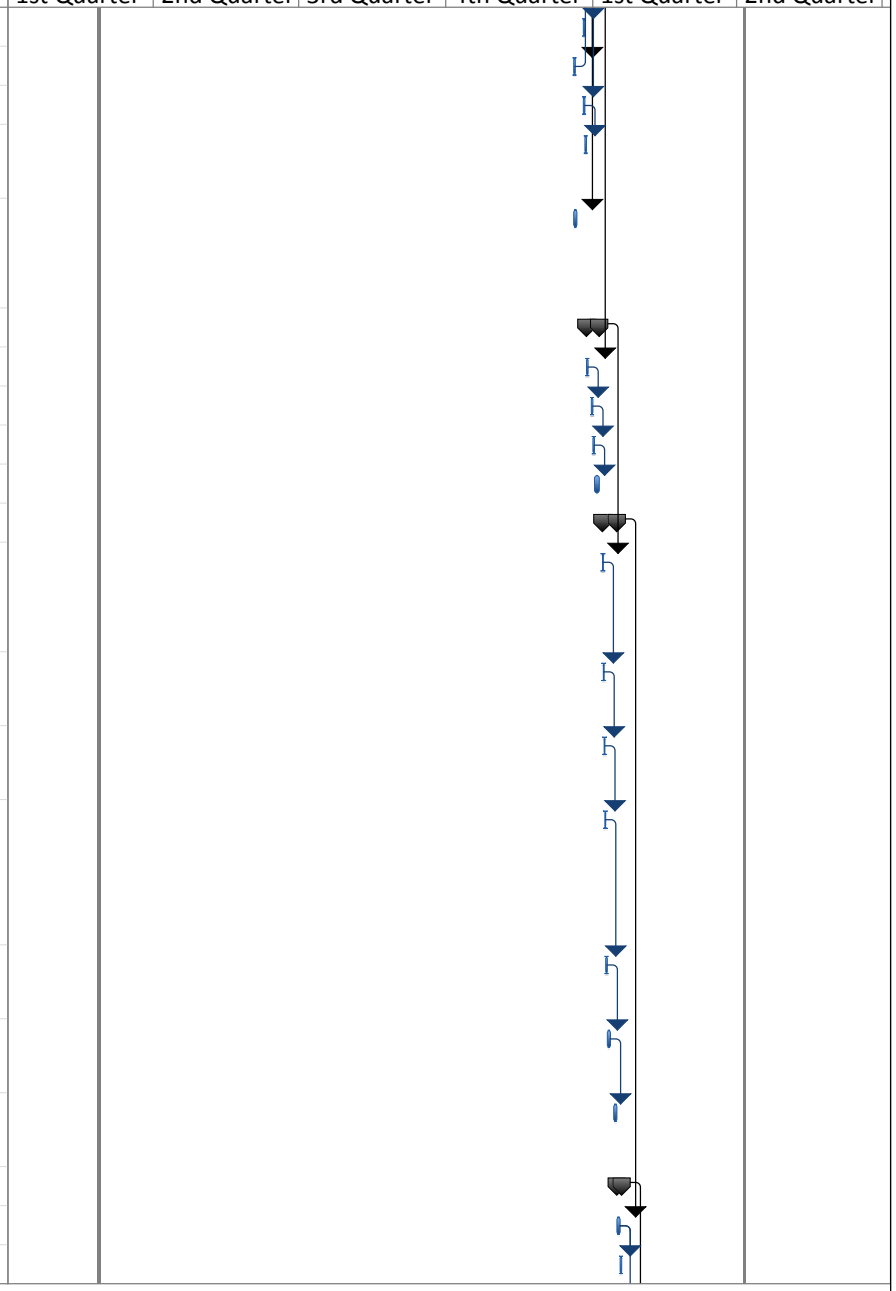


Iatan 2 Retirement

ID	Task Name	Duration
86	Remove access doors to open-top tanks.	1 day
87	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
88	**FGD Reagent Preparation-Limestone wet Scrubber**	**9 days**
89	Remove limestone from day bins.	2 days
90	Removed cartridges/bags from bin vent filters	2 days
91	Padlock or tack weld all bin access doors shut. (note: if doors are indoors, they could be removed and the opening covered with bird screens.)	1 day
92	Remove bin discharge isolation valve and install bird screen.	1 day
93	Thoroughly wash and drain mills	2 days
94	Remove balls from any ball mills	2 days
95	Padlock or tack weld mill access doors closed.	1 day
96	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	1 day
97	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
98	**FGD Byproduct Dewatering - Hydrocyclones and Vacuum Filters**	**5 days**
99	Wash vacuum filter belt and remove all accumulated solids	2 days
100	Wash out vacuum receiver, remove pressure relief valve and access door. Install bird screens.	1 day
101	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	1 day
102	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
103	**SCR**	**6 days**
104	Vacuum fly ash from catalyst.	4 days
105	Remove catalyst of salvage or disposal.	4 days

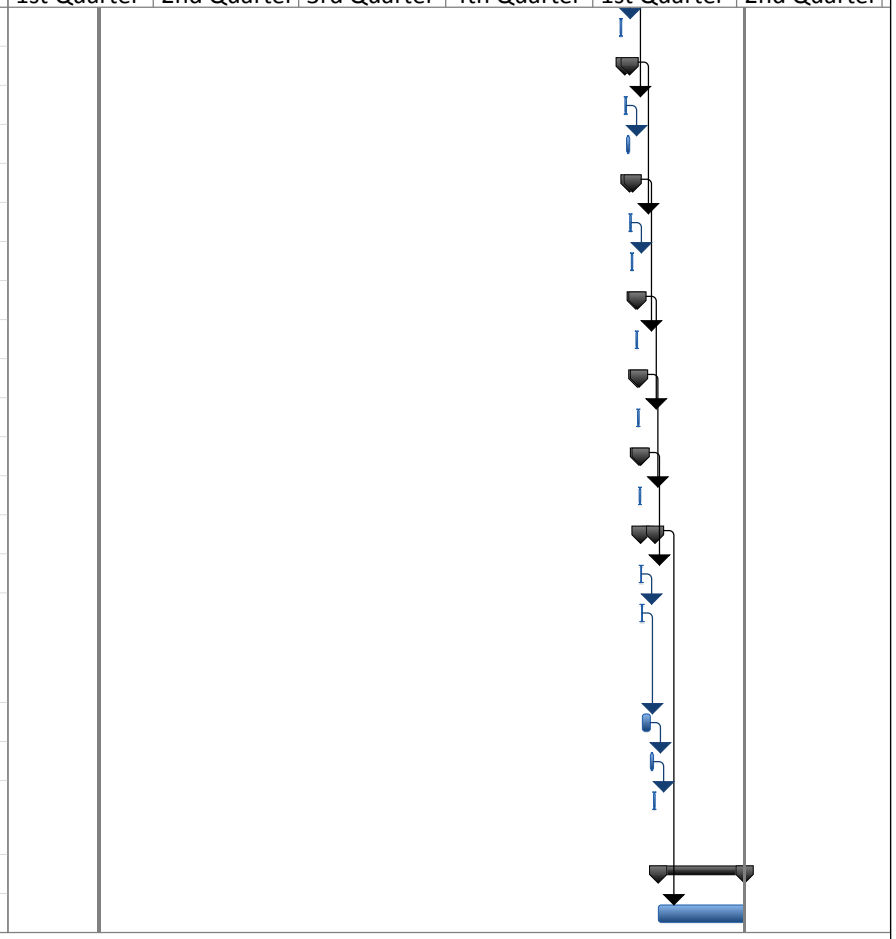


ID	Task Name	Duration
106	Padlock or tack weld access doors shut.	1 day
107	Remove ammonia from storage tank for resale.	1 day
108	Wash out and drain storage tank and supply piping.	1 day
109	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	1 day
110	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
111	**Turbine(s) and Condenser**	**6 days**
112	Drain hotwell and leave doors open.	1 day
113	Open main turbine doors.	1 day
114	Open bfp turbine doors.	1 day
115	Remove lube oil.	3 days
116	**Generator**	**7 days**
117	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	0.5 days
118	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
119	De-energize power supplies to generator excitation system at the source.	0.5 days
120	De-energize AC and DC power supplies to generator and exciter space heaters, cooling equipment, controls, lighting, etc. at the source and open circuit breakers or remove fuses at the generator and exciter.	0.5 days
121	Drain generator and exciter cooling water systems (if applicable).	1 day
122	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
123	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
124	**Circulation Water and Turbine Cooling Water System**	**3 days**
125	Drain.	2 days
126	Open water box doors.	1 day



