2012.04.20 16:36:01
Kansas Corporation Commission
/S/ Patrice Petersen-Klein

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

DIRECT TESTIMONY OF

CHRISTOPHER ROBERT ROGERS

ON BEHALF OF
KANSAS CITY POWER & LIGHT COMPANY

Received
on
APR 2 0 2012
by
State Corporation Commission
of Kansas

IN THE MATTER OF THE APPLICATION OF
KANSAS CITY POWER & LIGHT COMPANY
TO MAKE CERTAIN CHANGES IN
ITS CHARGES FOR ELECTRIC SERVICE

DOCKET NO. 12-KCPE-764-RTS

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 Kansas City Power & Light Company ("KCP&L" 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 KCP&L's fossil-fueled electric generating units.

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 38 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 and participated in several major rate cases, including the AmerenUE Callaway Nuclear Plant and KCP&L Wolf Creek Nuclear Plant rate cases before the Missouri Public Service Commission. Later, I provided testimony in the South Harper Generating Facility certification case before the Missouri Public Service Commission on behalf of Aquila, Inc. 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., an engineering and technical services firm located in Overland Park that is incorporated in Kansas. Among other things, I provide consulting and project management services for Sega's electric power generating clients. Since joining Sega, Inc. in 1994, I have worked on many projects for KCP&L and our other electric utility clients. Sega, Inc. has performed numerous plant betterment engineering projects for KCP&L on its fossil-fueled generation stations.

Q: Do you hold any professional licenses?

A: Yes. I am a licensed professional engineer in the State of Kansas (License No. 8200) 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 before the State Corporation Commission of the State of Kansas ("KCC" or "Commission") or other utility regulatory agencies?

A: No, I have not previously testified before the KCC. However I have testified before the Missouri Public Service Commission and the Public Utility Commission of the State of Hawaii. 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 KCP&L's fossil-fueled generating units?

A: Sega, Inc. was retained by KCP&L to study the cost of decommissioning KCP&L's fossil-fueled 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 potential uses. Based upon our experience in the electric

generation industry at large, and our familiarity with KCP&L's generating fleet, Sega developed opinions of probable cost for KCP&L 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 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. Since each of KCP&L's fossil-fueled units except Osawatomie is located on a multiple unit site, it was assumed that the common site facilities will 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 environmental permits and regulatory requirements 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 commences.

First, the unit is rendered safe by de-energizing it and disconnecting it from the electric grid. However, 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 the 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 Owner's Engineer will be hired to assist with environmental issues and technical details in a 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 for the Company. 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 value for iron and steel and non-ferrous metals were tallied for each unit or facility, based upon estimated quantities and average current-year scrap prices. These scrap values were listed separately because the scrap metal prices vary considerably, depending on international events and uncontrollable circumstances.

Q: What are the results of your study?

A: The opinion of the probable costs for retirement and dismantlement developed by Sega, Inc. for each of KCP&L's fossil-fueled units and the common facilities at each plant site

are provided below in Table 1. All costs shown are in 2012 dollars 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.

As shown below in Table 1, there is a significant difference in cost between retiring and dismantling a power plant. The cost to retire all of KCP&L's fossil-fueled generating units is estimated to be approximately $52 million. To dismantle all of KCP&L's fossil-fired units, I estimate that it would cost an additional $230 million. Some components could be sold for scrap during dismantlement thereby recovering an estimated $63 million and bringing the estimated Net Terminal Value (cost to dismantle less salvage) for all of KCP&L's fossil-fueled plants to $167 million.

Table 1 - Opinion of The Probable Costs For Decommissioning KCP&L Fossil-fueled Generating Units

(All cost values in 2012 dollars)

Type	Name	Unit No.	Rating [1]	Year In-Service	Retirement			Dismantlement		
					Unit Retirement	Activities Required by Permit or Regulation [4]	Total Retirement	Dismantlement	Scrap Value [5]	Net Terminal Cost
Coal-fired Steam Electric Generators	Montrose	1	170	1958	$455,953		$455,953	$7,670,864	$3,620,000	$4,050,864
		2	164	1960	$455,953		$455,953	$7,507,256	$3,540,000	$3,967,256
		3	176	1964	$455,953		$455,953	$7,832,178	$3,696,000	$4,136,178
		Common			$413,130	$2,523,663	$2,936,793	$10,623,079	$1,340,000	$9,283,079
	Hawthorn	5	564	1969 / 2001 [2]	$895,433		$895,433	$20,194,648	$7,434,000	$12,760,648
		Common			$293,706	$1,129,934	$1,423,640	$9,502,374	$952,000	$8,550,374
	LaCygne	1	735	1973	$953,699		$953,699	$23,672,342	$8,715,000	$14,957,342
		2	686	1977	$835,693		$835,693	$17,716,153	$8,360,000	$9,356,153
		Common			$477,878	$19,872,415	$20,350,293	$17,348,590	$1,980,700	$15,367,890
	Iatan	1	705	1980	$947,405	$561,052	$1,508,457	$17,810,821	$8,500,000	$9,310,821
		2	881	2010	$943,355		$943,355	$26,390,910	$9,700,000	$16,690,910
		Common			$519,185	$17,620,312	$18,139,497	$23,108,660	$2,434,000	$20,674,660
Distillate-fired Combustion Turbine Generators	Northeast	11	48	1972	$493,560		$991,544	$9,396,995	$526,000	$8,870,995
		12	51	1972						
		13	51	1975						
		14	54	1975						
		15	50	1976						
		16	44	1976						
		17	54	1977						
		18	56	1977						
		Common				$497,984				
Natural Gas-fired Combustion Turbine Generators	Hawthorn	7	77	2000	$313,445	$0	$313,445	$6,635,834	$171,720	$6,464,114
		8	77	2000						
	West Gardner	1	77	2003	$381,006	$0	$381,006	$10,913,429	$343,440	$10,569,989
		2	78	2003						
		3	77	2003						
		4	78	2003						
	Osawatomie	1	75	2003	$260,663	$0	$260,663	$5,107,307	$85,860	$5,021,447
Combined Cycle Plant	Hawthorn	6	232	1997	$368,765	$604,110	$972,875	$8,803,878	$2,114,000	$6,689,878
		9 [3]		2000						
TOTALS			**5,259**		**$9,464,783**	**$42,809,470**	**$52,274,253**	**$230,235,318**	**$63,512,720**	**$166,722,598**

Notes

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

(2) Hawthorn Unit 5 original year in service 1969; returned to service in 2001.

(3) Hawthorn Unit 4 steam turbine (1961 original in-service) repowered with heat recovery steam generated from the exhaust heat from Unit 6 combustion turbine.

(4) Activities required by permits and/or regulations that are to occur upon ceasing operations, including ash landfill closures, river water intake removals, and removal of fuel oil tanks.

(5) Current scrap value per averaged indices.

Q: Are retirement costs optional for KCP&L?

A: KCP&L 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 with the costs related to retirement only. Retirement costs represent the costs that unavoidably will be incurred by the utility 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 KCP&L by Company witness, Mr. Dane Watson. It is also my understanding that Mr. Watson 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. Watson's 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 was the Officer-in-Charge at Sega, Inc. 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, supervised the preparation of the report, and reviewed the results for reasonableness and appropriateness.

Q: Does this conclude your testimony?

A: Yes.

BEFORE THE STATE CORPORATION COMMISSION
OF THE STATE OF KANSAS

In the Matter of the Application of	)	
Kansas City Power & Light Company	)	Docket No.: 12-KCPE- -RTS
to Make Certain Changes in	)	
Its Charges for Electric Service	)	

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 by Great Plains Energy Services Incorporated, an affiliate of Kansas City Power & Light Company, to serve as an expert witness to provide testimony on behalf of Kansas City Power & Light Company.

2. Attached hereto and made a part hereof for all purposes is my Direct Testimony on behalf of Kansas City Power & Light 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 11th day of April, 2012.

Judith A Dennis
Notary Public

JUDITH A. DENNIS
NOTARY PUBLIC
My Appt. Exp. 12/29/14
STATE OF KANSAS

My commission expires: December 29, 2014

Chris R. Rogers, P.E.

POSITION Vice President / Project Manager, 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
- Minnesota
- Missouri
- Montana
- North Carolina
- 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 38 years of experience in the power industry. Among other things at Sega, he is responsible for 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 plants, including simple and combined cycle combustion turbine projects, coal and waste coal-fired fluidized bed boiler projects, pulverized coal units, and biomass-fired projects. He has performed engineering and feasibility reviews for financing, construction monitoring, and performance testing of numerous generating facilities.

Mr. Rogers served as the Manager of Generating Facilities in the Electric Department of the Missouri Public Service Commission from 1983 through 1986. He covered issues in conjunction with the construction management audits and 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 engineering for mechanical systems for large utility-owned coal-fired central generating facilities while he was 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 plant construction site.

SELECTED PROJECT EXPERIENCE

- **Kansas City Power & Light Company**, Kansas City, Missouri – Sega, Inc.'s project manager for combined cycle plant siting study that investigated and evaluated multiple candidate sites for potential new 600-MW class combined cycle generating station.

- **Kansas City Power & Light Company,** Lake Road Generating Station, Kansas City, Missouri – Sega, Inc.'s 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.

- **Independence Power & Light Department,** Independence, Missouri – Master plan study for a nominal 320-MW municipal utility. Sega, Inc.'s project manager for 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 on Oahu after lightning events on December 26, 2008. Project manager of Sega, Inc. team for investigation of causes of the outages, utility outage recovery operations and potential improvements to prevent or minimize future outages.

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

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

- **Idaho Power Company,** Mountain Home, Idaho – Sega, Inc.'s project manager for a study to convert 2 W 251B12 gas turbines from peaking to combined-cycle (150MW).

- **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.

- **Tulare County Power Projects,** Goshen and Tipton, California – Sega, Inc.'s project manager for conceptual design and detailed design proposal for 24-MW net, natural gas-fired reciprocating engine generator set peaking plants located planned at four existing utility substations.

- **High Plains Corp Cogeneration Project,** Wichita, Kansas – Sega, Inc.'s project manager for conceptual design, feasibility study and detailed design-build proposal for a 6-MW net, landfill recovery gas-fired combustion turbine and heat recovery steam generator cogeneration project.

- **City Utilities of Springfield, Missouri** – Sega, Inc.'s project manager for feasibility study for a 8-MW net, natural gas-fired combustion turbine and heat recovery steam generator cogeneration project at local university campus.

- **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.

- **Quantum Dynamics, Inc./Quebecor Printing, Inc.,** Fernley, Nevada – Sega Inc.'s project manager for balance-of-plant design/build contract on a 3-MW net, gas-fired combustion turbine (ASE40) and heat recovery project at a printing plant.

- **Trigen – St. Louis Energy Corporation**, St. Louis, Missouri – Sega, Inc.'s project manager providing detailed design, construction administration, and startup assistance for a 20-MW condensing steam turbine addition to an existing cogeneration plant on a fast-tracked basis.

- **University of Missouri-Rolla/Rolla Municipal Utilities** – Sega, Inc.'s project manager for a joint participation cogeneration project feasibility study that investigated alternative power supplies, generating options, and interconnection arrangements for the mutual benefit of the University and the City.

- **LTV Hennepin,** Hennepin, Illinois – Sega, Inc.'s project manager of an engineer–led EPC team for a 9-MW net, gas-fired combustion turbine (3 x ASE 40) and heat recovery project at LTV Steel Company plant in Hennepin, Illinois.

- **University of Missouri-Columbia** – Combustion turbine consultant for Owner's Engineer (Sega, Inc.) on feasibility study and subsequent detailed project design and equipment procurement for a 27-MW cogeneration project that used two Solar Titan combustion turbine generator sets and heat recovery steam generators.

- **Witco Corporation,** Memphis, Tennessee – Sega, Inc.'s project manager on engineer–led EPC team 7-MW net, gas-fired combustion turbine (2 x ASE 50) and heat recovery project at Witco Corporation plant in Memphis, Tennessee. .

- **Trigen – St. Louis Energy Corporation,** St. Louis, Missouri – Sega, Inc.'s project manager for detailed installation design for 15-MW net, gas-fired combustion turbine (two Solar Taurus 60/STAC) and heat recovery 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 of 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.

- **University of New Mexico** – Sega Inc.'s project manager for cogeneration feasibility study that evaluated replacement of campus central heating plant with a 30-MW net, gas-fired combustion turbine and heat recovery steam generator.

- **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 York – 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.

- **Honeywell FM&T,** Kansas City, Missouri – Bibb and Associates' project manager on AlliedSignal's engineering team for feasibility studies, conceptual design, permitting support, bidding, and evaluation of developer qualifications for a 40-MW, gas-fired, combustion turbine cogeneration project providing steam and electric service to a federal government complex in Kansas City, Missouri.

- **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.

- **Empire Cogen,** Tampa, Florida – Bibb and Associates' project manager for an independent engineering review for senior lender, National Westminster Bank PLC of a 10-MW, gas-fired multiple gas turbine (Allison/US Turbine) cogeneration project located on MacDill Air Force Base near Tampa, Florida.

- **ACE Cogeneration Project**, Trona, California – Bibb and Associates' project manager for independent engineering review 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.

- **Northeast Cogen,** Solvay, New York – Bibb and Associates' independent review engineer for development financing by Heller Financial, Inc. for a proposed 49-MW, gas-fired combined cycle (GE6B/LM6000) cogeneration project.

- **Newbay Cogeneration Project,** East Providence, Rhode Island – Bibb and Associates' project manager for independent engineering review for development/bridge financing by Heller Financial, Inc of a proposed 72.2 MW, coal-fired circulating fluidized bed boiler generating plant. Reviewed design, permit applications, and development status.

- **Redding Power Project,** Redding, California – Bibb and Associates' project manager for independent engineering review for National Westminster Bank PLC during lay-up, preservation, foreclosure, receivership, and resale of 23-MW, two biomass-fired stoker boiler generating units.

- **San Joaquin Valley Energy Partners I,** Fresno, California – Bibb and Associates' project manager for independent engineering review for take-over lender Canadian Imperial Bank of Commerce, for the evaluation, and equity re-sale of a 43-MW, three unit, biomass-fired fluidized bed boiler plant.

- **Redding Peaking,** Redding, California – Bibb and Associates' project manager for engineering review for bridge financing for Heller Financial, Inc. of a proposed 49.9-MW, gas-fired simple cycle combustion turbine (GE 6) peaking plant.

- **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.

- **Gifford-Hill Cement Cogeneration Project,** Oro Grande, California – Bibb and Associates' project manager for independent engineering review for US West Capital, Inc., for financing the sale/lease back of an existing 20-MW heat recovery steam electric cogeneration plant.

- **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.

- **Viking Power Projects,** Lincoln, Michigan, McBain, Michigan, and Northumberland, Pennsylvania – RW Beck and Associates' project manager on independent engineering review for financing, construction monitoring and performance testing for senior lender, CIGNA, of three 16-MW biomass fueled stoker-generating plants.

- **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.

- **Chinese Station,** Inyokern, California – RW Beck and Associates' project manager on engineering review for take-over and resale; reviewed design, plant betterment program, and projected operation and maintenance program of a 25-MW biomass-fired generating plant.

- **Koma Kulshan Hydro Project,** Whatcom County, Washington – RW Beck and Associates' project manager on independent engineering review of design and construction monitoring for senior lender National Westminster Bank PLC of a 12-MW hydroelectric station.

- **Scrubgrass Power Project,** Venango County, Pennsylvania – RW Beck and Associates' project manager on independent engineering review of design, permits, and contracts for financing and construction monitoring for senior lender, National Westminster Bank, PLC of an 80-MW waste coal-fired, circulating fluidized-bed boiler project.

- **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 a1150-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 210-MW pulverized coal power plant.

- **EPRI-DOE Fuel Cell Demonstration Project,** San Jose, California – Burns & McDonnell's mechanical engineer on cogeneration feasibility study for commercial demonstration of 5-MW fuel cell cogeneration demonstration project.

- **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, 550-MW net, 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.
AMEREN CASE NOS. EO-85-17 & ER-84-168				
Phase I – Inservice Criteria	Direct	A-7		
	Rebuttal	A-12		
	Surrebuttal	A-14	7	492-83
Phase II – Net Electric Capability	Direct	C-76		
	Surrebuttal	C-77	30	2852-2868
Phase III – Funding Decommissioning	Surrebuttal	C-38	28	2434-2440
Phase III – Inservice Review	Supplemental (1-28-85)	NA	NA	NA
AMEREN CASE NO. ER-85-20				
Status of Grand Gulf 1 and Waterford 3	Supplemental	12	4	118-181
KANSAS CITY POWER & LIGHT CASE NO. ER-85-128 & EO-85-185				
Phase I – Inservice Criteria Startup	Affidavits Direct (filed 1/10/85)		NA	NA
Phase IV – Fossil Plant Retirement Dates	Direct	262		
	Surrebuttal	266	23	1798-1817
Phase IV – Depreciation – Wolf Creek	Rebuttal	259		
Phase IV – AWS Structural Steel Welding	Direct	301		
	Surrebuttal	302	26	2294-2329
Phase IV – Net Electric Capability	Direct	399		
	Surrebuttal	400	33	3682-3699
Phase IV – Accreditation Overview	Direct	262	23	1798-1817
	Surrebuttal	436	7	4451-4483
	Appendices (9/10/82)	263		

TESTIMONY BEFORE THE MISSOURI PUBLIC SERVICE COMMISSION (Cont'd)

Issue Description	Exhibit No.		Transcript Vol. No.	Page Nos.
AMEREN CASE NO. ER-85-265				
Functionalization and Classification of Costs (Jurisdictional Allocations)	Surrebuttal	89	6	844-848
KANSAS CITY POWER & LIGHT (Formerly AQUIL INC.) CASE NO. EA-2006-0309				
South Harper Peaking Facility Site Selection	Direct (filed 01/27/06)		N/A	N/A

TESTIMONY BEFORE THE PUBLIC UTILITIES COMMISSION OF THE STATE OF HAWAII

Issue Description	Exhibit No.	Transcript Vol. No.	Page Nos.
HAWAII ELECTRIC LIGHT COMPANY, INC. DOCKET NO. 99-207			
Keahole Projects or Facilities:	Direct Pre-filed CA-T-		288 – 301
1. Shop/Warehouse Building	12	II	301 – 309
2. Fire Protection System	Direct Examination	II	309 - 313
3. Water Treatment System	Commissioners' Exam		
4. Inclusion in Rate Base Amounts			
HAWAII ELECTRIC COMPANY, INC., MAUI ELECTRIC COMPANY, LTD., AND HAWAII ELECTRIC LIGHT COMPANY, INC. DOCKET NO. 2006-0431			
Consumer Advocates Statement of Position:	Filed August 24, 2007		
Consumer Advocate's Supplement	Filed: September , 19, 2008		

The Costs of Retirement and Dismantlement:

Decommissioning KCP&L's Fossil-Fueled Generating Units

The Costs of Retirement and Dismantlement:

Decommissioning KCP&L's Fossil-Fueled Generating Units

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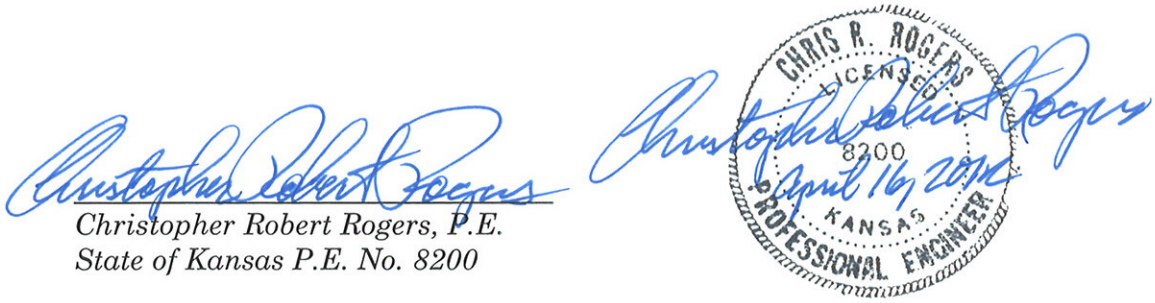
CERTIFICATION

I hereby certify that this plan or report 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 Kansas.



Christopher Robert Rogers, P.E.
State of Kansas P.E. No. 8200

SECTION 1

EXECUTIVE SUMMARY

EXECUTIVE SUMMARY

1.1 INTRODUCTION

Kansas City Power & Light Company (KCP&L) retained Sega, Inc. (Sega) to provide an opinion of probable costs for retirement and dismantlement of its fossil-fueled electric generating units within the jurisdiction of the Kansas Corporation Commission. 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.

KCP&L 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, 2012 dollars.

1.2 DESCRIPTION OF FACILITIES

The KCP&L fossil-fueled generating facilities are located on seven sites and include 15 simple-cycle combustion turbines, one combined-cycle plant, and eight steam electric generating units. 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
Montrose	1	170	1958	Coal / Steam
	2	164	1960	
	3	176	1964	
Hawthorn	5	564	1969 / 2001	Coal / Steam
La Cygne	1	735	1973	Coal / Steam
	2	686	1977	Coal / Steam
Iatan	1	705	1980	Coal / Steam
	2	881	2010	Coal / Steam
Northeast	11	48	1972	Distillate-Fired Combustion Turbines
	12	51		
	13	51	1975	
	14	54		
	15	50	1976	
	16	44		
	17	54	1977	
	18	56		
Hawthorn	7	77	2000	Natural Gas-Fired Gas Turbines
	8	77	2000	
Hawthorn	6	232	1997	Natural Gas-Fired Gas Turbine
	9		2000	HRSG & Turbine in Combined Cycle
West Gardner	1	77	2003	Natural Gas-Fired Gas Turbines
	2	78		
	3	77		
	4	78		
Osawatomie	1	75	2003	Natural Gas-Fired Gas Turbine

Figure 1.1 KCP&L Fossil-Fueled Electric Generating Units

1.2.1 Facility Descriptions

Montrose Generating Station is a three-unit pulverized coal-fired electric generating station located in rural Henry County, near the town of Montrose, Missouri. Each Montrose unit has an electrostatic precipitator.

Hawthorn Generating Station is located in eastern Kansas City within Jackson County, Missouri and is comprised of several different types of units. Unit 5 is a pulverized coal-fired steam electric plant with a selective catalytic reduction (SCR) system, baghouse, and dry scrubber. Unit 6 is a natural gas-fired combustion turbine generator that can be operated alone in simple cycle through its bypass stack or in combined cycle in conjunction with Unit 9, a heat recovery steam generator (HRSG) with a condensing steam turbine generator that was originally part of Unit 4. Units 1 through 3 and the remainder of Unit 4 were coal and natural gas-fired steam electric generators that were retired in place awaiting dismantlement. Units 7 and 8 are simple-cycle, natural gas-fired combustion turbine generator sets.

La Cygne Generating Station is comprised of two coal-fired steam electric units in rural Linn County near the town of La Cygne, Kansas. Unit 1 is a super-critical, coal-fired cyclone boiler steam electric plant with an SCR and wet scrubber. Unit 2 is a pulverized coal-fired steam electric plant with an electrostatic precipitator.

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

Northeast Generating Station is an eight-unit, distillate oil-fired combustion turbine peaking plant located near downtown Kansas City, in Jackson County, Missouri.

West Gardner Generating Station is a four-unit, natural gas-fired combustion turbine peaking plant in suburban Johnson County, near the town of Gardner, Kansas.

Osawatomie Generating Station is a single-unit, natural gas-fired combustion peaking plant located in rural Miami County, between the towns of Osawatomie and Paola, Kansas.

1.3 APPROACH

Sega met with representatives of KCP&L to gather information about the generating units and visited each of the plant sites. 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 KCP&L 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.

Because specific quantity information was available for Iatan Unit 1 and La Cygne Unit 2, the dismantlement costs of these two units were 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. In the case of Hawthorn, the common

facilities associated with the coal-fired unit, Hawthorn 5, will be retired with that unit. The remaining units at the Hawthorn site are gas-fired and do not require many of the common site facilities for operation.

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 KCP&L's fossil-fueled units and the common facilities at each plant site are provided in Figure 1.2 below. All costs shown are in 2012 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 KCP&L's fossil-fired units is approximately $230 million. Some materials could be sold for scrap, thereby recovering approximately $63 million and bringing the estimated net terminal value for dismantling all of KCP&L's plants to $167 million, based upon the current averaged scrap indices.

However, were KCP&L to retire its fossil-fired generating units in place without dismantlement, Sega believes the cost would be approximately $52 million. As explained more fully in Section 2 - Retirement, the bulk of these retirement costs are tied to activities that must be completed upon retirement of the unit or whenever the unit ceases operations, as required by regulation or permits. KCP&L accounts for most of these costs in asset retirement obligations (AROs).

Name	Unit No.	Retirement			Dismantlement		
		Unit Retirement	Activities Required by Permit or Regulation [2]	Total Retirement	Dismantlement	Scrap Value [3]	Net Terminal Cost
Montrose	1	$455,953		$455,953	$7,670,864	$3,620,000	$4,050,864
	2	$455,953		$455,953	$7,507,256	$3,540,000	$3,967,256
	3	$455,953		$455,953	$7,832,178	$3,696,000	$4,136,178
	Common	$413,130	$2,523,663	$2,936,793	$10,623,079	$1,340,000	$9,283,079
Hawthorn	5	$895,433		$895,433	$20,194,648	$7,434,000	$12,760,648
	Common	$293,706	$1,129,934	$1,423,640	$9,502,374	$952,000	$8,550,374
LaCygne	1	$953,699		$953,699	$23,672,342	$8,715,000	$14,957,342
	2	$835,693		$835,693	$17,716,153	$8,360,000	$9,356,153
	Common	$477,878	$19,872,415	$20,350,293	$17,348,590	$1,980,700	$15,367,890
Iatan	1	$947,405	$561,052	$1,508,457	$17,810,821	$8,500,000	$9,310,821
	2	$943,355		$943,355	$26,390,910	$9,700,000	$16,690,910
	Common	$519,185	$17,620,312	$18,139,497	$23,108,660	$2,434,000	$20,674,660
Northeast	11 12 13 14 15 16 17 18	$493,560		$991,544	$9,396,995	$526,000	$8,870,995
	Common		$497,984				
Hawthorn	7 8	$313,445	$0	$313,445	$6,635,834	$171,720	$6,464,114
West Gardner	1 2 3 4	$381,006	$0	$381,006	$10,913,429	$343,440	$10,569,989
Osawatomie	1	$260,663	$0	$260,663	$5,107,307	$85,860	$5,021,447
Hawthorn	6 9	$368,765	$604,110	$972,875	$8,803,878	$2,114,000	$6,689,878
		$9,464,783	**$42,809,470**	**$52,274,253**	**$230,235,318**	**$63,512,720**	**$166,722,598**

Figure 1.2 - Probable Costs of Decommissioning
KCP&L Fossil-Fueled Electric Generating Units [1]

(1) All values in 2012 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.

(3) Current scrap values per averaged indices.

SECTION 2

RETIREMENT

RETIREMENT

2.1 INTRODUCTION

Sega developed an opinion of probable cost to retire the KCP&L fossil-fueled 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, plus the retirement of the common facilities. With the exception of Hawthorn, the common facilities will be retired when the last unit is retired at a site. In the case of Hawthorn, the common facilities associated with the coal-fired unit, Hawthorn 5, will be retired with that unit. The remaining units at the Hawthorn site are gas-fired and do not require many of the common site facilities for operation.

2.2 OPINION OF PROBABLE COST BASIS

Retirement activities will be performed by KCP&L bargaining unit personnel and managed by KCP&L. Man-hour costs for both management and bargaining unit personnel were provide by KCP&L. At the direction of KCP&L, 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.

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 KCP&L 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 decommissioning and eventual demolition. 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 opened.

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. Turbine lube oil will be removed.

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 KCP&L 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, and regulations. For certain activities, such as ash landfill closures, KCP&L 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 KCP&L to periodically demonstrate the ability to fund these closure activities. This is because the costs for ash landfill closures are significant. In fact, landfill closure costs exceed the costs of all other retirement activities for the respective units at the Montrose, La Cygne, and Iatan Generating Stations.

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 (Montrose, Northeast, and Iatan Generating Stations). Since the Kansas fuel oil tank permits do not specifically require their removal upon ending operation, the costs for their removal are in the demolition (La Cygne Generating Station).

While KCP&L accounts for asbestos abatement activities in AROs for the La Cygne, Montrose, and Hawthorn 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.

In addition, Sega included amounts for closure and removal of the sanitary waste lagoons at the Montrose and La Cygne Generating Stations, since these activities are required by Kansas and Missouri regulations when operations cease. However, the probable costs for these closures are below KCP&L's threshold for maintaining an ARO.

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 2012 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.

SECTION 3

DISMANTLEMENT

DISMANTLEMENT

3.1 INTRODUCTION

Sega developed an opinion of probable cost to dismantle the KCP&L fossil-fueled 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.

3.2 OPINION OF PROBABLE COST BASIS

The project will be managed by KCP&L staff. KCP&L will hire an Owner's Engineer to assist with environmental issues and the technical dismantlement details. KCP&L 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 decommissioned as detailed in Section 2 - Retirement.

A resource-loaded MS Project dismantlement schedule and opinion of probable cost was developed for Northeast (all eight units), Hawthorn 7 and 8 (both units combined), West Gardner (all four units), Osawatomie (one unit), Hawthorn 6 and 9 (both units combined), Iatan Unit 1, La Cygne Unit 2, and the Common facilities for each of these plant sites. The dismantlement schedules for Iatan Unit 1 and La Cygne Unit 2 were developed based on the actual quantities and materials documented in the final construction reports for each unit. The costs for these units were used to derive the dismantlement costs for Montrose Units 1, 2, and 3, Iatan Unit 2, Hawthorn Unit 5, and La Cygne 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 KCP&L 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 KCP&L 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 KCP&L 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 KCP&L 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 KCP&L 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 KCP&L project management team will be responsible for bidding and contracting with a qualified DGC.

Prior to the DGC mobilizing on site, the KCP&L 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 KCP&L is complete and on file.

3.5 SCRAP METAL VALUES

Scrap metal weights were developed for Iatan Unit 1 based on the actual quantities and materials documented in the final construction reports. 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 were based on combustion turbine weights and generator weights for similar-sized combustion turbines and generators 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

MONTROSE

MONTROSE STATION

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

Montrose Unit 1 has an SPP-accredited unit rating of 170 MW and was placed in service in 1958. Unit 1 has a sub-critical Combustion Engineering boiler and a General Electric turbine. Lake water is used for condenser cooling. Unit 1 has an electrostatic precipitator for particulate removal.

Montrose Unit 2 has an SPP-accredited unit rating of 164 MW and was placed in service in 1960. Unit 2 has a sub-critical Combustion Engineering boiler and a General Electric turbine. Lake water is used for condenser cooling. Unit 2 has an electrostatic precipitator for particulate removal.

Montrose Unit 3 has an SPP-accredited unit rating of 176 MW and was placed in service in 1964. Unit 3 has a sub-critical Combustion Engineering boiler and a Westinghouse turbine. Lake water is used for condenser cooling. Unit 3 has an electrostatic precipitator for particulate removal.

The Montrose fuel yard has a rotary car dumper to unload unit trains of coal. Coal is stored in a common fuel yard. Fuel is reclaimed from the common fuel yard via a reclaim pit. Coal is transferred from the common conveyor system to dedicated unit conveyors (located near the final coal transfer points for each unit).

All three Montrose units have a fuel oil igniter system. The units are supplied with fuel oil from a common fuel oil unloading and storage facility.

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).

MONTROSE UNIT 1

1. Boiler and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Electrostatic precipitator.
4. Circulating water intake structure.
5. Dedicated Unit 1 fuel handling equipment.
6. Dedicated Unit 1 fuel oil equipment.

MONTROSE UNIT 2

1. Boiler and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Electrostatic precipitator.
4. Circulating water intake structure.
5. Dedicated Unit 2 fuel handling equipment.
6. Dedicated Unit 2 fuel oil equipment.

MONTROSE UNIT 3

1. Boiler and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Electrostatic precipitator.
4. Circulating water intake structure and piping.

5. Dedicated Unit 3 fuel handling equipment.
6. Dedicated Unit 3 fuel oil equipment.

COMMON

1. Administration building.
2. Fuel yard office building.
3. Training building.
4. Warehouses.
5. Maintenance shops.
6. Water treatment.
7. Miscellaneous small buildings and enclosures
8. Common fuel handling equipment.
9. Fuel oil storage and unloading.
10. Fire water systems.
11. Stacks (three).
12. Landfill.

UNIT 1

Montrose 1 Retirement

Owner Costs			
Pre-Retirement Activities		$95,040	
Retirement Activities		$241,071	
Post-Retirement Activities		$25,040	
Owner Direct Total			$361,151
Owner Internal Costs	5.00%		$18,058
Owner Contingency:	25.00%		$94,802

Montrose 1 Retirement Opinion of Probable Cost: $455,953.14

Montrose 1 Retirement

ID	Task Name	Cost
1	**Montrose 1 Retirement**	**$361,151.87**
2	**Pre-Engineering**	**$95,040.00**
3	Permit review and engineering analysis, establish isolation points, and confirm fuel yard inventory has been reduced to zero tons.	$0.00
4	**KCC&L Overhead Costs**	**$81,176.00**
5	KCP&L Retirement Manager	$81,176.00
6	**Equipment Rentals**	**$27,800.00**
7	Vacuum truck	$27,800.00
8	**Retirement**	**$132,095.87**
9	**Electrical**	**$18,367.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$5,382.08**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$2,553.60
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$6,030.72**
32	De-energize all primary power at the source.	$1,738.56

Montrose 1 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,738.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,553.60
35	**Coal Handling**	**$26,734.00**
36	Empty all transfer hoppers.	$1,655.60
37	Burn out coal silos.	$1,640.00
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,640.00
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
40	**Fuel Oil and Igniter System**	**$2,460.00**
41	Drain fuel oil system	$2,460.00
42	**Waste Oil System**	**$1,640.00**
43	Drain all waste oil systems	$1,640.00
44	**Boiler Chemical Feed**	**$1,640.00**
45	Drain all chemical feed tanks.	$1,640.00
46	**Boiler**	**$26,734.11**
47	Open boiler doors.	$851.20
48	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
49	Drain boiler, drum, downcomers and headers.	$820.00
50	Open drum doors.	$851.20
51	Drain and clean the submerged flight conveyor system.	$2,413.31
52	**Stack and Ductwork**	**$11,750.40**
53	Open ductwork doors.	$851.20
54	Perform cleaning of the ductwork.	$10,899.20
55	**Condensate and Feedwater Piping**	**$1,640.00**
56	Drain water from the system.	$820.00
57	Leave open vents and drains.	$820.00
58	**Feedwater heaters**	**$2,460.00**
59	Drain feedwater heaters	$820.00
60	Leave open vents and drains.	$1,640.00
61	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
62	Drain Deaerator and Storage	$820.00
63	Leave open vents and drains.	$820.00
64	**Precipitator**	**$13,651.92**
65	Multiple cleaning cycles for collection plates.	$2,460.00
66	Clear hoppers of all ash	$2,729.92
67	Disconnect tranformers.	$1,920.00
68	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$851.20
69	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,380.56
70	Install bird screens across hopper ash outlet and ash line flanges.	$851.20

Montrose 1 Retirement

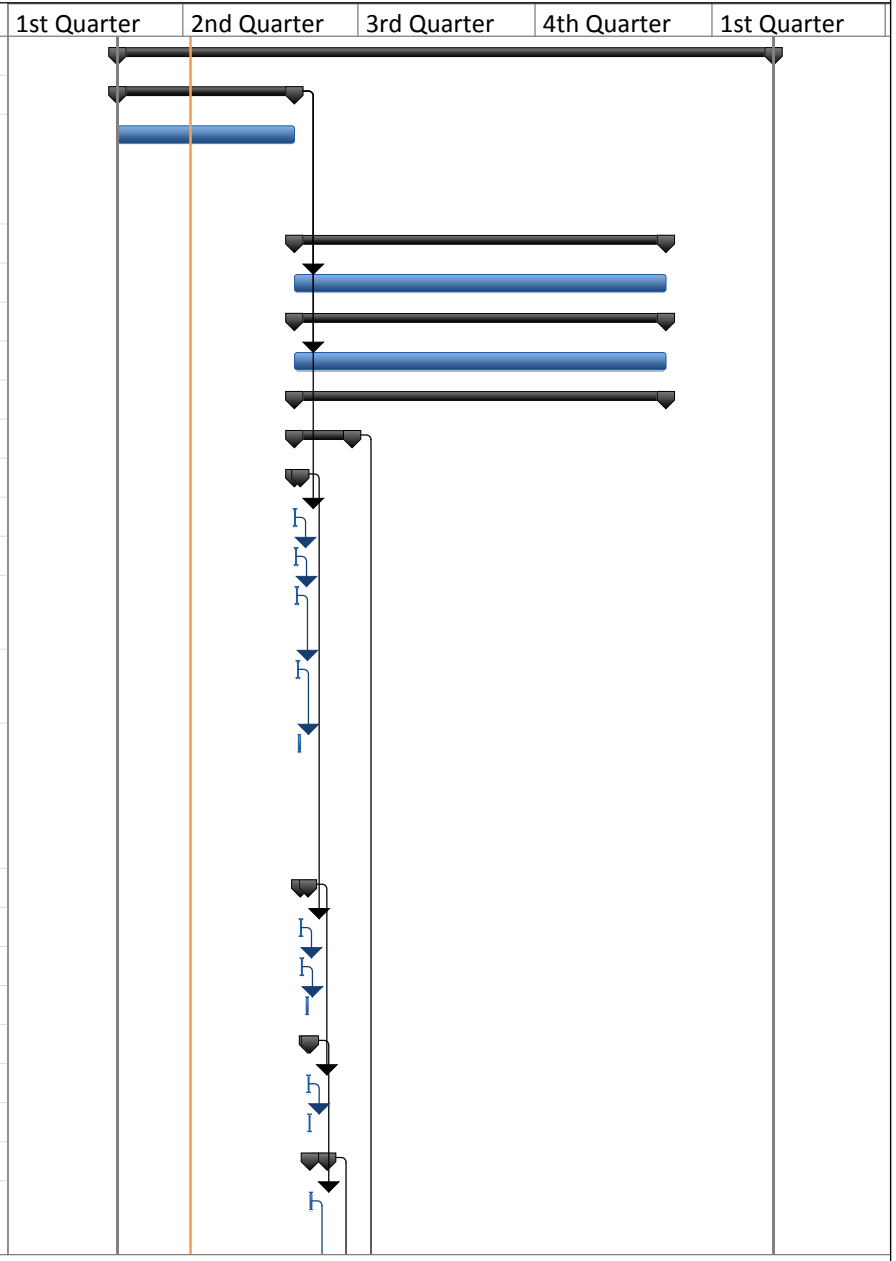
ID	Task Name	Cost
71	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$851.20
72	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
73	**Turbine(s) and Condenser**	**$5,091.60**
74	Drain hotwell and leave doors open.	$835.60
75	Open main turbine doors.	$851.20
76	Open bfp turbine doors.	$851.20
77	Remove lube oil.	$2,553.60
78	**Generator**	**$5,916.56**
79	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.	$434.64
80	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
81	De-energize power supplies to generator excitation system at the source.	$434.64
82	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.	$434.64
83	Drain generator and exciter cooling water systems (if applicable).	$835.60
84	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00
85	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40
86	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
87	Drain.	$1,640.00
88	Open water box doors.	$851.20
89	Drain any circulating water chemical feed tanks.	$820.00
90	**Compressed Air System**	**$820.00**
91	Open vents and drains.	$820.00
92	**Auxiliary Steam System**	**$1,640.00**
93	Drain water from system.	$820.00
94	Remove aux boiler chemicals.	$820.00
95	**Auxiliary Cooling Water System**	**$820.00**
96	Drain water from system.	$820.00
97	**Condenser Air Extraction**	**$820.00**
98	Drain water from system.	$820.00
99	**Building Heating System**	**$820.00**
100	Drain water from system.	$820.00

Montrose 1 Retirement

ID	Task Name	Cost
101	**Battery System**	**$4,139.04**
102	De-energize all battery chargers from the source.	$434.64
103	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
104	Remove and dispose of battery electrolyte.	$1,634.88
105	Remove and dispose of battery cells.	$1,089.92
106	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
107	**Post Retirement Activities**	**$25,040.00**
108	Post Retirement Activities	$25,040.00

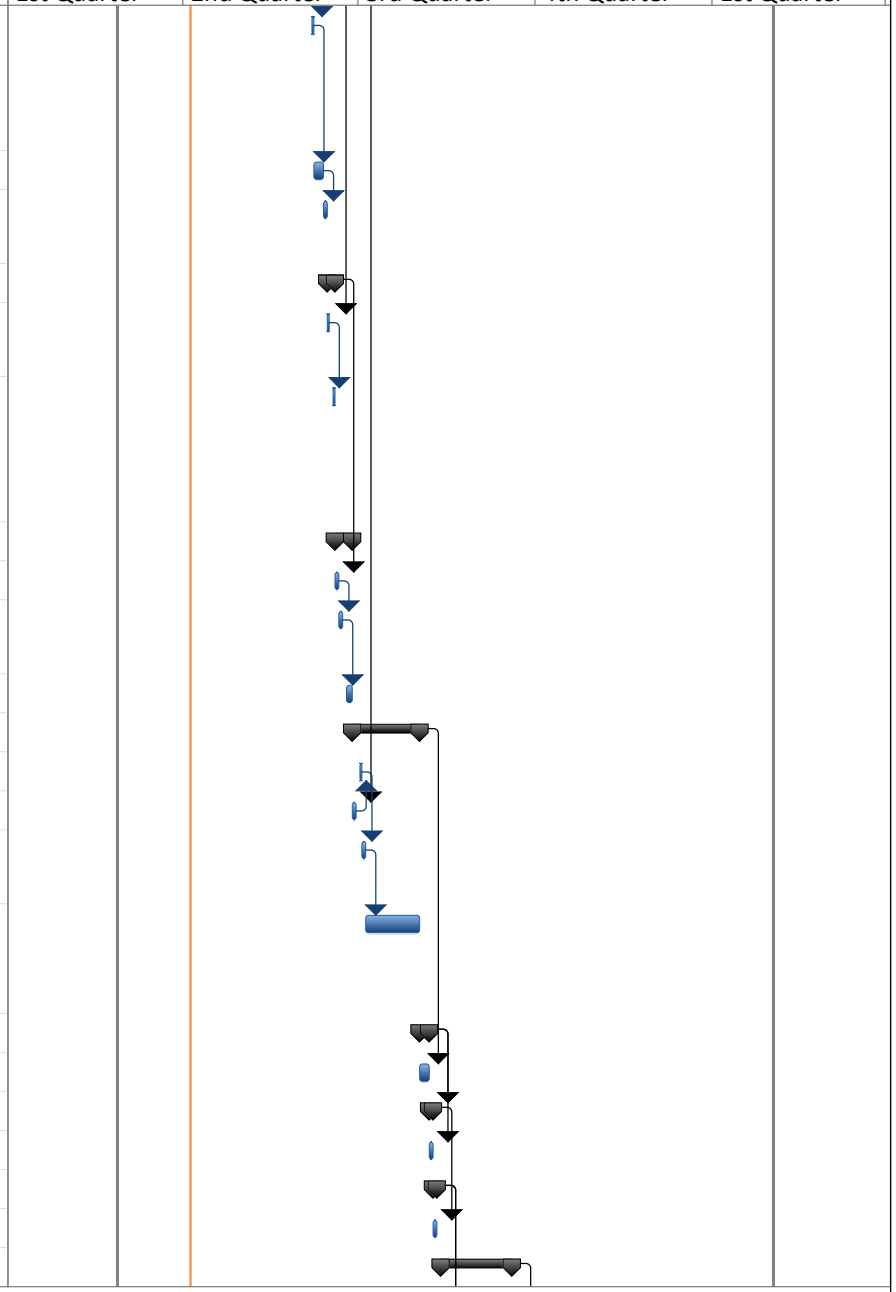
Montrose 1 Retirement

ID	Task Name	Duration
1	**Montrose 1 Retirement**	**245 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	**KCC&L Overhead Costs**	**139 days**
5	KCP&L Retirement Manager	139 days
6	**Equipment Rentals**	**139 days**
7	Vacuum truck	139 days
8	**Retirement**	**139 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



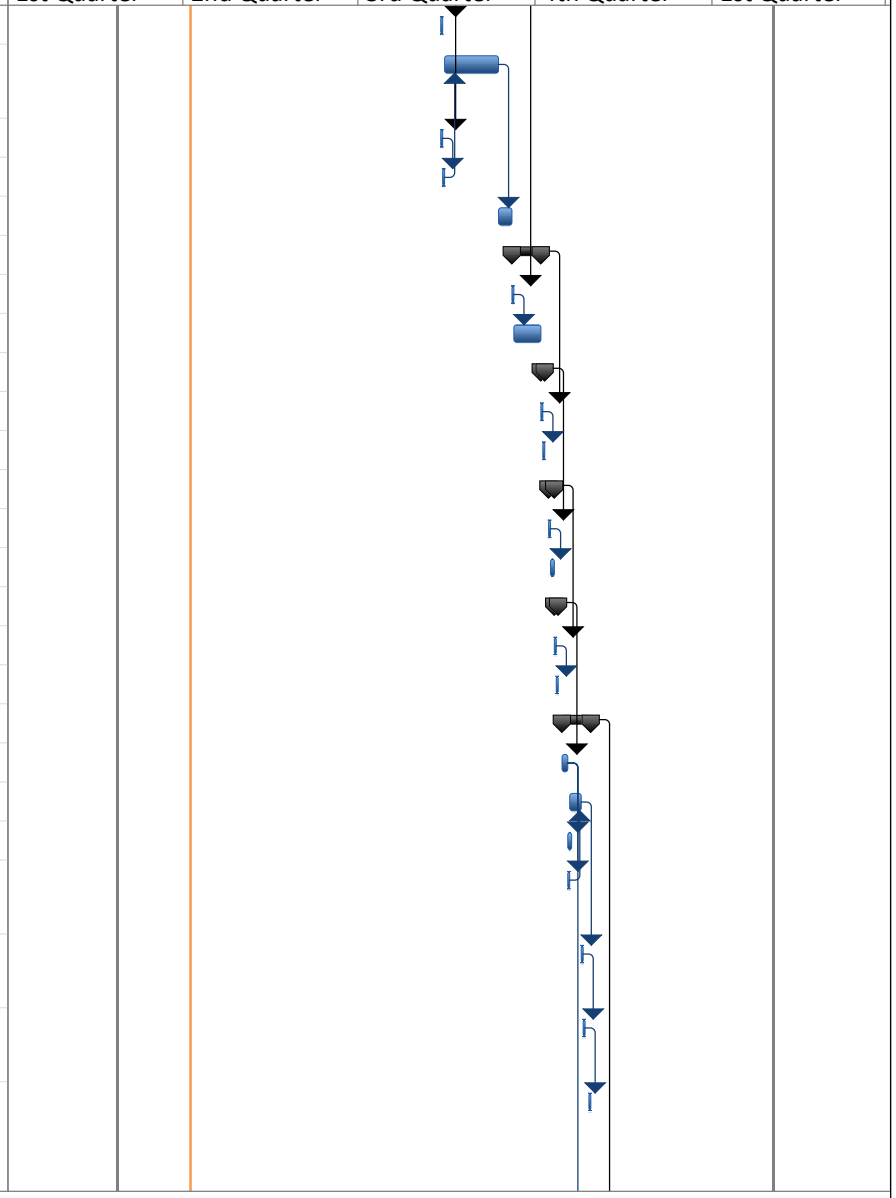
Montrose 1 Retirement

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	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	**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**



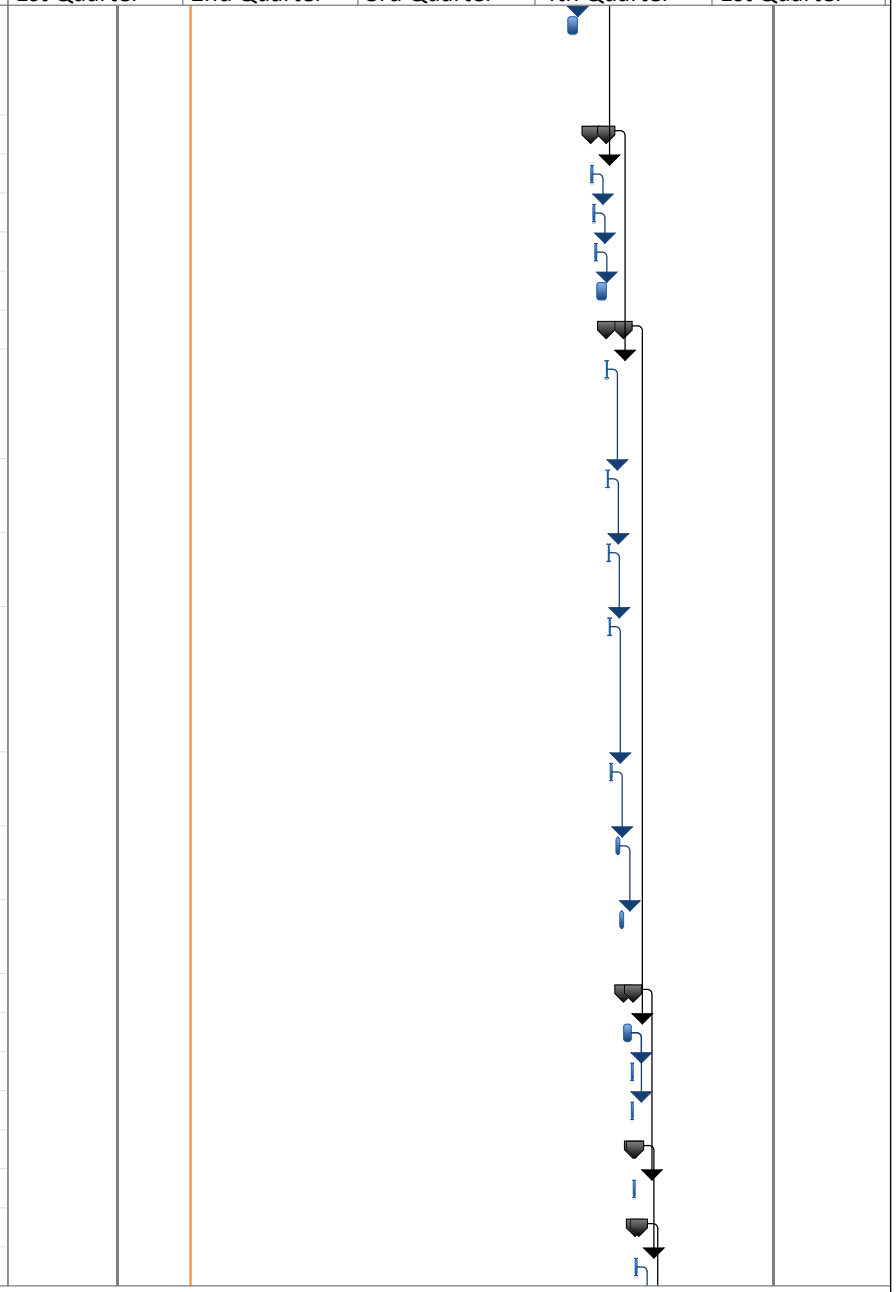
Montrose 1 Retirement

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**	**11 days**
53	Open ductwork doors.	1 day
54	Perform cleaning of the ductwork.	10 days
55	**Condensate and Feedwater Piping**	**2 days**
56	Drain water from the system.	1 day
57	Leave open vents and drains.	1 day
58	**Feedwater heaters**	**3 days**
59	Drain feedwater heaters	1 day
60	Leave open vents and drains.	2 days
61	**Deaerator and Deaerator Storage Tank**	**2 days**
62	Drain Deaerator and Storage	1 day
63	Leave open vents and drains.	1 day
64	**Precipitator**	**11 days**
65	Multiple cleaning cycles for collection plates.	3 days
66	Clear hoppers of all ash	4 days
67	Disconnect tranformers.	2 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
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



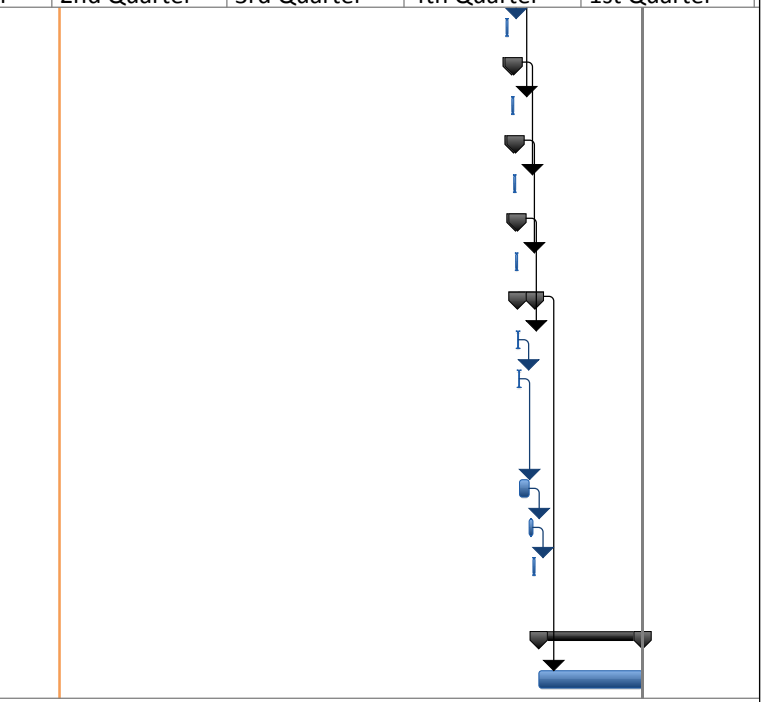
Montrose 1 Retirement

ID	Task Name	Duration
72	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
73	**Turbine(s) and Condenser**	**6 days**
74	Drain hotwell and leave doors open.	1 day
75	Open main turbine doors.	1 day
76	Open bfp turbine doors.	1 day
77	Remove lube oil.	3 days
78	**Generator**	**7 days**
79	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
80	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
81	De-energize power supplies to generator excitation system at the source.	0.5 days
82	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
83	Drain generator and exciter cooling water systems (if applicable).	1 day
84	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
85	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
86	**Circulation Water and Turbine Cooling Water System**	**3 days**
87	Drain.	2 days
88	Open water box doors.	1 day
89	Drain any circulating water chemical feed tanks.	1 day
90	**Compressed Air System**	**1 day**
91	Open vents and drains.	1 day
92	**Auxiliary Steam System**	**2 days**
93	Drain water from system.	1 day



Montrose 1 Retirement

ID	Task Name	Duration
94	Remove aux boiler chemicals.	1 day
95	**Auxiliary Cooling Water System**	**1 day**
96	Drain water from system.	1 day
97	**Condenser Air Extraction**	**1 day**
98	Drain water from system.	1 day
99	**Building Heating System**	**1 day**
100	Drain water from system.	1 day
101	**Battery System**	**7 days**
102	De-energize all battery chargers from the source.	0.5 days
103	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
104	Remove and dispose of battery electrolyte.	3 days
105	Remove and dispose of battery cells.	2 days
106	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
107	**Post Retirement Activities**	**40 days**
108	Post Retirement Activities	40 days



Montrose Unit 1 Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$338,625		
Overhead During Dismantlement		$647,921		
Post-Dismantlement Activities		$26,741		
Owner Costs Total			$1,013,288	
Demolition General Contractor (DGC) Costs				
Site Management		$384,284		
Equipment Rental		$641,963		
Consummables		$640,474		
Scrap Crew(s)		$647,773		
Dismantlement*		$1,723,401		
DGC Insurance	2.00%	$80,758		
Contingency/Profit	15.00%	$617,798		
Performance Bond	2.00%	$94,729		
Contractor Costs Total:			$4,831,180	
Total:				$5,844,468
Owner Internal Costs:	5.00%			$292,223
Owner Contingency:	25.00%			$1,534,173
Montrose Unit 1 Dismantlement Opinion of Probable Cost:				$7,670,865

UNIT 2

Montrose 2 Retirement

Owner Costs			
Pre-Retirement Activities		$95,040	
Retirement Activities		$241,071	
Post-Retirement Activities		$25,040	
Owner Direct Total			$361,151
Owner Internal Costs	5.00%		$18,058
Owner Contingency:	25.00%		$94,802

Montrose 2 Retirement Opinion of Probable Cost: $455,953.14

Montrose 2 Retirement

ID	Task Name	Cost
1	**Montrose 2 Retirement**	**$361,151.87**
2	**Pre-Engineering**	**$95,040.00**
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**	**$81,176.00**
5	KCP&L Retirement Manager	$81,176.00
6	**Equipment Rentals**	**$27,800.00**
7	Vacuum truck	$27,800.00
8	**Retirement**	**$132,095.87**
9	**Electrical**	**$18,367.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$5,382.08**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$2,553.60
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$6,030.72**
32	De-energize all primary power at the source.	$1,738.56

Montrose 2 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,738.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,553.60
35	**Coal Handling**	**$26,734.00**
36	Empty all transfer hoppers.	$1,655.60
37	Burn out coal silos.	$1,640.00
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,640.00
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
40	**Fuel Oil and Igniter System**	**$2,460.00**
41	Drain fuel oil system	$2,460.00
42	**Waste Oil System**	**$1,640.00**
43	Drain all waste oil systems	$1,640.00
44	**Boiler Chemical Feed**	**$1,640.00**
45	Drain all chemical feed tanks.	$1,640.00
46	**Boiler**	**$26,734.11**
47	Open boiler doors.	$851.20
48	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
49	Drain boiler, drum, downcomers and headers.	$820.00
50	Open drum doors.	$851.20
51	Drain and clean the submerged flight conveyor system.	$2,413.31
52	**Stack and Ductwork**	**$11,750.40**
53	Open ductwork doors.	$851.20
54	Perform cleaning of the ductwork.	$10,899.20
55	**Condensate and Feedwater Piping**	**$1,640.00**
56	Drain water from the system.	$820.00
57	Leave open vents and drains.	$820.00
58	**Feedwater heaters**	**$2,460.00**
59	Drain feedwater heaters	$820.00
60	Leave open vents and drains.	$1,640.00
61	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
62	Drain Deaerator and Storage	$820.00
63	Leave open vents and drains.	$820.00
64	**Precipitator**	**$13,651.92**
65	Multiple cleaning cycles for collection plates.	$2,460.00
66	Clear hoppers of all ash	$2,729.92
67	Disconnect tranformers.	$1,920.00
68	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$851.20
69	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,380.56
70	Install bird screens across hopper ash outlet and ash line flanges.	$851.20

Montrose 2 Retirement

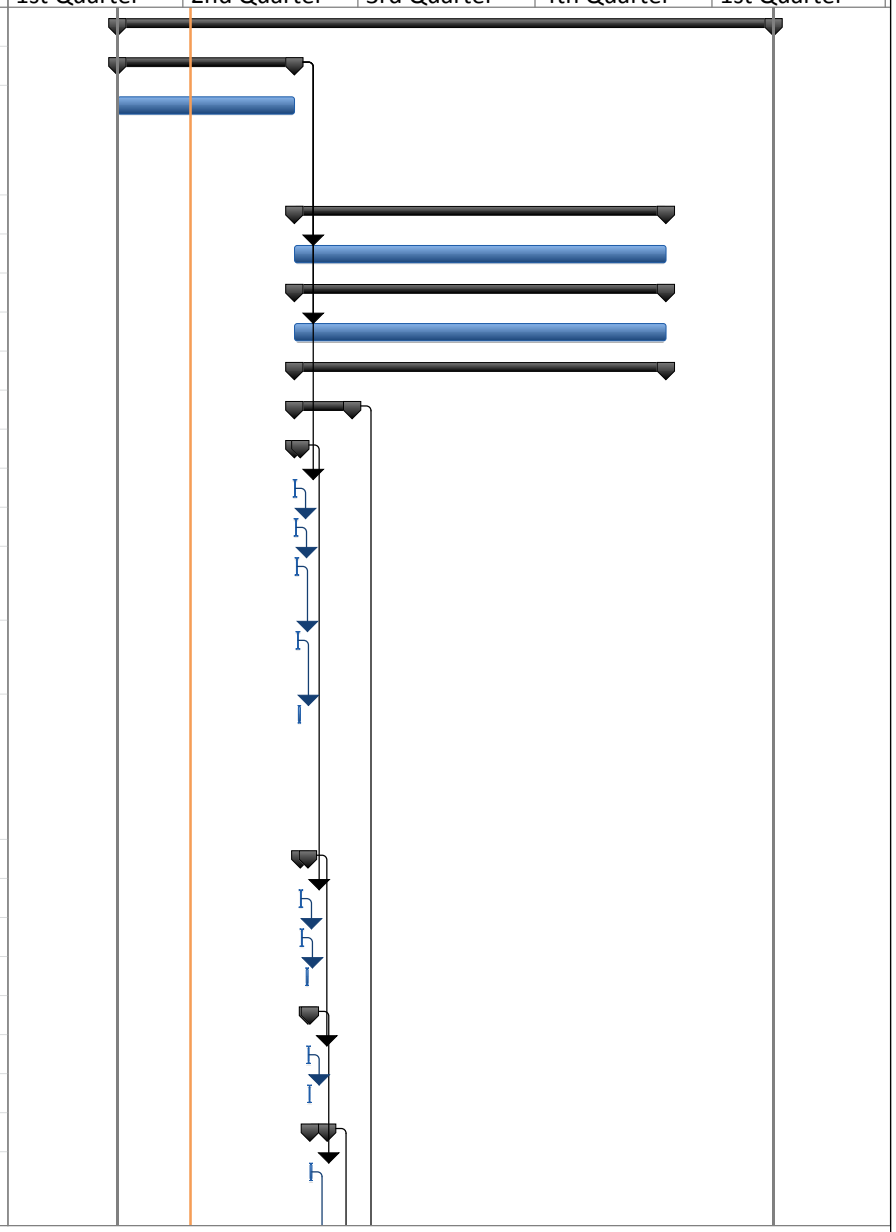
ID	Task Name	Cost
71	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$851.20
72	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
73	**Turbine(s) and Condenser**	**$5,091.60**
74	Drain hotwell and leave doors open.	$835.60
75	Open main turbine doors.	$851.20
76	Open bfp turbine doors.	$851.20
77	Remove lube oil.	$2,553.60
78	**Generator**	**$5,916.56**
79	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.	$434.64
80	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
81	De-energize power supplies to generator excitation system at the source.	$434.64
82	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.	$434.64
83	Drain generator and exciter cooling water systems (if applicable).	$835.60
84	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00
85	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40
86	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
87	Drain.	$1,640.00
88	Open water box doors.	$851.20
89	Drain any circulating water chemical feed tanks.	$820.00
90	**Compressed Air System**	**$820.00**
91	Open vents and drains.	$820.00
92	**Auxiliary Steam System**	**$1,640.00**
93	Drain water from system.	$820.00
94	Remove aux boiler chemicals.	$820.00
95	**Auxiliary Cooling Water System**	**$820.00**
96	Drain water from system.	$820.00
97	**Condenser Air Extraction**	**$820.00**
98	Drain water from system.	$820.00
99	**Building Heating System**	**$820.00**
100	Drain water from system.	$820.00
101	**Battery System**	**$4,139.04**
102	De-energize all battery chargers from the source.	$434.64

Montrose 2 Retirement

ID	Task Name	Cost
103	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
104	Remove and dispose of battery electrolyte.	$1,634.88
105	Remove and dispose of battery cells.	$1,089.92
106	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
107	**Post Retirement Activities**	**$25,040.00**
108	Post Retirement Activities	$25,040.00

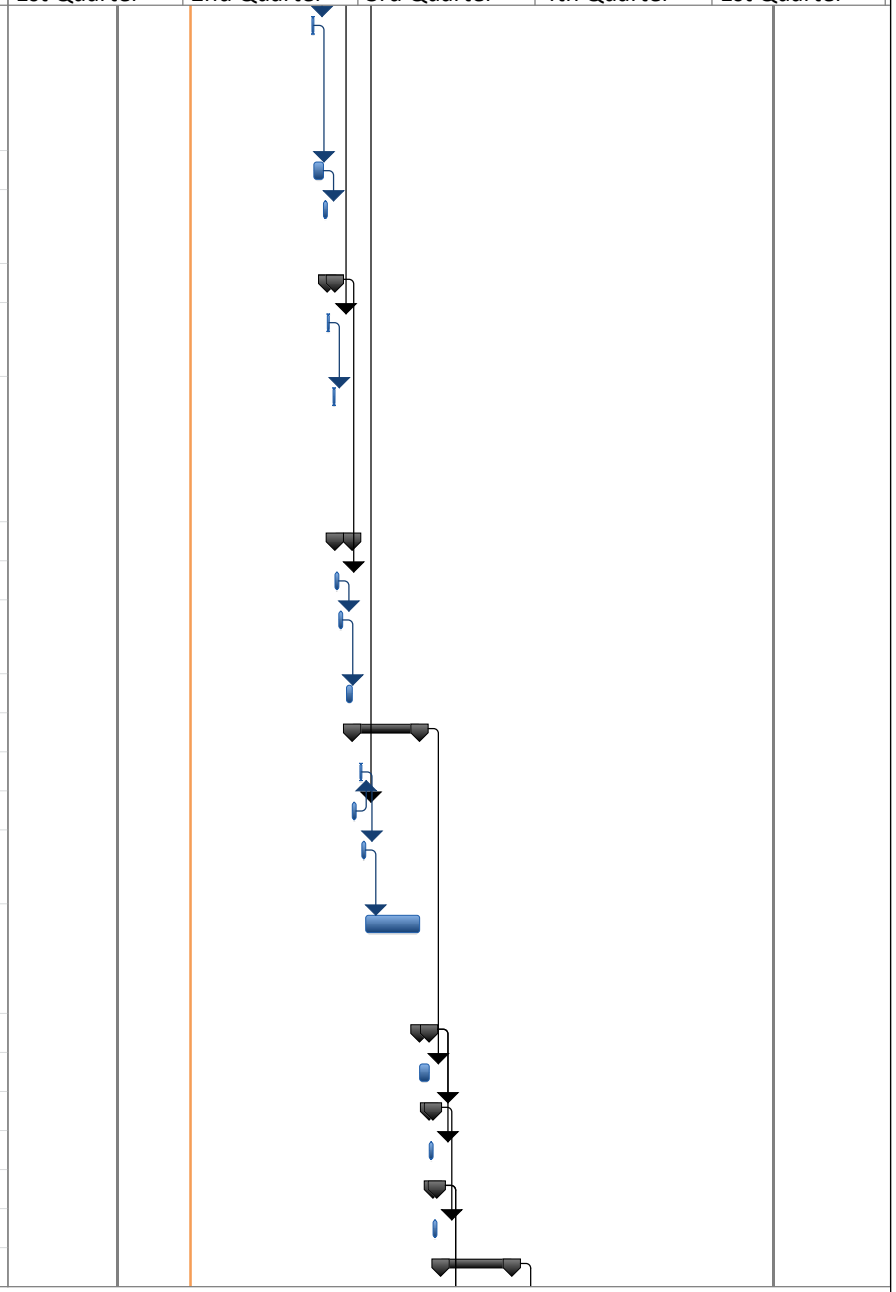
Montrose 2 Retirement

ID	Task Name	Duration
1	**Montrose 2 Retirement**	**245 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**	**139 days**
5	KCP&L Retirement Manager	139 days
6	**Equipment Rentals**	**139 days**
7	Vacuum truck	139 days
8	**Retirement**	**139 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



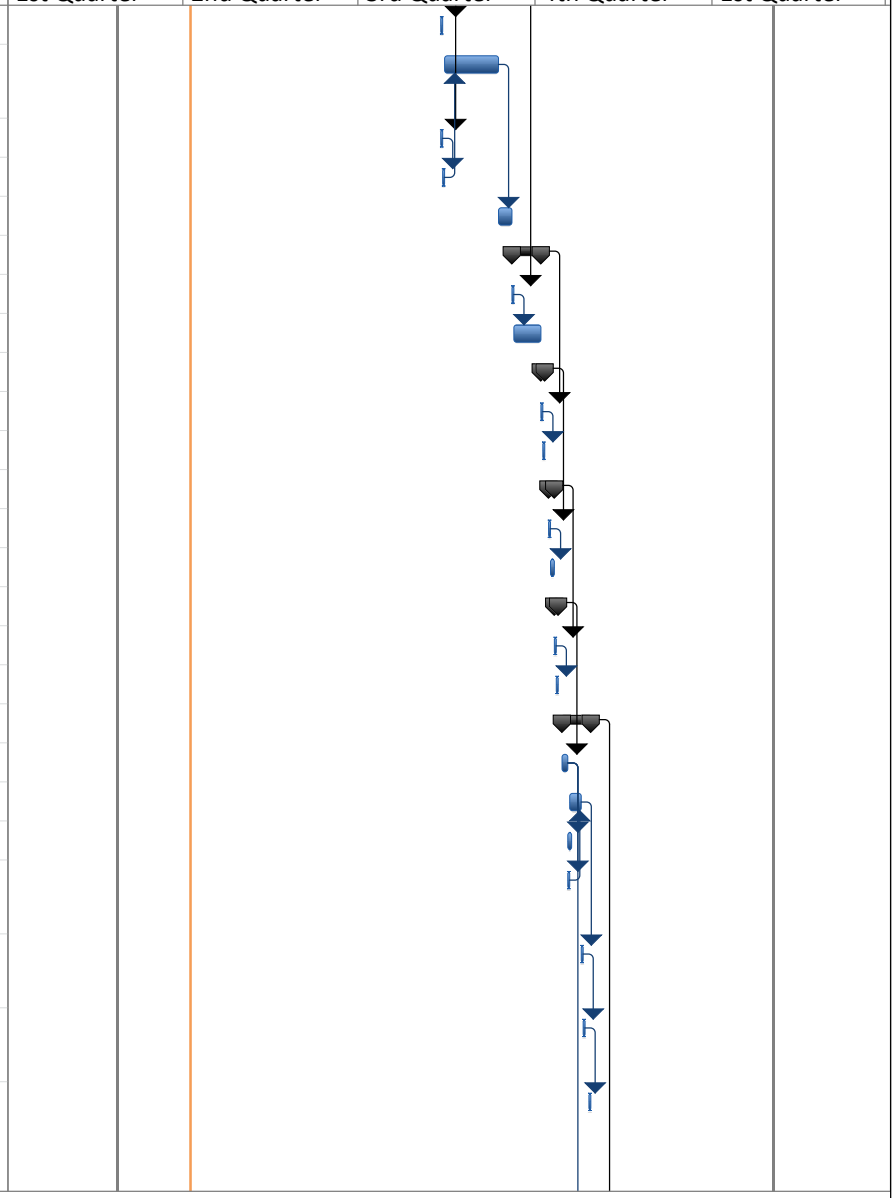
Montrose 2 Retirement

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	**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**



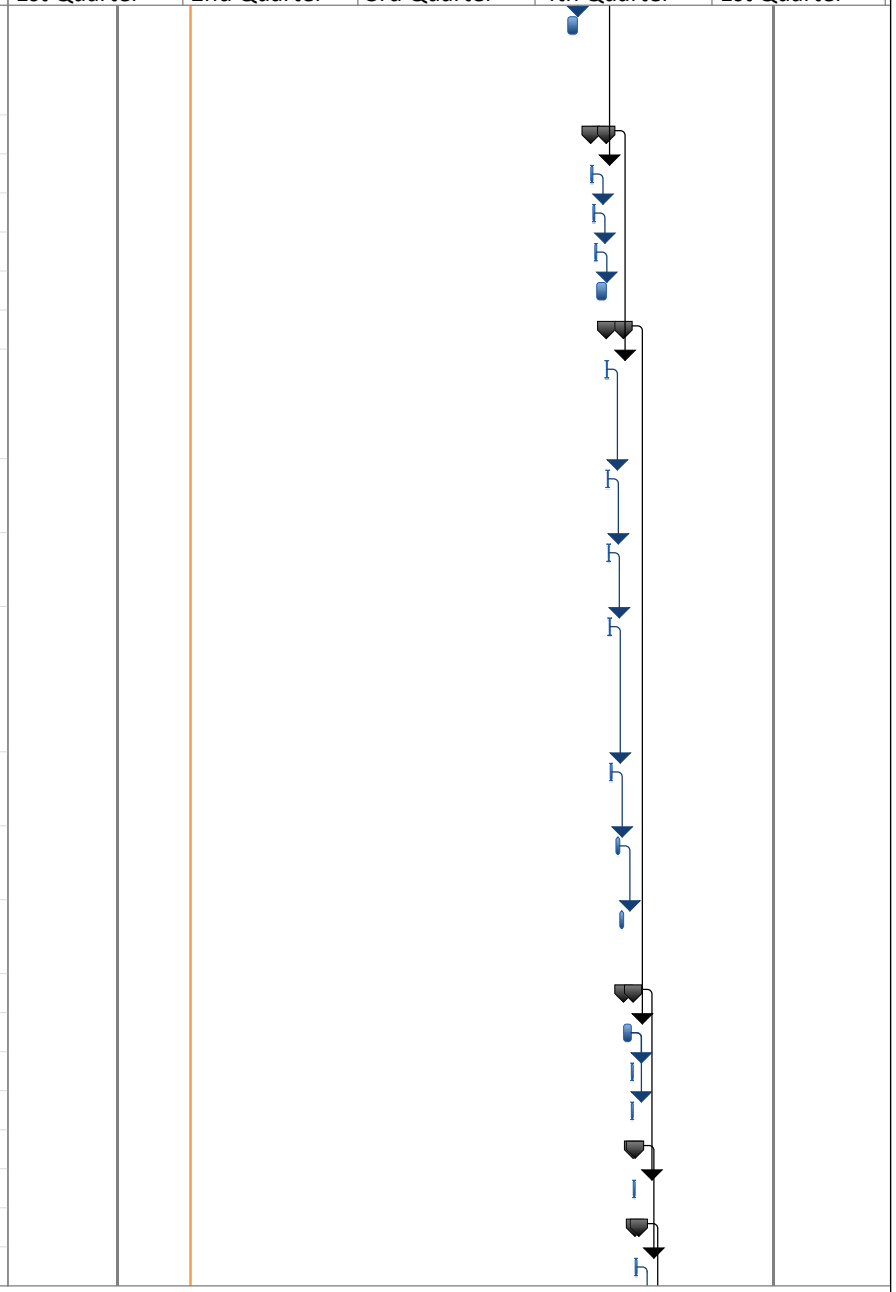
Montrose 2 Retirement

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**	**11 days**
53	Open ductwork doors.	1 day
54	Perform cleaning of the ductwork.	10 days
55	**Condensate and Feedwater Piping**	**2 days**
56	Drain water from the system.	1 day
57	Leave open vents and drains.	1 day
58	**Feedwater heaters**	**3 days**
59	Drain feedwater heaters	1 day
60	Leave open vents and drains.	2 days
61	**Deaerator and Deaerator Storage Tank**	**2 days**
62	Drain Deaerator and Storage	1 day
63	Leave open vents and drains.	1 day
64	**Precipitator**	**11 days**
65	Multiple cleaning cycles for collection plates.	3 days
66	Clear hoppers of all ash	4 days
67	Disconnect tranformers.	2 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
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



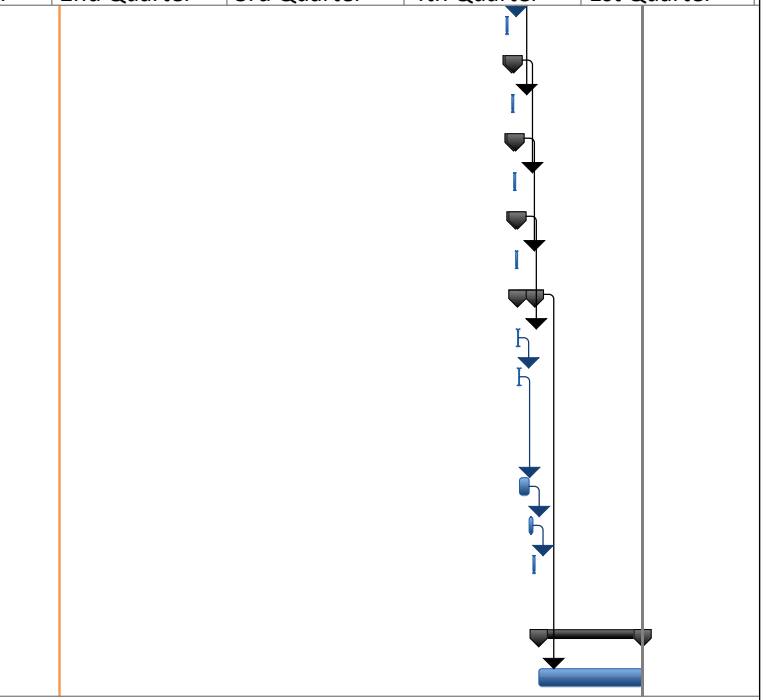
Montrose 2 Retirement

ID	Task Name	Duration
72	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
73	**Turbine(s) and Condenser**	**6 days**
74	Drain hotwell and leave doors open.	1 day
75	Open main turbine doors.	1 day
76	Open bfp turbine doors.	1 day
77	Remove lube oil.	3 days
78	**Generator**	**7 days**
79	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
80	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
81	De-energize power supplies to generator excitation system at the source.	0.5 days
82	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
83	Drain generator and exciter cooling water systems (if applicable).	1 day
84	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
85	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
86	**Circulation Water and Turbine Cooling Water System**	**3 days**
87	Drain.	2 days
88	Open water box doors.	1 day
89	Drain any circulating water chemical feed tanks.	1 day
90	**Compressed Air System**	**1 day**
91	Open vents and drains.	1 day
92	**Auxiliary Steam System**	**2 days**
93	Drain water from system.	1 day



Montrose 2 Retirement

ID	Task Name	Duration
94	Remove aux boiler chemicals.	1 day
95	**Auxiliary Cooling Water System**	**1 day**
96	Drain water from system.	1 day
97	**Condenser Air Extraction**	**1 day**
98	Drain water from system.	1 day
99	**Building Heating System**	**1 day**
100	Drain water from system.	1 day
101	**Battery System**	**7 days**
102	De-energize all battery chargers from the source.	0.5 days
103	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
104	Remove and dispose of battery electrolyte.	3 days
105	Remove and dispose of battery cells.	2 days
106	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
107	**Post Retirement Activities**	**40 days**
108	Post Retirement Activities	40 days



Montrose Unit 2 Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$331,403		
Overhead During Dismantlement		$634,102		
Post-Dismantlement Activities		$26,171		
Owner Costs Total			$991,676	
Demolition General Contractor (DGC) Costs				
Site Management		$376,088		
Equipment Rental		$628,271		
Consummables		$626,814		
Scrap Crew(s)		$633,957		
Dismantlement*		$1,686,643		
DGC Insurance	2.00%	$79,035		
Contingency/Profit	15.00%	$604,621.31		
Performance Bond	2.00%	$92,708.60		
Contractor Costs Total:			$4,728,139	
Total:				$5,719,815
Owner Internal Costs:	5.00%			$285,990.74
Owner Contingency:	25.00%			$1,501,451.37
Montrose Unit 2 Dismantlement Opinion of Probable Cost:				$7,507,256.84

UNIT 3

Montrose 3 Retirement

Owner Costs			
Pre-Retirement Activities		$95,040	
Retirement Activities		$241,071	
Post-Retirement Activities		$25,040	
Owner Direct Total			$361,151
Owner Internal Costs	5.00%		$18,058
Owner Contingency:	25.00%		$94,802

Montrose 3 Retirement Opinion of Probable Cost: $455,953.14

Montrose 3 Retirement

ID	Task Name	Cost
1	**Montrose 3 Retirement**	**$361,151.87**
2	**Pre-Engineering**	**$95,040.00**
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**	**$81,176.00**
5	KCP&L Retirement Manager	$81,176.00
6	**Equipment Rentals**	**$27,800.00**
7	Vacuum truck	$27,800.00
8	**Retirement**	**$132,095.87**
9	**Electrical**	**$18,367.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$5,382.08**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$2,553.60
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$6,030.72**
32	De-energize all primary power at the source.	$1,738.56

Montrose 3 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,738.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,553.60
35	**Coal Handling**	**$26,734.00**
36	Empty all transfer hoppers.	$1,655.60
37	Burn out coal silos.	$1,640.00
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,640.00
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
40	**Fuel Oil and Igniter System**	**$2,460.00**
41	Drain fuel oil system	$2,460.00
42	**Waste Oil System**	**$1,640.00**
43	Drain all waste oil systems	$1,640.00
44	**Boiler Chemical Feed**	**$1,640.00**
45	Drain all chemical feed tanks.	$1,640.00
46	**Boiler**	**$26,734.11**
47	Open boiler doors.	$851.20
48	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
49	Drain boiler, drum, downcomers and headers.	$820.00
50	Open drum doors.	$851.20
51	Drain and clean the submerged flight conveyor system.	$2,413.31
52	**Stack and Ductwork**	**$11,750.40**
53	Open ductwork doors.	$851.20
54	Perform cleaning of the ductwork.	$10,899.20
55	**Condensate and Feedwater Piping**	**$1,640.00**
56	Drain water from the system.	$820.00
57	Leave open vents and drains.	$820.00
58	**Feedwater heaters**	**$2,460.00**
59	Drain feedwater heaters	$820.00
60	Leave open vents and drains.	$1,640.00
61	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
62	Drain Deaerator and Storage	$820.00
63	Leave open vents and drains.	$820.00
64	**Precipitator**	**$13,651.92**
65	Multiple cleaning cycles for collection plates.	$2,460.00
66	Clear hoppers of all ash	$2,729.92
67	Disconnect tranformers.	$1,920.00
68	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$851.20
69	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,380.56
70	Install bird screens across hopper ash outlet and ash line flanges.	$851.20

Montrose 3 Retirement

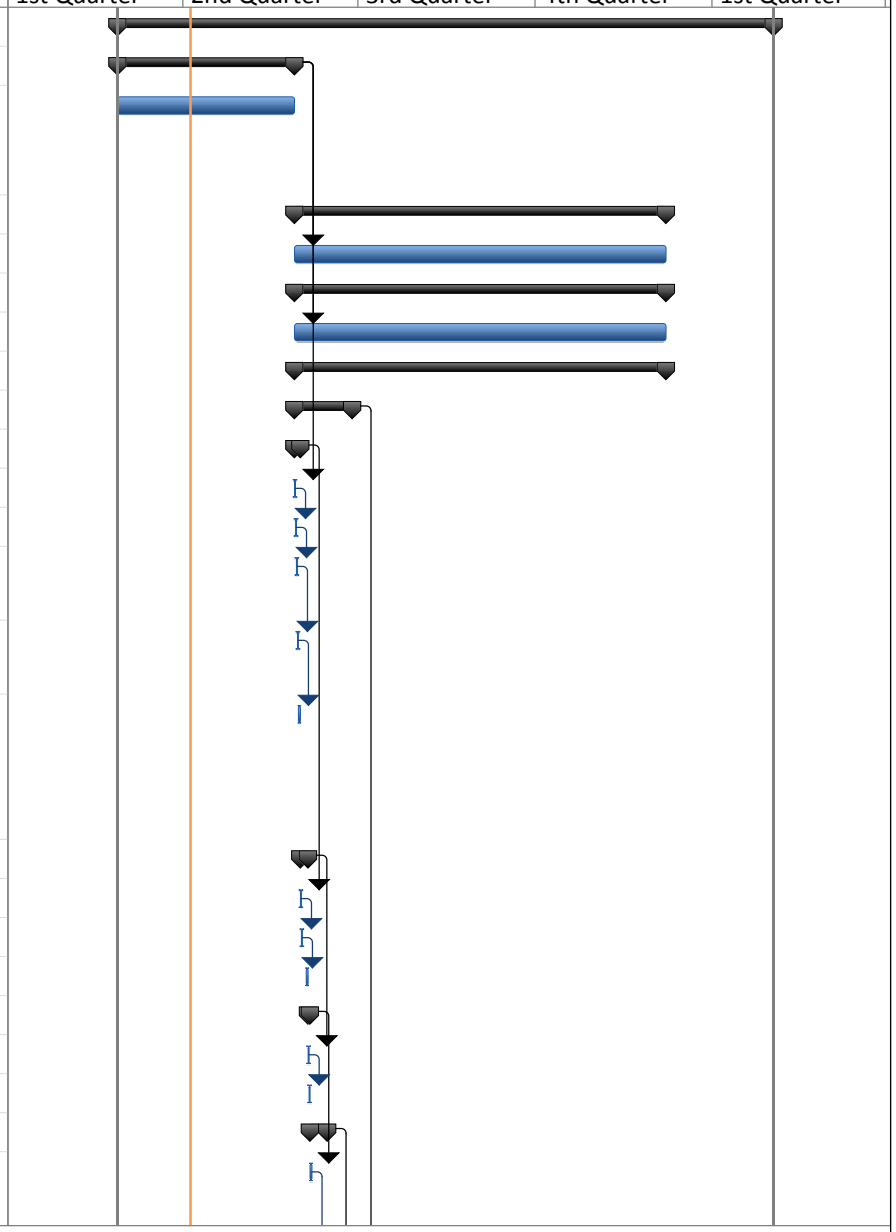
ID	Task Name	Cost
71	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$851.20
72	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
73	**Turbine(s) and Condenser**	**$5,091.60**
74	Drain hotwell and leave doors open.	$835.60
75	Open main turbine doors.	$851.20
76	Open bfp turbine doors.	$851.20
77	Remove lube oil.	$2,553.60
78	**Generator**	**$5,916.56**
79	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.	$434.64
80	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
81	De-energize power supplies to generator excitation system at the source.	$434.64
82	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.	$434.64
83	Drain generator and exciter cooling water systems (if applicable).	$835.60
84	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00
85	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40
86	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
87	Drain.	$1,640.00
88	Open water box doors.	$851.20
89	Drain any circulating water chemical feed tanks.	$820.00
90	**Compressed Air System**	**$820.00**
91	Open vents and drains.	$820.00
92	**Auxiliary Steam System**	**$1,640.00**
93	Drain water from system.	$820.00
94	Remove aux boiler chemicals.	$820.00
95	**Auxiliary Cooling Water System**	**$820.00**
96	Drain water from system.	$820.00
97	**Condenser Air Extraction**	**$820.00**
98	Drain water from system.	$820.00
99	**Building Heating System**	**$820.00**
100	Drain water from system.	$820.00
101	**Battery System**	**$4,139.04**
102	De-energize all battery chargers from the source.	$434.64