Iatan 2 Retirement

ID	Task Name	Duration
127	Drain any circulating water chemical feed tanks.	1 day
128	**Compressed Air System**	**3 days**
129	Open vents and drains.	1 day
130	Remove desiccant from desiccant dryers.	2 days
131	**Auxiliary Steam System**	**2 days**
132	Drain water from system.	1 day
133	Remove aux boiler chemicals.	1 day
134	**Auxiliary Cooling Water System**	**1 day**
135	Drain water from system.	1 day
136	**Condenser Air Extraction and Waterbox Priming System**	**1 day**
137	Drain water from system.	1 day
138	**Building Heating System**	**1 day**
139	Drain water from system.	1 day
140	**Battery System**	**7 days**
141	De-energize all battery chargers from the source.	0.5 days
142	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
143	Remove and dispose of battery electrolyte.	3 days
144	Remove and dispose of battery cells.	2 days
145	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
146	**Post Retirement Activities**	**40 days**
147	Post Retirement Activities	40 days



Iatan 2 Dismantlement

Owner Additional Costs				
Pre-Dismantlement Activities			$1,020,485	
Overhead During Dismantlement			$1,916,492	
Post-Dismantlement Activities			$70,596	
Owner Costs Total*				$3,007,573
Demolition General Contractor (DGC) Costs				
Additional Site Management			$1,434,705	
Equipment Rental			$2,483,702	
Consummables			$2,711,297	
Scrap Crew(s)			$2,457,174	
Dismantlement*			$5,879,227	
Contractor Direct Cost*		$14,966,105		
Contractor Allowances				
DGC Insurance	2.00%		$299,322	
Contingency/Profit	15.00%		$2,289,814	
Performance Bond	2.00%		$351,104.82	
Contractor Costs Total:				$17,906,346
Total:				$20,913,919
Owner Internal Costs:	5.00%			$1,045,696
Owner Contingency:	25.00%			$5,489,904
Iatan Unit 2 Dismantlement Opinion of Probable Cost:				$27,449,519

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $17,973,678

COMMON

Iatan Common Retirement

Owner Costs			
Pre-Retirement Activities		$52,449	
Retirement Activities		$365,473	
Post-Retirement Activities		$32,080	
Owner Direct Total			$450,002
Owner Internal Costs	5.00%		$22,500
Owner Contingency:	25.00%		$118,125
Iatan Common Retirement Opinion of Probable Cost:			$590,627.36

Activities Required by Permit or Regulation

Iatan Fuel Oil Tank Removal	$239,995	
Iatan Ash Landfill Closure, Phase 1	$1,470,192	
Iatan Ash Landfill Closure, Phase 2	$2,308,430	
Iatan Ash Landfill Post Closure, Phase 1 & 2	$2,024,220	
Activities Required by Permit or Regulation:		$6,042,837

Iatan Common Retirement

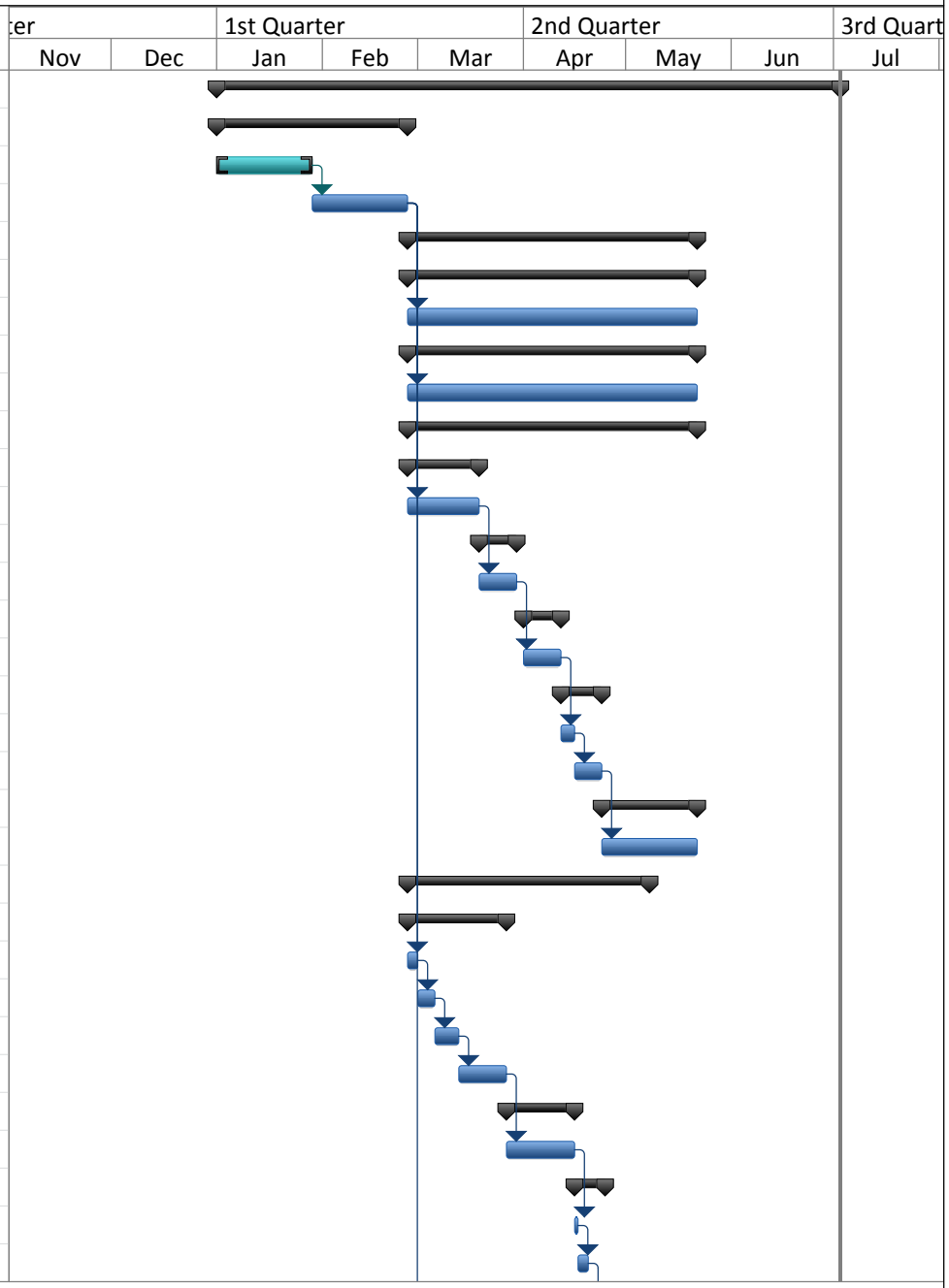
ID	Task Name	Cost
1	**Iatan Common Retirement**	**$450,003.76**
2	**Pre-Retirement Activities**	**$52,448.80**
3	Permitting Review	$26,224.40
4	Develop Detailed Retirement Plan	$26,224.40
5	**Overheads**	**$102,172.56**
6	**Common Retirement Overheads**	**$89,367.44**
7	Added Overhead Staff for Common Retirement	$89,367.44
8	**Common Retirment Equipment Rental**	**$12,805.12**
9	Common Removal Equipment Rental	$12,805.12
10	**Retirement Activities**	**$263,301.60**
11	**Administration Building**	**$17,175.60**
12	Secure Administration Building	$17,175.60
13	**Fuel Yard Office Building**	**$10,305.36**
14	Secure Fuel Yard Office Building	$10,305.36
15	**Training Building**	**$10,305.36**
16	Secure Training Building	$10,305.36
17	**Warehouse(s)**	**$10,607.20**
18	Secure Unit 1 Warehouse	$3,736.96
19	Secure Unit 2 Warehouse	$6,870.24
20	**Maintenance Shop**	**$25,951.20**
21	Secure Maintenance Shop	$25,951.20
22	**Fuel Yard**	**$131,234.64**
23	**Transfer Towers**	**$80,527.44**
24	Clean Transfer Tower 1	$3,784.08
25	Clean Transfer Tower 2	$3,784.08
26	Clean and Secure Crusher Building	$6,306.80
27	Clean Stockout Conveyor Reclaim Pit	$12,613.60
28	**Conveyors**	**$17,659.04**
29	Clean Conveyor 2A, 4, 5B 6A, 6B, 7A and 7B	$17,659.04
30	**Car Dumper**	**$8,829.52**
31	Empty Car Dumper Hoppers	$1,261.36
32	Clean Car Dumper	$3,784.08
33	Secure Dumper Building	$3,784.08
34	**Remove Stacker/Reclaimer**	**$19,173.20**
35	Clean and Secure Stacker/Reclaimer	$6,306.80
36	**Unit 1 Reclaim**	**$5,045.44**
37	Clean Unit 1 Reclaim	$2,522.72
38	Secure Unit 1 Reclaim Building	$2,522.72
39	**Sewage Treatment**	**$4,202.72**
40	Clean Sewage Treatment and Transfer Points	$4,202.72
41	**Fuel Oil Storage and Unloading**	**$842.72**
42	Remove Fuel Oil from Fuel Oil Storage and Vent	$842.72
43	**Yard Fire Water Systems**	**$842.72**
44	Drain Yard Fire Water System	$842.72