Montrose 3 Retirement

ID	Task Name	Cost
103	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
104	Remove and dispose of battery electrolyte.	$1,634.88
105	Remove and dispose of battery cells.	$1,089.92
106	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
107	**Post Retirement Activities**	**$25,040.00**
108	Post Retirement Activities	$25,040.00

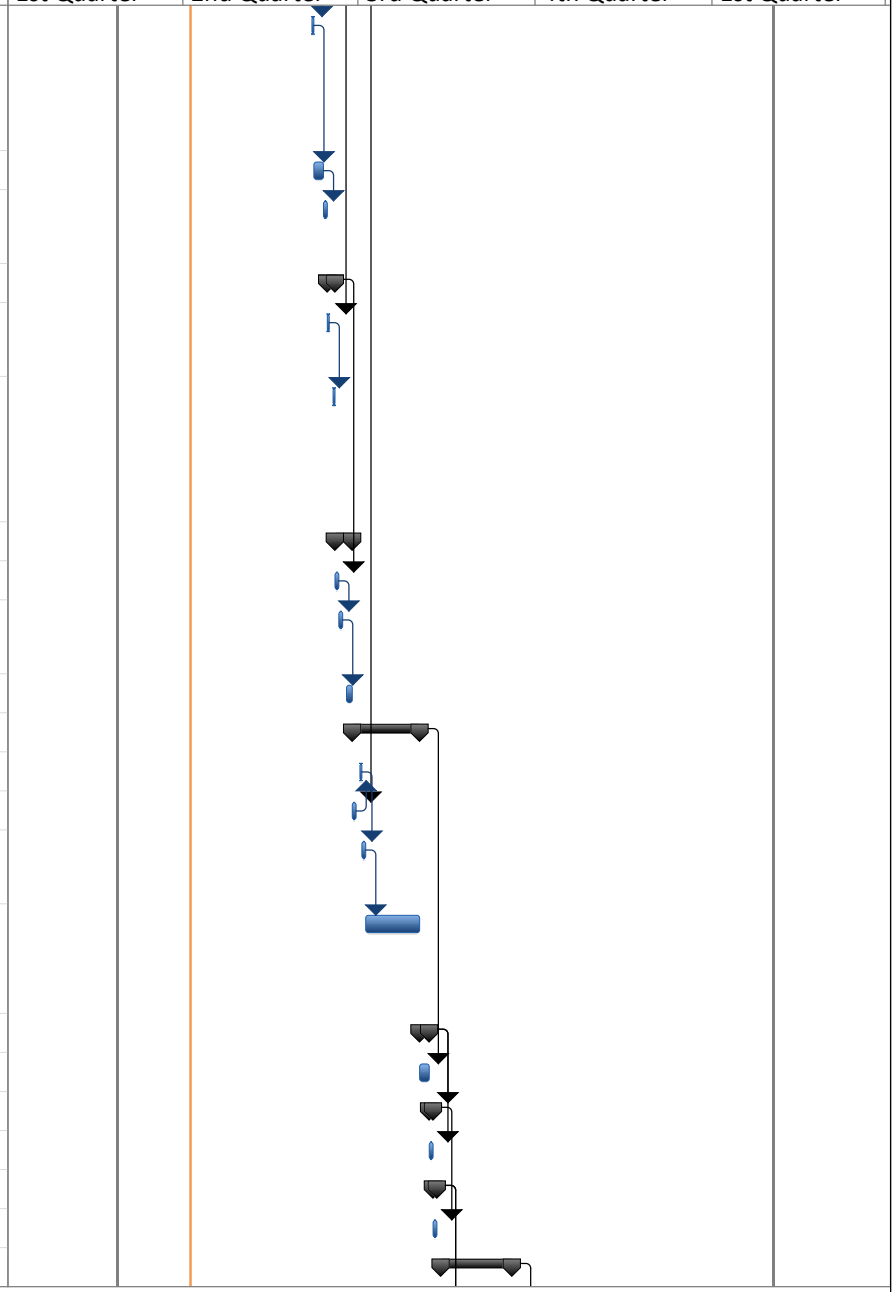
Montrose 3 Retirement

ID	Task Name	Duration
1	**Montrose 3 Retirement**	**245 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**	**139 days**
5	KCP&L Retirement Manager	139 days
6	**Equipment Rentals**	**139 days**
7	Vacuum truck	139 days
8	**Retirement**	**139 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



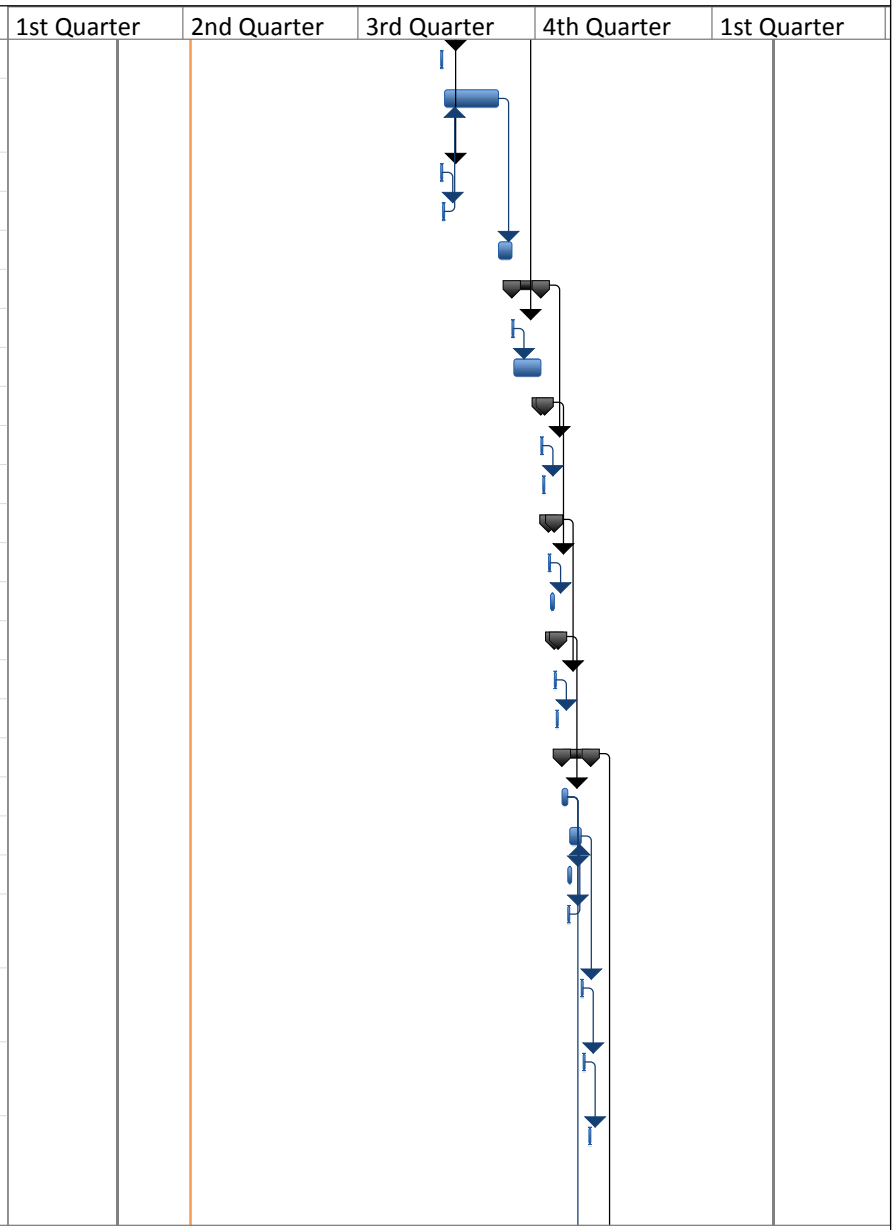
Montrose 3 Retirement

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**	**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**



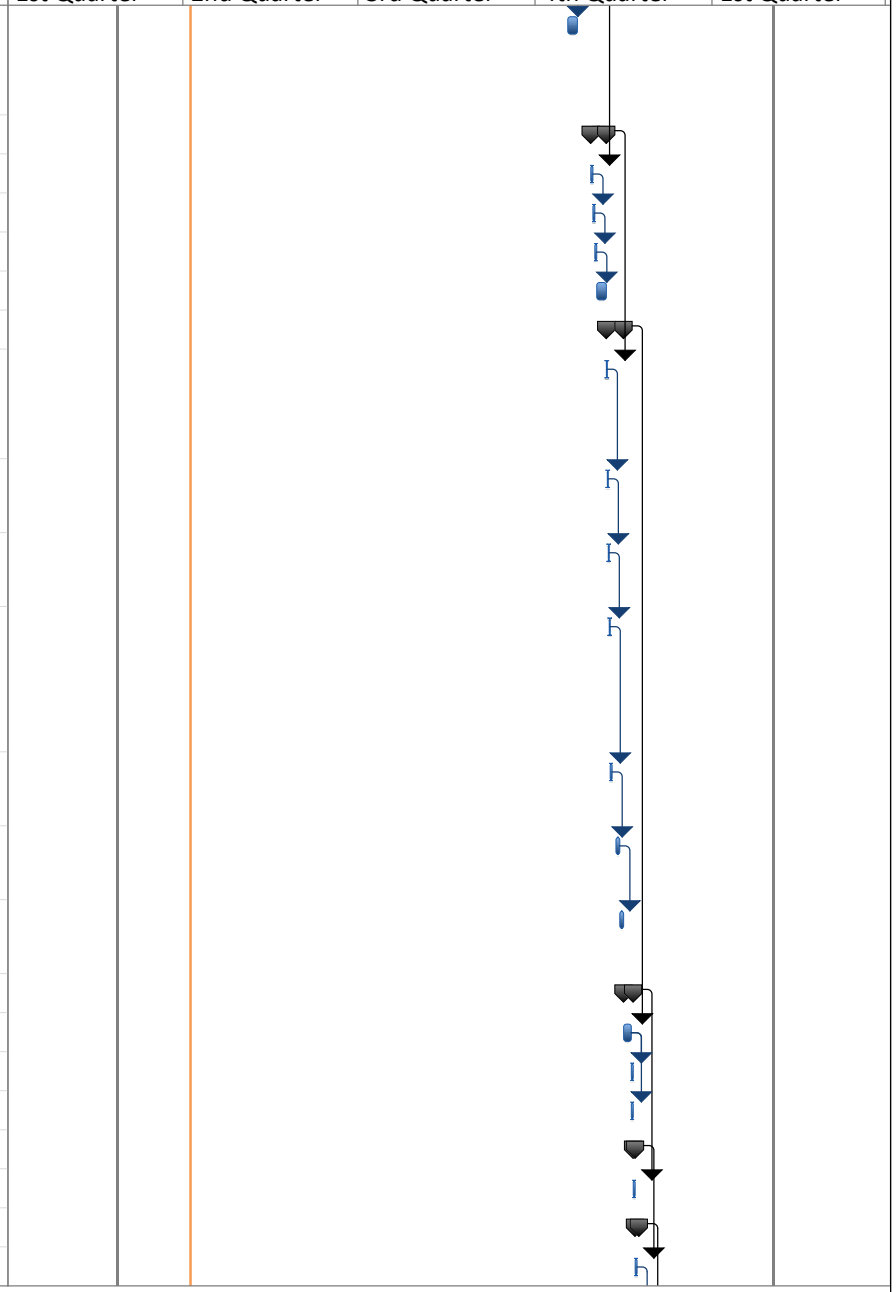
Montrose 3 Retirement

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**	**11 days**
53	Open ductwork doors.	1 day
54	Perform cleaning of the ductwork.	10 days
55	**Condensate and Feedwater Piping**	**2 days**
56	Drain water from the system.	1 day
57	Leave open vents and drains.	1 day
58	**Feedwater heaters**	**3 days**
59	Drain feedwater heaters	1 day
60	Leave open vents and drains.	2 days
61	**Deaerator and Deaerator Storage Tank**	**2 days**
62	Drain Deaerator and Storage	1 day
63	Leave open vents and drains.	1 day
64	**Precipitator**	**11 days**
65	Multiple cleaning cycles for collection plates.	3 days
66	Clear hoppers of all ash	4 days
67	Disconnect tranformers.	2 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
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



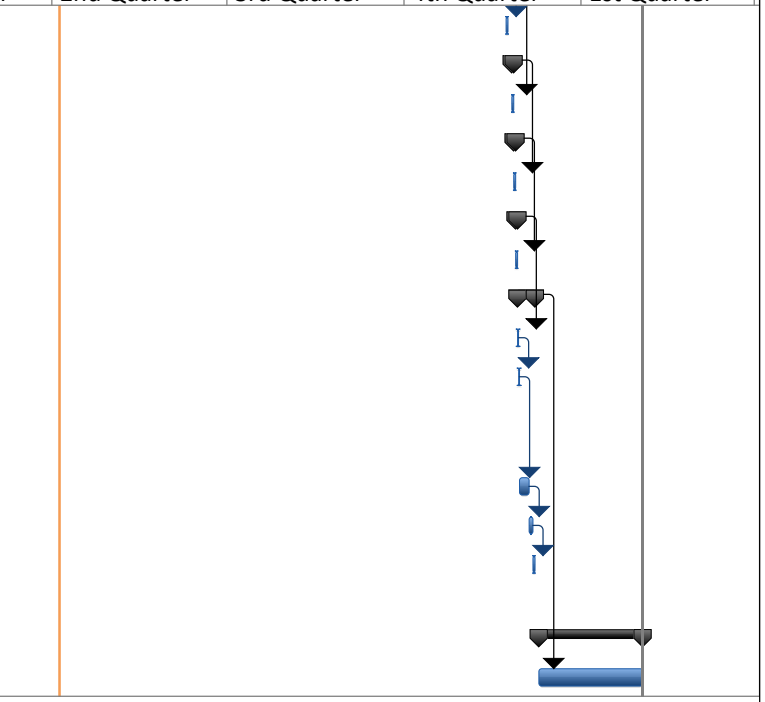
Montrose 3 Retirement

ID	Task Name	Duration
72	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
73	**Turbine(s) and Condenser**	**6 days**
74	Drain hotwell and leave doors open.	1 day
75	Open main turbine doors.	1 day
76	Open bfp turbine doors.	1 day
77	Remove lube oil.	3 days
78	**Generator**	**7 days**
79	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
80	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
81	De-energize power supplies to generator excitation system at the source.	0.5 days
82	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
83	Drain generator and exciter cooling water systems (if applicable).	1 day
84	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
85	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
86	**Circulation Water and Turbine Cooling Water System**	**3 days**
87	Drain.	2 days
88	Open water box doors.	1 day
89	Drain any circulating water chemical feed tanks.	1 day
90	**Compressed Air System**	**1 day**
91	Open vents and drains.	1 day
92	**Auxiliary Steam System**	**2 days**
93	Drain water from system.	1 day



Montrose 3 Retirement

ID	Task Name	Duration
94	Remove aux boiler chemicals.	1 day
95	**Auxiliary Cooling Water System**	**1 day**
96	Drain water from system.	1 day
97	**Condenser Air Extraction**	**1 day**
98	Drain water from system.	1 day
99	**Building Heating System**	**1 day**
100	Drain water from system.	1 day
101	**Battery System**	**7 days**
102	De-energize all battery chargers from the source.	0.5 days
103	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
104	Remove and dispose of battery electrolyte.	3 days
105	Remove and dispose of battery cells.	2 days
106	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
107	**Post Retirement Activities**	**40 days**
108	Post Retirement Activities	40 days



Montrose Unit 3 Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$345,746		
Overhead During Dismantlement		$661,547		
Post-Dismantlement Activities		$27,304		
Owner Costs Total			$1,034,597	
Demolition General Contractor (DGC) Costs				
Site Management		$392,365		
Equipment Rental		$655,464		
Consummables		$653,943		
Scrap Crew(s)		$661,395		
Dismantlement*		$1,759,643		
DGC Insurance	2.00%	$82,456		
Contingency/Profit	15.00%	$630,790		
Performance Bond	2.00%	$96,721		
Contractor Costs Total:			$4,932,777	
Total:				$5,967,374
Owner Internal Costs:	5.00%			$298,369
Owner Contingency:	25.00%			$1,566,436
Montrose Unit 3 Dismantlement Opinion of Probable Cost:				$7,832,178

COMMON

Montrose Common Retirement

Owner Costs				
Pre-Retirement Activities		$49,440		
Retirement Activities		$262,672		
Post-Retirement Activities		$15,120		
Owner Direct Total			$327,232	
Owner Internal Costs	5.00%		$16,362	
Owner Contingency:	25.00%		$85,898	
Montrose Common Retirement Opinion of Probable Cost:				$413,130.40

Activities Required by Permit or Regulation

Montrose Fuel Oil Tank Removal	$238,166		
Montrose Wastewater Lagoon Removal	$120,000		
Montrose Landfill Retirement	$2,165,497		
Activities Required by Permit or Regulation:			$2,523,663

Montrose Common Retirement

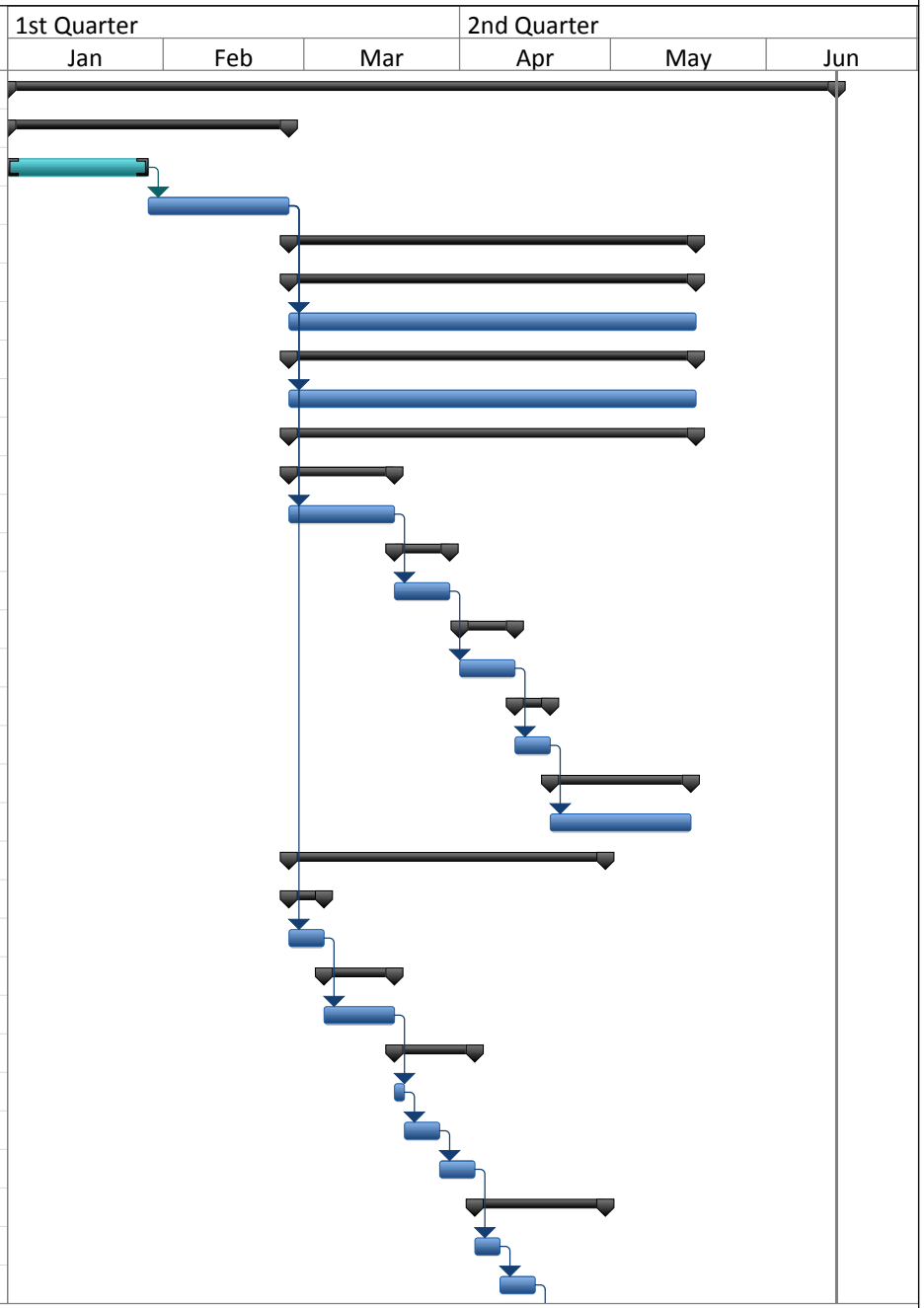
ID	Task Name	Cost
1	**Montrose Common Retirement**	**$327,232.88**
2	**Pre-Retirement Activities**	**$49,440.00**
3	Permitting Review	$24,720.00
4	Develop Detailed Retirement Plan	$24,720.00
5	**Overheads**	**$94,083.76**
6	**Common Retirement Overheads**	**$82,283.76**
7	Added Overhead Staff for Common Retirement	$82,283.76
8	**Common Retirment Equipment Rental**	**$11,800.00**
9	Common Removal Equipment Rental	$11,800.00
10	**Retirement Activities**	**$168,589.12**
11	**Administration Building**	**$18,872.00**
12	Secure Administration Building	$18,872.00
13	**Fuel Yard Office Building**	**$11,323.20**
14	Secure Fuel Yard Office Building	$11,323.20
15	**Training Building**	**$11,323.20**
16	Secure Training Building	$11,323.20
17	**Warehouse(s)**	**$9,076.00**
18	Secure Unit Warehouse(s)	$9,076.00
19	**Maintenance Shop**	**$36,304.00**
20	Secure Maintenance Shop	$36,304.00
21	**Fuel Yard**	**$67,755.60**
22	**Crusher Tower**	**$18,658.00**
23	Clean Crusher Tower	$6,137.20
24	**Conveyors**	**$12,274.40**
25	Clean Conveyor 10,42,43,44, 51	$12,274.40
26	**Car Dumper**	**$14,729.28**
27	Empty Car Dumper Hoppers	$2,454.88
28	Clean Car Dumper	$6,137.20
29	Secure Dumper Building	$6,137.20
30	**Reclaim**	**$22,093.92**
31	Clean Unit 1 Reclaim	$3,682.32
32	Secure Unit 1 Reclaim Building	$6,137.20
33	Clean Stock Out Conveyor Reclaim	$12,274.40
34	**Sewage Treatment**	**$4,089.76**
35	Clean Sewage Treatment and Transfer Points	$4,089.76
36	**Fuel Oil Storage and Unloading**	**$820.00**
37	Remove Fuel Oil from Fuel Oil Storage and Vent	$820.00
38	**Water Treatment**	**$5,322.32**
39	Drain All Tanks and Vessels	$1,227.44
40	Remove Membranes, Resin and Sand from Filters	$2,454.88
41	Remove Chemicals	$820.00
42	Open and Vent Vessels	$820.00
43	**Compressed Air**	**$1,640.00**
44	Vent Compressed Air	$820.00

Montrose Common Retirement

ID	Task Name	Cost
45	Vent Compressed Air Vessels	$820.00
46	**Yard Fire Water Systems**	**$2,063.04**
47	Drain Yard Fire Water System	$2,063.04
48	**Post Retirement Closure Activities**	**$15,120.00**
49	Post Retirement Closure Activities	$15,120.00

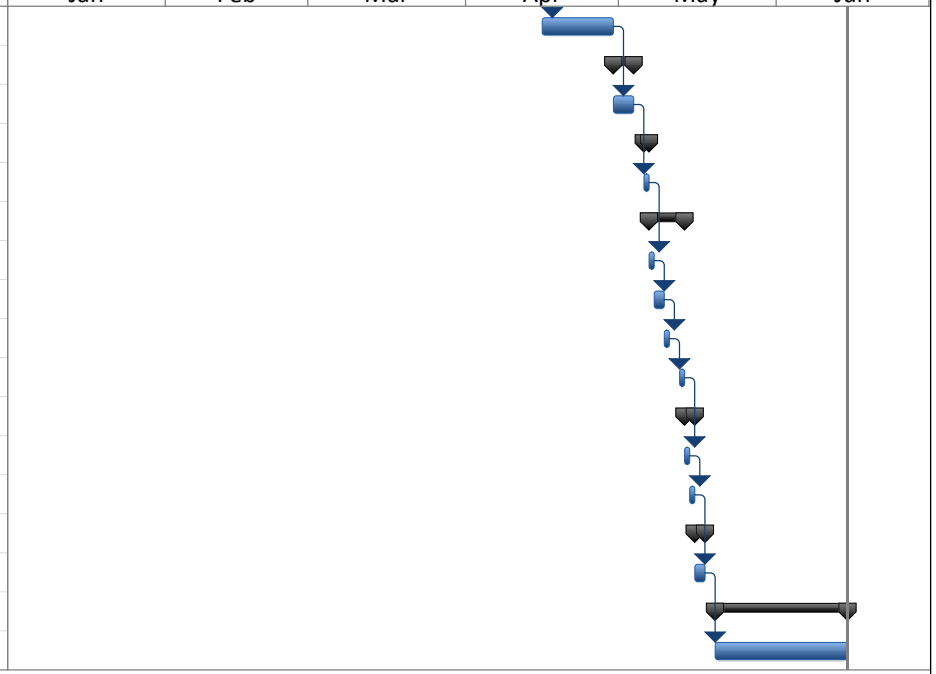
Montrose Common Retirement Gantt

ID	Task Name	Duration
1	**Montrose Common Retirement**	**119 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Overheads**	**59 days**
6	**Common Retirement Overheads**	**59 days**
7	Added Overhead Staff for Common Retirement	59 days
8	**Common Retirment Equipment Rental**	**59 days**
9	Common Removal Equipment Rental	59 days
10	**Retirement Activities**	**59 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)**	**5 days**
18	Secure Unit Warehouse(s)	5 days
19	**Maintenance Shop**	**20 days**
20	Secure Maintenance Shop	20 days
21	**Fuel Yard**	**45 days**
22	**Crusher Tower**	**5 days**
23	Clean Crusher Tower	5 days
24	**Conveyors**	**10 days**
25	Clean Conveyor 10,42,43,44, 51	10 days
26	**Car Dumper**	**12 days**
27	Empty Car Dumper Hoppers	2 days
28	Clean Car Dumper	5 days
29	Secure Dumper Building	5 days
30	**Reclaim**	**18 days**
31	Clean Unit 1 Reclaim	3 days
32	Secure Unit 1 Reclaim Building	5 days



Montrose Common Retirement Gantt

ID	Task Name	Duration
33	Clean Stock Out Conveyor Reclaim	10 days
34	**Sewage Treatment**	**4 days**
35	Clean Sewage Treatment and Transfer Points	4 days
36	**Fuel Oil Storage and Unloading**	**1 day**
37	Remove Fuel Oil from Fuel Oil Storage and Vent	1 day
38	**Water Treatment**	**5 days**
39	Drain All Tanks and Vessels	1 day
40	Remove Membranes, Resin and Sand from Filters	2 days
41	Remove Chemicals	1 day
42	Open and Vent Vessels	1 day
43	**Compressed Air**	**2 days**
44	Vent Compressed Air	1 day
45	Vent Compressed Air Vessels	1 day
46	**Yard Fire Water Systems**	**2 days**
47	Drain Yard Fire Water System	2 days
48	**Post Retirement Closure Activities**	**20 days**
49	Post Retirement Closure Activities	20 days



Montrose 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		$710,504		
Equipment Rental		$153,792		
Consummables		$204,344		
Scrap Crew(s)		$309,648		
Dismantlement		$5,386,480		
DGC Insurance	2.00%	$135,295		
Contingency/Profit	15.00%	$1,035,010		
Performance Bond	2.00%	$158,701		
Contractor Costs Total:			$8,093,774	
Total:				$8,093,774
Owner Internal Costs:	5.00%			$404,689
Owner Contingency:	25.00%			$2,124,616
Montrose Common Dismantlement Opinion of Probable Cost:				$10,623,079

Montrose Common Dismantlement

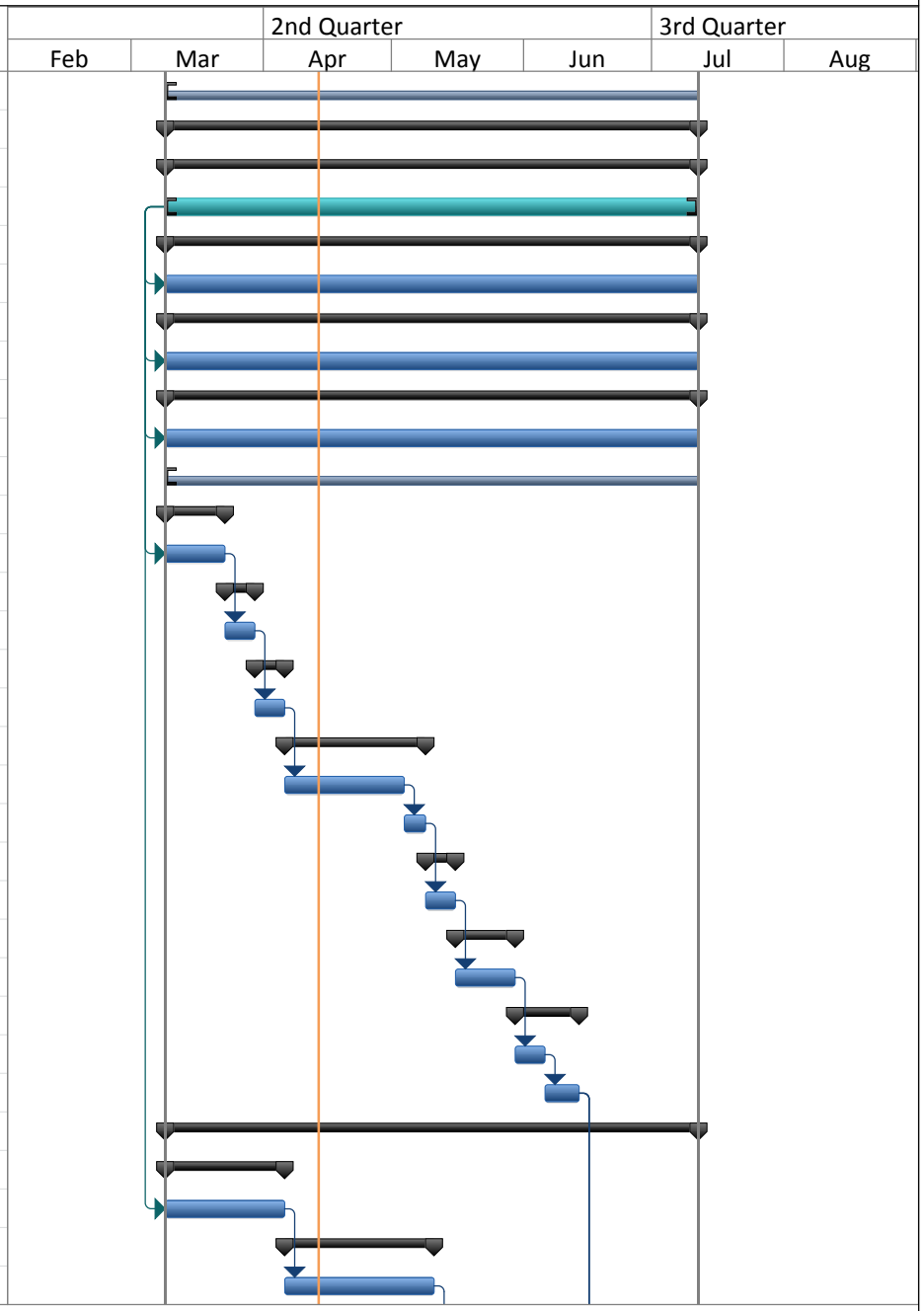
ID	Task Name	Cost
1	**Montrose Common Dismantlement**	**$6,096,985.60**
2	**Overheads**	**$710,504.80**
3	**Common Removal Overheads**	**$42,720.00**
4	Added Overhead Staff for Common Removals	$42,720.00
5	**Common Removal Equipment Rental**	**$153,792.00**
6	Common Removal Equipment Rental	$153,792.00
7	**Scrap Crew**	**$309,648.80**
8	Crew(s) to Handle Scrap Material	$309,648.80
9	**Demolition Contractor Consummables**	**$204,344.00**
10	Consummables	$204,344.00
11	**Dismantlement Activities**	**$5,386,480.64**
12	**Administration Building**	**$34,792.00**
13	Remove Administration Building	$34,792.00
14	**Fuel Yard Office Building**	**$17,396.00**
15	Remove Fuel Yard Office Building	$17,396.00
16	**Training Building**	**$17,396.00**
17	Remove Training Building	$17,396.00
18	**Parking Lots and Plant Roads**	**$80,021.60**
19	Plant Roads and Parking Areas	$69,584.00
20	Guard Shack	$10,437.60
21	**Warehouse(s)**	**$17,396.00**
22	Remove Warehouse	$17,396.00
23	**Maintenance Shop**	**$22,544.80**
24	Remove Maintenance Shop	$22,544.80
25	**Water Treatment**	**$38,271.20**
26	Remove Water Treatment Equipment	$17,396.00
27	Remove Water Treatment Building	$20,875.20
28	**Fuel Yard**	**$379,232.80**
29	**Crusher Tower**	**$139,168.00**
30	Remove Crusher Building and Equipment	$69,584.00
31	**Conveyors**	**$86,980.00**
32	Remove Conveyor 10, 42, 43, 44, and 51	$86,980.00
33	**Car Dumper**	**$90,459.20**
34	Remove Underground Equipment	$13,916.80
35	Remove Above Ground Equipment	$34,792.00
36	Remove Building	$24,354.40
37	Backfill Dumper Structure	$17,396.00
38	**Reclaim**	**$62,625.60**
39	Remove Underground Equipment	$17,396.00
40	Remove Above Ground Equipment	$17,396.00
41	Remove Building	$13,916.80
42	Backfill Structure	$13,916.80
43	**Yard Fire Water Systems**	**$34,792.00**

Montrose Common Dismantlement

ID	Task Name	Cost
44	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	$34,792.00
45	**Stacks**	**$4,294,638.08**
46	Remove Unit 1 and Unit 2 Stack to Grade	$2,555,020.00
47	Remove Unit 3 Stack to Grade	$1,739,617.92
48	**Final Site Grading and Drainage**	**$450,000.00**
49	Final Site Grading and Drainage	$450,000.00

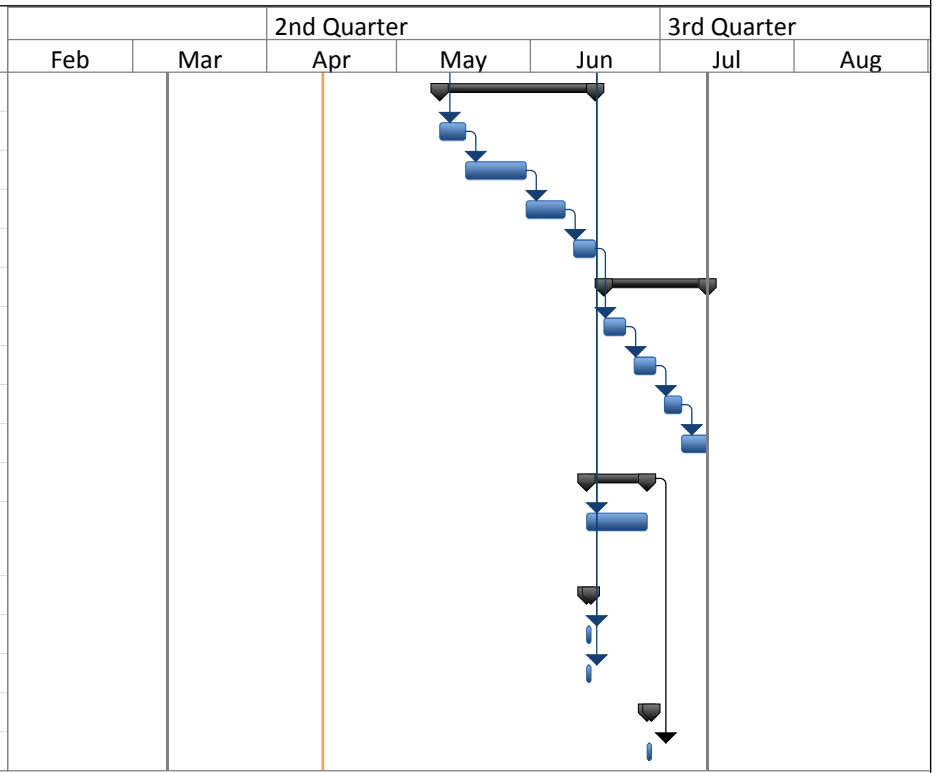
Montrose Common Dismantlement

ID	Task Name	Duration
1	**Montrose Common Dismantlement**	
2	**Overheads**	**89 days**
3	**Common Removal Overheads**	**89 days**
4	Added Overhead Staff for Common Removals	89 days
5	**Common Removal Equipment Rental**	**89 days**
6	Common Removal Equipment Rental	89 days
7	**Scrap Crew**	**89 days**
8	Crew(s) to Handle Scrap Material	89 days
9	**Demolition Contractor Consummables**	**89 days**
10	Consummables	89 days
11	**Dismantlement Activities**	
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)**	**5 days**
22	Remove Warehouse	5 days
23	**Maintenance Shop**	**10 days**
24	Remove Maintenance Shop	10 days
25	**Water Treatment**	**11 days**
26	Remove Water Treatment Equipment	5 days
27	Remove Water Treatment Building	6 days
28	**Fuel Yard**	**89 days**
29	**Crusher Tower**	**20 days**
30	Remove Crusher Building and Equipment	20 days
31	**Conveyors**	**25 days**
32	Remove Conveyor 10, 42, 43, 44, and 51	25 days



Montrose Common Dismantlement

ID	Task Name	Duration
33	**Car Dumper**	**26 days**
34	Remove Underground Equipment	4 days
35	Remove Above Ground Equipment	10 days
36	Remove Building	7 days
37	Backfill Dumper Structure	5 days
38	**Reclaim**	**18 days**
39	Remove Underground Equipment	5 days
40	Remove Above Ground Equipment	5 days
41	Remove Building	4 days
42	Backfill Structure	4 days
43	**Yard Fire Water Systems**	**10 days**
44	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	10 days
45	**Stacks**	**1 day**
46	Remove Unit 1 and Unit 2 Stack to Grade	1 day
47	Remove Unit 3 Stack to Grade	1 day
48	**Final Site Grading and Drainage**	**1 day**
49	Final Site Grading and Drainage	1 day



HAWTHORN

HAWTHORN STATION

The Hawthorn Generating Station consists of one coal-fired power plant (Hawthorn Unit 5), two simple-cycle combustion turbines (Hawthorn Units 7 and 8), and a one-on-one combined-cycle plant (Hawthorn Units 6 and 9).

Note: This section of the report covers Hawthorn Unit 5 and the Hawthorn Common facilities.

Hawthorn Unit 5 has an SPP-accredited unit rating of 564 MW and was placed in service in 2001. Unit 5 has a sub-critical Babcock & Wilcox boiler and a General Electric turbine. Unit 5 has an SCR, dry scrubber with a dedicated reagent preparation system, and baghouse. River water is used for condenser cooling.

The Hawthorn fuel yard has a rotary car dumper to unload unit trains of coal. The coal is unloaded to the ground. Coal is transferred to Hawthorn Unit 5 via a reclaim pit and a series of conveyors.

Hawthorn Unit 5 has a fuel gas igniter system. The gas is supplied by a regional natural gas supplier via underground pipelines.

Hawthorn Unit 5 beneficially uses off site the majority of their coal combustion products. Coal combustion products that are not beneficially used off site are disposed in an off-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).

HAWTHORN UNIT 5

1. Boiler, SCR, and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Baghouse, dry scrubber, and dry scrubber auxiliaries.
4. Fuel handling equipment.

COMMON

1. Administration building.
2. Fuel yard office building.
3. Training building.
4. Warehouses.
5. Maintenance shops.
6. Water treatment.
7. Fire water systems.
8. Hawthorn Units 1 and 2 intake structure and circulating water piping.
9. Hawthorn Unit 5 intake structure and circulating water piping.
10. Hawthorn Unit 5 stack.

UNIT 5

Hawthorn 5 Retirement

Owner Costs			
Pre-Retirement Activities		$95,040	
Retirement Activities		$589,174	
Post-Retirement Activities		$25,040	
Owner Direct Total			$709,254
Owner Internal Costs	5.00%		$35,463
Owner Contingency:	25.00%		$186,179

Hawthorn 5 Retirement Opinion of Probable Cost: $895,432.91

Hawthorn 5 Retirement

ID	Task Name	Cost
1	**Hawthorn 5 Retirement**	**$709,253.79**
2	**Pre-Engineering**	**$95,040.00**
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**	**$98,696.00**
5	KCP&L Retirement Manager	$98,696.00
6	**Equipment Rentals**	**$33,800.00**
7	Vacuum truck	$33,800.00
8	**Retirement**	**$456,677.79**
9	**Electrical**	**$14,944.16**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$4,105.28**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$1,276.80
27	Clean up and dispose of oil on surface areas around transformers and in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$3,884.64**
32	De-energize all primary power at the source.	$869.28

Hawthorn 5 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,738.56
34	Drain lube oil system (if applicable) and dispose of oil.	$1,276.80
35	**Coal Handling**	**$26,734.00**
36	Empty all transfer hoppers.	$1,655.60
37	Burn out coal silos.	$1,640.00
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,640.00
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
40	**Gas and Igniter System**	**$1,276.80**
41	Isolate fuel gas system in gas yard and vent gas piping	$1,276.80
42	**Waste Oil System**	**$1,640.00**
43	Drain all waste oil systems	$1,640.00
44	**Boiler Chemical Feed**	**$1,640.00**
45	Drain all chemical feed tanks.	$1,640.00
46	**Boiler**	**$26,734.11**
47	Open boiler doors.	$851.20
48	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
49	Drain boiler, drum, downcomers and headers.	$820.00
50	Open drum doors.	$851.20
51	Drain and clean the submerged flight conveyor system.	$2,413.31
52	**Stack and Ductwork**	**$311,750.40**
53	Open ductwork doors.	$851.20
54	Perform extensive cleaning of the ductwork.	$10,899.20
55	Place cap over stack opening to keep moisture out.	$300,000.00
56	**Condensate and Feedwater Piping**	**$1,640.00**
57	Drain water from the system.	$820.00
58	Leave open vents and drains.	$820.00
59	**Feedwater heaters**	**$2,460.00**
60	Drain feedwater heaters	$820.00
61	Leave open vents and drains.	$1,640.00
62	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
63	Drain Deaerator and Storage	$820.00
64	Leave open vents and drains.	$820.00
65	**Baghouse**	**$16,664.16**
66	Multiple cleaning cycles for filter bags.	$2,460.00
67	Open all vent and drain lines on bag cleaning air and control air lines. Leave in open position or remove vent valves.	$820.00
68	Remove all filter bags and cages.	$851.20
69	Clear hoppers of all ash	$2,729.92
70	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$851.20
71	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,380.56

Hawthorn 5 Retirement

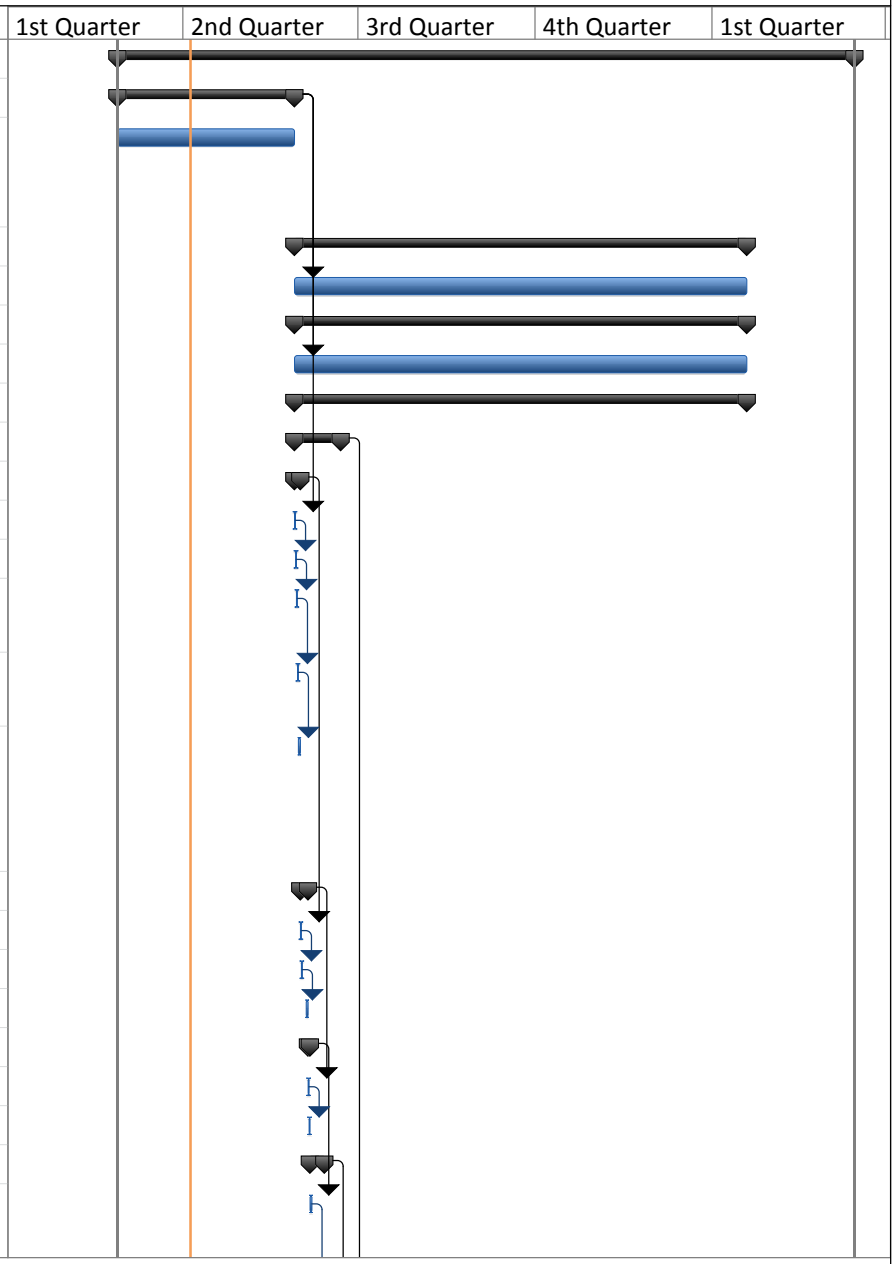
ID	Task Name	Cost
72	Install bird screens across hopper ash outlet and ash line flanges.	$851.20
73	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$851.20
74	If walk-in plenum, padlock or tack weld all outlet plenum doors and compartment ventilation dampers shut.	$851.20
75	If top-door plenum, close and secure top doors and remove/disable door lift hoist.	$1,671.20
76	If top-door plenum, establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in penthouse enclosure.	$738.64
77	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
78	**Spray Dryer Absorber FGD**	**$4,671.04**
79	Clear SDA of all accumulated solids	$3,819.84
80	Padlock or tack weld SDA module access doors closed.	$851.20
81	**Lime Slurry Preparation System**	**$10,283.04**
82	Remove lime from day bins.	$1,909.92
83	Removed cartridges/bags from bin vent filters	$682.48
84	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.)	$851.20
85	Remove bin discharge isolation valve and install bird screen.	$851.20
86	Thoroughly wash and drain slakers.	$1,092.48
87	Remove balls from any ball mills from ball mill slakers.	$698.08
88	Padlock or tack weld slaker access doors closed.	$851.20
89	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$738.64
90	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
91	**SCR**	**$9,762.48**
92	Vacuum fly ash from catalyst.	$2,179.84
93	Remove catalyst of salvage or disposal.	$2,792.32
94	Padlock or tack weld access doors shut.	$851.20
95	Remove ammonia from storage tank for resale.	$682.48
96	Wash out and drain storage tank and supply piping.	$682.48
97	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$835.60
98	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,738.56
99	**Turbine(s) and Condenser**	**$5,091.60**
100	Drain hotwell and leave doors open.	$835.60
101	Open main turbine doors.	$851.20
102	Open bfp turbine doors.	$851.20

Hawthorn 5 Retirement

ID	Task Name	Cost
103	Remove lube oil.	$2,553.60
104	**Generator**	**$5,916.56**
105	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.	$434.64
106	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
107	De-energize power supplies to generator excitation system at the source.	$434.64
108	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.	$434.64
109	Drain generator and exciter cooling water systems (if applicable).	$835.60
110	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00
111	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40
112	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
113	Drain.	$1,640.00
114	Open water box doors.	$851.20
115	Drain any circulating water chemical feed tanks.	$820.00
116	**Compressed Air System**	**$2,279.20**
117	Open vents and drains.	$820.00
118	Remove desiccant from desiccant dryers.	$1,459.20
119	**Auxiliary Steam System**	**$1,640.00**
120	Drain water from system.	$820.00
121	Remove aux boiler chemicals.	$820.00
122	**Auxiliary Cooling Water System**	**$820.00**
123	Drain water from system.	$820.00
124	**Condenser Air Extraction and Waterbox Priming System**	**$820.00**
125	Drain water from system.	$820.00
126	**Building Heating System**	**$820.00**
127	Drain water from system.	$820.00
128	**Battery System**	**$4,139.04**
129	De-energize all battery chargers from the source.	$434.64
130	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
131	Remove and dispose of battery electrolyte.	$1,634.88
132	Remove and dispose of battery cells.	$1,089.92
133	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
134	**Post Retirement Activities**	**$25,040.00**
135	Post Retirement Activities	$25,040.00

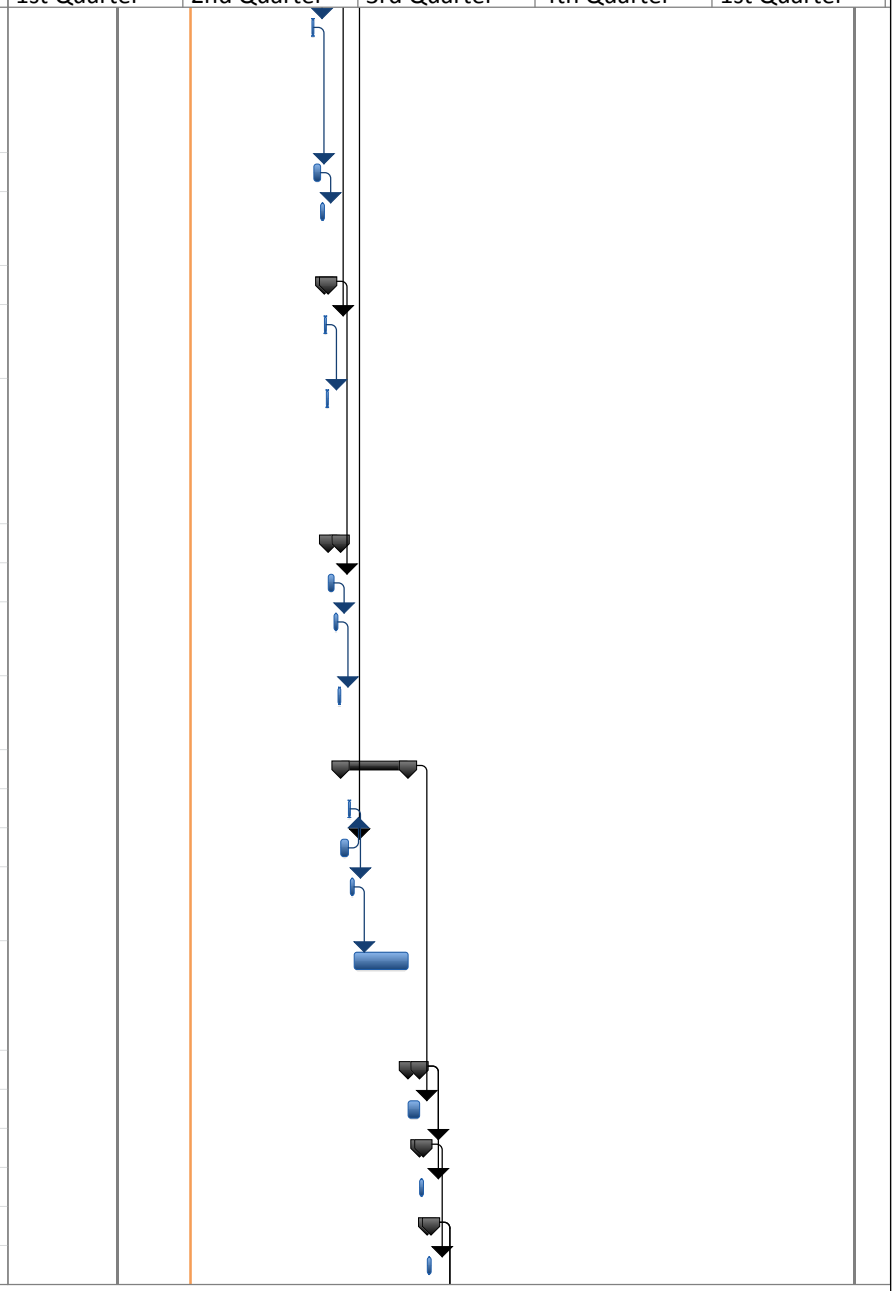
Hawthorn 5 Retirement

ID	Task Name	Duration
1	**Hawthorn 5 Retirement**	**275 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**	**169 days**
5	KCP&L Retirement Manager	169 days
6	**Equipment Rentals**	**169 days**
7	Vacuum truck	169 days
8	**Retirement**	**169 days**
9	**Electrical**	**18 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**	**5.5 days**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day



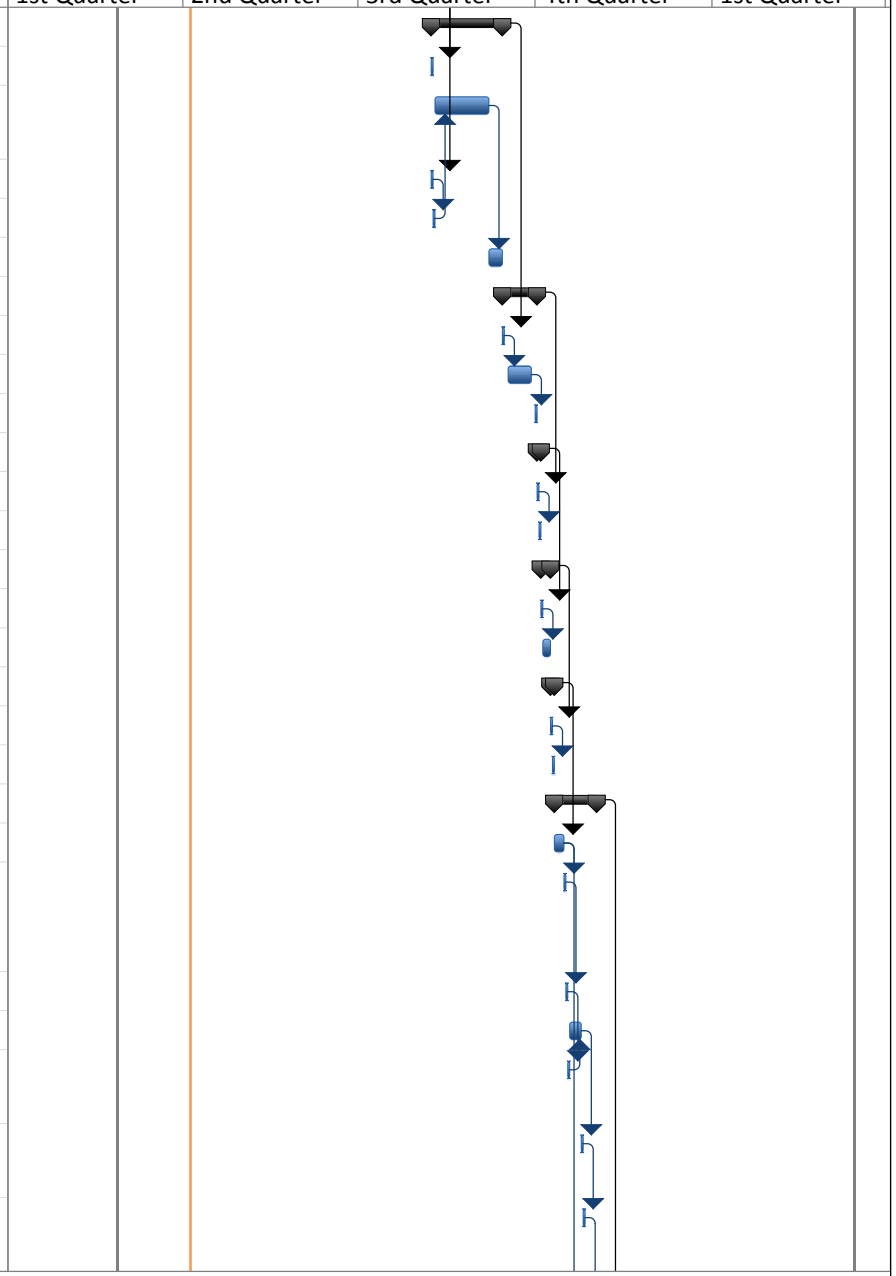
Hawthorn 5 Retirement

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.	1.5 days
27	Clean up and dispose of oil on surface areas around transformers and 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**	**4.5 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.	2 days
34	Drain lube oil system (if applicable) and dispose of oil.	1.5 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	**Gas and Igniter System**	**4 days**
41	Isolate fuel gas system in gas yard and vent gas piping	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



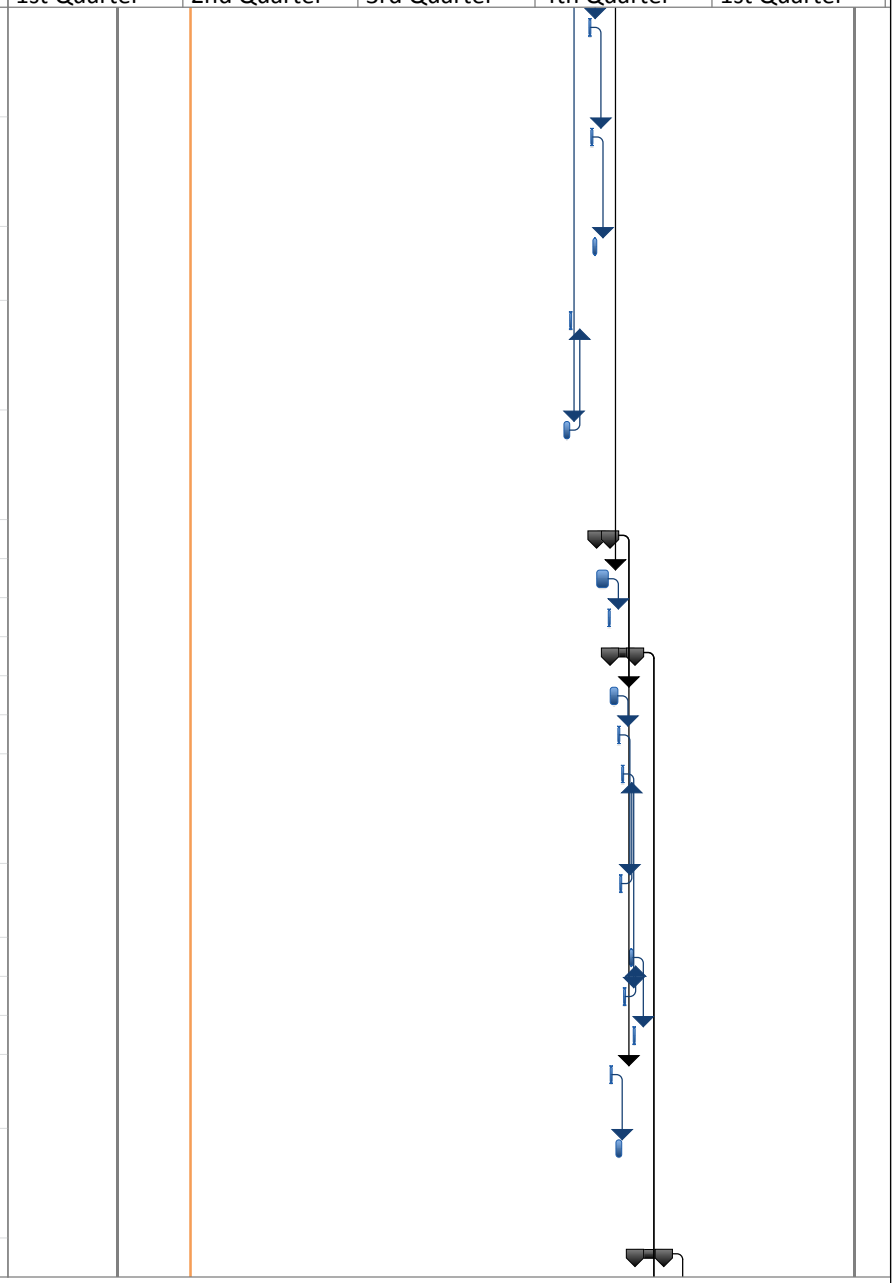
Hawthorn 5 Retirement

ID	Task Name	Duration
46	**Boiler**	**27 days**
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



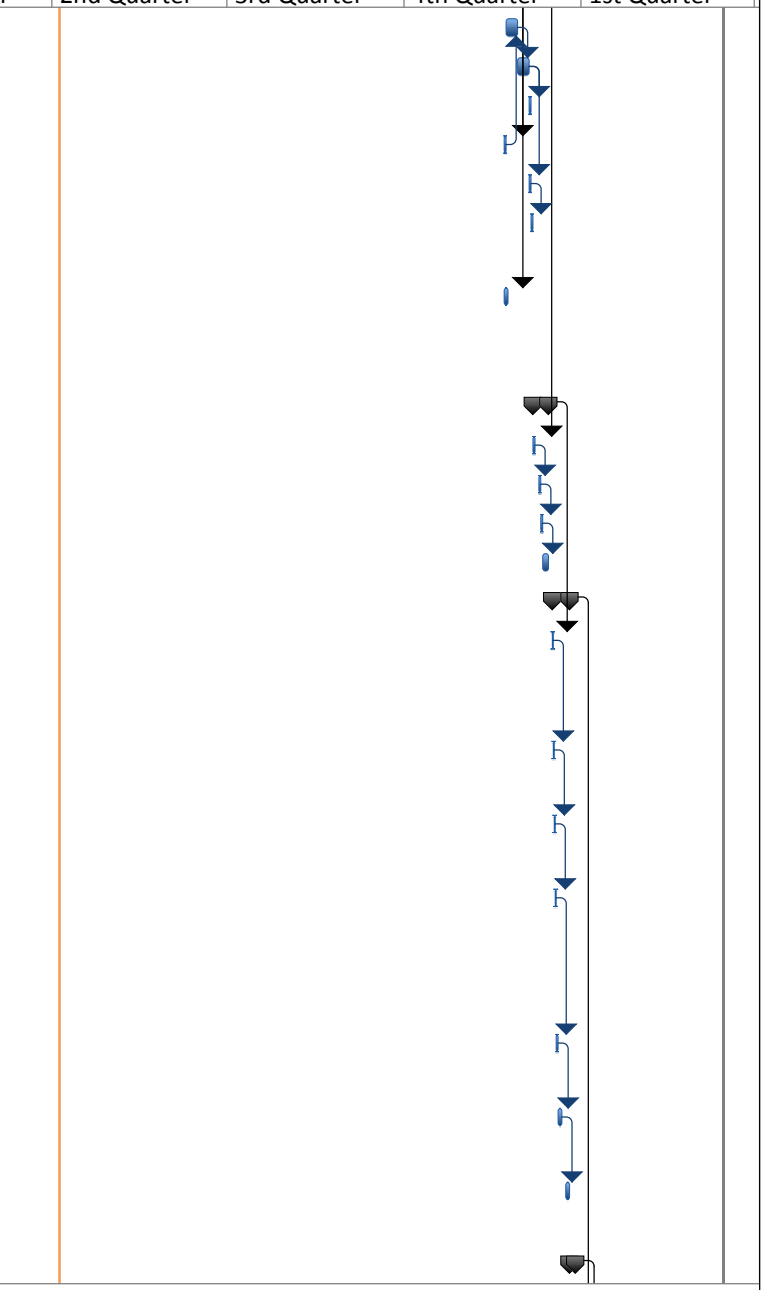
Hawthorn 5 Retirement

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	**Spray Dryer Absorber FGD**	**5 days**
79	Clear SDA of all accumulated solids	4 days
80	Padlock or tack weld SDA module access doors closed.	1 day
81	**Lime Slurry Preparation System**	**9 days**
82	Remove lime from day bins.	2 days
83	Removed cartridges/bags from bin vent filters	1 day
84	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
85	Remove bin discharge isolation valve and install bird screen.	1 day
86	Thoroughly wash and drain slakers.	2 days
87	Remove balls from any ball mills from ball mill slakers.	1 day
88	Padlock or tack weld slaker access doors closed.	1 day
89	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	1 day
90	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
91	**SCR**	**11 days**



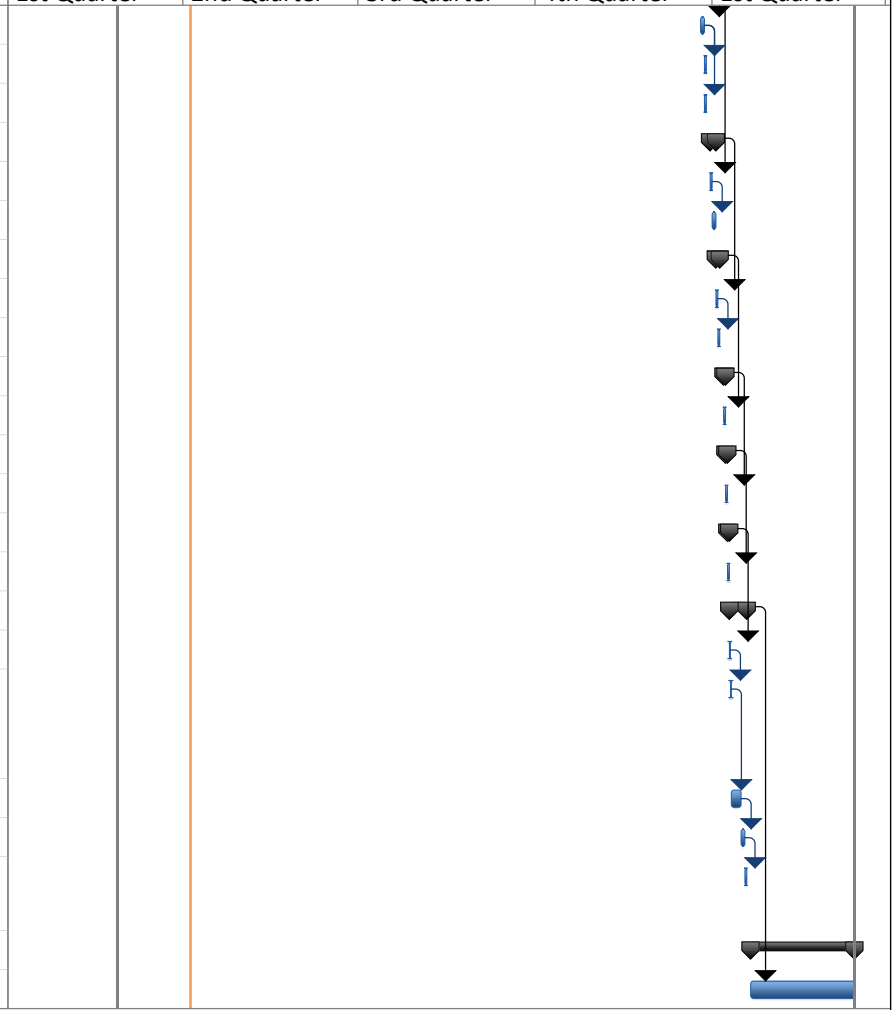
Hawthorn 5 Retirement

ID	Task Name	Duration
92	Vacuum fly ash from catalyst.	4 days
93	Remove catalyst of salvage or disposal.	4 days
94	Padlock or tack weld access doors shut.	1 day
95	Remove ammonia from storage tank for resale.	1 day
96	Wash out and drain storage tank and supply piping.	1 day
97	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	1 day
98	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
99	**Turbine(s) and Condenser**	**6 days**
100	Drain hotwell and leave doors open.	1 day
101	Open main turbine doors.	1 day
102	Open bfp turbine doors.	1 day
103	Remove lube oil.	3 days
104	**Generator**	**7 days**
105	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
106	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
107	De-energize power supplies to generator excitation system at the source.	0.5 days
108	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
109	Drain generator and exciter cooling water systems (if applicable).	1 day
110	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
111	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
112	**Circulation Water and Turbine Cooling Water System**	**3 days**



Hawthorn 5 Retirement

ID	Task Name	Duration
113	Drain.	2 days
114	Open water box doors.	1 day
115	Drain any circulating water chemical feed tanks.	1 day
116	**Compressed Air System**	**3 days**
117	Open vents and drains.	1 day
118	Remove desiccant from desiccant dryers.	2 days
119	**Auxiliary Steam System**	**2 days**
120	Drain water from system.	1 day
121	Remove aux boiler chemicals.	1 day
122	**Auxiliary Cooling Water System**	**1 day**
123	Drain water from system.	1 day
124	**Condenser Air Extraction and Waterbox Priming System**	**1 day**
125	Drain water from system.	1 day
126	**Building Heating System**	**1 day**
127	Drain water from system.	1 day
128	**Battery System**	**7 days**
129	De-energize all battery chargers from the source.	0.5 days
130	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
131	Remove and dispose of battery electrolyte.	3 days
132	Remove and dispose of battery cells.	2 days
133	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
134	**Post Retirement Activities**	**40 days**
135	Post Retirement Activities	40 days



Hawthorn Unit 5 Dismantlement

Owner Additional Costs				
Pre-Dismantlement Activities		$684,067		
Overhead During Dismantlement		$1,445,862		
Post-Dismantlement Activities		$54,021		
Owner Costs Total			$2,129,929	
Demolition General Contractor (DGC) Costs				
Additional Site Management		$1,061,803		
Equipment Rental		$1,810,747		
Consummables		$1,976,659		
Scrap Crew(s)		$1,825,932		
Dismantlement*		$4,404,602		
DGC Insurance	2.00%	$221,595		
Contingency/Profit	15.00%	$1,695,201		
Performance Bond	2.00%	$259,930.77		
Contractor Costs Total:			$13,256,470	
Total:				$15,386,398
Owner Internal Costs:	5.00%			$769,320
Owner Contingency:	25.00%			$4,038,930
Hawthorn Unit 5 Dismantlement Opinion of Probable Cost:				$20,194,648

COMMON

Hawthorn Common Retirement

Owner Costs			
Pre-Retirement Activities		$24,720	
Retirement Activities		$177,679	
Post-Retirement Activities		$30,240	
Owner Direct Total			$232,639
Owner Internal Costs	5.00%		$11,632
Owner Contingency:	25.00%		$61,068

Hawthorn Common Retirement Opinion of Probable Cost: $293,706.74

Activities Required by Permit or Regulation

Hawthorn 1 & 2 Intake Removal	$604,110
Hawthorn 5 Intake Removal	$525,824

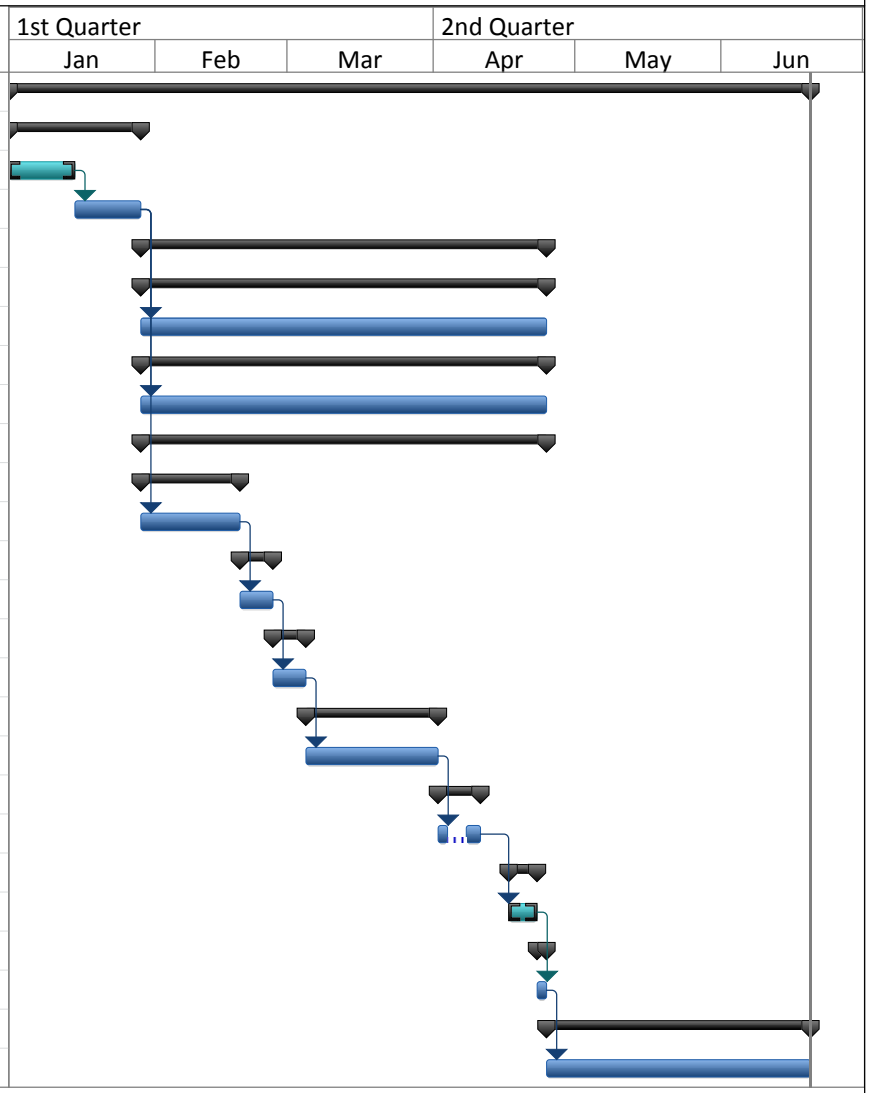
Activities Required by Permit or Regulation: $1,129,934

Hawthorn Common Retirement

ID	Task Name	Cost
1	**Hawthorn Common Retirement**	**$232,639.52**
2	**Pre-Retirement Activities**	**$24,720.00**
3	Permitting Review	$12,360.00
4	Develop Detailed Retirement Plan	$12,360.00
5	**Overheads**	**$98,867.68**
6	**Common Retirement Overheads**	**$86,467.68**
7	Added Overhead Staff for Common Retirement	$86,467.68
8	**Common Retirment Equipment Rental**	**$12,400.00**
9	Common Removal Equipment Rental	$12,400.00
10	**Retirement Activities**	**$78,811.84**
11	**Administration Building**	**$18,872.00**
12	Secure Administration Building	$18,872.00
13	**Training Building**	**$7,404.80**
14	Secure Training Building	$7,404.80
15	**Warehouse(s)**	**$9,076.00**
16	Secure Unit Warehouse(s)	$9,076.00
17	**Maintenance Shops**	**$36,304.00**
18	Secure Maintenance Shops	$36,304.00
19	**Sewage Treatment**	**$5,092.00**
20	Isolate and Cap Sewage Lines	$5,092.00
21	**City Water**	**$0.00**
22	Isolate and Cap City Water Lines	$0.00
23	**Yard Fire Water Systems**	**$2,063.04**
24	Drain Yard Fire Water System	$2,063.04
25	**Post Retirement Closure Activities**	**$30,240.00**
26	Post Retirement Closure Activities	$30,240.00

Hawthorn Common Retirement

ID	Task Name	Duration
1	**Hawthorn Common Retirement**	**122 days**
2	**Pre-Retirement Activities**	**20 days**
3	Permitting Review	10 days
4	Develop Detailed Retirement Plan	10 days
5	**Overheads**	**62 days**
6	**Common Retirement Overheads**	**62 days**
7	Added Overhead Staff for Common Retirement	62 days
8	**Common Retirment Equipment Rental**	**62 days**
9	Common Removal Equipment Rental	62 days
10	**Retirement Activities**	**62 days**
11	**Administration Building**	**15 days**
12	Secure Administration Building	15 days
13	**Training Building**	**5 days**
14	Secure Training Building	5 days
15	**Warehouse(s)**	**5 days**
16	Secure Unit Warehouse(s)	5 days
17	**Maintenance Shops**	**20 days**
18	Secure Maintenance Shops	20 days
19	**Sewage Treatment**	**7 days**
20	Isolate and Cap Sewage Lines	5 days
21	**City Water**	**4 days**
22	Isolate and Cap City Water Lines	4 days
23	**Yard Fire Water Systems**	**2 days**
24	Drain Yard Fire Water System	2 days
25	**Post Retirement Closure Activities**	**40 days**
26	Post Retirement Closure Activities	40 days



Hawthorn 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		$42,720		
Equipment Rental		$153,792		
Consummables		$204,344		
Scrap Crew(s)		$309,648		
Dismantlement		$5,340,600		
DGC Insurance	2.00%	$121,022		
Contingency/Profit	15.00%	$925,819		
Performance Bond	2.00%	$141,959		
Contractor Costs Total:			$7,239,904	
Total:				$7,239,904
Owner Internal Costs:	5.00%			$361,995
Owner Contingency:	25.00%			$1,900,475
Hawthorn Common Dismantlement Opinion of Probable Cost:				$9,502,374

Hawthorn Common Dismantlement

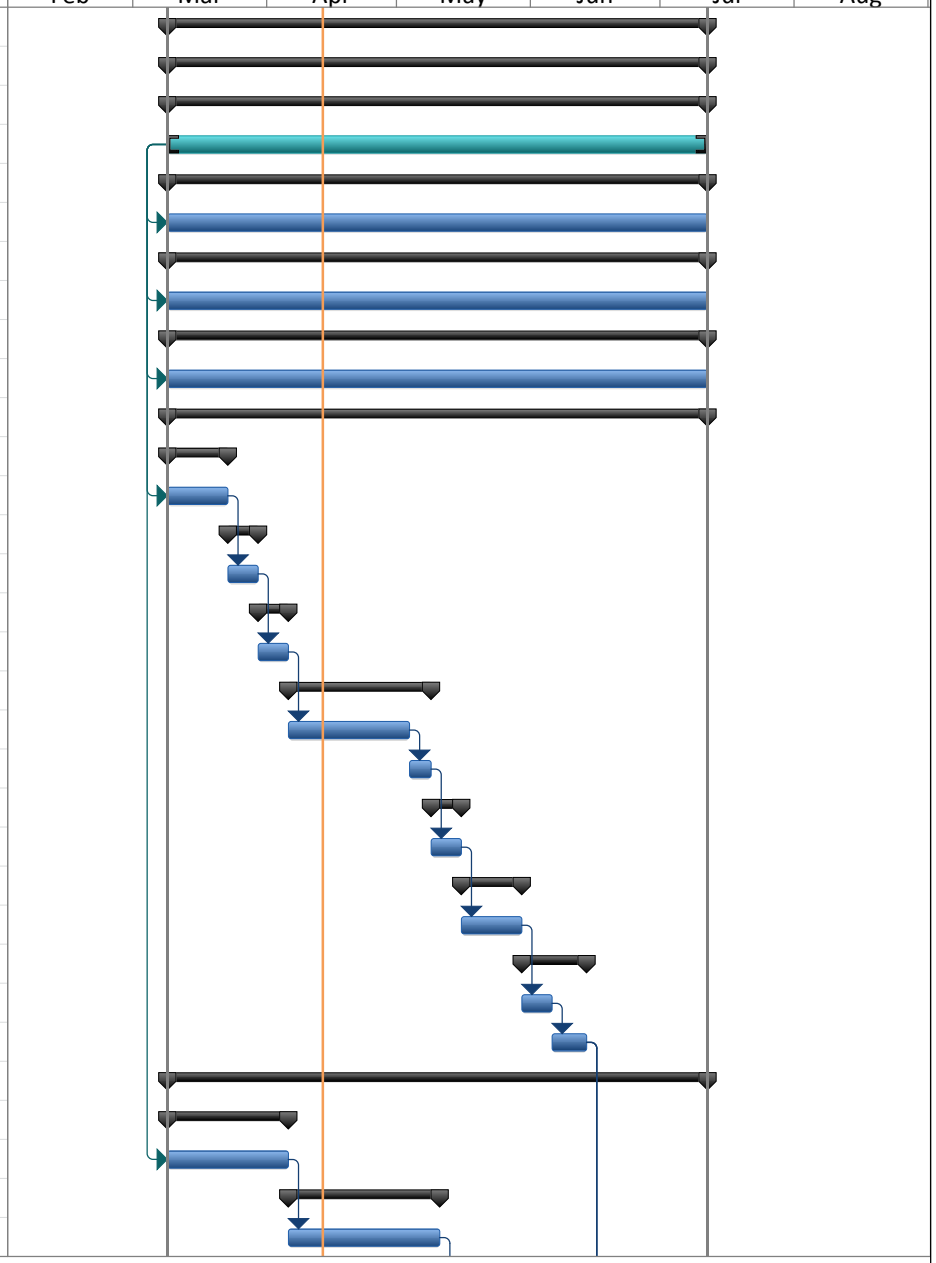
ID	Task Name	Cost
1	**Hawthorn Common Dismantlement**	**$6,051,105.28**
2	**Overheads**	**$710,504.80**
3	**Common Removal Overheads**	**$42,720.00**
4	Added Overhead Staff for Common Removals	$42,720.00
5	**Common Removal Equipment Rental**	**$153,792.00**
6	Common Removal Equipment Rental	$153,792.00
7	**Scrap Crew**	**$309,648.80**
8	Crew(s) to Handle Scrap Material	$309,648.80
9	**Demolition Contractor Consummables**	**$204,344.00**
10	Consummables	$204,344.00
11	**Dismantlement Activities**	**$5,340,600.32**
12	**Administration Building**	**$34,792.00**
13	Remove Administration Building	$34,792.00
14	**Fuel Yard Office Building**	**$17,396.00**
15	Remove Fuel Yard Office Building	$17,396.00
16	**Training Building**	**$17,396.00**
17	Remove Training Building	$17,396.00
18	**Parking Lots and Plant Roads**	**$80,021.60**
19	Plant Roads and Parking Areas	$69,584.00
20	Guard Shack	$10,437.60
21	**Warehouse(s)**	**$17,396.00**
22	Remove Warehouse	$17,396.00
23	**Maintenance Shop**	**$22,544.80**
24	Remove Maintenance Shop	$22,544.80
25	**Water Treatment**	**$38,271.20**
26	Remove Water Treatment Equipment	$17,396.00
27	Remove Water Treatment Building	$20,875.20
28	**Fuel Yard**	**$379,232.80**
29	**Crusher Tower**	**$139,168.00**
30	Remove Crusher Building and Equipment	$69,584.00
31	**Conveyors**	**$86,980.00**
32	Remove Conveyor 10, 42, 43, 44, and 51	$86,980.00
33	**Car Dumper**	**$90,459.20**
34	Remove Underground Equipment	$13,916.80
35	Remove Above Ground Equipment	$34,792.00
36	Remove Building	$24,354.40
37	Backfill Dumper Structure	$17,396.00
38	**Reclaim**	**$62,625.60**
39	Remove Underground Equipment	$17,396.00
40	Remove Above Ground Equipment	$17,396.00
41	Remove Building	$13,916.80
42	Backfill Structure	$13,916.80
43	**Yard Fire Water Systems**	**$34,792.00**

Hawthorn Common Dismantlement

ID	Task Name	Cost
44	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	$34,792.00
45	**Stacks**	**$3,498,758.08**
46	Remove Hawthorn 5 Stack to Grade	$3,498,758.08
47	**Final Site Grading and Drainage**	**$1,200,000.00**
48	Final Site Grading and Drainage	$1,200,000.00

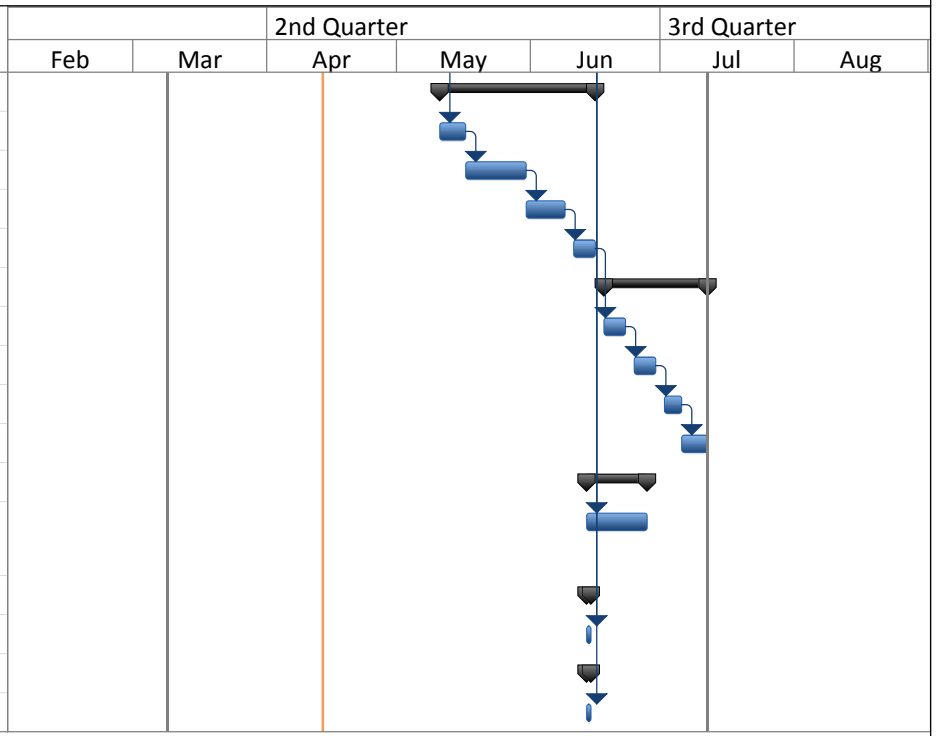
Hawthorn Common Dismantlement

ID	Task Name	Duration
1	**Hawthorn Common Dismantlement**	**89 days**
2	**Overheads**	**89 days**
3	**Common Removal Overheads**	**89 days**
4	Added Overhead Staff for Common Removals	89 days
5	**Common Removal Equipment Rental**	**89 days**
6	Common Removal Equipment Rental	89 days
7	**Scrap Crew**	**89 days**
8	Crew(s) to Handle Scrap Material	89 days
9	**Demolition Contractor Consummables**	**89 days**
10	Consummables	89 days
11	**Dismantlement Activities**	**89 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)**	**5 days**
22	Remove Warehouse	5 days
23	**Maintenance Shop**	**10 days**
24	Remove Maintenance Shop	10 days
25	**Water Treatment**	**11 days**
26	Remove Water Treatment Equipment	5 days
27	Remove Water Treatment Building	6 days
28	**Fuel Yard**	**89 days**
29	**Crusher Tower**	**20 days**
30	Remove Crusher Building and Equipment	20 days
31	**Conveyors**	**25 days**
32	Remove Conveyor 10, 42, 43, 44, and 51	25 days



Hawthorn Common Dismantlement

ID	Task Name	Duration
33	**Car Dumper**	**26 days**
34	Remove Underground Equipment	4 days
35	Remove Above Ground Equipment	10 days
36	Remove Building	7 days
37	Backfill Dumper Structure	5 days
38	**Reclaim**	**18 days**
39	Remove Underground Equipment	5 days
40	Remove Above Ground Equipment	5 days
41	Remove Building	4 days
42	Backfill Structure	4 days
43	**Yard Fire Water Systems**	**10 days**
44	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	10 days
45	**Stacks**	**1 day**
46	Remove Hawthorn 5 Stack to Grade	1 day
47	**Final Site Grading and Drainage**	**1 day**
48	Final Site Grading and Drainage	1 day



LA CYGNE

LA CYGNE STATION

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

La Cygne Unit 1 has an SPP-accredited unit rating of 735 MW and was placed in service in 1973. Unit 1 has a super-critical Babcock & Wilcox boiler and a Westinghouse turbine. Lake water is used for condenser cooling. La Cygne Unit 1 has an SCR and an eight-module wet scrubber. La Cygne Unit 1 has a dedicated limestone slurry preparation facility. The flue gas is discharged through a dedicated Unit 1 stack.