Iatan Common Retirement

ID	Task Name	Cost
45	**Reagent Prep and Gypsum Handling**	**$29,365.20**
46	Clean and Secure Limestone Unloading Facility	$3,784.08
47	Clean and Secure Limestone Storage Facility	$3,784.08
48	Clean Limestone Conveyor	$3,859.92
49	Clean and Secure Limestone Prep Building	$6,433.20
50	Clean Gypsum Stackout Conveyor	$2,573.28
51	Clean and Secure PCM-1	$2,573.28
52	Clean and Secure PCM-2	$2,573.28
53	Clean and Secure the Vacuum Pump and Air Compressor Building	$3,784.08
54	**Water Pretreatment and ZLD**	**$22,468.88**
55	Drain and Clean Clarifiers	$3,784.08
56	Drain and Clean ZLD System	$7,568.16
57	Clean and Secure ZLD Building	$8,593.92
58	Drain and Vent Storage Tanks	$2,522.72
59	**Post Retirement Closure Activities**	**$32,080.80**
60	Post Retirement Closure Activities	$32,080.80

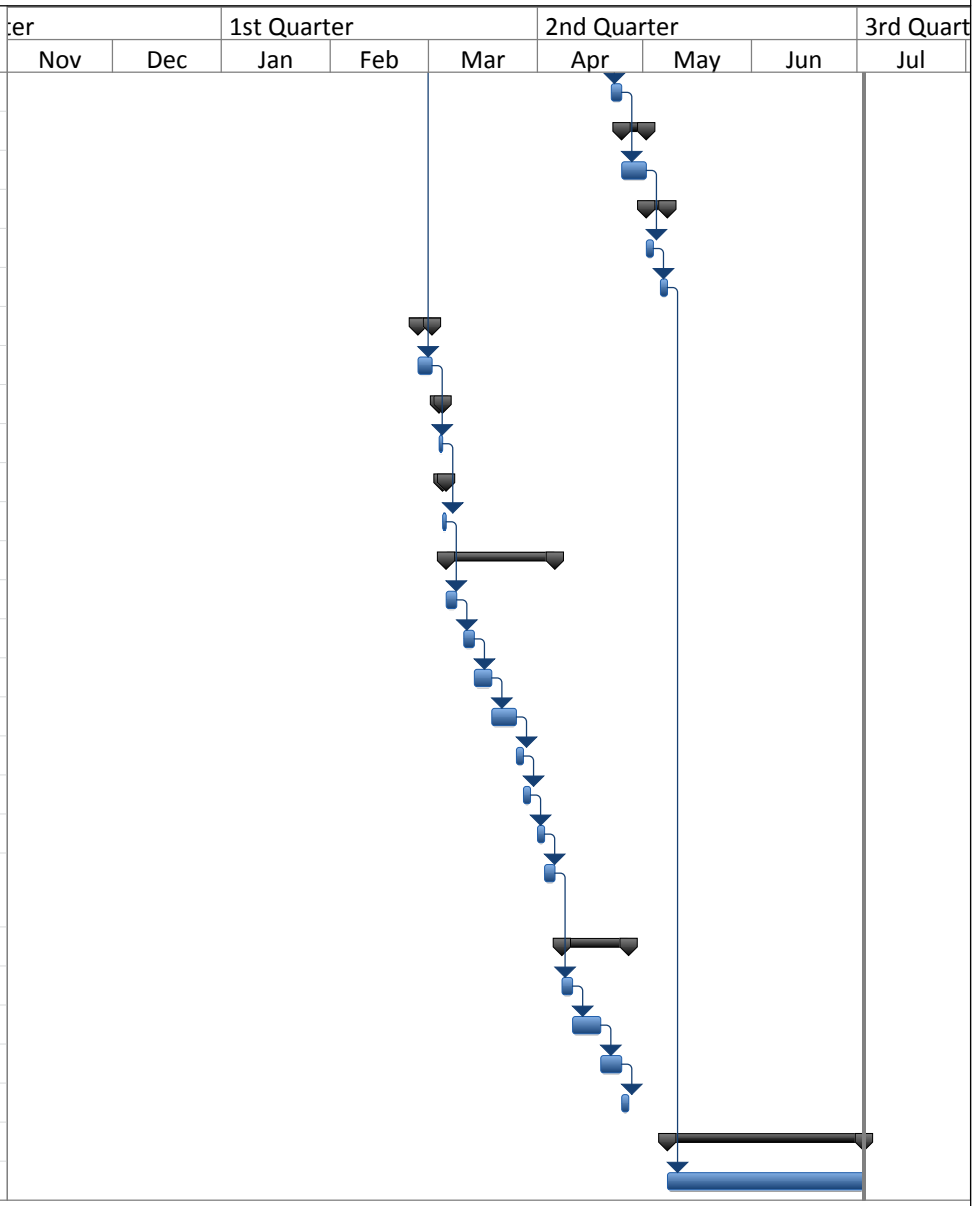
Iatan Common Retirement

ID	Task Name	Duration
1	**Iatan Common Retirement**	**131 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Overheads**	**61 days**
6	**Common Retirement Overheads**	**61 days**
7	Added Overhead Staff for Common Retirement	61 days
8	**Common Retirment Equipment Rental**	**61 days**
9	Common Removal Equipment Rental	61 days
10	**Retirement Activities**	**61 days**
11	**Administration Building**	**15 days**
12	Secure Administration Building	15 days
13	**Fuel Yard Office Building**	**9 days**
14	Secure Fuel Yard Office Building	9 days
15	**Training Building**	**9 days**
16	Secure Training Building	9 days
17	**Warehouse(s)**	**8 days**
18	Secure Unit 1 Warehouse	2 days
19	Secure Unit 2 Warehouse	6 days
20	**Maintenance Shop**	**20 days**
21	Secure Maintenance Shop	20 days
22	**Fuel Yard**	**51 days**
23	**Transfer Towers**	**21 days**
24	Clean Transfer Tower 1	3 days
25	Clean Transfer Tower 2	3 days
26	Clean and Secure Crusher Building	5 days
27	Clean Stockout Conveyor Reclaim Pit	10 days
28	**Conveyors**	**14 days**
29	Clean Conveyor 2A, 4, 5B 6A, 6B, 7A and 7B	14 days
30	**Car Dumper**	**7 days**
31	Empty Car Dumper Hoppers	1 day
32	Clean Car Dumper	3 days



Iatan Common Retirement

ID	Task Name	Duration
33	Secure Dumper Building	3 days
34	**Remove Stacker/Reclaimer**	**5 days**
35	Clean and Secure Stacker/Reclaimer	5 days
36	**Unit 1 Reclaim**	**4 days**
37	Clean Unit 1 Reclaim	2 days
38	Secure Unit 1 Reclaim Building	2 days
39	**Sewage Treatment**	**4 days**
40	Clean Sewage Treatment and Transfer Points	4 days
41	**Fuel Oil Storage and Unloading**	**1 day**
42	Remove Fuel Oil from Fuel Oil Storage and Vent	1 day
43	**Yard Fire Water Systems**	**1 day**
44	Drain Yard Fire Water System	1 day
45	**Reagent Prep and Gypsum Handling**	**23 days**
46	Clean and Secure Limestone Unloading Facility	3 days
47	Clean and Secure Limestone Storage Facility	3 days
48	Clean Limestone Conveyor	3 days
49	Clean and Secure Limestone Prep Building	5 days
50	Clean Gypsum Stackout Conveyor	2 days
51	Clean and Secure PCM-1	2 days
52	Clean and Secure PCM-2	2 days
53	Clean and Secure the Vacuum Pump and Air Compressor Building	3 days
54	**Water Pretreatment and ZLD**	**15 days**
55	Drain and Clean Clarifiers	3 days
56	Drain and Clean ZLD System	6 days
57	Clean and Secure ZLD Building	4 days
58	Drain and Vent Storage Tanks	2 days
59	**Post Retirement Closure Activities**	**40 days**
60	Post Retirement Closure Activities	40 days



Iatan Common Dismantlement

Owner Additional Costs				
Pre-Dismantlement Activities			$0	
Overhead During Dismantlement			$0	
Post-Dismantlement Activities				
Owner Costs Total*				$0
Demolition General Contractor (DGC) Costs				
Additional Site Management			$86,011	
Equipment Rental			$419,326	
Consummables			$628,251	
Scrap Crew(s)			$623,393	
Dismantlement			$14,083,108	
Contractor Direct Cost*		$15,840,089		
Contractor Allowances				
DGC Insurance	2.00%		$316,802	
Contingency/Profit	15.00%		$2,423,534	
Performance Bond	2.00%		$371,608.49	
Contractor Costs Total:				$18,952,033
Total:				$18,952,033
Owner Internal Costs:	5.00%			$947,602
Owner Contingency:	25.00%			$4,974,909
Iatan Common Dismantlement Opinion of Probable Cost:				$24,874,543

*Owner Costs Total + Contractor Direct Costs = Manpower Loaded Schedule Total w/o Contractor Allowances
= $15,840,089

Iatan Common Dismantlement

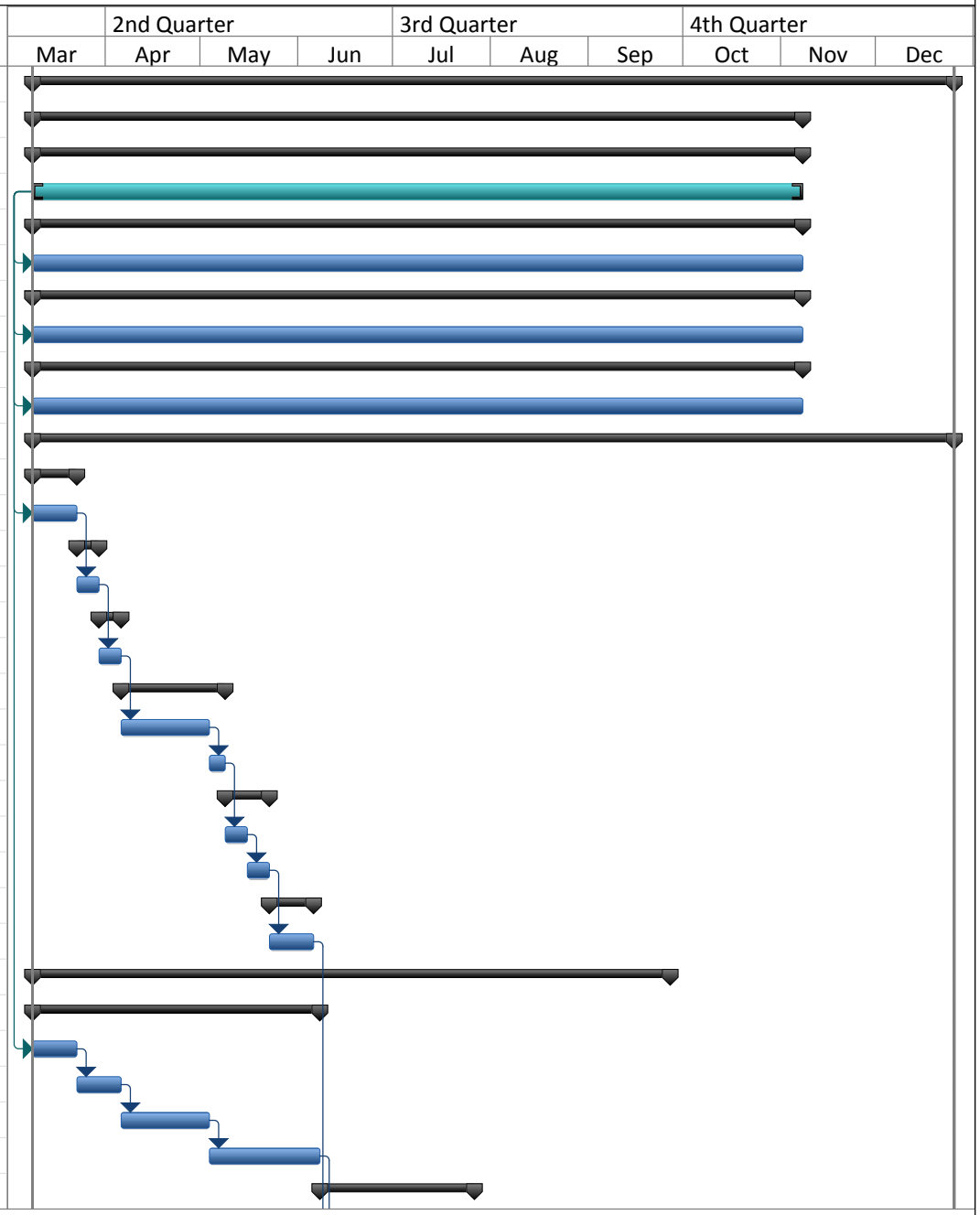
ID	Task Name	Cost
1	**Iatan Common Dismantlement**	**$15,840,077.07**
2	**Overheads**	**$1,756,968.56**
3	**Common Removal Overheads**	**$86,011.67**
4	Added Overhead Staff for Common Removals	$86,011.67
5	**Common Removal Equipment Rental**	**$419,326.08**
6	Common Removal Equipment Rental	$419,326.08
7	**Scrap Crew**	**$623,393.36**
8	Crew(s) to Handle Scrap Material	$623,393.36
9	**Demolition Contractor Consummables**	**$628,237.44**
10	Consummables	$628,237.44
11	**Dismantlement Activities**	**$14,083,108.51**
12	**Administration Building**	**$35,827.20**
13	Remove Administration Building	$35,827.20
14	**Fuel Yard Office Building**	**$17,913.60**
15	Remove Fuel Yard Office Building	$17,913.60
16	**Training Building**	**$17,913.60**
17	Remove Training Building	$17,913.60
18	**Parking Lots and Plant Roads**	**$82,402.56**
19	Plant Roads and Parking Areas	$71,654.40
20	Guard Shack	$10,748.16
21	**Warehouse(s)**	**$35,827.20**
22	Remove Unit 1 Warehouse	$17,913.60
23	Remove Unit 2 Warehouse	$17,913.60
24	**Maintenance Shop**	**$23,215.20**
25	Remove Maintenance Shop	$23,215.20
26	**Fuel Yard**	**$752,371.20**
27	**Remove Transfer Towers**	**$465,753.60**
28	Transfer Tower 1	$35,827.20
29	Transfer Tower 2	$35,827.20
30	Crusher Building	$71,654.40
31	Stockout Conveyor Reclaim Pit	$89,568.00
32	**Remove Conveyors**	**$125,395.20**
33	Conveyor 2A, 4, 5B 6A, 6B, 7A and 7B	$125,395.20
34	**Remove Car Dumper**	**$89,568.00**
35	Remove Underground Equipment	$17,913.60
36	Remove Above Ground Equipment	$35,827.20
37	Remove Building	$17,913.60
38	Backfill Dumper Structure	$17,913.60
39	**Remove Stacker/Reclaimer**	**$7,165.44**
40	Remove Stacker/Reclaimer	$3,582.72
41	**Remove Unit 1 Reclaim**	**$64,488.96**
42	Remove Underground Equipment	$17,913.60
43	Remove Above Ground Equipment	$17,913.60
44	Remove Building	$14,330.88