La Cygne Unit 2 has an SPP-accredited unit rated of 686 MW and was placed in service in 1977. Unit 2 has a sub-critical Babcock & Wilcox boiler and a General Electric turbine. Lake water is used for condenser cooling. La Cygne Unit 2 has an electrostatic precipitator for particulate removal. The flue gas is discharged through a dedicated Unit 2 stack.

The La Cygne fuel yard has a rotary car dumper to unload unit trains of coal and a truck unloading reclaim pit to unload coal trailers. La Cygne Unit 1 burns a blend of Powder River Basin coal and local higher BTU coal. Coal is segregated into coal silos and blended using a series of belt feeders and conveyors. La Cygne Unit 2 burns Powder River Basin coal. Fuel 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 La Cygne 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 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).

LA CYGNE UNIT 1

1. Boiler, SCR, and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Wet scrubber and limestone slurry preparation system.
4. Dedicated Unit 1 fuel handling equipment.
5. Dedicated Unit 1 fuel oil equipment.

LA CYGNE UNIT 2

1. Boiler and boiler auxiliaries.
2. Turbine, heat balance equipment, and turbine auxiliaries.
3. Precipitator.
4. Dedicated Unit 2 fuel handling equipment.
5. Dedicated Unit 2 fuel oil equipment.

COMMON

1. Administration building.
2. Fuel yard office building.
3. Training building.
4. Warehouses.
5. Maintenance shops.

6. Welding shop.
7. Insulators shop.
8. Auxiliary boilers.
9. Circulating water intake structure and circulating water piping.
10. Common fuel handling equipment.
11. Sewage treatment and wastewater lagoon.
12. Fuel oil storage and unloading.
13. Fire water systems.
14. Unit 1 stack.
15. Unit 2 stack.
16. Landfill.

UNIT 1

La Cygne 1 Retirement

Owner Costs			
Pre-Retirement Activities		$95,040	
Retirement Activities		$635,325	
Post-Retirement Activities		$25,040	
Owner Direct Total			$755,405
Owner Internal Costs	5.00%		$37,770
Owner Contingency:	25.00%		$198,294

La Cygne 1 Retirement Opinion of Probable Cost: $953,698.81

L aCygne 1 Retirement

ID	Task Name	Cost
1	**LaCygne 1 Retirement**	**$755,405.07**
2	**Pre-Engineering**	**$95,040.00**
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**	**$110,376.00**
5	KCP&L Retirement Manager	$110,376.00
6	**Equipment Rentals**	**$37,800.00**
7	Vacuum truck	$37,800.00
8	**Retirement**	**$487,149.07**
9	**Electrical**	**$18,367.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$5,382.08**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$2,553.60
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$6,030.72**
32	De-energize all primary power at the source.	$1,738.56

L aCygne 1 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,738.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,553.60
35	**Coal Handling**	**$25,094.00**
36	Empty all transfer hoppers.	$1,655.60
37	Confirm all fuel lines and conveyors.	$1,640.00
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
39	**Fuel Oil and Igniter System**	**$2,460.00**
40	Drain fuel oil system	$2,460.00
41	**Boiler Chemical Feed**	**$1,640.00**
42	Drain all chemical feed tanks.	$1,640.00
43	**Condensate Polisher**	**$4,401.12**
44	Drain water from system.	$820.00
45	Drain acid and caustic tanks.	$1,640.00
46	Open tanks and vessels.	$851.20
47	Remove resin.	$1,089.92
48	**Boiler**	**$26,734.11**
49	Open boiler doors.	$851.20
50	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
51	Drain boiler, drum, downcomers and headers.	$820.00
52	Open drum doors.	$851.20
53	Drain and clean the submerged flight conveyor system.	$2,413.31
54	**Stack and Ductwork**	**$311,750.40**
55	Open ductwork doors.	$851.20
56	Perform extensive cleaning of the ductwork.	$10,899.20
57	Place cap over stack opening to keep moisture out.	$300,000.00
58	**Condensate and Feedwater Piping**	**$1,640.00**
59	Drain water from the system.	$820.00
60	Leave open vents and drains.	$820.00
61	**Feedwater heaters**	**$2,460.00**
62	Drain feedwater heaters	$820.00
63	Leave open vents and drains.	$1,640.00
64	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
65	Drain Deaerator and Storage	$820.00
66	Leave open vents and drains.	$820.00
67	**Wet FGD system**	**$49,702.72**
68	Multiple mist eliminator wash cycles. Remove ME's from absorber.	$2,491.20
69	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.	$3,311.20
70	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	$20,718.72

L aCygne 1 Retirement

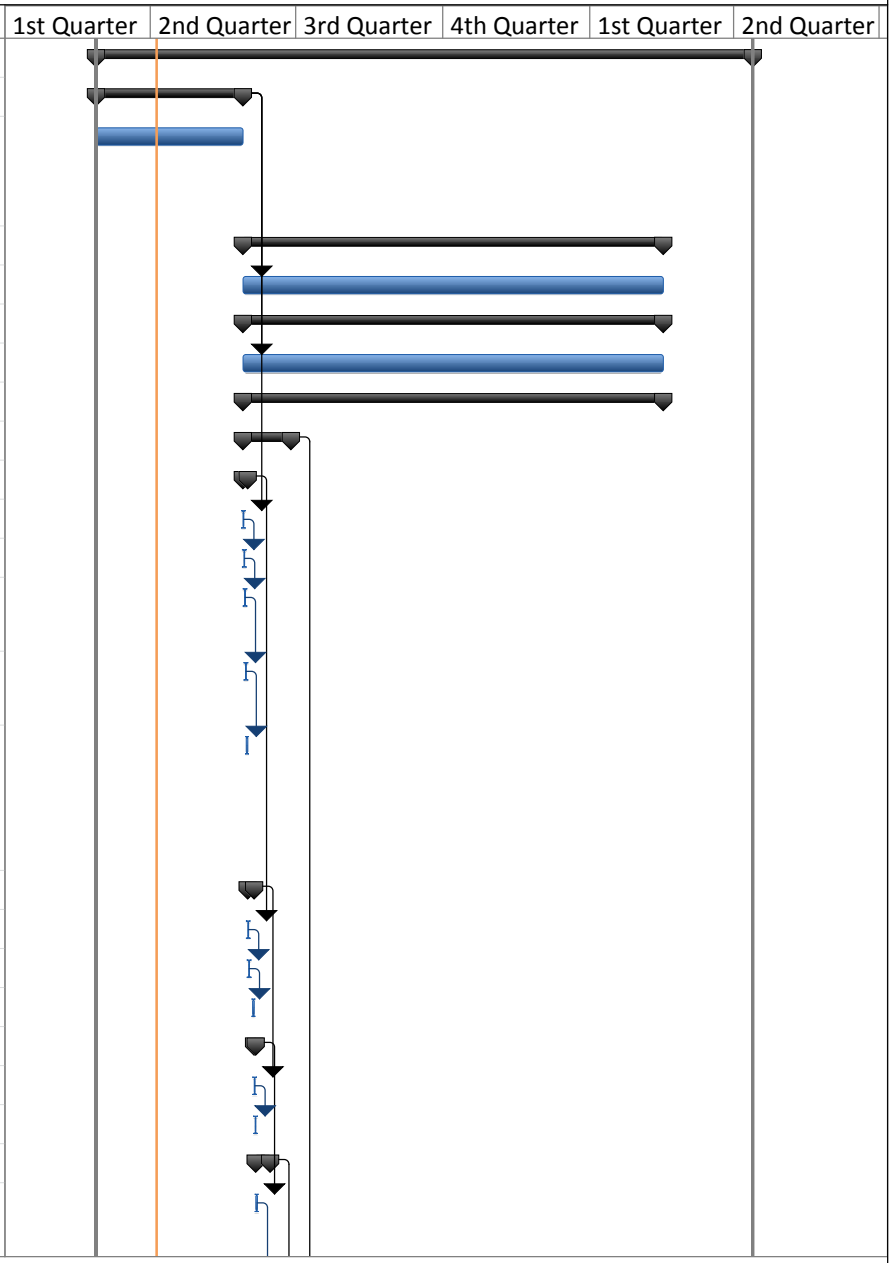
ID	Task Name	Cost
71	Leave all tank drain valves open or remove. Install bird screens across openings.	$2,553.60
72	Drain all makeup and mist eliminator water pumps and piping. Leave vent and drain valves open or remove. Install bird screens across drain openings.	$2,522.40
73	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	$3,404.80
74	Remove solids from all inlet and outlet ductwork as necessary	$8,719.36
75	Open all vent station air and control air lines. Leave in open position or remove vent valves	$1,671.20
76	Padlock or tack weld all access doors to modules and ductwork shut.	$851.20
77	Remove access doors to open-top tanks.	$851.20
78	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
79	**FGD Reagent Preparation-Limestone wet Scrubber**	**$8,938.80**
80	Remove limestone from day bins.	$1,364.96
81	Removed cartridges/bags from bin vent filters	$1,364.96
82	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.)	$425.60
83	Remove bin discharge isolation valve and install bird screen.	$425.60
84	Thoroughly wash and drain mills	$1,364.96
85	Remove balls from any ball mills	$1,089.92
86	Padlock or tack weld mill access doors closed.	$425.60
87	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$738.64
88	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,738.56
89	**SCR**	**$9,762.48**
90	Vacuum fly ash from catalyst.	$2,179.84
91	Remove catalyst of salvage or disposal.	$2,792.32
92	Padlock or tack weld access doors shut.	$851.20
93	Remove ammonia from storage tank for resale.	$682.48
94	Wash out and drain storage tank and supply piping.	$682.48
95	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$835.60
96	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,738.56
97	**Turbine(s) and Condenser**	**$5,091.60**
98	Drain hotwell and leave doors open.	$835.60
99	Open main turbine doors.	$851.20
100	Open bfp turbine doors.	$851.20
101	Remove lube oil.	$2,553.60

L aCygne 1 Retirement

ID	Task Name	Cost
102	**Generator**	**$5,916.56**
103	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.	$434.64
104	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
105	De-energize power supplies to generator excitation system at the source.	$434.64
106	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.	$434.64
107	Drain generator and exciter cooling water systems (if applicable).	$835.60
108	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00
109	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40
110	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
111	Drain.	$1,640.00
112	Open water box doors.	$851.20
113	Drain any circulating water chemical feed tanks.	$820.00
114	**Compressed Air System**	**$820.00**
115	Open vents and drains.	$820.00
116	**Auxiliary Steam System**	**$820.00**
117	Drain water from system.	$820.00
118	**Auxiliary Cooling Water System**	**$820.00**
119	Drain water from system.	$820.00
120	**Condenser Air Extraction and Waterbox Priming System**	**$820.00**
121	Drain water from system.	$820.00
122	**Building Heating System**	**$820.00**
123	Drain water from system.	$820.00
124	**Battery System**	**$4,139.04**
125	De-energize all battery chargers from the source.	$434.64
126	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
127	Remove and dispose of battery electrolyte.	$1,634.88
128	Remove and dispose of battery cells.	$1,089.92
129	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
130	**Post Retirement Activities**	**$25,040.00**
131	Post Retirement Activities	$25,040.00

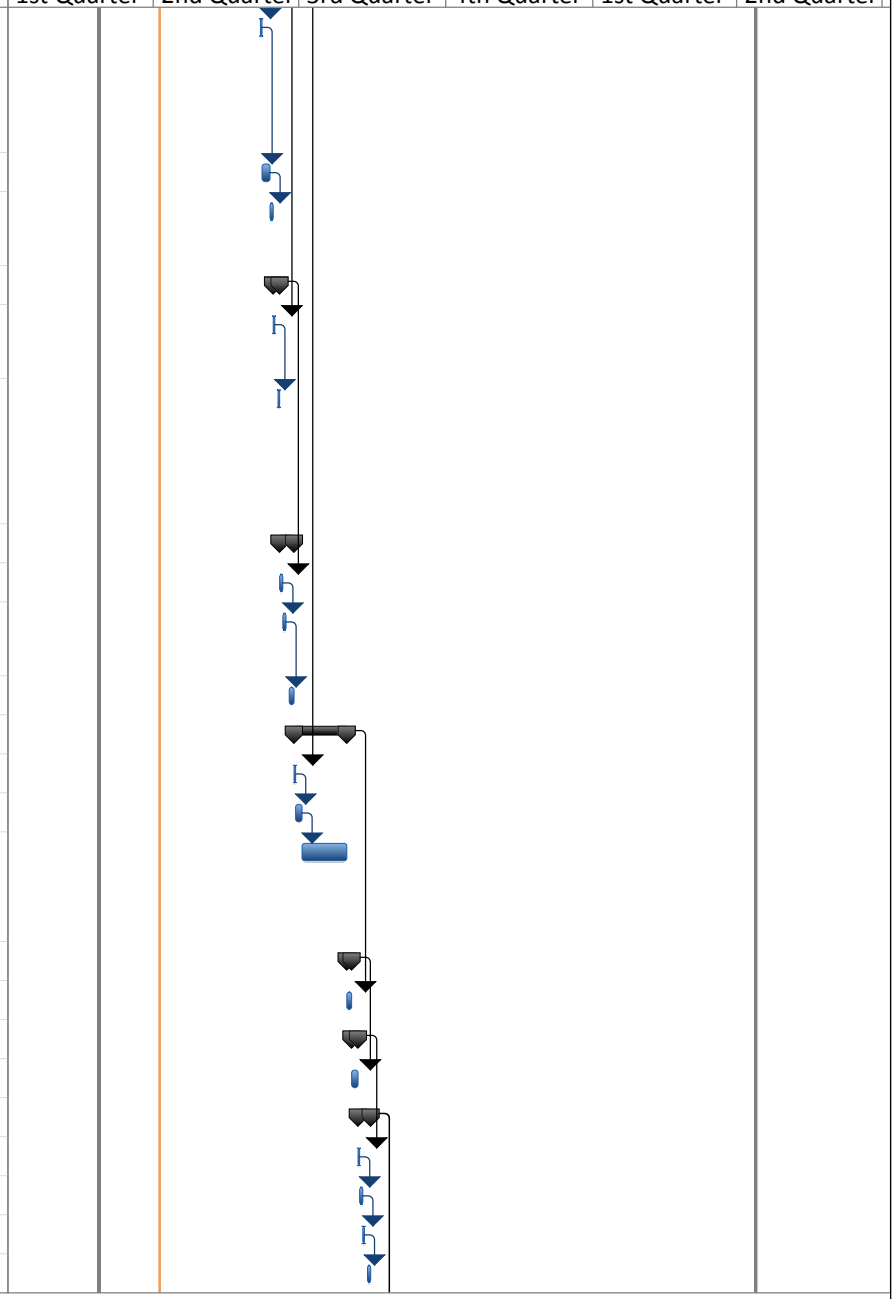
La Cygne 1 Retirement

ID	Task Name	Duration
1	**LaCygne 1 Retirement**	**295 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**	**189 days**
5	KCP&L Retirement Manager	189 days
6	**Equipment Rentals**	**189 days**
7	Vacuum truck	189 days
8	**Retirement**	**189 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



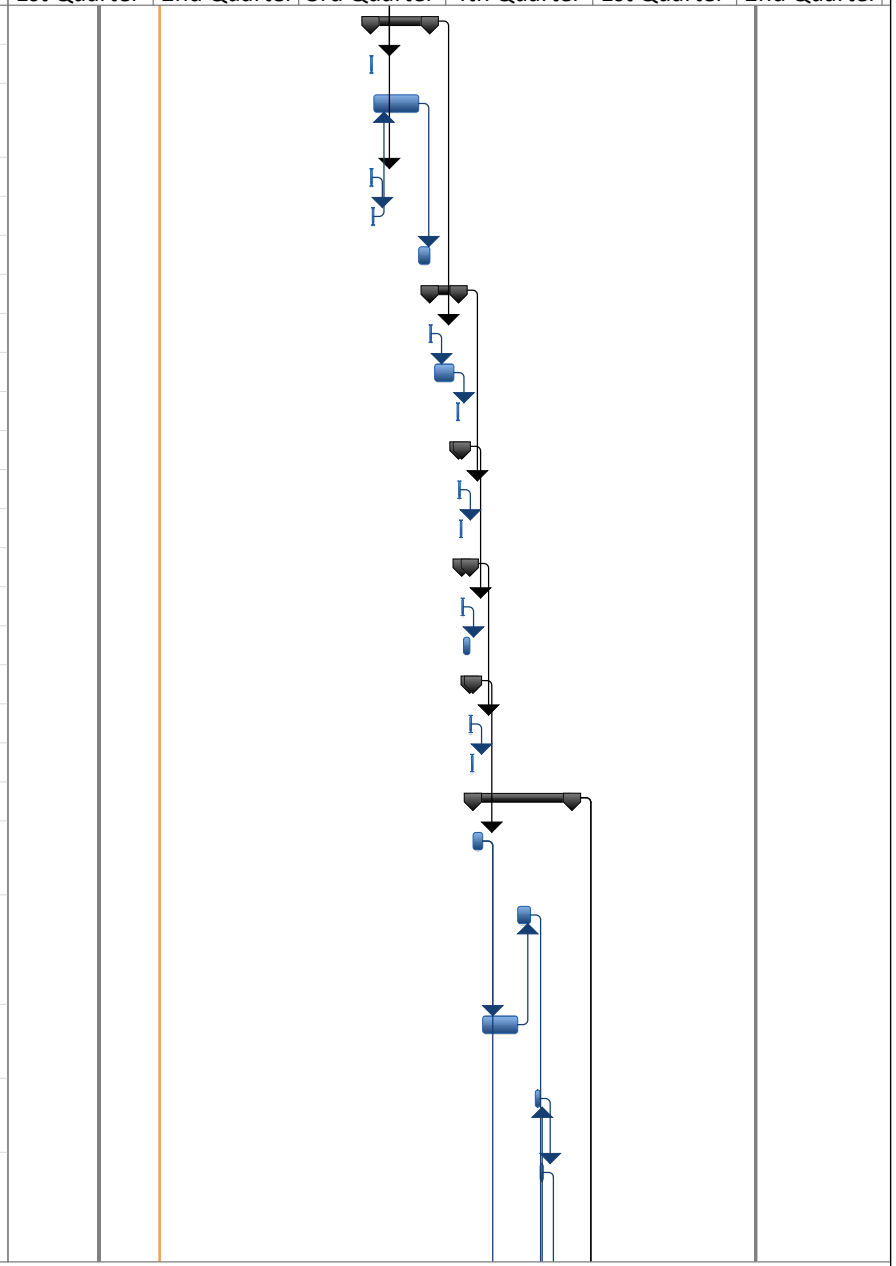
La Cygne 1 Retirement

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	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Coal Handling**	**23 days**
36	Empty all transfer hoppers.	1 day
37	Confirm all fuel lines and conveyors.	2 days
38	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	20 days
39	**Fuel Oil and Igniter System**	**3 days**
40	Drain fuel oil system	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



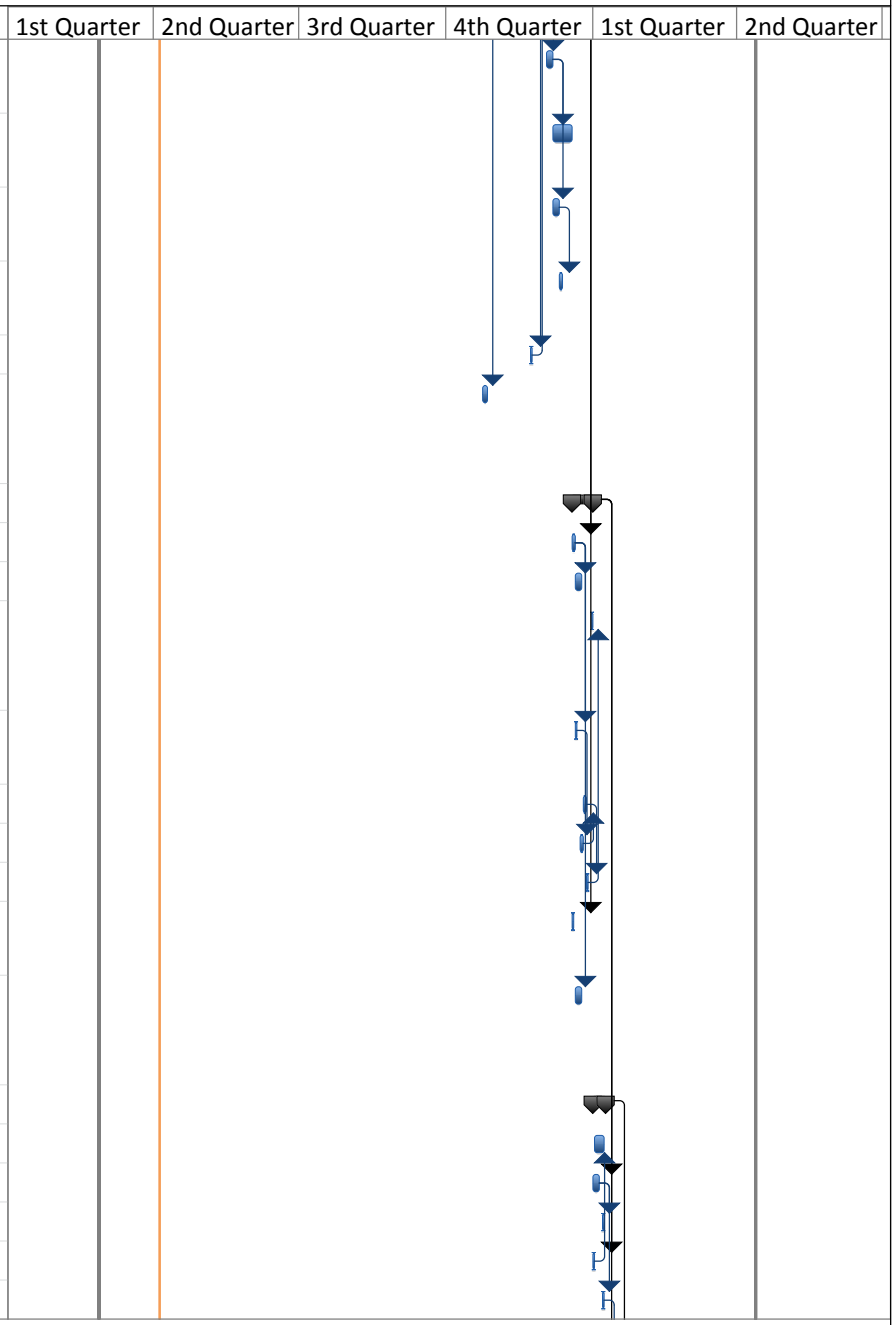
La Cygne 1 Retirement

ID	Task Name	Duration
48	**Boiler**	**27 days**
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 and clean the submerged flight conveyor system.	5 days
54	**Stack and Ductwork**	**12 days**
55	Open ductwork doors.	1 day
56	Perform extensive cleaning of the ductwork.	10 days
57	Place cap over stack opening to keep moisture out.	1 day
58	**Condensate and Feedwater Piping**	**2 days**
59	Drain water from the system.	1 day
60	Leave open vents and drains.	1 day
61	**Feedwater heaters**	**3 days**
62	Drain feedwater heaters	1 day
63	Leave open vents and drains.	2 days
64	**Deaerator and Deaerator Storage Tank**	**2 days**
65	Drain Deaerator and Storage	1 day
66	Leave open vents and drains.	1 day
67	**Wet FGD system**	**44 days**
68	Multiple mist eliminator wash cycles. Remove ME's from absorber.	4 days
69	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.	6 days
70	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	16 days
71	Leave all tank drain valves open or remove. Install bird screens across openings.	3 days
72	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



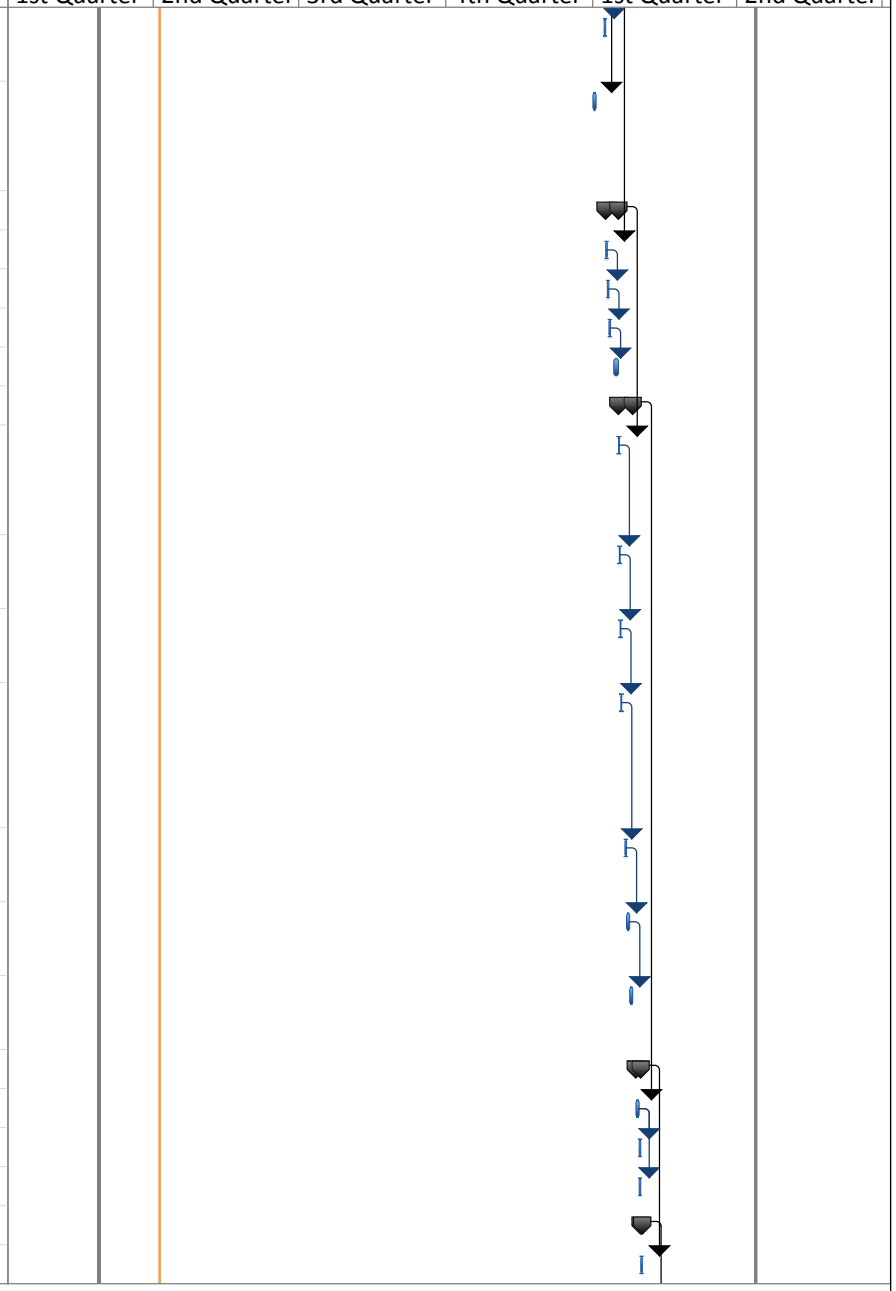
La Cygne 1 Retirement

ID	Task Name	Duration
73	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	4 days
74	Remove solids from all inlet and outlet ductwork as necessary	8 days
75	Open all vent station air and control air lines. Leave in open position or remove vent valves	2 days
76	Padlock or tack weld all access doors to modules and ductwork shut.	2 days
77	Remove access doors to open-top tanks.	1 day
78	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
79	**FGD Reagent Preparation-Limestone wet Scrubber**	**9 days**
80	Remove limestone from day bins.	2 days
81	Removed cartridges/bags from bin vent filters	2 days
82	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
83	Remove bin discharge isolation valve and install bird screen.	1 day
84	Thoroughly wash and drain mills	2 days
85	Remove balls from any ball mills	2 days
86	Padlock or tack weld mill access doors closed.	1 day
87	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	1 day
88	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
89	**SCR**	**6 days**
90	Vacuum fly ash from catalyst.	4 days
91	Remove catalyst of salvage or disposal.	4 days
92	Padlock or tack weld access doors shut.	1 day
93	Remove ammonia from storage tank for resale.	1 day
94	Wash out and drain storage tank and supply piping.	1 day



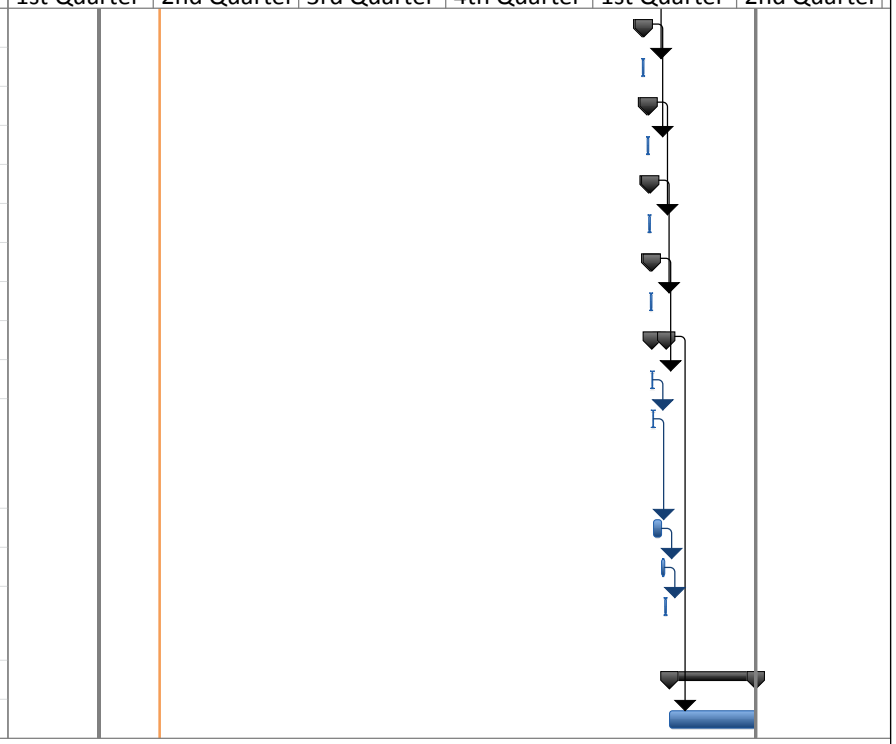
La Cygne 1 Retirement

ID	Task Name	Duration
95	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	1 day
96	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	2 days
97	**Turbine(s) and Condenser**	**6 days**
98	Drain hotwell and leave doors open.	1 day
99	Open main turbine doors.	1 day
100	Open bfp turbine doors.	1 day
101	Remove lube oil.	3 days
102	**Generator**	**7 days**
103	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
104	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
105	De-energize power supplies to generator excitation system at the source.	0.5 days
106	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
107	Drain generator and exciter cooling water systems (if applicable).	1 day
108	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
109	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
110	**Circulation Water and Turbine Cooling Water System**	**3 days**
111	Drain.	2 days
112	Open water box doors.	1 day
113	Drain any circulating water chemical feed tanks.	1 day
114	**Compressed Air System**	**1 day**
115	Open vents and drains.	1 day



La Cygne 1 Retirement

ID	Task Name	Duration
116	**Auxiliary Steam System**	**1 day**
117	Drain water from system.	1 day
118	**Auxiliary Cooling Water System**	**1 day**
119	Drain water from system.	1 day
120	**Condenser Air Extraction and Waterbox Priming System**	**1 day**
121	Drain water from system.	1 day
122	**Building Heating System**	**1 day**
123	Drain water from system.	1 day
124	**Battery System**	**7 days**
125	De-energize all battery chargers from the source.	0.5 days
126	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
127	Remove and dispose of battery electrolyte.	3 days
128	Remove and dispose of battery cells.	2 days
129	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
130	**Post Retirement Activities**	**40 days**
131	Post Retirement Activities	40 days



La Cygne 1 Dismantlement

Owner Additional Costs				
Pre-Dismantlement Activities		$801,869		
Overhead During Dismantlement		$1,694,852		
Post-Dismantlement Activities		$63,324		
Owner Costs Total			$2,496,721	
Demolition General Contractor (DGC) Costs				
Additional Site Management		$1,244,655		
Equipment Rental		$2,122,574		
Consummables		$2,317,057		
Scrap Crew(s)		$2,140,374		
Dismantlement*		$5,163,112		
DGC Insurance	2.00%	$259,755		
Contingency/Profit	15.00%	$1,987,129		
Performance Bond	2.00%	$304,693.12		
Contractor Costs Total:			$15,539,349	
Total:				$18,036,070
Owner Internal Costs:	5.00%			$901,803
Owner Contingency:	25.00%			$4,734,468
La Cygne Unit 1 Dismantlement Opinion of Probable Cost:				$23,672,342

UNIT 2

La Cygne 2 Retirement

Owner Costs			
Pre-Retirement Activities		$95,040	
Retirement Activities		$541,855	
Post-Retirement Activities		$25,040	
Owner Direct Total			$661,935
Owner Internal Costs	5.00%		$33,097
Owner Contingency:	25.00%		$173,758

La Cygne 2 Retirement Opinion of Probable Cost: $835,692.94

La Cygne 2 Retirement

ID	Task Name	Cost
1	**LaCygne 2 Retirement**	**$661,935.87**
2	**Pre-Engineering**	**$95,040.00**
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**	**$81,760.00**
5	KCP&L Retirement Manager	$81,760.00
6	**Equipment Rentals**	**$28,000.00**
7	Vacuum truck	$28,000.00
8	**Retirement**	**$432,095.87**
9	**Electrical**	**$18,367.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$5,382.08**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$2,553.60
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$6,030.72**
32	De-energize all primary power at the source.	$1,738.56

La Cygne 2 Retirement

ID	Task Name	Cost
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,738.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,553.60
35	**Coal Handling**	**$26,734.00**
36	Empty all transfer hoppers.	$1,655.60
37	Burn out coal silos.	$1,640.00
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,640.00
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
40	**Fuel Oil and Igniter System**	**$2,460.00**
41	Drain fuel oil system	$2,460.00
42	**Waste Oil System**	**$1,640.00**
43	Drain all waste oil systems	$1,640.00
44	**Boiler Chemical Feed**	**$1,640.00**
45	Drain all chemical feed tanks.	$1,640.00
46	**Boiler**	**$26,734.11**
47	Open boiler doors.	$851.20
48	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
49	Drain boiler, drum, downcomers and headers.	$820.00
50	Open drum doors.	$851.20
51	Drain and clean the submerged flight conveyor system.	$2,413.31
52	**Stack and Ductwork**	**$311,750.40**
53	Open ductwork doors.	$851.20
54	Perform extensive cleaning of the ductwork.	$10,899.20
55	Place cap over stack opening to keep moisture out.	$300,000.00
56	**Condensate and Feedwater Piping**	**$1,640.00**
57	Drain water from the system.	$820.00
58	Leave open vents and drains.	$820.00
59	**Feedwater heaters**	**$2,460.00**
60	Drain feedwater heaters	$820.00
61	Leave open vents and drains.	$1,640.00
62	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
63	Drain Deaerator and Storage	$820.00
64	Leave open vents and drains.	$820.00
65	**Precipitator**	**$13,651.92**
66	Multiple cleaning cycles for collection plates.	$2,460.00
67	Clear hoppers of all ash	$2,729.92
68	Disconnect tranformers.	$1,920.00
69	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$851.20
70	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,380.56
71	Install bird screens across hopper ash outlet and ash line flanges.	$851.20

La Cygne 2 Retirement

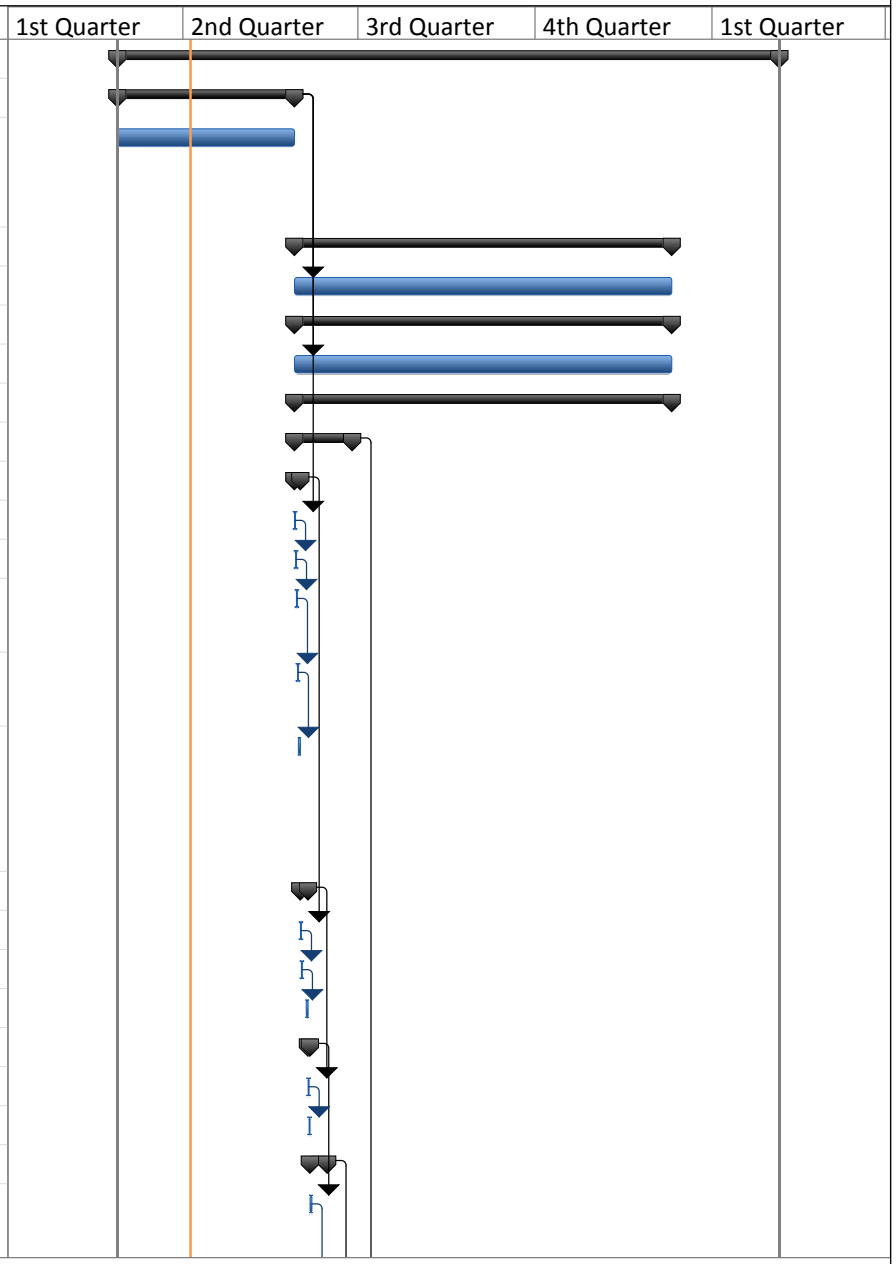
ID	Task Name	Cost
72	Padlock or tack weld all hopper doors shut. (note: if ash hopper doors are indoors, they could be removed and the opening covered with bird screens.)	$851.20
73	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
74	**Turbine(s) and Condenser**	**$5,091.60**
75	Drain hotwell and leave doors open.	$835.60
76	Open main turbine doors.	$851.20
77	Open bfp turbine doors.	$851.20
78	Remove lube oil.	$2,553.60
79	**Generator**	**$5,916.56**
80	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.	$434.64
81	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
82	De-energize power supplies to generator excitation system at the source.	$434.64
83	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.	$434.64
84	Drain generator and exciter cooling water systems (if applicable).	$835.60
85	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00
86	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40
87	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
88	Drain.	$1,640.00
89	Open water box doors.	$851.20
90	Drain any circulating water chemical feed tanks.	$820.00
91	**Compressed Air System**	**$820.00**
92	Open vents and drains.	$820.00
93	**Auxiliary Steam System**	**$1,640.00**
94	Drain water from system.	$820.00
95	Remove aux boiler chemicals.	$820.00
96	**Auxiliary Cooling Water System**	**$820.00**
97	Drain water from system.	$820.00
98	**Condenser Air Extraction and Waterbox Priming System**	**$820.00**
99	Drain water from system.	$820.00
100	**Building Heating System**	**$820.00**
101	Drain water from system.	$820.00
102	**Battery System**	**$4,139.04**
103	De-energize all battery chargers from the source.	$434.64