Iatan Common Dismantlement

ID	Task Name	Cost
45	Backfill Structure	$14,330.88
46	**Sewage Treatment**	**$21,496.32**
47	Remove Sewage Treatment Pumps and Miscellaneous Equipment	$7,165.44
48	Remove Sewage Treatment Concrete Structures	$14,330.88
49	**Yard Fire Water Systems**	**$35,827.20**
50	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	$35,827.20
51	**Water Pretreatment Clarifiers and ZLD**	**$121,812.48**
52	Remove Clarifier Vessels	$10,748.16
53	Remove Pump House	$17,913.60
54	Remove Clarifier Water Storage Tanks	$17,913.60
55	Remove Water Treatment Equipment	$10,748.16
56	Remove Water Treatment Building	$17,913.60
57	Remove ZLD Equipment	$10,748.16
58	Remove ZLD Building	$17,913.60
59	Remove Condensate Storage Tanks	$17,913.60
60	**Stacks**	**$11,027,325.89**
61	Remove Unit 1 Stack to Grade	$4,198,401.00
62	Remove Common Stack to Grade	$6,828,924.89
63	**Reagent Prep and Gypsum Handling**	**$336,775.68**
64	Remove Limestone Unloading Facility	$35,827.20
65	Remove Limestone Storage Facility	$17,913.60
66	Remove Limestone Conveyor	$17,913.60
67	Remove Limestone Prep Building	$143,308.80
68	Remove Gypsum Stackout Conveyor	$17,913.60
69	Remove PCM-1	$7,165.44
70	Remove PCM-2	$7,165.44
71	Remove the Vacuum Pump and Air Compressor Building	$71,654.40
72	Remove Miscellaneous Equipment	$17,913.60
73	**Final Site Grading and Drainage**	**$1,574,400.38**
74	Final Site Grading and Drainage	$1,574,400.38

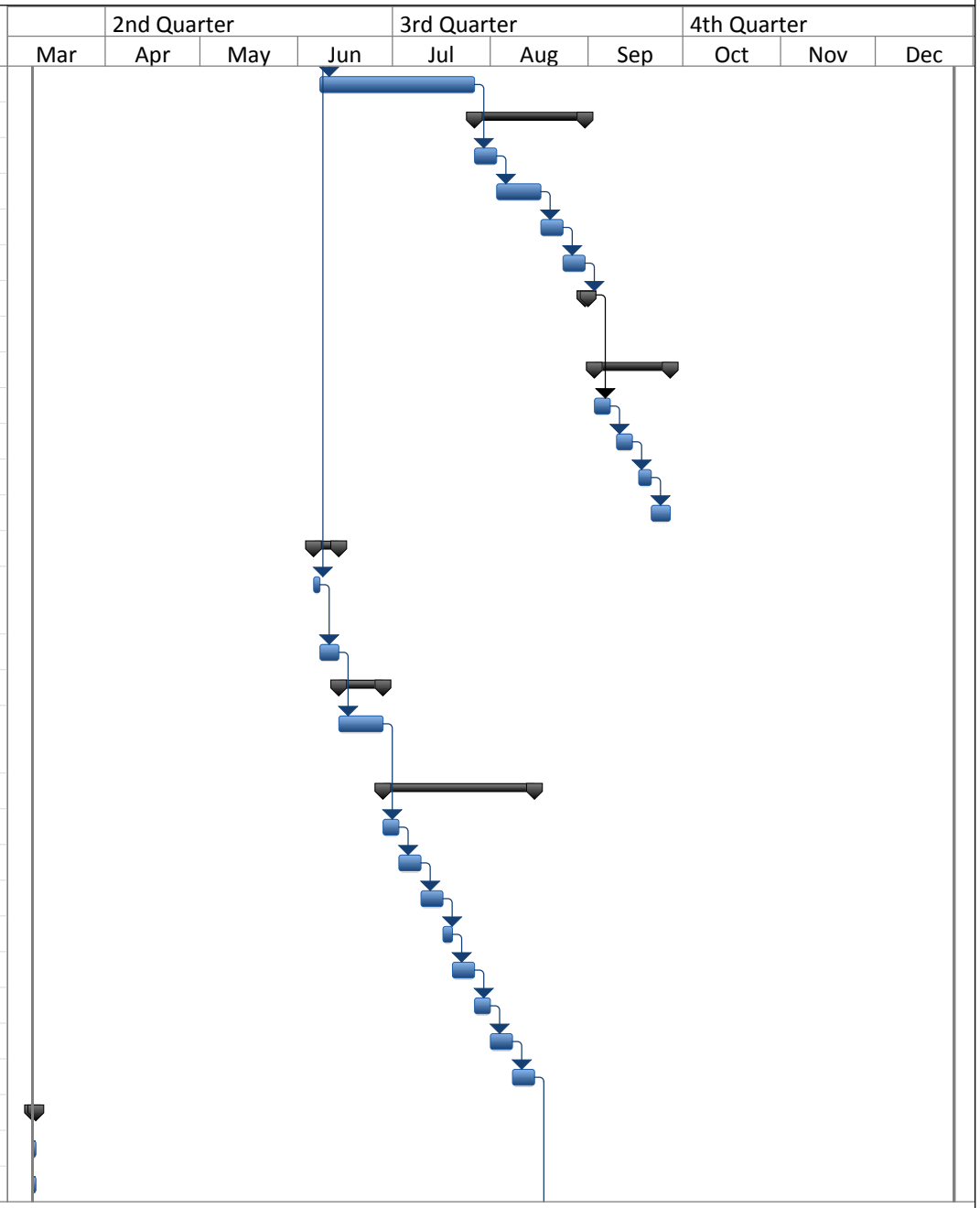
Iatan Common Dismantlement

ID	Task Name	Duration
1	**Iatan Common Dismantlement**	**208 days?**
2	**Overheads**	**174 days**
3	**Common Removal Overheads**	**174 days**
4	Added Overhead Staff for Common Removal	174 days
5	**Common Removal Equipment Rental**	**174 days**
6	Common Removal Equipment Rental	174 days
7	**Scrap Crew**	**174 days**
8	Crew(s) to Handle Scrap Material	174 days
9	**Demolition Contractor Consummables**	**174 days**
10	Consummables	174 days
11	**Dismantlement Activities**	**208 days?**
12	**Administration Building**	**10 days**
13	Remove Administration Building	10 days
14	**Fuel Yard Office Building**	**5 days**
15	Remove Fuel Yard Office Building	5 days
16	**Training Building**	**5 days**
17	Remove Training Building	5 days
18	**Parking Lots and Plant Roads**	**23 days**
19	Plant Roads and Parking Areas	20 days
20	Guard Shack	3 days
21	**Warehouse(s)**	**10 days**
22	Remove Unit 1 Warehouse	5 days
23	Remove Unit 2 Warehouse	5 days
24	**Maintenance Shop**	**10 days**
25	Remove Maintenance Shop	10 days
26	**Fuel Yard**	**144 days?**
27	**Remove Transfer Towers**	**65 days**
28	Transfer Tower 1	10 days
29	Transfer Tower 2	10 days
30	Crusher Building	20 days
31	Stockout Conveyor Reclaim Pit	25 days
32	**Remove Conveyors**	**35 days**



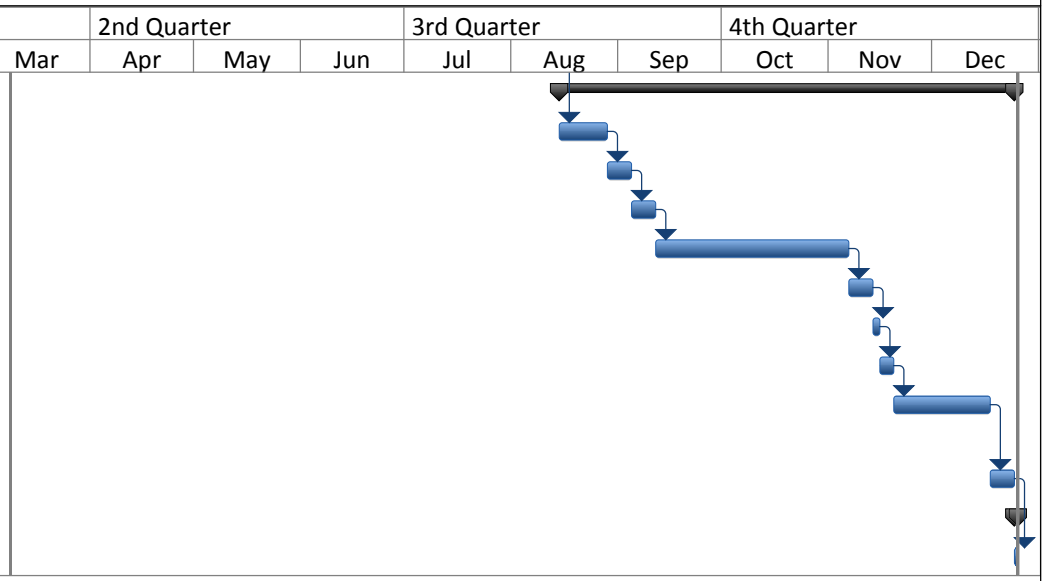
Iatan Common Dismantlement

ID	Task Name	Duration
33	Conveyor 2A, 4, 5B 6A, 6B, 7A and 7B	35 days
34	**Remove Car Dumper**	**25 days**
35	Remove Underground Equipment	5 days
36	Remove Above Ground Equipment	10 days
37	Remove Building	5 days
38	Backfill Dumper Structure	5 days
39	**Remove Stacker/Reclaimer**	**1 day?**
40	Remove Stacker/Reclaimer	
41	**Remove Unit 1 Reclaim**	**18 days**
42	Remove Underground Equipment	5 days
43	Remove Above Ground Equipment	5 days
44	Remove Building	4 days
45	Backfill Structure	4 days
46	**Sewage Treatment**	**6 days**
47	Remove Sewage Treatment Pumps and Miscellaneous Equipment	2 days
48	Remove Sewage Treatment Concrete Structu	4 days
49	**Yard Fire Water Systems**	**10 days**
50	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	10 days
51	**Water Pretreatment Clarifiers and ZLD**	**34 days**
52	Remove Clarifier Vessels	3 days
53	Remove Pump House	5 days
54	Remove Clarifier Water Storage Tanks	5 days
55	Remove Water Treatment Equipment	3 days
56	Remove Water Treatment Building	5 days
57	Remove ZLD Equipment	3 days
58	Remove ZLD Building	5 days
59	Remove Condensate Storage Tanks	5 days
60	**Stacks**	**1 day?**
61	Remove Unit 1 Stack to Grade	1 day?
62	Remove Common Stack to Grade	1 day?



Iatan Common Dismantlement

ID	Task Name	Duration
63	**Reagent Prep and Gypsum Handling**	**94 days**
64	Remove Limestone Unloading Facility	10 days
65	Remove Limestone Storage Facility	5 days
66	Remove Limestone Conveyor	5 days
67	Remove Limestone Prep Building	40 days
68	Remove Gypsum Stackout Conveyor	5 days
69	Remove PCM-1	2 days
70	Remove PCM-2	2 days
71	Remove the Vacuum Pump and Air Compressor Building	20 days
72	Remove Miscellaneous Equipment	5 days
73	**Final Site Grading and Drainage**	**1 day?**
74	Final Site Grading and Drainage	1 day?



APPENDIX B

OPINIONS OF COSTS FOR SCRAP

OPINIONS OF SCRAP VALUES

The opinion of scrap value was based on a scrap value of:

1. Mixed Scrap: $370.00/GT.
2. Insulated Cables: $2.56/lb.
3. Motors: $0.37/lb.

These scrap values were taken from www.scrapmonster.com. This website is an industry-recognized source of scrap information that provides daily scrap pricing for the worldwide scrap market.

Attached in the back of this Appendix is information that was developed from the quantities used to build a 20-MW, coal-fired power plant (CFPP) located in the Midwest. Per the attached spreadsheet:

1. 20-MW, CFPP Scrap Value: $483,672.

The AACE International Capacity Factor Method (AACE) was used to estimate the scrap value of the other coal-fired units. The capacity factor method is based on the following calculation:

UnitA(scrap value)=CFPP(scrap value)*(CapacityUnitA/CapacityCFPP)^e

Where:

1. UnitA(scrap value) = Unit A Scrap Value.
2. CFPP(scrap value)= 20-MW, CFPP Scrap Value: $483,672.
3. CapacityUnitA = Capacity of Unit A.
4. CapacityCFPP = 20 MW.
5. e = Proration Factor: 0.6 per the AACE guidelines.

Therefore, the scrap value of the other CFPPs is as follows:

SIBLEY UNIT 1

1. Capacity A = 51 MW.
2. Scrap Value = $848,154.

SIBLEY UNIT 2

1. Capacity A = 51 MW.
2. Scrap Value = $848,154.

SIBLEY UNIT 3

1. Capacity A = 363.8 MW.
2. Scrap Value = $2,757,087.

LAKE ROAD 4/6

1. Capacity A = 99 MW.
2. Scrap Value = $1,262,740.

The value of the common portion of these facilities was estimated at approximately 12-percent of the combined scrap values of the units on site.