La Cygne 2 Retirement

ID	Task Name	Cost
104	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
105	Remove and dispose of battery electrolyte.	$1,634.88
106	Remove and dispose of battery cells.	$1,089.92
107	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
108	**Post Retirement Activities**	**$25,040.00**
109	Post Retirement Activities	$25,040.00

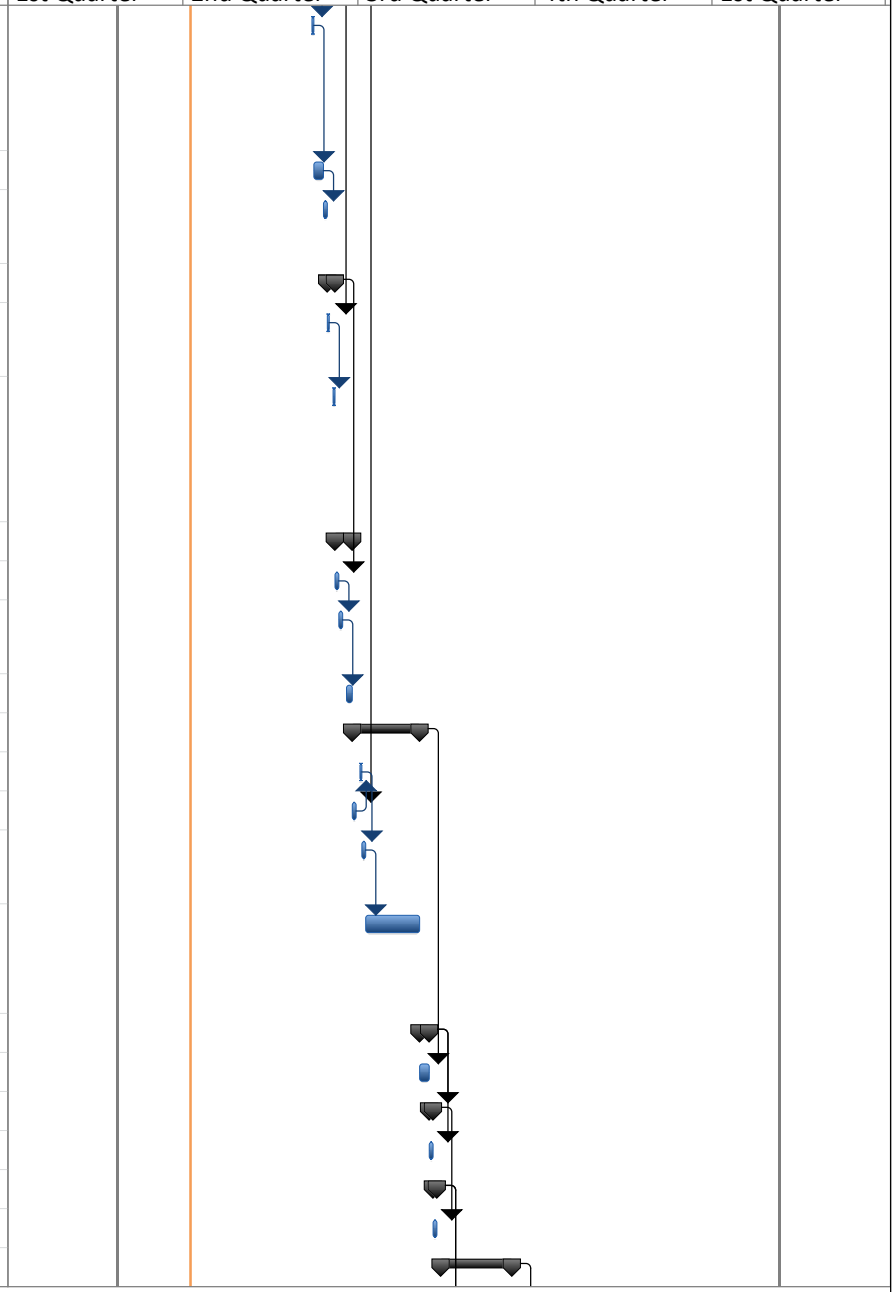
La Cygne 2 Retirement

ID	Task Name	Duration
1	**LaCygne 2 Retirement**	**246 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**	**140 days**
5	KCP&L Retirement Manager	140 days
6	**Equipment Rentals**	**140 days**
7	Vacuum truck	140 days
8	**Retirement**	**140 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



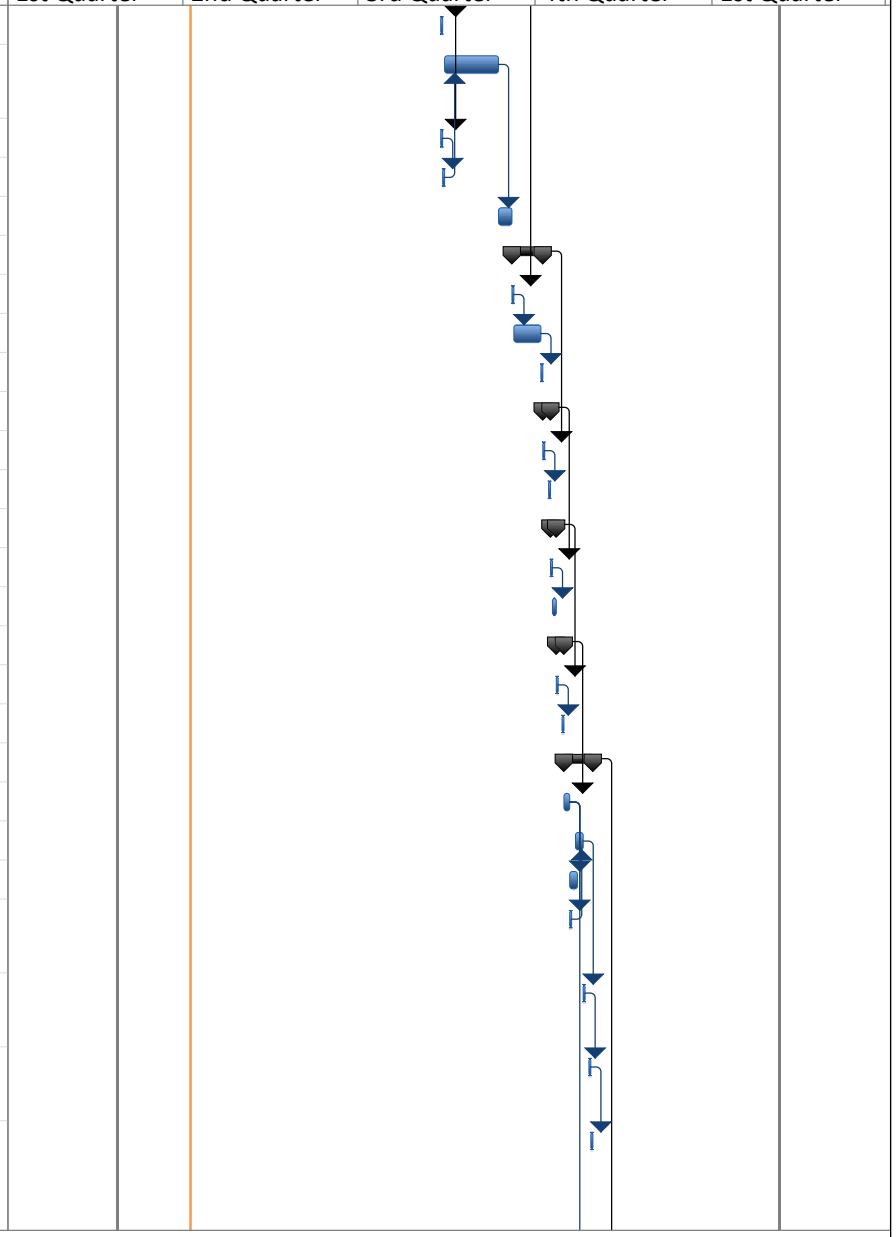
La Cygne 2 Retirement

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	**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**



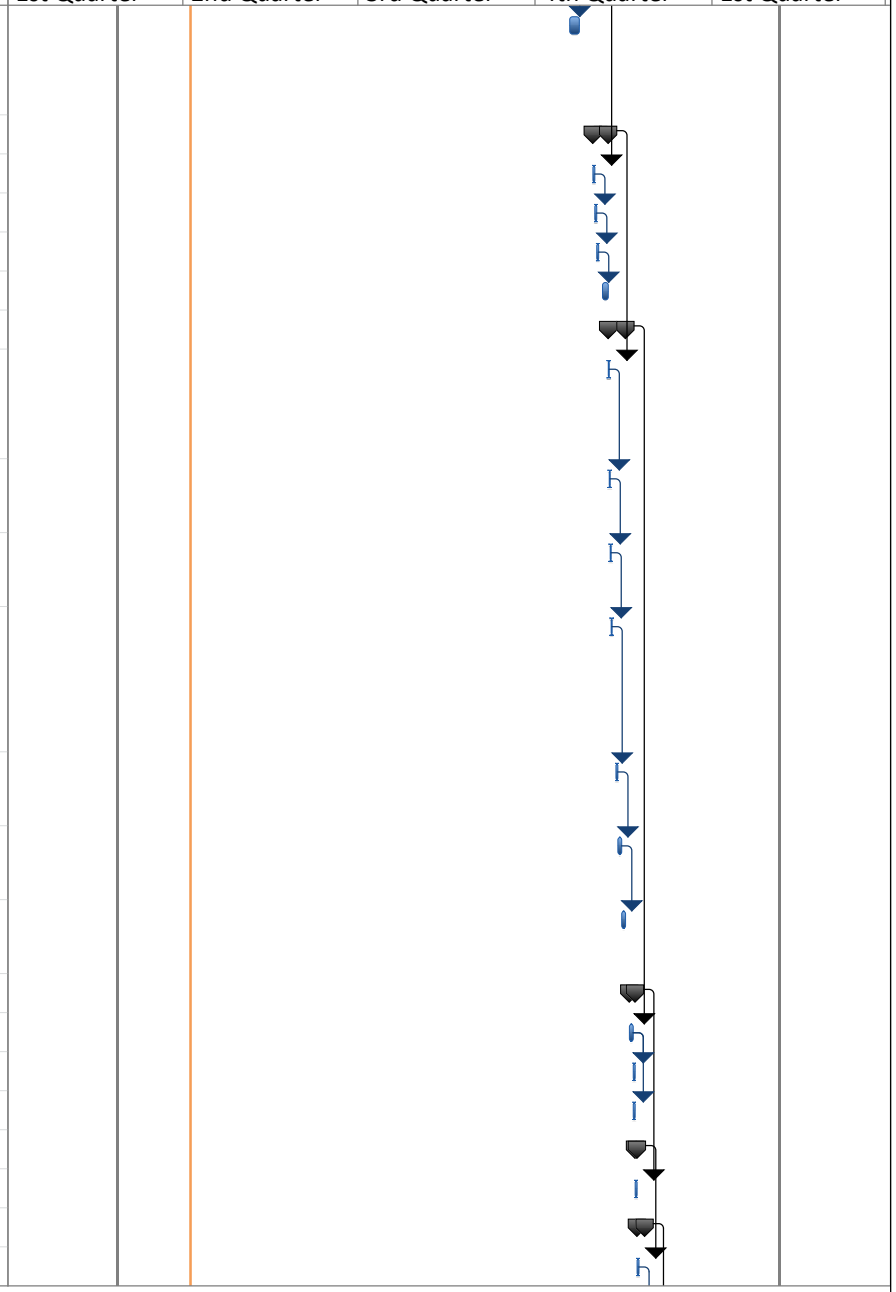
La Cygne 2 Retirement

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	**Precipitator**	**11 days**
66	Multiple cleaning cycles for collection plates.	3 days
67	Clear hoppers of all ash	4 days
68	Disconnect tranformers.	2 days
69	Mechanically secure all compartment dampers and hopper outlet valves in open position.	1 day
70	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	1 day
71	Install bird screens across hopper ash outlet and ash line flanges.	1 day
72	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



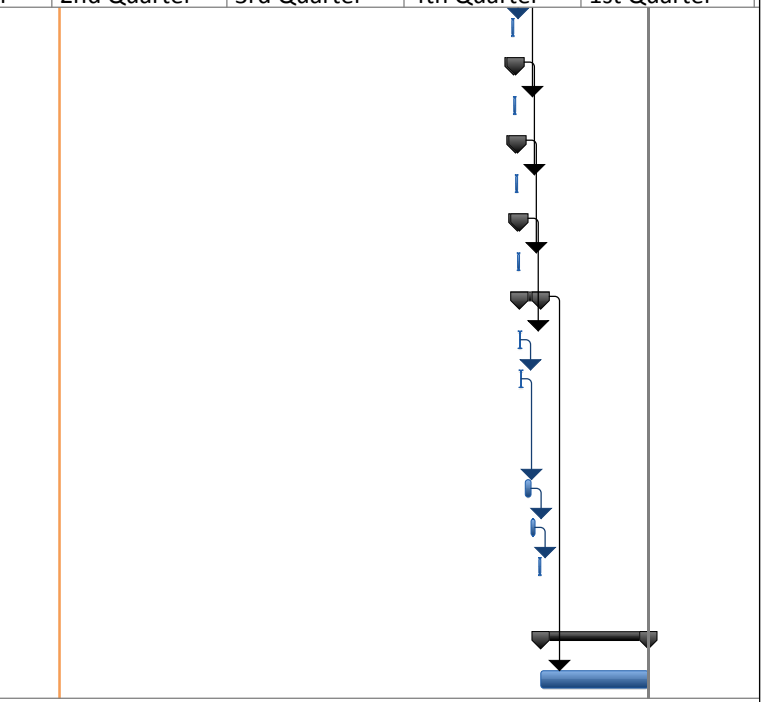
La Cygne 2 Retirement

ID	Task Name	Duration
73	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	3 days
74	**Turbine(s) and Condenser**	**6 days**
75	Drain hotwell and leave doors open.	1 day
76	Open main turbine doors.	1 day
77	Open bfp turbine doors.	1 day
78	Remove lube oil.	3 days
79	**Generator**	**7 days**
80	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
81	Verify that generator field breaker or contactor (if applicable) is open.	0.5 days
82	De-energize power supplies to generator excitation system at the source.	0.5 days
83	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
84	Drain generator and exciter cooling water systems (if applicable).	1 day
85	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	2 days
86	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
87	**Circulation Water and Turbine Cooling Water System**	**3 days**
88	Drain.	2 days
89	Open water box doors.	1 day
90	Drain any circulating water chemical feed tanks.	1 day
91	**Compressed Air System**	**1 day**
92	Open vents and drains.	1 day
93	**Auxiliary Steam System**	**2 days**
94	Drain water from system.	1 day



La Cygne 2 Retirement

ID	Task Name	Duration
95	Remove aux boiler chemicals.	1 day
96	**Auxiliary Cooling Water System**	**1 day**
97	Drain water from system.	1 day
98	**Condenser Air Extraction and Waterbox Priming System**	**1 day**
99	Drain water from system.	1 day
100	**Building Heating System**	**1 day**
101	Drain water from system.	1 day
102	**Battery System**	**7 days**
103	De-energize all battery chargers from the source.	0.5 days
104	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	0.5 days
105	Remove and dispose of battery electrolyte.	3 days
106	Remove and dispose of battery cells.	2 days
107	Clean up and dispose of electrolyte on surface areas around batteries.	1 day
108	**Post Retirement Activities**	**40 days**
109	Post Retirement Activities	40 days



La Cygne Unit 2 Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$782,068		
Overhead During Dismantlement		$1,496,399		
Post-Dismantlement Activities		$61,760		
Owner Costs Total			$2,340,227	
Demolition General Contractor (DGC) Costs				
Site Management		$887,519		
Equipment Rental		$1,482,639		
Consummables		$1,479,200		
Scrap Crew(s)		$1,496,056		
Dismantlement		$3,980,259		
DGC Insurance	2.00%	$186,513		
Contingency/Profit	15.00%	$1,426,827.97		
Performance Bond	2.00%	$218,780.29		
Contractor Costs Total:			$11,157,795	
Total:				$13,498,022
Owner Internal Costs:	5.00%			$674,901.09
Owner Contingency:	25.00%			$3,543,230.70
La Cygne Unit 2 Dismantlement Opinion of Probable Cost:				$17,716,153.50

La Cygne Unit 2 Dismantlement

ID	Task Name	Cost
1	**La Cygne Unit 2 Dismantlement**	**$11,665,902.08**
2	**Pre-Dismantlement Activities**	**$782,068.00**
3	Detailed Planning & Hire Owner's Engineer	$98,448.00
4	Detailed Site Characterization Study	$525,148.00
5	Hire Demolition General Contractor	$149,544.00
6	KCP&L Prepares Unit for Dismantlement	$8,928.00
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,496,399.84**
9	KCP&L Project Manager	$251,119.98
10	KCP&L Administrative Support	$92,879.99
11	KCP&L Engineer	$412,799.96
12	Owners Engineer Project Manager	$120,400.00
13	Owners Engineer - Engineer	$619,199.96
14	**Demoliton Contractor Overhead during Dismantlement**	**$887,519.92**
15	Demolition Contractor Project Manager	$251,119.98
16	Demolition Contractor Safety Manager	$223,599.98
17	Demolition Contractor Superintendent	$412,799.96
18	**Demolition Contractor Equipment Rental Costs**	**$1,482,639.84**
19	Equipment Rental	$1,482,639.84
20	**Demolition Contractor Consummables**	**$1,479,200.00**
21	Consummables	$1,479,200.00
22	**Scrap Crew(s)**	**$1,496,056.00**
23	Crew to Handle Scrap Material(s)	$1,496,056.00
24	**Dismantlement Directs**	**$3,980,259.20**
25	**Phase 1 Demolition**	**$934,541.44**
26	**Phase 1 Electrical Demolition**	**$332,263.60**
27	Electrical Demolition of Phase 1 Equipment	$332,263.60
28	**Condensate System**	**$102,636.40**
29	Condensate Pumps	$3,479.20
30	Condensate Transfer Pumps	$1,739.60
31	Cycle Make-Up Pump	$1,739.60
32	Steam Packing Exhauster and Blower	$3,479.20
33	Low Pressure Heaters (except the condenser neck heat exchangers)	$52,188.00
34	Deaerator	$13,916.80
35	Deaerator Storage Tank	$8,698.00
36	Condensate Piping	$17,396.00
37	**Boiler Feed System**	**$65,858.16**
38	Boiler Feed Pump Turbine and Exhaust	$13,670.16
39	Boiler Feed Pump	$17,396.00
40	High Pressure Heaters	$34,792.00
41	**Critical Piping**	**$78,282.00**
42	Main Steam Piping	$26,094.00
43	Cold Reheat Piping	$26,094.00

La Cygne Unit 2 Dismantlement

ID	Task Name	Cost
44	Hot Reheat Piping	$26,094.00
45	**Extraction Steam System**	**$17,396.00**
46	Piping	$17,396.00
47	**Heater Drips**	**$13,916.80**
48	Piping	$13,916.80
49	**Auxiliary Steam**	**$15,656.40**
50	Auxiliary Steam Piping	$15,656.40
51	**Circulating Water (plant side)**	**$8,698.00**
52	Waterboxes	$8,698.00
53	**Bearing Cooling Water**	**$29,573.20**
54	Bearing Cooling Water Pumps	$3,479.20
55	Bearing Cooling Water Heat Exchanger	$8,698.00
56	Bearing Cooling Water Piping	$17,396.00
57	**Auxiliary Cooling Water**	**$27,833.60**
58	Auxiliary Cooling Water Heat Exchanger	$5,218.80
59	Auxiliary Cooling Water Pumps	$5,218.80
60	Auxiliary Cooling Water Piping	$17,396.00
61	**Service Water**	**$8,698.00**
62	Service Water Piping	$8,698.00
63	**Fuel Oil System (plant side)**	**$40,010.80**
64	Igniter Fuel Oil Pumps	$5,218.80
65	Igniter Fuel Oil and Atomizing Air Piping	$8,698.00
66	Igniters	$26,094.00
67	**Waste Oil System**	**$12,177.20**
68	Waste Oil Tank	$3,479.20
69	Waste Oil Transfer Pump	$3,479.20
70	Waste Oil Piping	$5,218.80
71	**Air Preheat System**	**$10,367.60**
72	Air Preheat Pumps	$3,905.76
73	Air Preheat Piping	$6,461.84
74	**Condenser Air Extraction System**	**$10,437.60**
75	Vacuum Pumps	$6,958.40
76	Extraction Piping	$3,479.20
77	**Turbine Seals and Drains**	**$13,670.16**
78	Piping	$13,670.16
79	**Turbine Lube Oil System**	**$20,841.84**
80	Turbine Lube Oil Tank	$11,077.44
81	Turbine Lube Oil Pumps	$7,811.52
82	Turbine Oil Mist Eliminator	$1,952.88
83	**Generator Auxiliary Systems**	**$35,151.84**
84	Hydrogen Cooler Skid and Piping	$9,764.40
85	Stator Cooling Water Skid and Piping	$9,764.40
86	Isophase Bus Duct	$7,811.52
87	Exciter Heat Exchanger	$3,905.76

La Cygne Unit 2 Dismantlement

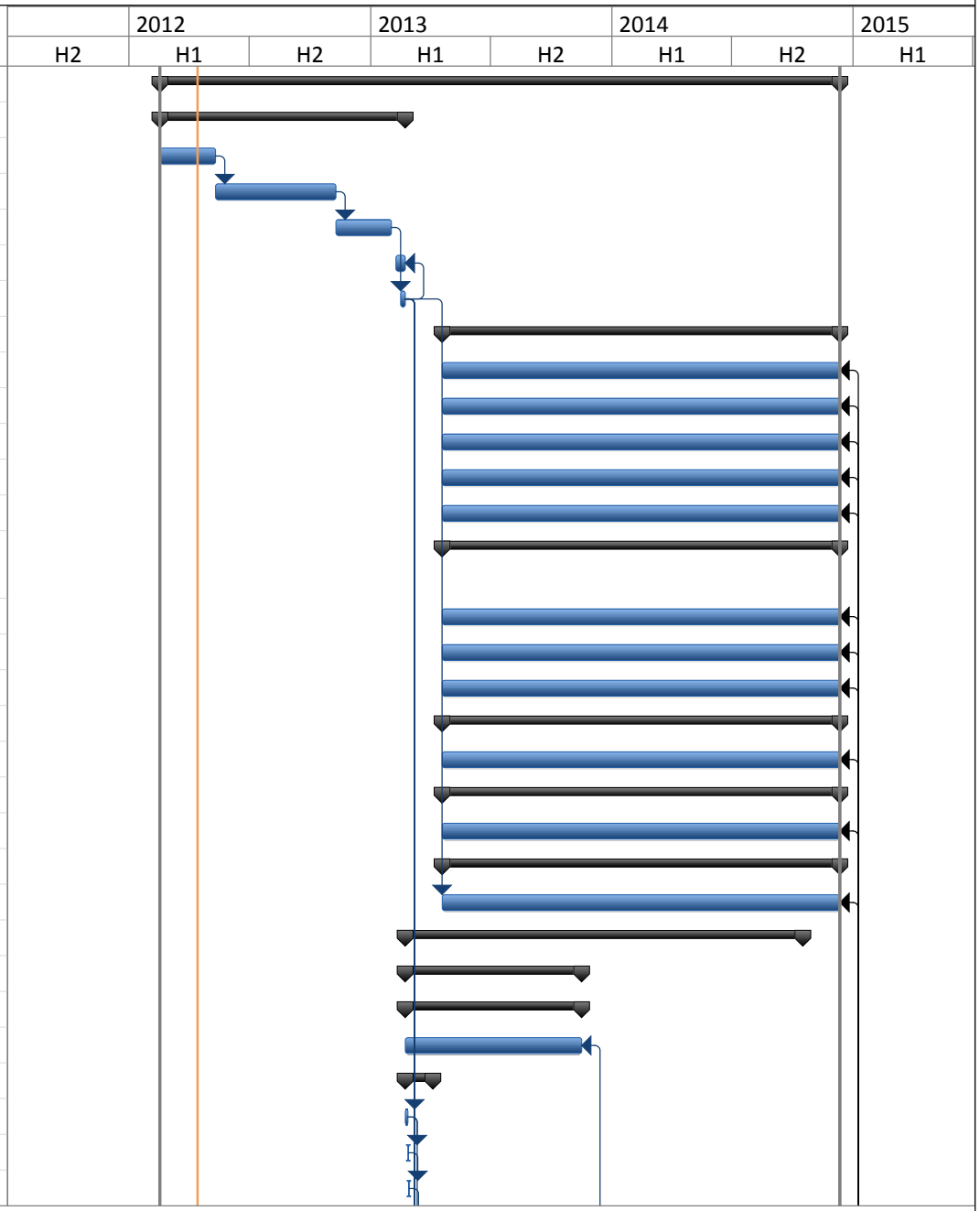
ID	Task Name	Cost
88	EHC Coolers	$3,905.76
89	**Chemical Feed Systems**	**$18,745.68**
90	Tanks	$8,308.08
91	Pumps	$5,218.80
92	Piping	$5,218.80
93	**Sampling Systems**	**$6,675.12**
94	Field Mounted Heat Exchangers	$3,905.76
95	Piping	$2,769.36
96	**Building Heating Systems**	**$12,923.68**
97	Steam Unit Heaters	$9,231.20
98	Steam Piping	$3,692.48
99	**Compressed Air System**	**$29,293.20**
100	Air Compressors	$7,811.52
101	Air Drying Equipment	$5,858.64
102	Air Reciever Tanks	$5,858.64
103	Compressed Air Piping	$9,764.40
104	**Miscellaneous Equipment**	**$23,434.56**
105	Miscellaneous Equipment (including Fire Protection)	$23,434.56
106	**Phase 2 Demolition**	**$2,823,652.16**
107	**Precipitator**	**$104,376.00**
108	Remove Precipitator	$104,376.00
109	**Boiler Equipment**	**$690,454.40**
110	Fans	$61,419.20
111	Pulverizers	$69,584.00
112	Bottom Ash	$15,976.32
113	Air Heater	$194,835.20
114	Steam Drum	$86,980.00
115	Coal Bunkers	$69,584.00
116	Coal Feeders	$45,229.60
117	Soot Blowers	$49,428.48
118	Ductwork	$97,417.60
119	**Boiler Removal**	**$389,670.40**
120	Furnace	$222,668.80
121	Back Pass	$167,001.60
122	**Boiler Steel Framing**	**$702,798.40**
123	Hanger Girders at Top	$104,376.00
124	All Other Framing	$327,044.80
125	Bracing and Girts	$160,043.20
126	Columns	$111,334.40
127	**Boiler Foundations**	**$125,251.20**
128	Equipment Foundation Demolition to Grade	$125,251.20
129	**Remove Turbine**	**$811,101.76**
130	Remove HP Turbine	$25,560.80
131	Remove IP Turbine	$25,560.80

La Cygne Unit 2 Dismantlement

ID	Task Name	Cost
132	Remove LP Turbine	$25,560.80
133	Remove Generator	$51,121.60
134	Remove Condenser Neck Heat Exchanger	$25,560.80
135	Remove Condenser	$25,560.80
136	Remove Misc. Auxiliary Turbine Equipment	$38,341.20
137	**Turbine Pedestal Demolition to Grade**	**$260,720.16**
138	Top Slab and Beams	$102,243.20
139	Columns	$158,476.96
140	**Remove Turbine Building**	**$333,114.80**
141	Siding and Rooding	$105,550.40
142	All Framing Elevations	$153,364.80
143	Bracing and Girts	$51,121.60
144	Columns	$23,078.00
145	**Phase 3 Demolition**	**$222,065.60**
146	**Yard Demolition**	**$222,065.60**
147	Remove Circulating Water Pumps, Screens and Intake Auxiliaries	$17,396.00
148	**Remove Ash Handling Equipment and Piping**	**$43,490.00**
149	Remove Fly Ash Storage Silo 2A	$17,396.00
150	Remove Dewatering Bin 2A and 2B	$8,698.00
151	Remove Piping and Misc. Equipment	$17,396.00
152	**Remove Fuel Yard Equipment**	**$78,282.00**
153	Remove Crushers 2A, 2B and Surge Bin	$26,094.00
154	Remove Conveyor 206	$17,396.00
155	Remove Conveyor 207	$17,396.00
156	Remove Conveyor 2A	$17,396.00
157	Remove Laydown Equipment and Warehoused Equipment	$17,396.00
158	Remove Unit 2 Condensate Storage Tank and Pump	$4,615.60
159	Remove Unit 2 Make-Up Water Storage Tank	$8,698.00
160	Remove Unit 2 Water Pre-Treatment Equipment and Building	$52,188.00
161	**Project Close-Out**	**$61,760.00**
162	Project Close-Out Activities	$61,760.00

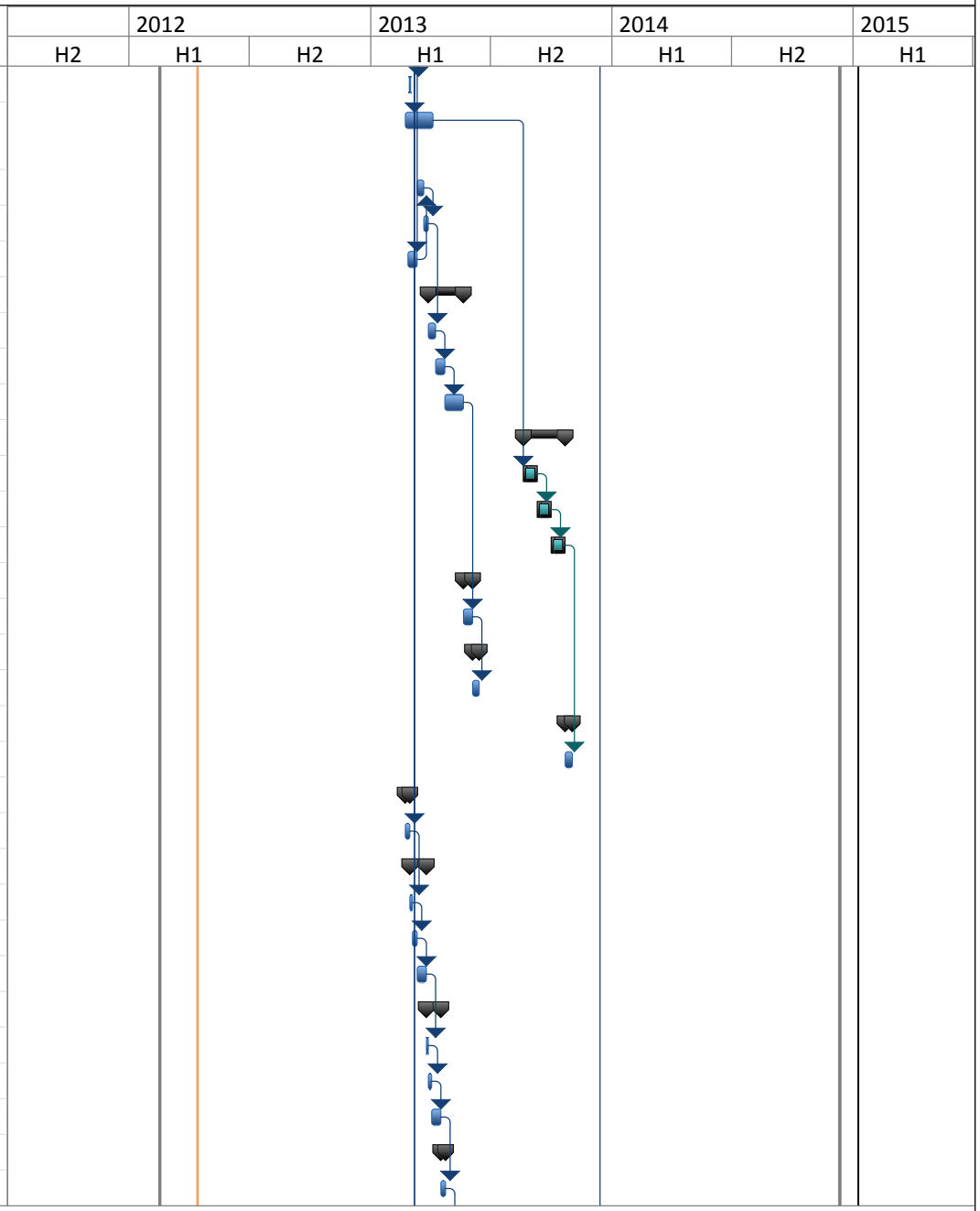
La Cygne Unit 2 Dismantlement

ID	Task Name	Duration
1	**La Cygne Unit 2 Dismantlement**	**735 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**	**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(s)**	**430 days**
23	Crew to Handle Scrap Material(s)	430 days
24	**Dismantlement Directs**	**430 days**
25	**Phase 1 Demolition**	**191 days**
26	**Phase 1 Electrical Demolition**	**191 days**
27	Electrical Demolition of Phase 1 Equipmer	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



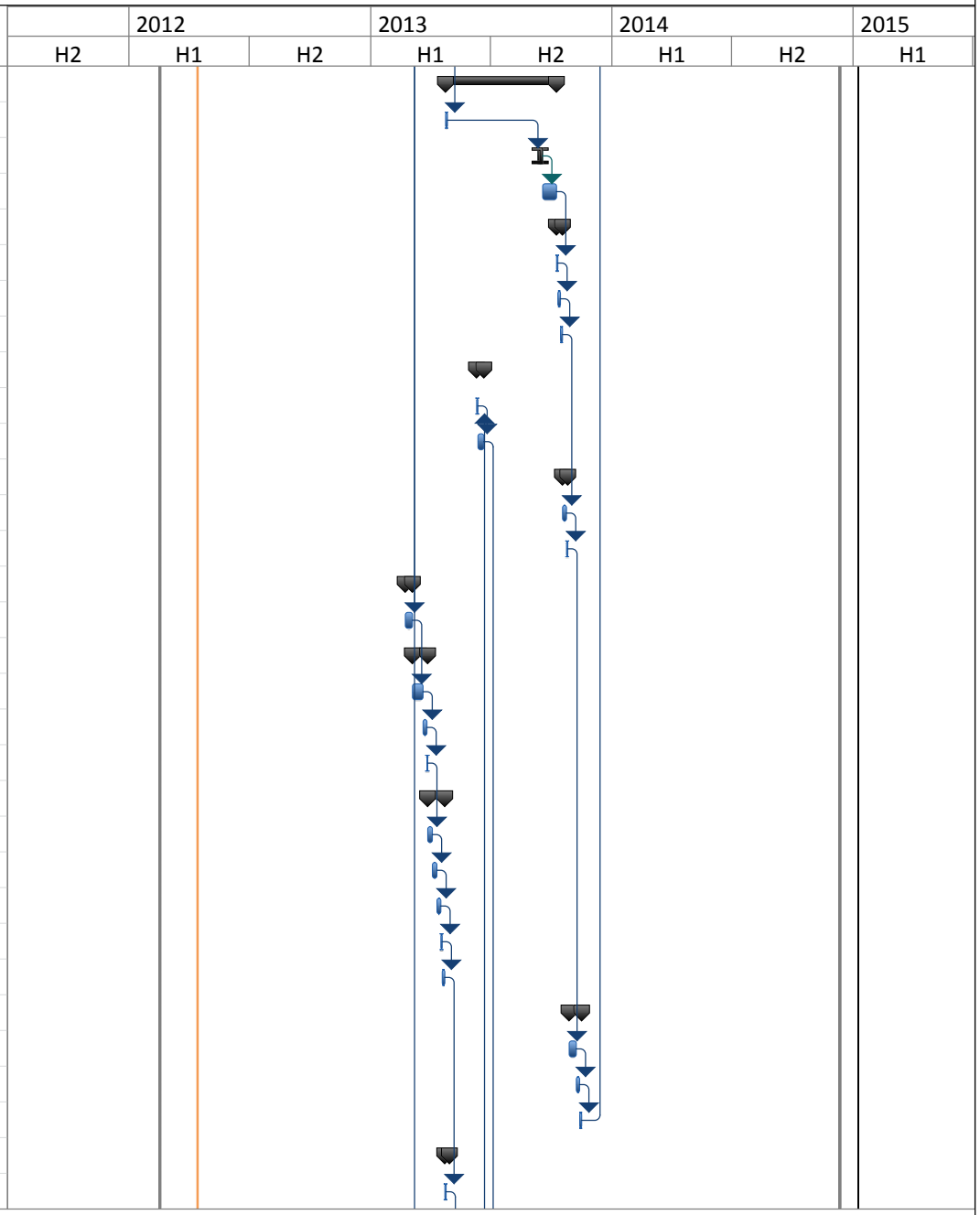
La Cygne Unit 2 Dismantlement

ID	Task Name	Duration
32	Steam Packing Exhauster and Blower	2 days
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**	**9 days**
50	Auxiliary Steam Piping	9 days
51	**Circulating Water (plant side)**	**5 days**
52	Waterboxes	5 days
53	**Bearing Cooling Water**	**17 days**
54	Bearing Cooling Water Pumps	2 days
55	Bearing Cooling Water Heat Exchanger	5 days
56	Bearing Cooling Water Piping	10 days
57	**Auxiliary Cooling Water**	**16 days**
58	Auxiliary Cooling Water Heat Exchanger	3 days
59	Auxiliary Cooling Water Pumps	3 days
60	Auxiliary Cooling Water Piping	10 days
61	**Service Water**	**5 days**
62	Service Water Piping	5 days



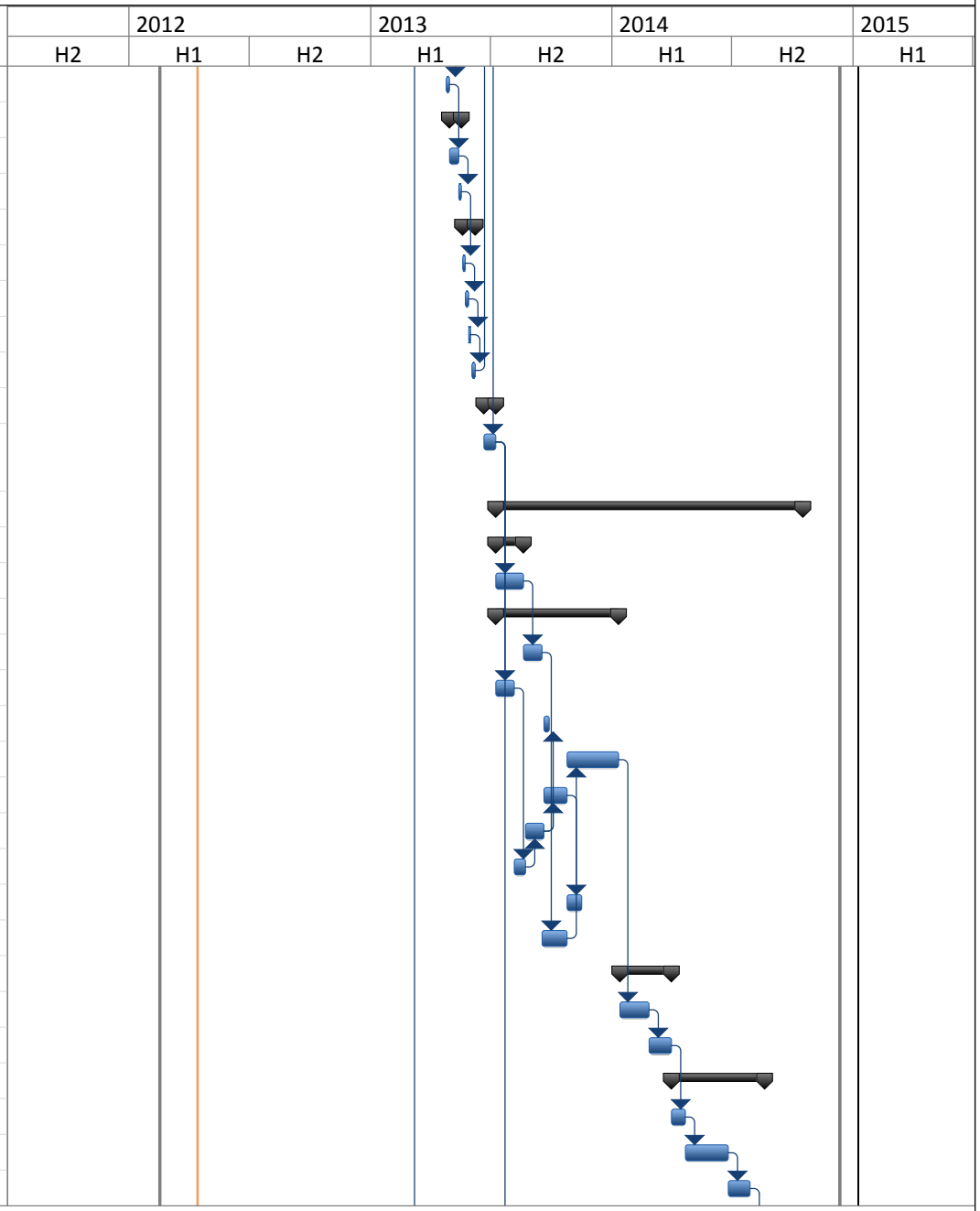
La Cygne Unit 2 Dismantlement

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



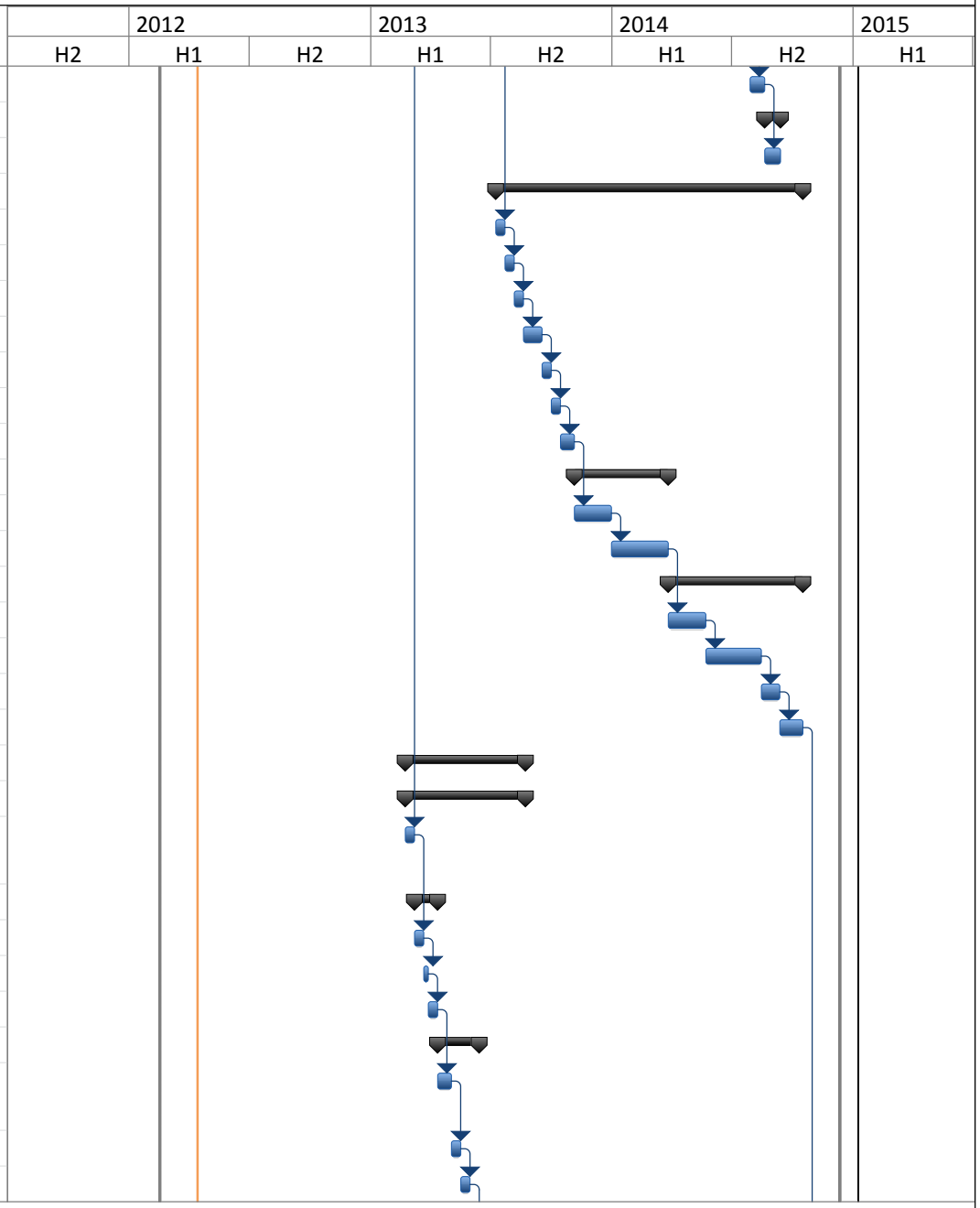
La Cygne Unit 2 Dismantlement

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



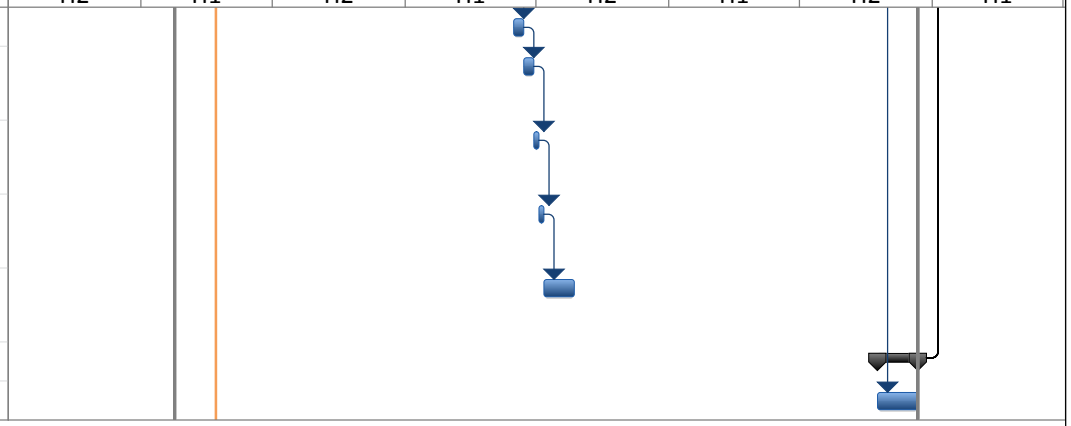
La Cygne Unit 2 Dismantlement

ID	Task Name	Duration
126	Columns	16 days
127	**Boiler Foundations**	**18 days**
128	Equipment Foundation Demolition to Gra	18 days
129	**Remove Turbine**	**333 days**
130	Remove HP Turbine	10 days
131	Remove IP Turbine	10 days
132	Remove LP Turbine	10 days
133	Remove Generator	20 days
134	Remove Condenser Neck Heat Exchanger	10 days
135	Remove Condenser	10 days
136	Remove Misc. Auxiliary Turbine Equipmen	15 days
137	**Turbine Pedestal Demolition to Grade**	**102 days**
138	Top Slab and Beams	40 days
139	Columns	62 days
140	**Remove Turbine Building**	**146 days**
141	Siding and Rooding	41 days
142	All Framing Elevations	60 days
143	Bracing and Girts	20 days
144	Columns	25 days
145	**Phase 3 Demolition**	**130 days**
146	**Yard Demolition**	**130 days**
147	Remove Circulating Water Pumps, Screens and Intake Auxiliaries	10 days
148	**Remove Ash Handling Equipment and Pip**	**25 days**
149	Remove Fly Ash Storage Silo 2A	10 days
150	Remove Dewatering Bin 2A and 2B	5 days
151	Remove Piping and Misc. Equipment	10 days
152	**Remove Fuel Yard Equipment**	**45 days**
153	Remove Crushers 2A, 2B and Surge Bin	15 days
154	Remove Conveyor 206	10 days
155	Remove Conveyor 207	10 days



La Cygne Unit 2 Dismantlement

ID	Task Name	Duration
156	Remove Conveyor 2A	10 days
157	Remove Laydown Equipment and Warehoused Equipment	10 days
158	Remove Unit 2 Condensate Storage Tank and Pump	5 days
159	Remove Unit 2 Make-Up Water Storage Tank	5 days
160	Remove Unit 2 Water Pre-Treatment Equipment and Building	30 days
161	**Project Close-Out**	**40 days**
162	Project Close-Out Activities	40 days



COMMON

La Cygne Common Retirement

Owner Costs				
Pre-Retirement Activities		$49,440		
Retirement Activities		$304,357		
Post-Retirement Activities		$24,720		
Owner Direct Total			$378,517	
Owner Internal Costs	5.00%		$18,926	
Owner Contingency:	25.00%		$99,361	
La Cygne Common Retirement Opinion of Probable Cost:				$477,877.71

Activities Required by Permit or Regulation

La Cygne Wastewater Lagoon Removal	$213,082	
La Cygne Landfill Retirement	$19,659,333	
Activities Required by Permit or Regulation:		$19,872,415

La Cygne Common Retirement

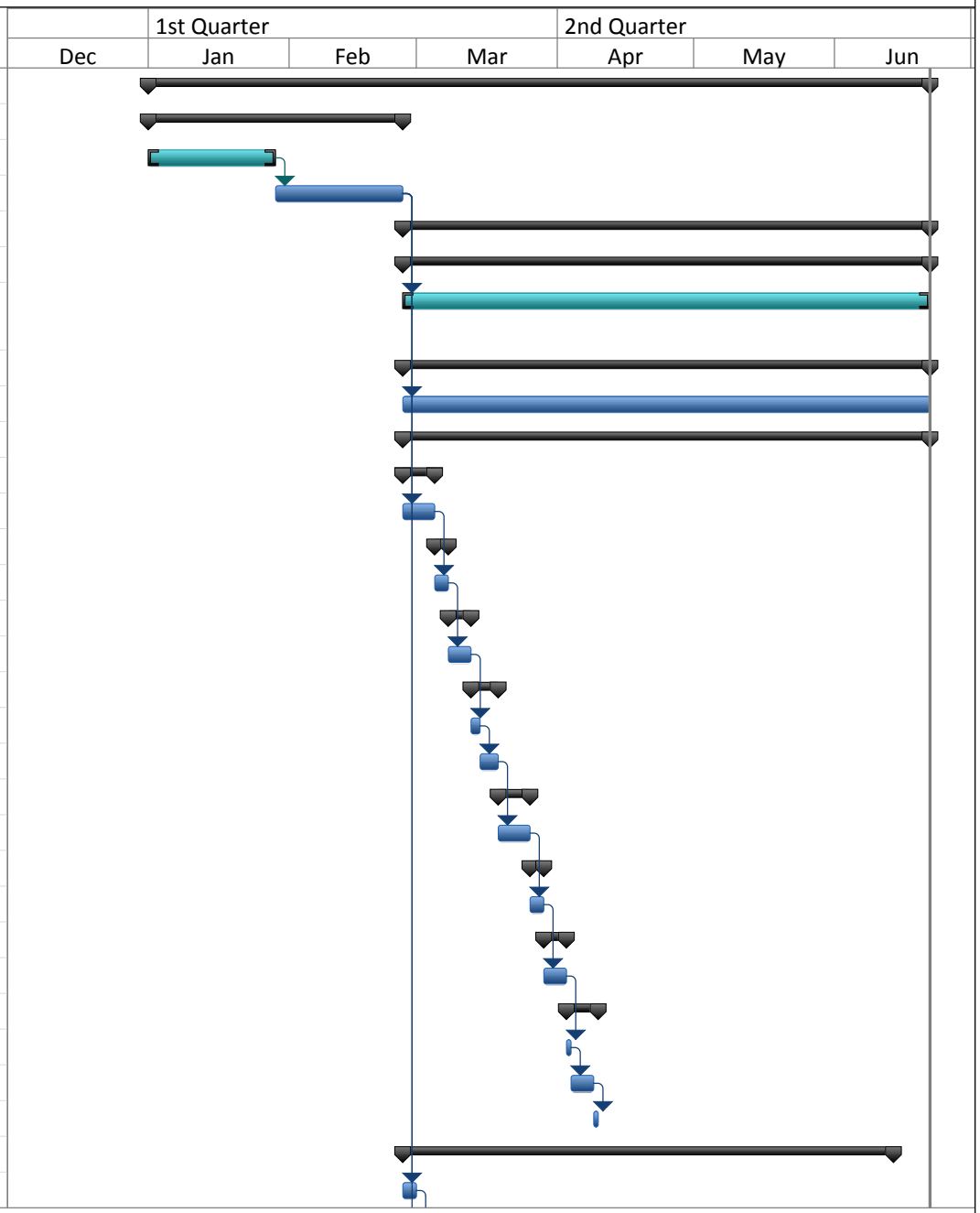
ID	Task Name	Cost
1	**La Cygne Common Retirement**	**$355,033.04**
2	**Pre-Retirement Activities**	**$49,440.00**
3	Permitting Review	$24,720.00
4	Develop Detailed Retirement Plan	$24,720.00
5	**Overheads**	**$133,949.75**
6	**Retirement Overheads**	**$117,149.75**
7	Added Overhead Staff for Common Retirement	$117,149.75
8	**Common Removal Equipment Rental**	**$16,800.00**
9	Common Removal Equipment Rental	$16,800.00
10	**Retirement Activities**	**$170,407.28**
11	**Administration Building**	**$9,076.00**
12	Secure Administration Building	$9,076.00
13	**Fuel Yard Office Building**	**$5,445.60**
14	Secure Fuel Yard Office Building	$5,445.60
15	**Training Building**	**$5,445.60**
16	Secure Training Building	$5,445.60
17	**Warehouse(s)**	**$7,260.80**
18	Secure Unit 1 Warehouse	$3,630.40
19	Secure Unit 2 Warehouse	$3,630.40
20	**Welding Shop**	**$11,249.20**
21	Secure Welding Shop	$11,249.20
22	**Maintenance Shop**	**$5,445.60**
23	Secure Maintenance Shop	$5,445.60
24	**Insulators Shop**	**$5,445.60**
25	Secure Insulators Shop	$5,445.60
26	**Auxiliary Boilers and Building**	**$4,100.00**
27	Remove Aux. Boiler Chemicals	$820.00
28	Drain Auxiliary Boilers	$2,460.00
29	Open and Vent Auxiliary Boilers	$820.00
30	**Fuel Yard**	**$106,652.32**
31	Empty and Clean Silo 2a	$2,862.32
32	Empty and Clean Silo E	$2,862.32
33	Empty and Clean Silo F	$2,862.32
34	Empty Transfer Hoppers and Clean Transfer Tower 201	$3,682.32
35	Clean Truck Reclaim	$3,682.32
36	**Car Dumper**	**$8,592.08**
37	Empty Car Dumper Hoppers	$1,227.44
38	Clean Car Dumper	$3,682.32
39	Secure Dumper Building	$3,682.32
40	**Stacker/Reclaimer**	**$18,658.00**
41	Clean and Secure the Stacker/Reclaimer	$6,137.20
42	**Unit 1 Reclaim**	**$4,909.76**
43	Clean Unit 1 Reclaim	$2,454.88
44	Secure the Unit 1 Reclaim Building	$2,454.88

La Cygne Common Retirement

ID	Task Name	Cost
45	**Unit 2 Reclaim**	**$4,909.76**
46	Clean Unit 2 Reclaim	$2,454.88
47	Secure the Unit 2 Reclaim Building	$2,454.88
48	Clean and Secure Transfer Tower 201	$6,137.20
49	Clean and Secure Transfer Tower 3	$6,137.20
50	Clean and Secure Primary Crusher Building	$6,137.20
51	Clean and Secure Old Truck Unloader	$3,682.32
52	Clean Conveyors - 300, 302, 301, 203, 202, 201, 3, 204	$19,639.04
53	Remove Bags and Clean Dust Collectors	$5,760.96
54	Clean and Secure Miscellaneous Fuel Yard Equipment	$6,137.20
55	**Lake Intake Structure and Intake Chemical Feed System**	**$820.00**
56	Remove Chemicals	$820.00
57	**Underground Circulating Water Piping**	**$3,736.80**
58	Drain the Underground Circulating Water Piping	$3,736.80
59	**Sewage Treatment**	**$4,089.76**
60	Clean the Sewage Treatment Tanks and Transfer Points	$4,089.76
61	**Fuel Oil Storage and Unloading**	**$1,640.00**
62	Remove Fuel from the Fuel Oil Storage Tank(s) and Vent	$820.00
63	Drain Fuel Oil Pipe and Vent	$820.00
64	**Post Retirement Closure Activities**	**$1,236.00**
65	Post Retirement Closure Activities	$1,236.00

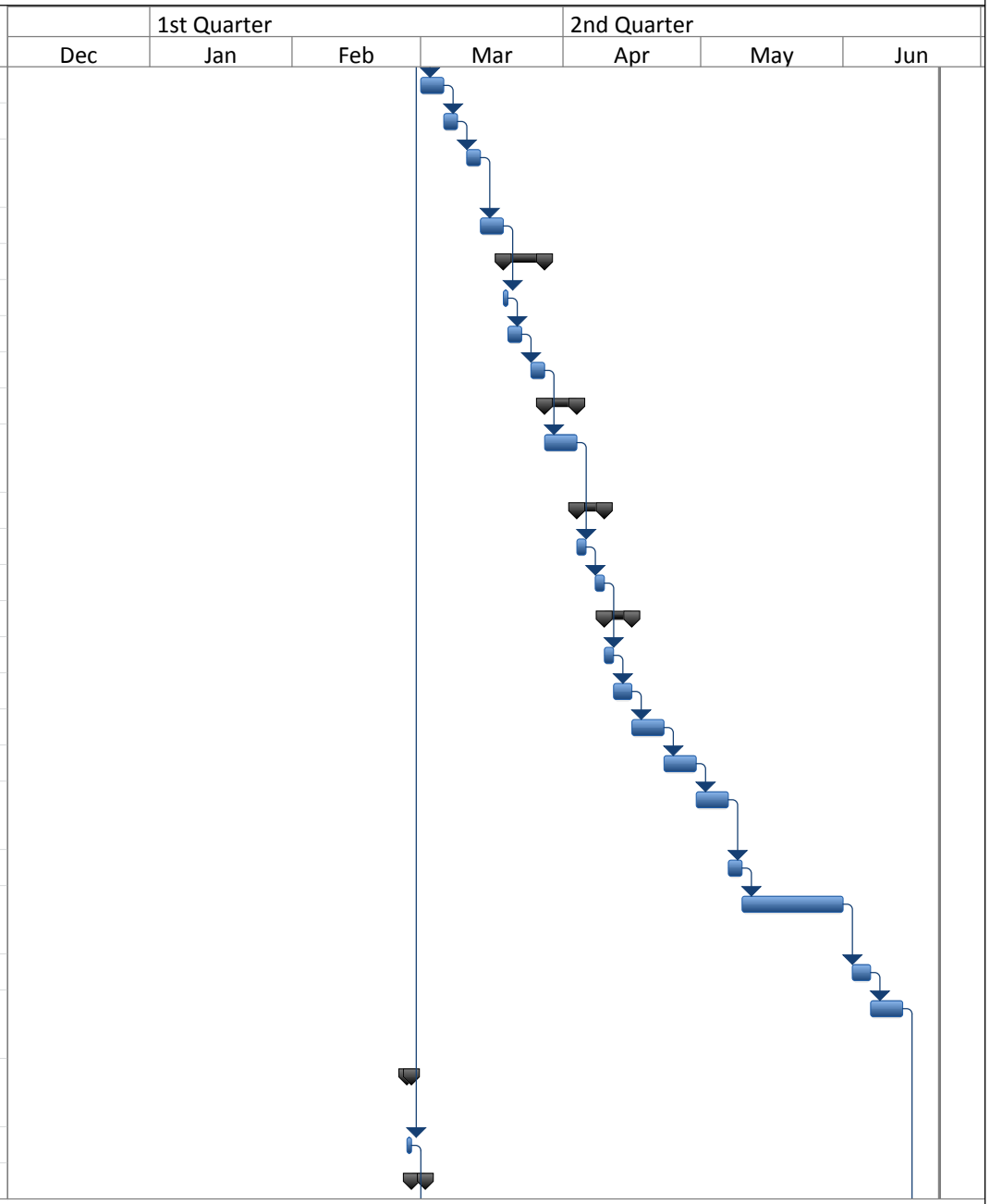
La Cygne Common Retirement

ID	Task Name	Duration
1	**La Cygne Common Retirement**	**124 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Overheads**	**84 days**
6	**Retirement Overheads**	**84 days**
7	Added Overhead Staff for Common Retirement	84 days
8	**Common Removal Equipment Rental**	**84 days**
9	Common Removal Equipment Rental	84 days
10	**Retirement Activities**	**84 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	**Training Building**	**3 days**
16	Secure Training Building	3 days
17	**Warehouse(s)**	**4 days**
18	Secure Unit 1 Warehouse	2 days
19	Secure Unit 2 Warehouse	2 days
20	**Welding Shop**	**5 days**
21	Secure Welding Shop	5 days
22	**Maintenance Shop**	**3 days**
23	Secure Maintenance Shop	3 days
24	**Insulators Shop**	**3 days**
25	Secure Insulators Shop	3 days
26	**Auxiliary Boilers and Building**	**5 days**
27	Remove Aux. Boiler Chemicals	1 day
28	Drain Auxiliary Boilers	3 days
29	Open and Vent Auxiliary Boilers	1 day
30	**Fuel Yard**	**78 days**
31	Empty and Clean Silo 2a	3 days



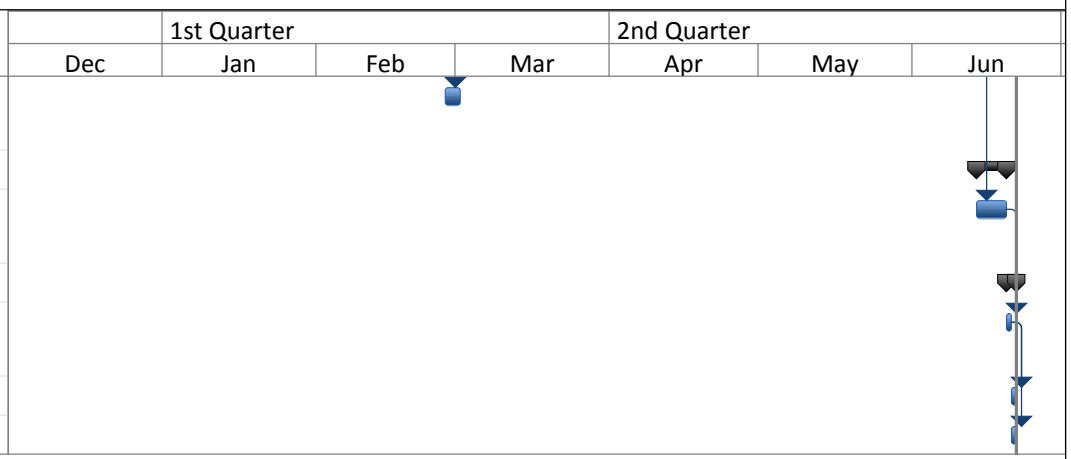
La Cygne Common Retirement

ID	Task Name	Duration
32	Empty and Clean Silo E	3 days
33	Empty and Clean Silo F	3 days
34	Empty Transfer Hoppers and Clean Transfer Tower 201	3 days
35	Clean Truck Reclaim	3 days
36	**Car Dumper**	**7 days**
37	Empty Car Dumper Hoppers	1 day
38	Clean Car Dumper	3 days
39	Secure Dumper Building	3 days
40	**Stacker/Reclaimer**	**5 days**
41	Clean and Secure the Stacker/Reclaimer	5 days
42	**Unit 1 Reclaim**	**4 days**
43	Clean Unit 1 Reclaim	2 days
44	Secure the Unit 1 Reclaim Building	2 days
45	**Unit 2 Reclaim**	**4 days**
46	Clean Unit 2 Reclaim	2 days
47	Secure the Unit 2 Reclaim Building	2 days
48	Clean and Secure Transfer Tower 201	5 days
49	Clean and Secure Transfer Tower 3	5 days
50	Clean and Secure Primary Crusher Building	5 days
51	Clean and Secure Old Truck Unloader	3 days
52	Clean Conveyors - 300, 302, 301, 203, 202, 201, 3, 204	16 days
53	Remove Bags and Clean Dust Collectors	4 days
54	Clean and Secure Miscellaneous Fuel Yard Equipment	5 days
55	**Lake Intake Structure and Intake Chemical Feed System**	**1 day**
56	Remove Chemicals	1 day
57	**Underground Circulating Water Piping**	**3 days**



La Cygne Common Retirement

ID	Task Name	Duration
58	Drain the Underground Circulating Water Piping	3 days
59	**Sewage Treatment**	**4 days**
60	Clean the Sewage Treatment Tanks and Transfer Points	4 days
61	**Fuel Oil Storage and Unloading**	**2 days**
62	Remove Fuel from the Fuel Oil Storage Tank(s) and Vent	1 day
63	Drain Fuel Oil Pipe	1 day
64	Vent Fuel Oil Pipe	1 day



La Cygne 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		$102,719		
Equipment Rental		$369,792		
Consummables		$491,344		
Scrap Crew(s)		$744,548		
Dismantlement		$9,339,165		
DGC Insurance	2.00%	$220,951		
Contingency/Profit	15.00%	$1,690,278		
Performance Bond	2.00%	$259,176		
Contractor Costs Total:			$13,217,973	
Total:				$13,217,973
Owner Internal Costs:	5.00%			$660,899
Owner Contingency:	25.00%			$3,469,718
La Cygne Common Dismantlement Opinion of Probable Cost:				$17,348,590

La Cygne Common Dismantlement

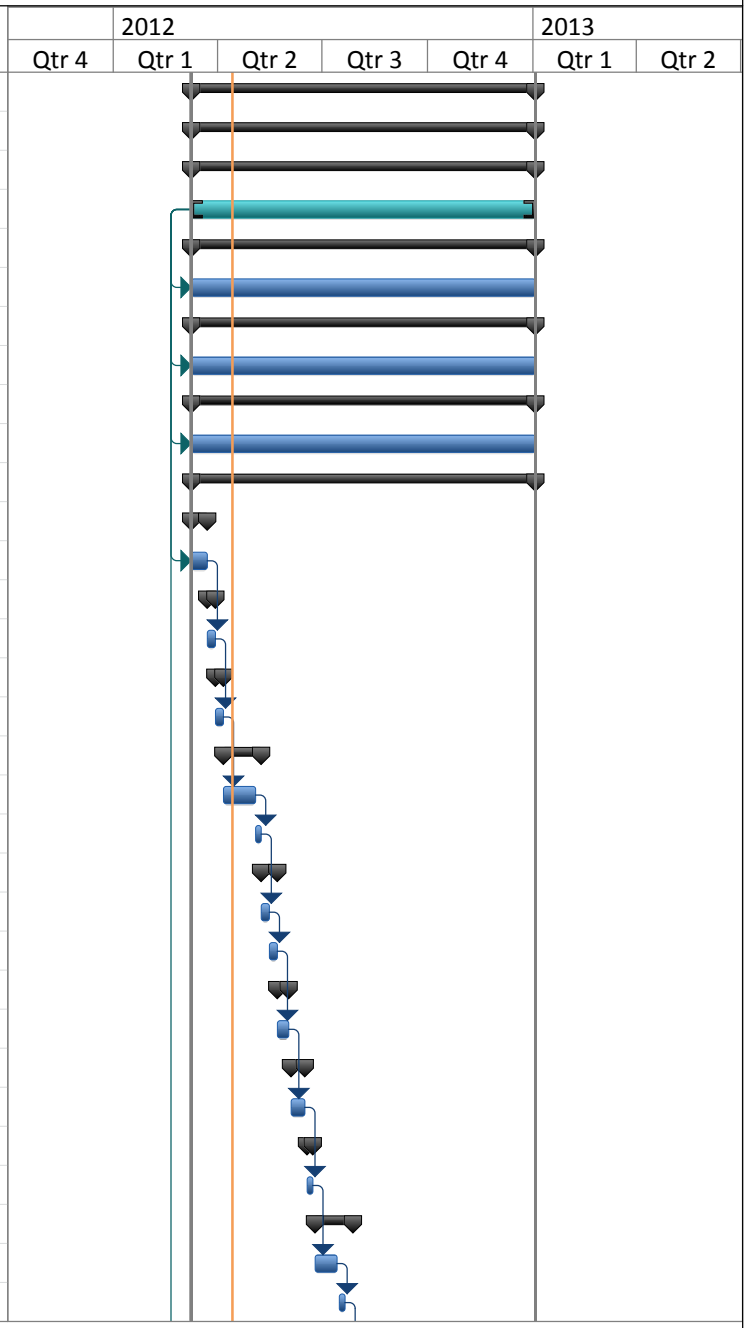
ID	Task Name	Cost
1	**La Cygne Common Dismantlement**	**$12,047,569.92**
2	**Overheads**	**$1,708,404.80**
3	**Common Removal Overheads**	**$102,720.00**
4	Added Overhead Staff for Common Removals	$102,720.00
5	**Common Removal Equipment Rental**	**$369,792.00**
6	Common Removal Equipment Rental	$369,792.00
7	**Demolition Contractor Consummables**	**$491,344.00**
8	Consummables	$491,344.00
9	**Scrap Crew**	**$744,548.80**
10	Crew(s) to Handle Scrap Material	$744,548.80
11	**Dismantlement Activities**	**$9,339,165.44**
12	**Administration Building**	**$34,792.00**
13	Remove Administration Building	$34,792.00
14	**Fuel Yard Office Building**	**$17,396.00**
15	Remove Fuel Yard Office Building	$17,396.00
16	**Training Building**	**$17,396.00**
17	Remove Training Building	$17,396.00
18	**Parking Lots and Plant Roads**	**$80,021.60**
19	Plant Roads and Parking Areas	$69,584.00
20	Guard Shack	$10,437.60
21	**Warehouse(s)**	**$34,792.00**
22	Remove Unit 1 Warehouse	$17,396.00
23	Remove Unit 2 Warehouse	$17,396.00
24	**Welding Shop**	**$27,833.60**
25	Remove Welding Shop	$27,833.60
26	**Maintenance Shop**	**$22,544.80**
27	Remove Maintenance Shop	$22,544.80
28	**Insulators Shop**	**$17,396.00**
29	Remove Insulators Shop	$17,396.00
30	**Auxiliary Boilers and Building**	**$86,980.00**
31	Remove Auxiliary Boilers	$52,188.00
32	Remove Building	$17,396.00
33	Remove Piping and Tressell	$17,396.00
34	**Fuel Yard**	**$744,548.80**
35	Remove Silo 2A	$3,479.20
36	Remove Silo E	$3,479.20
37	Remove Silo F	$3,479.20
38	Remove Transfer Tower 201	$34,792.00
39	Remove Truck Reclaim	$17,396.00
40	**Remove Car Dumper**	**$86,980.00**
41	Remove Underground Equipment	$17,396.00
42	Remove Above Ground Equipment	$34,792.00
43	Remove Building	$17,396.00
44	Backfill Dumper Structure	$17,396.00

La Cygne Common Dismantlement

ID	Task Name	Cost
45	Remove Stacker/Reclaimer	$34,792.00
46	**Remove Unit 1 Reclaim**	**$62,625.60**
47	Remove Underground Equipment	$17,396.00
48	Remove Above Ground Equipment	$17,396.00
49	Remove Building	$13,916.80
50	Backfill Structure	$13,916.80
51	**Remove Unit 2 Reclaim**	**$62,625.60**
52	Remove Underground Equipment	$17,396.00
53	Remove Above Ground Equipment	$17,396.00
54	Remove Building	$13,916.80
55	Backfill Structure	$13,916.80
56	Remove Transfer Tower 201	$52,188.00
57	Remove Transfer Tower 3	$52,188.00
58	Remove Primary Crusher Building	$69,584.00
59	Remove Old Truck Unloader	$69,584.00
60	Remove Conveyors - 300, 302, 301, 203, 202, 201, 3, 204	$139,168.00
61	Remove Dust Collectors	$17,396.00
62	Remove Miscellaneous Fuel Yard Equipment	$34,792.00
63	**Lake Intake Structure and Intake Chemical Feed System**	**$111,334.40**
64	Remove Chemical Feed System and Misc. Equipment	$6,958.40
65	Remove Concrete Intake Structure	$69,584.00
66	Complete Intake Grading and Drainage	$34,792.00
67	**Underground Circulating Water Piping**	**$52,188.00**
68	Excavate Underground Circulating Water Piping	$17,396.00
69	Collapse Underground Circulating Water Piping	$10,437.60
70	Backfill and Compact Over Circulating Water Piping	$24,354.40
71	**Sewage Treatment**	**$20,875.20**
72	Remove Sewage Treatment Pumps and Miscellaneous Equipment	$6,958.40
73	Remove Sewage Treatment Concrete Structures	$13,916.80
74	**Yard Fire Water Systems**	**$34,792.00**
75	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	$34,792.00
76	**Stacks Removal**	**$8,036,275.20**
77	Unit 1 Stack Removal	$4,101,274.88
78	Unit 2 Stack Removal	$3,935,000.00
79	**Final Site Grading and Drainage**	**$1,000,000.00**
80	Final Site Grading and Drainage	$1,000,000.00

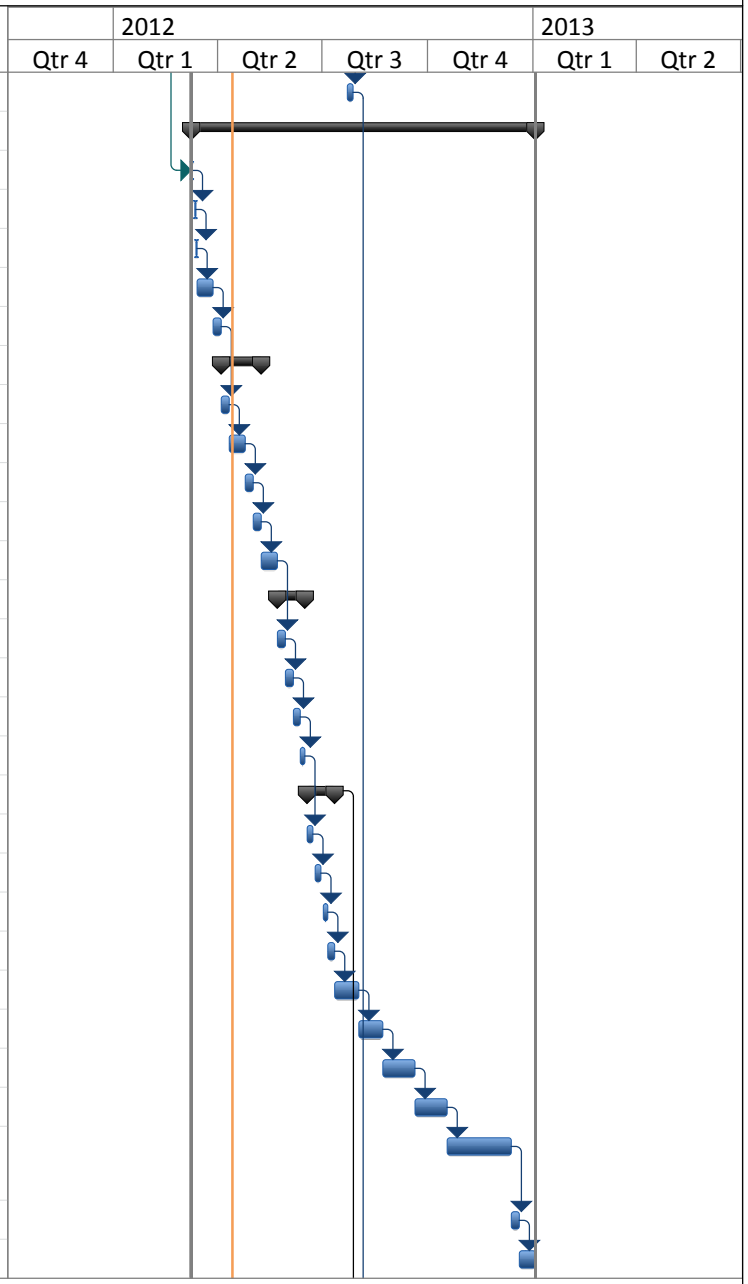
La Cygne Common Dismantlement

ID	Task Name	Duration
1	**La Cygne Common Dismantlement**	**214 days**
2	**Overheads**	**214 days**
3	**Common Removal Overheads**	**214 days**
4	Added Overhead Staff for Common Removals	214 days
5	**Common Removal Equipment Rental**	**214 days**
6	Common Removal Equipment Rental	214 days
7	**Demolition Contractor Consummables**	**214 days**
8	Consummables	214 days
9	**Scrap Crew**	**214 days**
10	Crew(s) to Handle Scrap Material	214 days
11	**Dismantlement Activities**	**214 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	**Welding Shop**	**8 days**
25	Remove Welding Shop	8 days
26	**Maintenance Shop**	**10 days**
27	Remove Maintenance Shop	10 days
28	**Insulators Shop**	**5 days**
29	Remove Insulators Shop	5 days
30	**Auxiliary Boilers and Building**	**25 days**
31	Remove Auxiliary Boilers	15 days
32	Remove Building	5 days



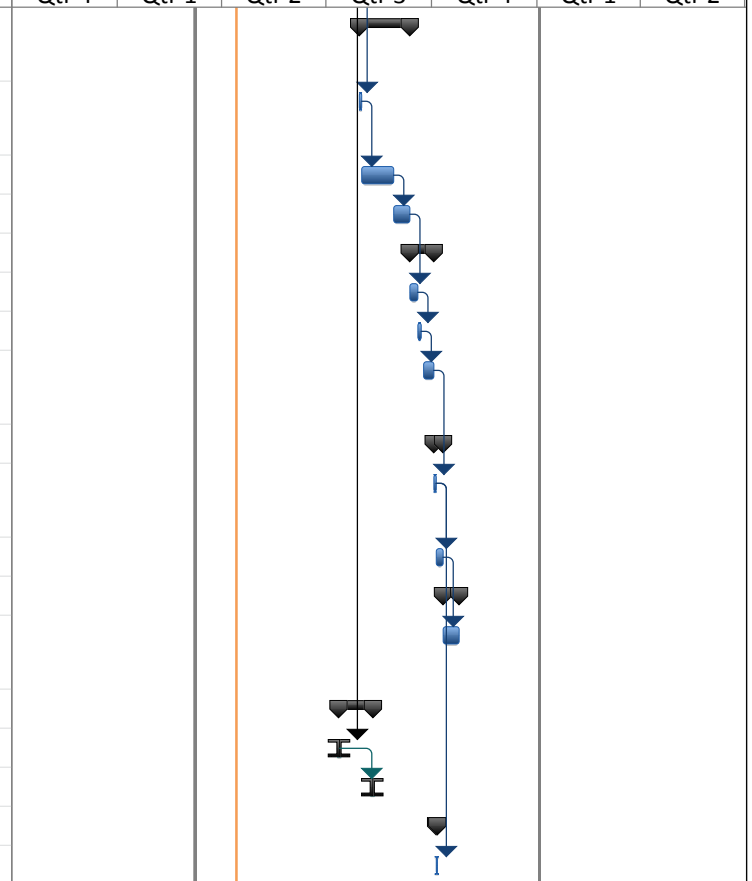
La Cygne Common Dismantlement

ID	Task Name	Duration
33	Remove Piping and Tressell	5 days
34	**Fuel Yard**	**214 days**
35	Remove Silo 2A	1 day
36	Remove Silo E	1 day
37	Remove Silo F	1 day
38	Remove Transfer Tower 201	10 days
39	Remove Truck Reclaim	5 days
40	**Remove Car Dumper**	**25 days**
41	Remove Underground Equipment	5 days
42	Remove Above Ground Equipment	10 days
43	Remove Building	5 days
44	Backfill Dumper Structure	5 days
45	Remove Stacker/Reclaimer	10 days
46	**Remove Unit 1 Reclaim**	**18 days**
47	Remove Underground Equipment	5 days
48	Remove Above Ground Equipment	5 days
49	Remove Building	4 days
50	Backfill Structure	4 days
51	**Remove Unit 2 Reclaim**	**18 days**
52	Remove Underground Equipment	5 days
53	Remove Above Ground Equipment	5 days
54	Remove Building	4 days
55	Backfill Structure	4 days
56	Remove Transfer Tower 201	15 days
57	Remove Transfer Tower 3	15 days
58	Remove Primary Crusher Building	20 days
59	Remove Old Truck Unloader	20 days
60	Remove Conveyors - 300, 302, 301, 203, 202, 201, 3, 204	40 days
61	Remove Dust Collectors	5 days
62	Remove Miscellaneous Fuel Yard Equipment	10 days



La Cygne Common Dismantlement

ID	Task Name	Duration
63	**Lake Intake Structure and Intake Chemical Feed System**	**32 days**
64	Remove Chemical Feed System and Misc. Equipment	2 days
65	Remove Concrete Intake Structure	20 days
66	Complete Intake Grading and Drainage	10 days
67	**Underground Circulating Water Piping**	**15 days**
68	Excavate Underground Circulating Water Piping	5 days
69	Collapse Underground Circulating Water Piping	3 days
70	Backfill and Compact Over Circulating Water Piping	7 days
71	**Sewage Treatment**	**6 days**
72	Remove Sewage Treatment Pumps and Miscellaneous Equipment	2 days
73	Remove Sewage Treatment Concrete Structures	4 days
74	**Yard Fire Water Systems**	**10 days**
75	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	10 days
76	**Stacks Removal**	**22 days**
77	Unit 1 Stack Removal	1 day
78	Unit 2 Stack Removal	1 day
79	**Final Site Grading and Drainage**	**1 day**
80	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.
7. Clarifiers, clarifier storage tanks, and the zero liquid discharge equipment and auxiliaries.

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.