Therefore:

1. Sibley Common: Scrap Value = $1,564,200.
2. Lake Road Common: Scrap Value = $248,964.

The scrap value of a 75-MW combustion turbine was calculated based on the following scrap weights:

1. Combustion Turbine: 250,000 lbs.
2. Generator: 280,000 lbs.
3. Total: 530,000 lbs.
4. Scrap Value of a 75-MW Combustion Turbine:
   (530,000 lbs/2,000 lbs/ton) * 370/GT = $98,000.

The AACE method was used to estimate the scrap value of the GMO combustion turbines as described above.

SOUTH HARPER

1. Capacity A = 104.6 MW.
2. Number of CTs = Three.
3. Scrap Value = $358,946.

GREENWOOD

1. Capacity A = 63.2 MW.
2. Number of CTs = Four.
3. Scrap Value = $353,746.

CROSSROADS

1. Capacity A = 74.2 MW.
2. Number of CTs = Four.
3. Scrap Value = $389,486.

KCI

1. Capacity A = 21 MW.
2. Number of CTs = Two.
3. Scrap Value = $91,317.

NEVADA

1. Capacity A = 21 MW.
2. Number of CTs = One.
3. Scrap Value = $45,397.

RALPH GREEN

1. Capacity A = 71.5 MW.
2. Number of CTs = One.
3. Scrap Value = $95,230.

LAKE ROAD CT 5

1. Capacity A = 63 MW.
2. Number of CTs = One.
3. Scrap Value = $88,266.

LAKE ROAD CTS 6 AND 7

1. Capacity A = 21 MW.
2. Number of CTs = Two.
3. Scrap Value = $91,317.

The approximate weight of a 160-MW turbine is 342 tons. The AACE method was used to estimate the weight of the Lake Road turbines to determine scrap value.

LAKE ROAD STEAM TURBINE GENERATOR 1

1. Weight = 103 tons.
2. Scrap Value = $38,162.

LAKE ROAD STEAM TURBINE GENERATOR 2

1. Weight = 118 tons.
2. Scrap Value = $43,797.

LAKE ROAD STEAM TURBINE GENERATOR 3

1. Weight = 69 tons.
2. Scrap Value = $25,661.

The approximate weight of the boiler that produces 220,000 lbs/hr of steam is 561 tons. The AACE method was used to estimate the weight of the Lake Road boilers to determine scrap value.

LAKE ROAD BOILER 1

1. Weight = 317 tons.
2. Scrap Value = $117,312.

LAKE ROAD BOILER 2

1. Weight = 317 tons.
2. Scrap Value = $117,312.

LAKE ROAD BOILER 3

1. Weight = 410 tons.
2. Scrap Value = $151,376.

LAKE ROAD BOILER 4

1. Weight = 530 tons.
2. Scrap Value = $196,024.

LAKE ROAD BOILER 5

1. Weight = 605 tons.
2. Scrap Value = $224,107.

LAKE ROAD BOILER 8

1. Weight = 605 tons.
2. Scrap Value = $224,107.

KCP&L-GMO
Baghouse Weights

Baghouse Ductwork and Paneling Weights

Member	Number	Length (foot)	lb/foot	weight (lb)	
L2X2X1/4	4	6	3.19	76.56	
C5X6.7	4	36	6.7	964.8	
C6X8.2	4	25	8.2	820	
L3X2X1/4	4	13	4.1	213.2	
C5X6.7	2	45	6.7	603	
C7X9.8	1	52	9.8	509.6	
W10X26	1	30	26	780	
L2 1/2X1 1/2 X 1/4	1	23	3.22	74.06	
C5X6.7	1	60	6.7	402	
W10X26	1	20	26	520	
C5X6.7	1	2332	6.7	15624.4	
C5X6.7	2	3424	6.7	45881.6	
C4x5.4	2	440	5.4	4752	
C5X6.7	1	990	6.7	6633	
W10X26	1	1164	26	30264	
				108,118	lbs
Assume plate adds 50% additional weight:				162,177	lbs

Weight of Ductwork: **270,296** lbs

Drawings of the baghouse structural steel was not available.
Assume that the steel weighs approximately 60% of the boiler steel: **138,000** lbs

Total Estimated Scrap Weight of Baghouse: **408,000** lbs

KCP&L-GMO
Pipe Weights (per Unit)

Pipe Description	Length (ft)	Material Spec.	Equipment List #	Found on sheet:	Pipe Diameter	Unit Weight (lbs.)	Total Weight (lbs.)
8" Main Steam	112	P1	A01	8, 9, 18, 19	8	50.9	5700.8
4" Aux from Main to PRV	15	P1	A02	19	4	14.98	224.7
6" Steam from A2 to Desuperheating nozzle	8.5	P1	A03	19	6	28.57	242.845
3" Aux Steam	99	P1	A04	8, 9, 18, 19	3	10.25	1014.75
2" Aux Steam	13	P1	A05	8	2	5.02	65.26
1.5" Steam from A5 to Aux Oil Turbine Pump	58	P1	A06	8	1.5	3.63	210.54
1" Aux Steam from A5 to Starting Ejector	16.5	P1	A07	8	1	2.17	35.805
Auxillary steam PRV to flange past 260# safty valve	45	P2	A08	18	6	28.57	1285.65
A8 to 260# header	5	P5	A09	18	6	18.97	94.85
260# common header	25	P5	A11	18, 21	6	18.97	474.25
A11 to 150# safty valve	1	P5	A12	18	1	28.57	28.57
150# steam header	7	P5	A13	18	6	18.97	132.79
A13 to boiler burner header	10	P5	A14	18	6	18.97	189.7
A22 to building heating system	70	P5	A23	18	6	18.97	1327.9
A22 to intake structure heating system	45	P5	A24	18, 21	3	18.97	853.65
10" Extraction No. 4 to Heater No. 1	21	P5	B01	11, 13	10	40.5	850.5
8" Extraction No. 3 to Heater No. 2	135	P5	B02	11, 14, 16	8	28.6	3861
6" Extraction No. 2 to Heater No. 3	36	P5	B03	11, 13	6	18.97	682.92
6" Extraction (B3) to 8" Extraction (B2)	20	P5	B04	11	6	18.97	379.4
6" Extraction (B3) to Evaporator	96	P5	B05	11, 14, 16	6	18.97	1821.12
4" Extraction No. 1 to Heater No. 4	54	P5	B06	11, 14	4	10.79	582.66
4" Extraction (B6) to 8" Extraction (B2)	22	P5	B07	11, 14	4	10.79	237.38
4" Extraction (B6) to B5	11	P5	B08a	11	4	10.79	118.69
4" Extraction (B6) to B5	18	P5	B08b	11	6	18.97	341.46
8" Line from B2 to Back Pressure Valve	16	P5	C01	16	8	28.6	457.6
8" line from Evaporator to C1	8.5	P5	C02	16	8	28.6	243.1
Evaporator to Evaporator Feed Heater	7.5	P5	C03	16	8	28.6	214.5
8" Steam Exhaust	134	P5	C04a		8	28.6	3832.4
6" Disch. From Priming Eject	28.5	P5	C04b	8, 9	6	18.97	540.645
4" Exhaust from Aux Oil Pump	45.5	P5	C05	8, 9	4	10.79	490.945
B.F.P. Turbine Exhaust to line B2	7	P5	C06	15	8	28.6	200.2
B.F. Pumps Disch. To and including Header	153	P3	D01	11, 15, 18, 19, 20,	4	14.98	2291.94
Header to Heater No. 3 including bypass	25	P3	D02	12	4	14.98	374.5
Heater No. 3 to Heater No. 4 including bypass	30	P3	D03	12	4	14.98	449.4
Heater No. 4 to Boiler stop check valve	30	P3	D04	14	4	14.98	449.4
Emergency feed from D1 to boiler stop check valve	30	P3	D05	14	4	14.98	449.4

KCP&L-GMO
Pipe Weights (per Unit)

Pipe Description	Length (ft)	Material Spec.	Equipment List #	Found on sheet:	Pipe Diameter	Unit Weight (lbs.)	Total Weight (lbs.)
T.D.B.F. Pump recirculation to Htr. No. 2	64	P3	D06a	12, 16	1.25	3	192
T.D.B.F. Pump recirculation to Htr. No. 2	18	P3	D06b	12, 16	1	2.17	39.06
M.D.B.F. Pump recirculation to D6	5	P3	D07	12	1	2.17	10.85
D1 to desuperheater in line A8	42	P3	D08	19	1	2.17	91.14
D8 to Chem Feed Tank	57	P3	D09	11, 12, 15, 19	1.25	3	171
Chem Feed tank to boiler connection	28	P3	D10	19	1	2.17	60.76
Hotwell to Condensate Pumps	2	P6	E01	13	6	18.97	37.94
Condensate pump to condensate cooler including bypass	35	P6	E02	11, 15	4	10.79	377.65
Condensate cooler to hyd. Cooler including bypass	16	P6	E03a	11	4	10.79	172.64
Condensate cooler to hyd. Cooler including bypass	35	P6	E03b	11	6	18.97	663.95
Hyd. Cooler to air ejector	15	P6	E04	11, 13	4	10.79	161.85
E3 to bearing water make-up	25	P6	E05a	11	2	3.65	91.25
E3 to bearing water make-up	14	P6	E05b	11	1.5	1.09	15.26
E5 to gland water storage	103	P6	E06	11, 16	1.5	1.09	112.27
Air ejector to Heater No. 1 including bypass	35	P6	E07	13	4	10.79	377.65
Recirculation line from E7 to condenser	20	P6	E08	13	2.5	5.79	115.8
bypass from E7 to lower surge tank	15	P6	E09	14	3	7.58	113.7
Heater No. 1 to Heater No. 2	62	P6	E10	14, 16	6	18.97	1176.14
Heater No. 1 to Drip Pump	18	P6	E11	15	2.5	5.79	104.22
Drip Pump to E10	9	P6	E12	14	2.5	5.79	52.11
Recirculation line from E12 to Heater No. 1	21	P6	E13	14	3	7.58	159.18
Drip Pump bypass from E11 to condenser.	6	P6	E14	15	3	7.58	45.48
Return line from lower surge tank to condenser	40	P6	E15	12, 14	3	7.58	303.2
Lower Surge Tank to transfer pump	5	P6	E16	14	4	10.79	53.95
Transfer pump to E10	18	P6	E17	12	3	7.58	136.44
Heater No. 2 to B.F. Pumps	74	P6	E18	12, 15, 16	1.25	3	222
Heater No. 2 overflow to lower surge tank	58	P6	E19	12, 15, 16	6	18.97	1100.26
Heater No. 2 drain to line E19	4.5	P6	E20	16	2	3.65	16.425
Line E19 to drain	25	P6	E21	14, 15	6	18.97	474.25
Lower surge tank overflow to line E21	10	P6	E22	14	3	7.58	75.8
Gland seal water tank to turbine	same as E6	same as E6	E23	same as E6	same as E6		n/a
Heater No. 1 bypass from line E29 to E14	10	P6	E24	15	2.5	5.79	57.9

KCP&L-GMO
Pipe Weights (per Unit)

Pipe Description	Length (ft)	Material Spec.	Equipment List #	Found on sheet:	Pipe Diameter	Unit Weight (lbs.)	Total Weight (lbs.)
Condensate return header from lower surge tank No. 1 to lower surge tank No. 2	60	P6	E25	17	4	10.79	647.4
Heater No. 4 drips to Heater No. 3	13	P6	E26	13, 14	2.5	5.79	75.27
Heater No. 3 bypass from line E26 to line E28	10	P6	E27	14	2.5	5.79	57.9
Heater No. 3 drips to Heater No. 2	53	P6	E28	15, 16	4	10.79	571.87
Line E28 to Heater No. 1	19	P6	E29	15	2.5	5.79	110.01
Boiler drum safety valve vents through roof	63	P6	G01	22	8	28.6	1801.8
superheater safety valve vent thru roof	61.5	P6	G02	22	6	18.97	1166.655
Drip pan elbows to line F8		P6	G03				0
Safety valve drains to line G3		P6	G04				0
Condensate pump vents to condenser	21	P6	G05	13, 15	4	10.79	226.59
Heater No.1 vent to condenser	15	P6	G06	15	3	7.58	113.7
Drip Pump vent to Heater No. 1	10	P6	G07	15	3	7.58	75.8
Blowdown tank vent thru roof	102	P6	G08	20	8	28.6	2917.2
Drain header to ash sump	43	P6	G09	17	3	7.58	325.94
Evaporator drain to line G9	56	P6	G10	17	3	7.58	424.48
Evaporator Feed Heater drain to line G10	71	P6	G11	16, 17	3	7.58	538.18
6" Air Suction	51	P6	K1 & K2	8, 9	6	18.97	967.47

Total Weight (per Unit): **47,554** lbs
Total Weight: **95,108** lbs

APPENDIX C

REFERENCE DOCUMENTS

REFERENCE DOCUMENTS

1. *Decommissioning Handbook for Coal-Fired Power Plants*, EPRI, Palo Alto, CA: 2004. (1011220)

2. *Decommissioning Process for Fossil-Fueled Power Plants*, EPRI, Palo Alto, CA: 2010. (1020652)

3. Association for the Advancement of Cost Estimating (AACE) International, *Skills and Knowledge of Cost Engineering*, 5th Edition, 2004.

4. Combustion Fossil Power, Fourth Edition, 1991.

5. Steam Its Generation and Use, 40th Edition, 1992.

6. Daniel International Corporation, La Cygne Station - Unit 2, Weekly Progress Report No. 175, October 1, 1976.

7. Black & Veatch, Iatan Steam Generating Station Monthly Progress Report, November 1979.

APPENDIX D

ARO - SOURCE OF REQUIREMENT

Appendix D
ARO - Source of Requirement

Station	Equipment		Source of Requirement
Greenwood	Fuel Oil Storage Tanks		Missouri Regulation 10 CSR 26-5.020 Release Reporting and Initial Release Response Measures
Nevada	Fuel Oil Storage Tank		Missouri Regulation 10 CSR 26-5.020 Release Reporting and Initial Release Response Measures
Ralph Green	Ash Pond Landfill Closure		Missouri Regulation 10 CSR 80-2.030
Sibley	Propane Storage Tanks		Missouri Regulation 10 CSR 20-15.020 Release Reporting and Initial Release Response Measures
	Common Pond		Missouri State Operating Permit MO-0004871, Missouri Regulation 10 CSR 80-2.030
	Landfill Stage A		Solid Waste Operating Permit #709505
	Units 1 & 2 River Intake		US Army Corps of Engineers Section 10 Permit - Rivers & Harbor Act of March 3, 1899
	Unit 3 River Intake		US Army Corps of Engineers Section 10 Permit - Rivers & Harbor Act of March 3, 1899
Lake Road	Boiler 5 Pond		Missouri State Operating Permit MO-0004898
	Turbine Generator 4 River Intake		US Army Corps of Engineers Section 10 Permit - Rivers & Harbor Act of March 3, 1899
	Boiler 5 Tank		Missouri Regulation 10 CSR 26-5.020 Release Reporting and Initial Release Response Measures
	Boiler 6 Tank		Missouri Regulation 10 CSR 26-5.020 Release Reporting and Initial Release Response Measures
	Boiler 7 Tank		Missouri Regulation 10 CSR 26-5.020 Release Reporting and Initial Release Response Measures
Iatan	Iatan Fuel Oil Tank Removal		Missouri Regulation 10 CSR 26-5.020 Release Reporting and Initial Release Response Measures
	Iatan Landfill Retirement		Solid Waste Operating Permit No. 0916501