UNIT 1

Iatan 1 Retirement

Owner Costs				
Pre-Retirement Activities		$95,040		
Retirement Activities		$630,340		
Post-Retirement Activities		$25,040		
Owner Direct Total			$750,420	
Owner Internal Costs	5.00%		$37,521	
Owner Contingency:	25.00%		$196,985	
Iatan 1 Retirement Opinion of Probable Cost:				$947,405.25

Activities Required by Permit or Regulation

Iatan 1 Intake Removal	$561,052		
Activities Required by Permit or Regulation:			$561,052

Iatan 1 Retirement

ID	Task Name	Cost
1	**Iatan 1 Retirement**	**$750,420.11**
2	**Pre-Engineering**	**$95,040.00**
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**	**$108,624.00**
5	KCP&L Retirement Manager	$108,624.00
6	**Equipment Rentals**	**$37,200.00**
7	Vacuum truck	$37,200.00
8	**Retirement**	**$484,516.11**
9	**Electrical**	**$18,367.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$5,382.08**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$2,553.60
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$6,030.72**
32	De-energize all primary power at the source.	$1,738.56

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.	$1,738.56
34	Drian lube oil system (if applicable) and dispoe of oil.	$2,553.60
35	**Coal Handling**	**$26,734.00**
36	Empty all transfer hoppers.	$1,655.60
37	Burn out coal silos.	$1,640.00
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,640.00
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
40	**Fuel Oil and Igniter System**	**$2,460.00**
41	Drain fuel oil system	$2,460.00
42	**Waste Oil System**	**$1,640.00**
43	Drain all waste oil systems	$1,640.00
44	**Boiler Chemical Feed**	**$1,640.00**
45	Drain all chemical feed tanks.	$1,640.00
46	**Boiler**	**$26,734.11**
47	Open boiler doors.	$851.20
48	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
49	Drain boiler, drum, downcomers and headers.	$820.00
50	Open drum doors.	$851.20
51	Drain and clean the submerged flight conveyor system.	$2,413.31
52	**Stack and Ductwork**	**$311,750.40**
53	Open ductwork doors.	$851.20
54	Perform extensive cleaning of the ductwork.	$10,899.20
55	Place cap over stack opening to keep moisture out.	$300,000.00
56	**Condensate and Feedwater Piping**	**$1,640.00**
57	Drain water from the system.	$820.00
58	Leave open vents and drains.	$820.00
59	**Feedwater heaters**	**$2,460.00**
60	Drain feedwater heaters	$820.00
61	Leave open vents and drains.	$1,640.00
62	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
63	Drain Deaerator and Storage	$820.00
64	Leave open vents and drains.	$820.00
65	**Baghouse**	**$16,664.16**
66	Multiple cleaning cycles for filter bags.	$2,460.00
67	Open all vent and drain lines on bag cleaning air and control air lines. Leave in open position or remove vent valves.	$820.00
68	Remove all filter bags and cages.	$851.20
69	Clear hoppers of all ash	$2,729.92
70	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$851.20
71	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,380.56

Iatan 1 Retirement

ID	Task Name	Cost
72	Install bird screens across hopper ash outlet and ash line flanges.	$851.20
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.)	$851.20
74	If walk-in plenum, padlock or tack weld all outlet plenum doors and compartment ventilation dampers shut.	$851.20
75	If top-door plenum, close and secure top doors and remove/disable door lift hoist.	$1,671.20
76	If top-door plenum, establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in penthouse enclosure.	$738.64
77	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
78	**Wet FGD system**	**$22,340.64**
79	Multiple mist eliminator wash cycles. Remove ME's from absorber.	$2,081.20
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.	$1,671.20
81	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	$4,499.76
82	Leave all tank drain valves open or remove. Install bird screens across openings.	$1,702.40
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.	$2,522.40
84	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	$1,702.40
85	Remove solids from all inlet and outlet ductwork as necessary	$2,179.84
86	Open all vent station air and control air lines. Leave in open position or remove vent valves	$1,671.20
87	Padlock or tack weld all access doors to modules and ductwork shut.	$851.20
88	Remove access doors to open-top tanks.	$851.20
89	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
90	**FGD Reagent Preparation-Limestone wet Scrubber**	**$8,938.80**
91	Remove limestone from day bins.	$1,364.96
92	Removed cartridges/bags from bin vent filters	$1,364.96
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.)	$425.60
94	Remove bin discharge isolation valve and install bird screen.	$425.60
95	Thoroughly wash and drain mills	$1,364.96
96	Remove balls from any ball mills	$1,089.92

Iatan 1 Retirement

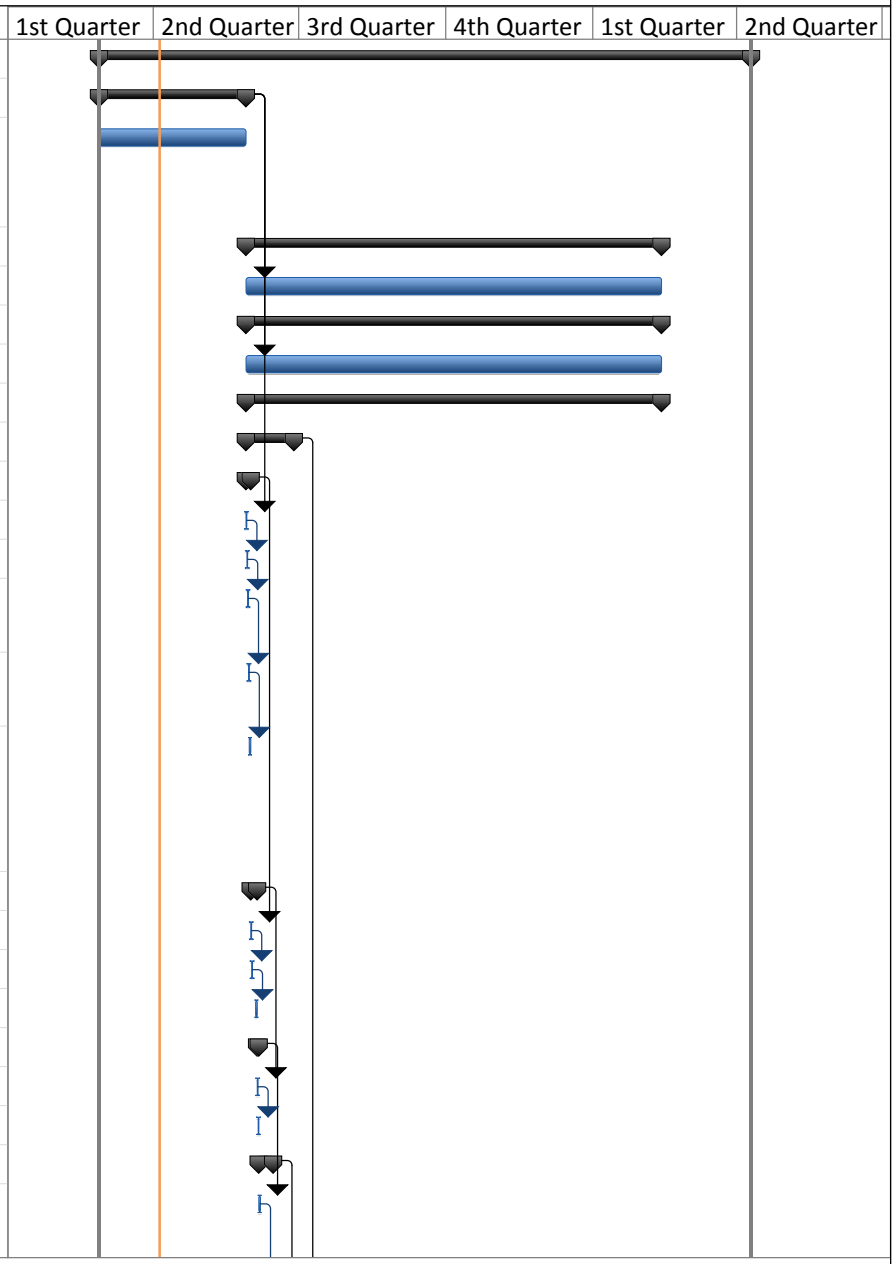
ID	Task Name	Cost
97	Padlock or tack weld mill access doors closed.	$425.60
98	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$738.64
99	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,738.56
100	**FGD Byproduct Dewatering - Hydrocyclones and Vacuum Filters**	**$6,906.88**
101	Wash vacuum filter belt and remove all accumulated solids	$2,179.84
102	Wash out vacuum receiver, remove pressure relief valve and access door. Install bird screens.	$1,380.56
103	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$738.64
104	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
105	**SCR**	**$9,762.48**
106	Vacuum fly ash from catalyst.	$2,179.84
107	Remove catalyst of salvage or disposal.	$2,792.32
108	Padlock or tack weld access doors shut.	$851.20
109	Remove ammonia from storage tank for resale.	$682.48
110	Wash out and drain storage tank and supply piping.	$682.48
111	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$835.60
112	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,738.56
113	**Turbine(s) and Condenser**	**$5,091.60**
114	Drain hotwell and leave doors open.	$835.60
115	Open main turbine doors.	$851.20
116	Open bfp turbine doors.	$851.20
117	Remove lube oil.	$2,553.60
118	**Generator**	**$5,916.56**
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.	$434.64
120	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
121	De-energize power supplies to generator excitation system at the source.	$434.64
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.	$434.64
123	Drain generator and exciter cooling water systems (if applicable).	$835.60
124	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00

Iatan 1 Retirement

ID	Task Name	Cost
125	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40
126	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
127	Drain.	$1,640.00
128	Open water box doors.	$851.20
129	Drain any circulating water chemical feed tanks.	$820.00
130	**Compressed Air System**	**$2,279.20**
131	Open vents and drains.	$820.00
132	Remove desiccant from desiccant dryers.	$1,459.20
133	**Auxiliary Steam System**	**$1,640.00**
134	Drain water from system.	$820.00
135	Remove aux boiler chemicals.	$820.00
136	**Auxiliary Cooling Water System**	**$820.00**
137	Drain water from system.	$820.00
138	**Condenser Air Extraction and Waterbox Priming System**	**$820.00**
139	Drain water from system.	$820.00
140	**Building Heating System**	**$820.00**
141	Drain water from system.	$820.00
142	**Battery System**	**$4,139.04**
143	De-energize all battery chargers from the source.	$434.64
144	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
145	Remove and dispose of battery electrolyte.	$1,634.88
146	Remove and dispose of battery cells.	$1,089.92
147	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
148	**Post Retirement Activities**	**$25,040.00**
149	Post Retirement Activities	$25,040.00

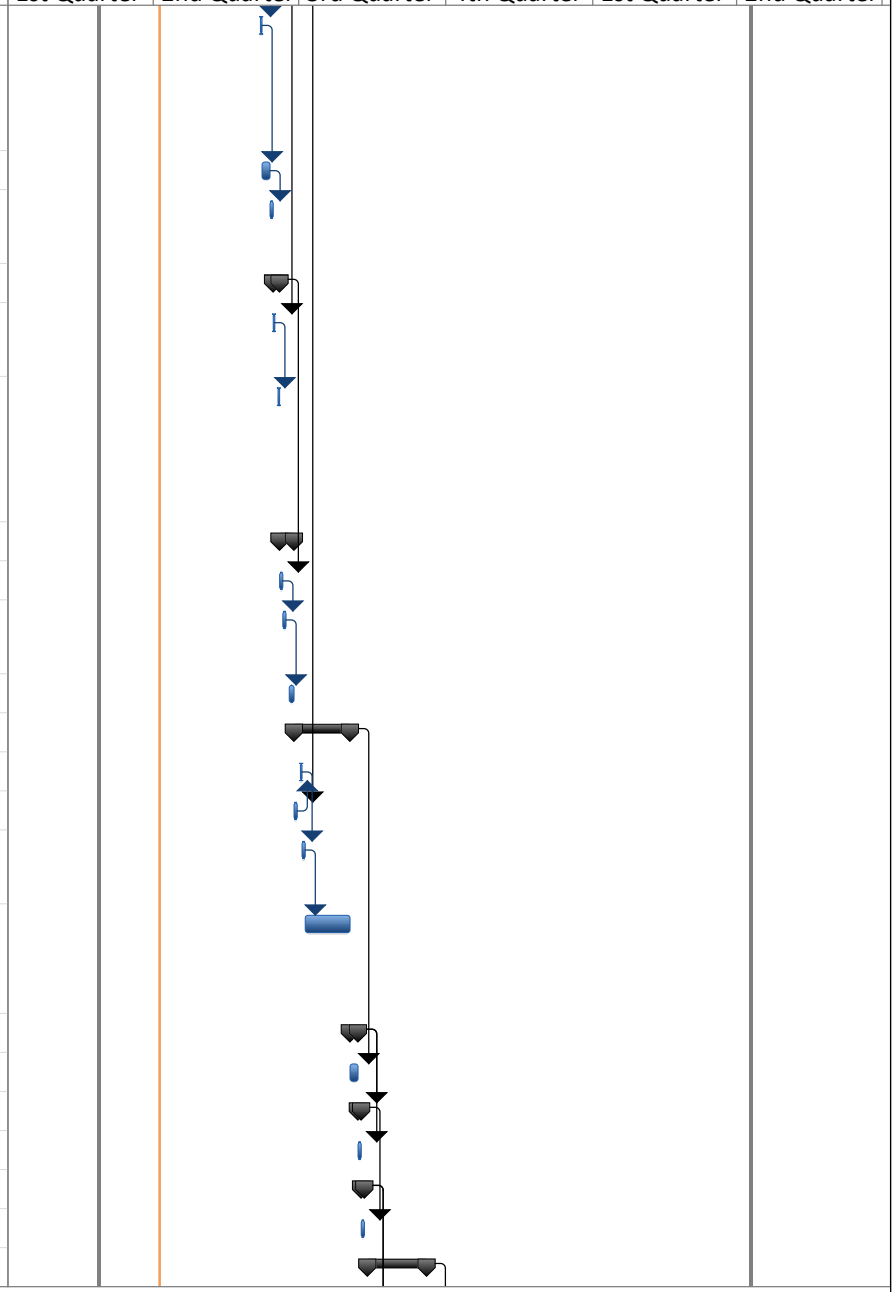
Iatan 1 Retirement

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



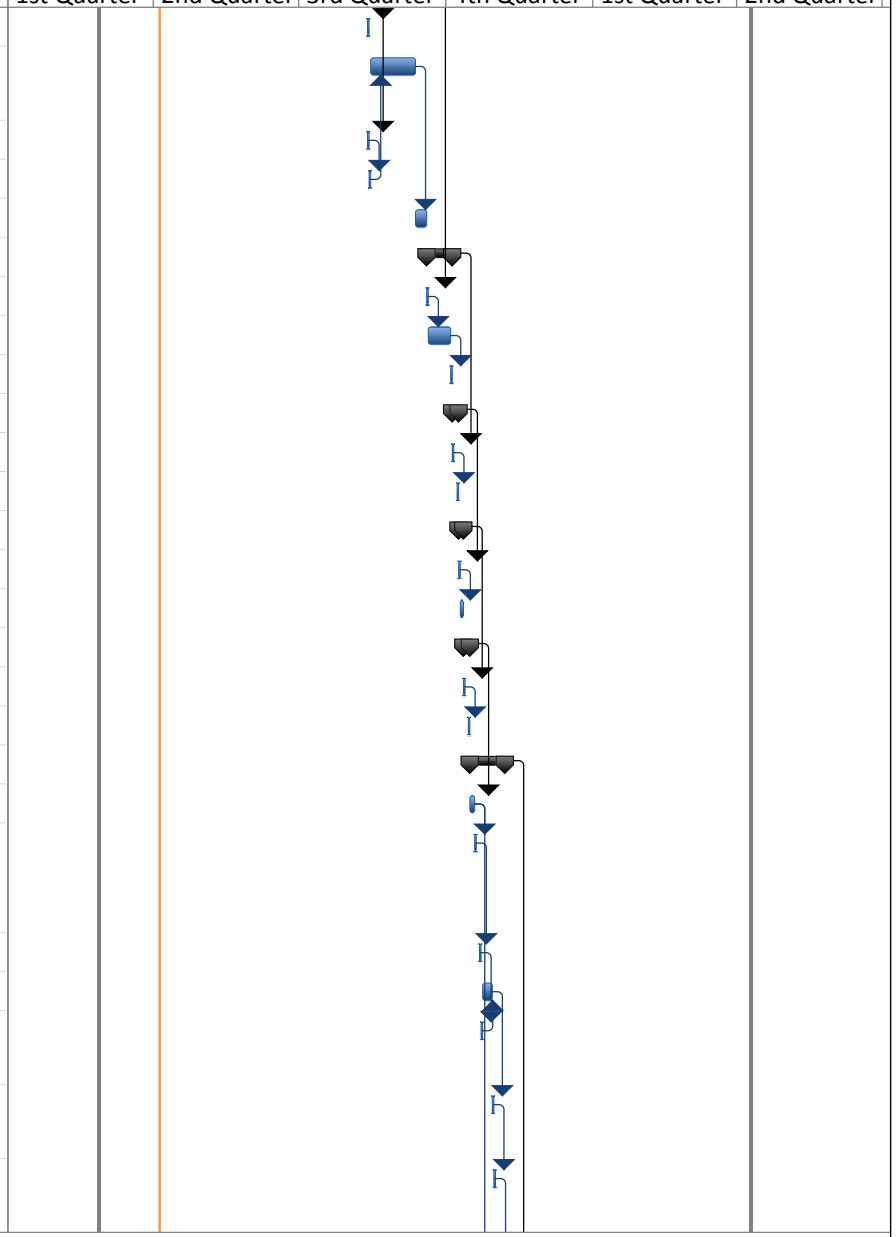
Iatan 1 Retirement

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**



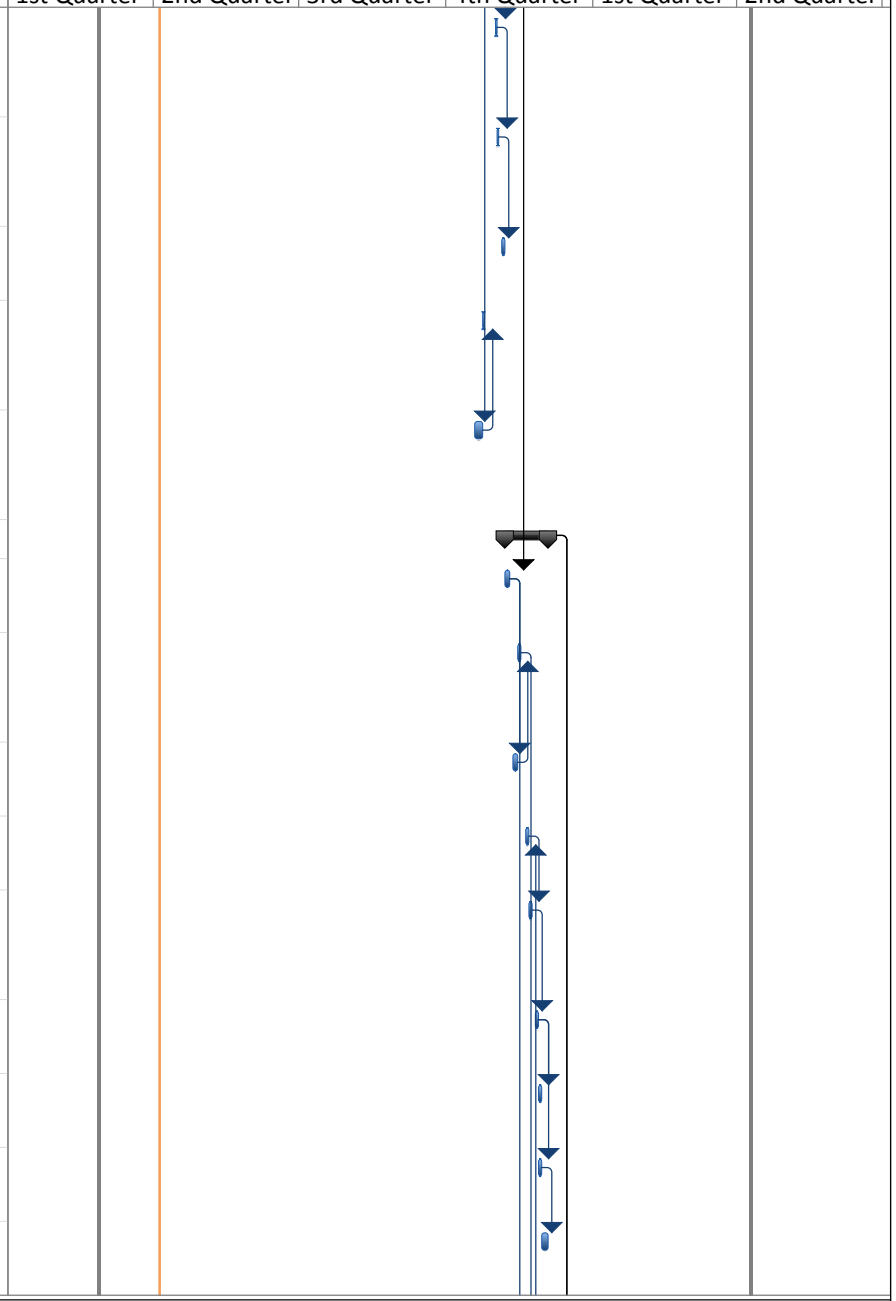
Iatan 1 Retirement

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



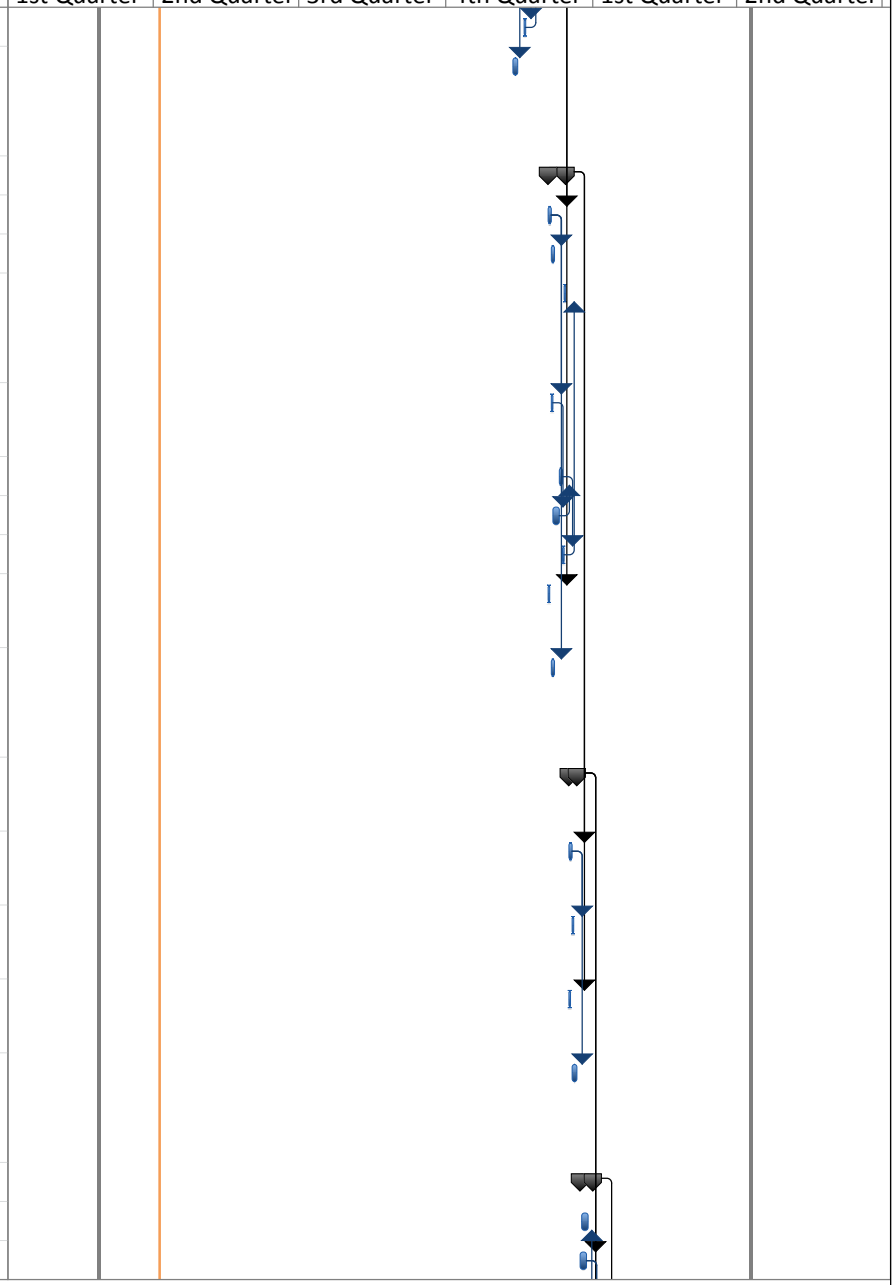
Iatan 1 Retirement

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

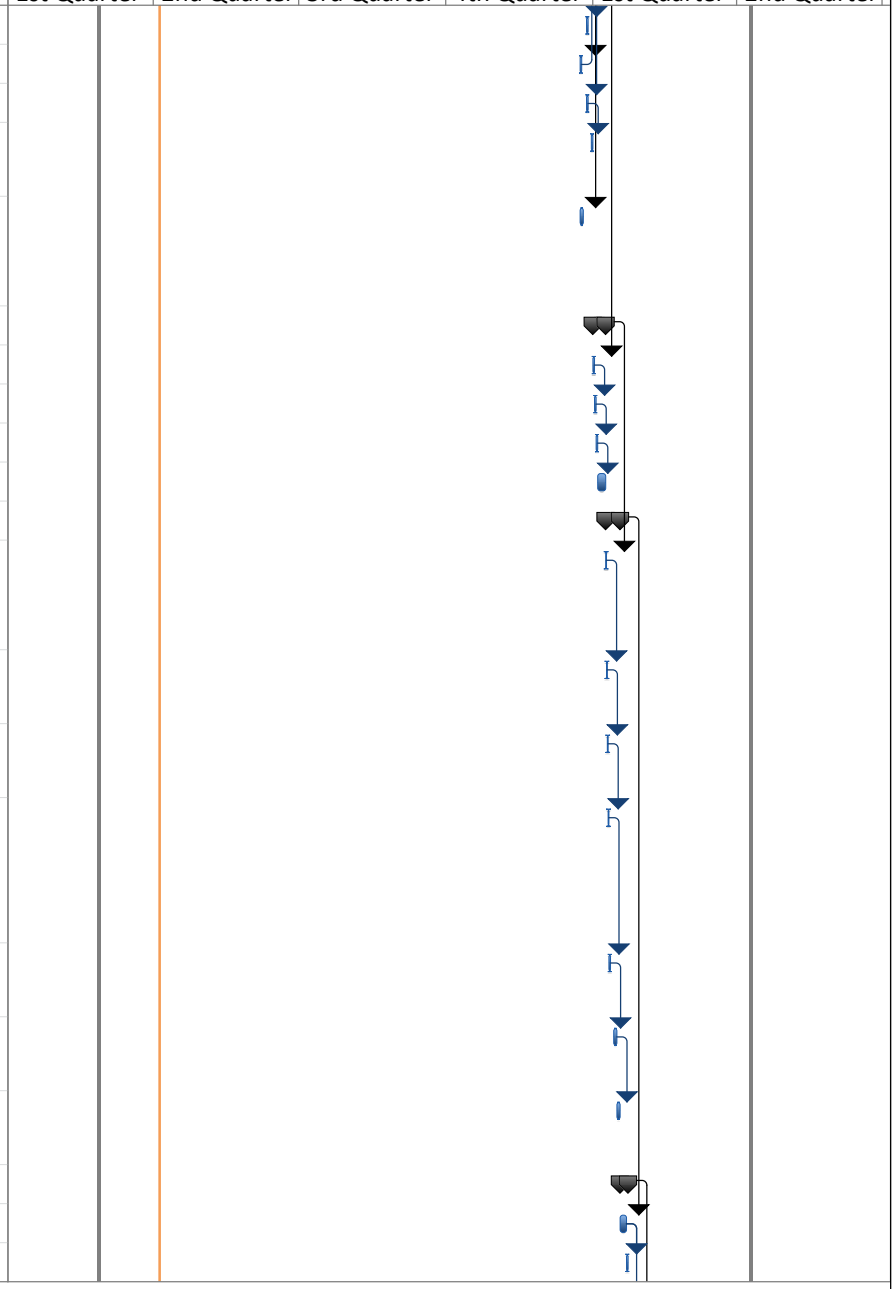


Iatan 1 Retirement

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

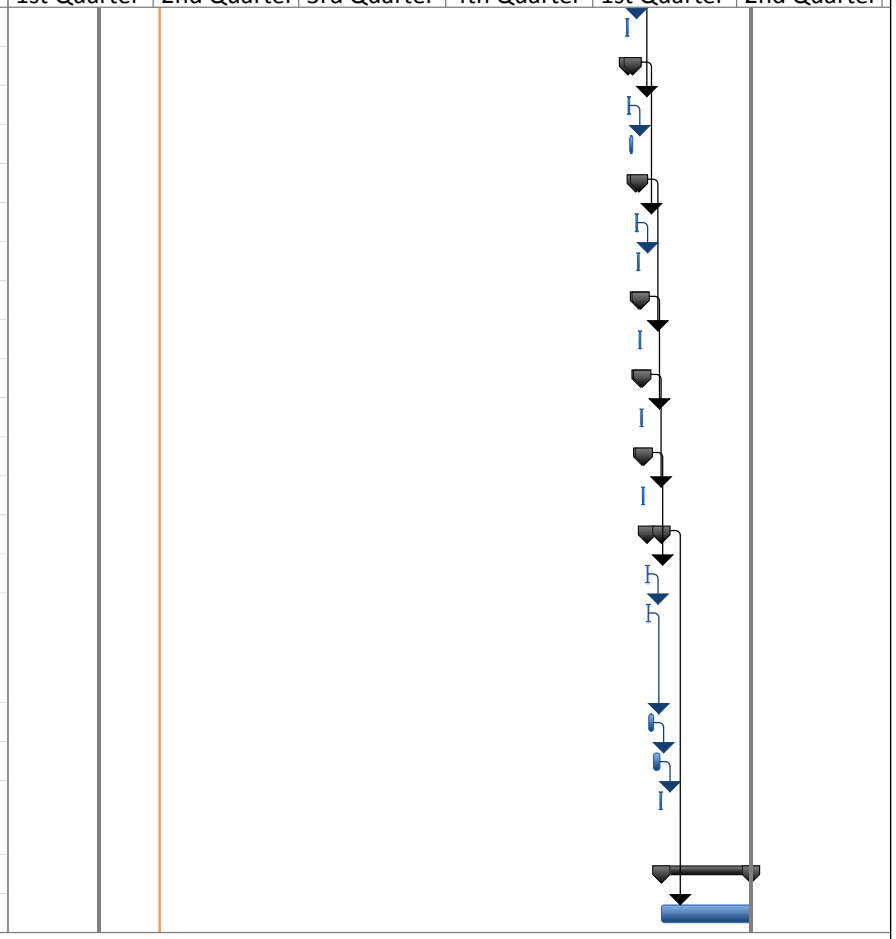


ID	Task Name	Duration
108	Padlock or tack weld access doors shut.	1 day
109	Remove ammonia from storage tank for resale.	1 day
110	Wash out and drain storage tank and supply piping.	1 day
111	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	1 day
112	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 Unit 1 Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$782,068		
Overhead During Dismantlement		$1,496,399		
Post-Dismantlement Activities		$61,760		
Owner Costs Total			$2,340,227	
Demolition General Contractor (DGC) Costs				
Site Management		$887,520		
Equipment Rental		$1,482,639		
Consummables		$1,479,200		
Scrap Crew(s)		$1,496,056		
Dismantlement		$4,040,542		
DGC Insurance	2.00%	$187,719		
Contingency/Profit	15.00%	$1,436,051		
Performance Bond	2.00%	$220,194.55		
Contractor Costs Total:			$11,229,922	
Total:				$13,570,149
Owner Internal Costs:	5.00%			$678,507
Owner Contingency:	25.00%			$3,562,164
Iatan Unit 1 Dismantlement Opinion of Probable Cost:				$17,810,821

Iatan Unit 1 Dismantlement

ID	Task Name	Cost
1	**Iatan Unit 1 Dismantlement**	**$11,726,184.96**
2	**Pre-Demolition Activities**	**$782,068.00**
3	Detailed Planning & Hire Owner's Engineer	$98,448.00
4	Detailed Site Characterization Study	$525,148.00
5	Hire Demolition General Contractor	$149,544.00
6	KCP&L Prepares Unit for Dismantlement	$8,928.00
7	Demolition Contractor Mobilizes on Site	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,496,399.84**
9	KCP&L Project Manager	$251,119.98
10	KCP&L Administrative Support	$92,879.99
11	KCP&L Engineer	$412,799.96
12	Owners Engineer Project Manager	$120,400.00
13	Owners Engineer - Engineer	$619,199.96
14	**Demoliton Contractor Overhead during Dismantlement**	**$887,519.92**
15	Demolition Contractor Project Manager	$251,119.98
16	Demolition Contractor Safety Manager	$223,599.98
17	Demolition Contractor Superintendent	$412,799.96
18	**Demolition Contractor Equipment Rental Costs**	**$1,482,639.84**
19	Equipment Rental	$1,482,639.84
20	**Demolition Contractor Consummables**	**$1,479,200.00**
21	Consummables	$1,479,200.00
22	**Scrap Crew**	**$1,496,056.00**
23	Crew to Handle Scrap Material(s)	$1,496,056.00
24	**Dismantlement**	**$4,040,542.08**
25	**Phase 1 Demolition**	**$943,239.44**
26	**Phase 1 Electrical Demolition**	**$332,263.60**
27	Electrical Demolition of Phase 1 Equipment	$332,263.60
28	**Condensate System**	**$102,636.40**
29	Condensate Pumps	$3,479.20
30	Condensate Transfer Pumps	$1,739.60
31	Cycle Make-Up Pump	$1,739.60
32	Steam Packing Exhauster and Blower	$3,479.20
33	Low Pressure Heaters (except the condenser neck heat excha	$52,188.00
34	Deaerator	$13,916.80
35	Deaerator Storage Tank	$8,698.00
36	Condensate Piping	$17,396.00
37	**Boiler Feed System**	**$65,858.16**
38	Boiler Feed Pump Turbine and Exhaust	$13,670.16
39	Boiler Feed Pump	$17,396.00
40	High Pressure Heaters	$34,792.00
41	**Critical Piping**	**$78,282.00**
42	Main Steam Piping	$26,094.00
43	Cold Reheat Piping	$26,094.00
44	Hot Reheat Piping	$26,094.00

Iatan Unit 1 Dismantlement

ID	Task Name	Cost
45	**Extraction Steam System**	**$17,396.00**
46	Piping	$17,396.00
47	**Heater Drips**	**$13,916.80**
48	Piping	$13,916.80
49	**Auxiliary Steam**	**$24,354.40**
50	Auxiliary Boilers and Auxiliary Skids	$8,698.00
51	Auxiliary Steam Piping	$15,656.40
52	**Circulating Water (plant side)**	**$8,698.00**
53	Waterboxes	$8,698.00
54	**Bearing Cooling Water**	**$29,573.20**
55	Bearing Cooling Water Pumps	$3,479.20
56	Bearing Cooling Water Heat Exchanger	$8,698.00
57	Bearing Cooling Water Piping	$17,396.00
58	**Auxiliary Cooling Water**	**$27,833.60**
59	Auxiliary Cooling Water Heat Exchanger	$5,218.80
60	Auxiliary Cooling Water Pumps	$5,218.80
61	Auxiliary Cooling Water Piping	$17,396.00
62	**Service Water**	**$8,698.00**
63	Service Water Piping	$8,698.00
64	**Fuel Oil System (plant side)**	**$40,010.80**
65	Igniter Fuel Oil Pumps	$5,218.80
66	Igniter Fuel Oil and Atomizing Air Piping	$8,698.00
67	Igniters	$26,094.00
68	**Waste Oil System**	**$12,177.20**
69	Waste Oil Tank	$3,479.20
70	Waste Oil Transfer Pump	$3,479.20
71	Waste Oil Piping	$5,218.80
72	**Air Preheat System**	**$10,367.60**
73	Air Preheat Pumps	$3,905.76
74	Air Preheat Piping	$6,461.84
75	**Condenser Air Extraction System**	**$10,437.60**
76	Vacuum Pumps	$6,958.40
77	Extraction Piping	$3,479.20
78	**Turbine Seals and Drains**	**$13,670.16**
79	Piping	$13,670.16
80	**Turbine Lube Oil System**	**$20,841.84**
81	Turbine Lube Oil Tank	$11,077.44
82	Turbine Lube Oil Pumps	$7,811.52
83	Turbine Oil Mist Eliminator	$1,952.88
84	**Generator Auxiliary Systems**	**$35,151.84**
85	Hydrogen Cooler Skid and Piping	$9,764.40
86	Stator Cooling Water Skid and Piping	$9,764.40
87	Isophase Bus Duct	$7,811.52
88	Exciter Heat Exchanger	$3,905.76

Iatan Unit 1 Dismantlement

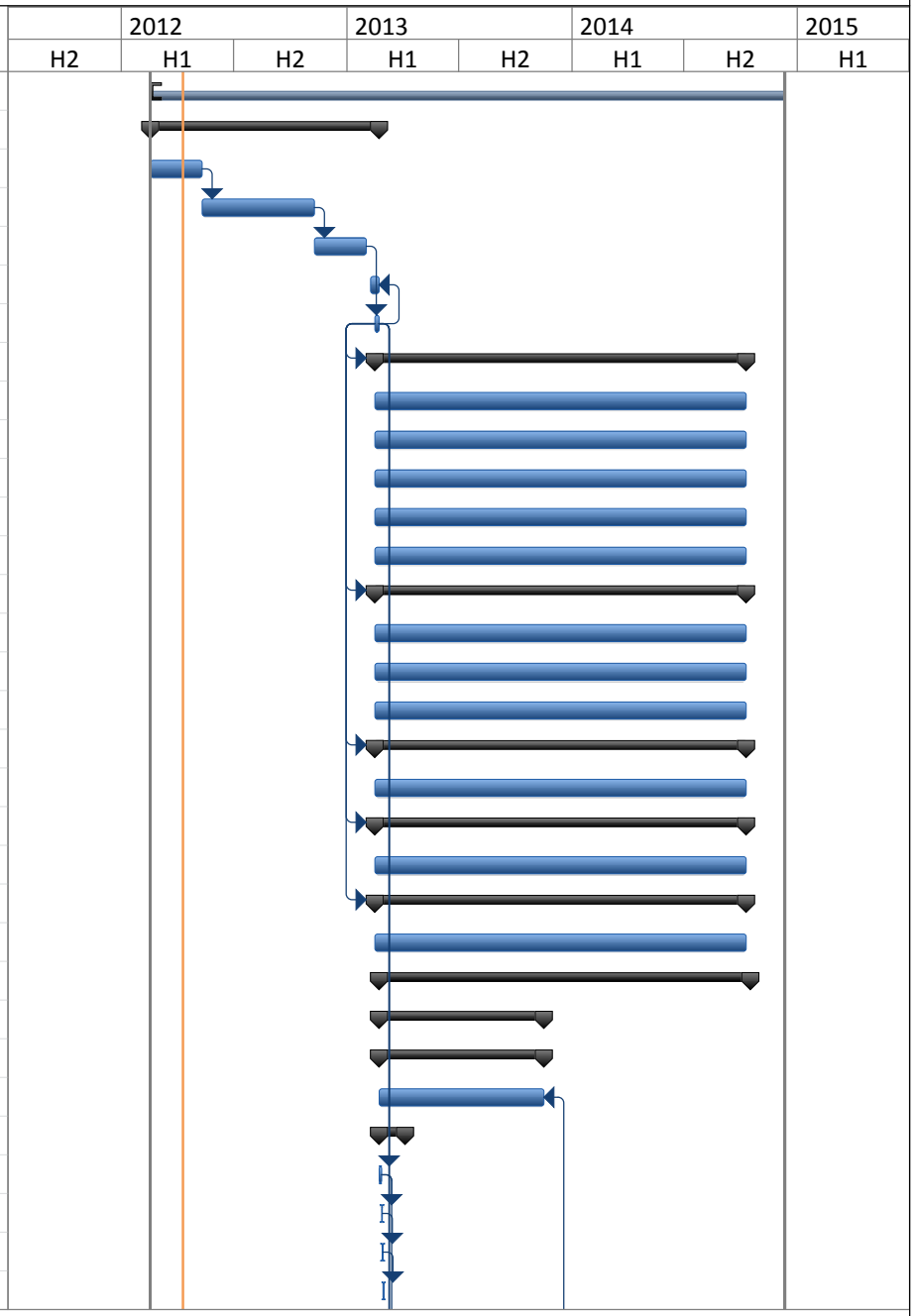
ID	Task Name	Cost
89	EHC Coolers	$3,905.76
90	**Chemical Feed Systems**	**$18,745.68**
91	Tanks	$8,308.08
92	Pumps	$5,218.80
93	Piping	$5,218.80
94	**Sampling Systems**	**$6,675.12**
95	Field Mounted Heat Exchangers	$3,905.76
96	Piping	$2,769.36
97	**Building Heating Systems**	**$12,923.68**
98	Steam Unit Heaters	$9,231.20
99	Steam Piping	$3,692.48
100	**Compressed Air System**	**$29,293.20**
101	Air Compressors	$7,811.52
102	Air Drying Equipment	$5,858.64
103	Air Reciever Tanks	$5,858.64
104	Compressed Air Piping	$9,764.40
105	**Miscellaneous Equipment**	**$23,434.56**
106	Miscellaneous Equipment (including Fire Protection)	$23,434.56
107	**Phase 2 Demolition**	**$2,844,527.36**
108	**Precipitator**	**$104,376.00**
109	Remove Precipitator	$104,376.00
110	**Boiler Equipment**	**$711,329.60**
111	Fans	$61,419.20
112	Pulverizers	$69,584.00
113	Bottom Ash	$15,976.32
114	Air Heater	$194,835.20
115	Steam Drum	$86,980.00
116	Coal Bunkers	$69,584.00
117	Coal Feeders	$45,229.60
118	Soot Blowers	$49,428.48
119	Ductwork	$97,417.60
120	Miscellaneous Other	$20,875.20
121	**Boiler Removal**	**$389,670.40**
122	Furnace	$222,668.80
123	Back Pass	$167,001.60
124	**Boiler Steel Framing**	**$702,798.40**
125	Hanger Girders at Top	$104,376.00
126	All Other Framing	$327,044.80
127	Bracing and Girts	$160,043.20
128	Columns	$111,334.40
129	**Boiler Foundations**	**$125,251.20**
130	Equipment Foundation Demolition to Grade	$125,251.20
131	**Remove Turbine**	**$811,101.76**
132	Remove HP Turbine	$25,560.80

Iatan Unit 1 Dismantlement

ID	Task Name	Cost
133	Remove IP Turbine	$25,560.80
134	Remove LP Turbine	$25,560.80
135	Remove Generator	$51,121.60
136	Remove Condenser Neck Heat Exchanger	$25,560.80
137	Remove Condenser	$25,560.80
138	Remove Misc. Auxiliary Turbine Equipment	$38,341.20
139	**Turbine Pedestal Demolition to Grade**	**$260,720.16**
140	Top Slab and Beams	$102,243.20
141	Columns	$158,476.96
142	**Remove Turbine Building**	**$333,114.80**
143	Siding and Rooding	$105,550.40
144	All Framing Elevations	$153,364.80
145	Bracing and Girts	$51,121.60
146	Columns	$23,078.00
147	**Phase 3 Yard Demolition**	**$252,775.20**
148	**Circulating Water Pipe (yard)**	**$69,584.00**
149	Excavate Circulating Water Pipe	$17,396.00
150	Collapse Circulating Water Pipe	$34,792.00
151	Backfill Circulating Water Pipe	$17,396.00
152	**Remove Ash Handling Equipment and Piping**	**$34,792.00**
153	Remove Fly-Ash Silo and Scale	$26,094.00
154	Remove Ash Piping and Misc. Equipment	$8,698.00
155	Remove Laydown Equipment and Warehoused Equipment	$69,584.00
156	Remove Unit 1 Condensate Storage Tank and Pump	$9,231.20
157	Remove Unit 1 Make-Up Water Storage Tank	$17,396.00
158	Remove Unit 1 Water Treatment Equipment and Building	$52,188.00
159	**Post Dismantlement Activities**	**$61,760.00**
160	Post Dismantlement Activities	$61,760.00

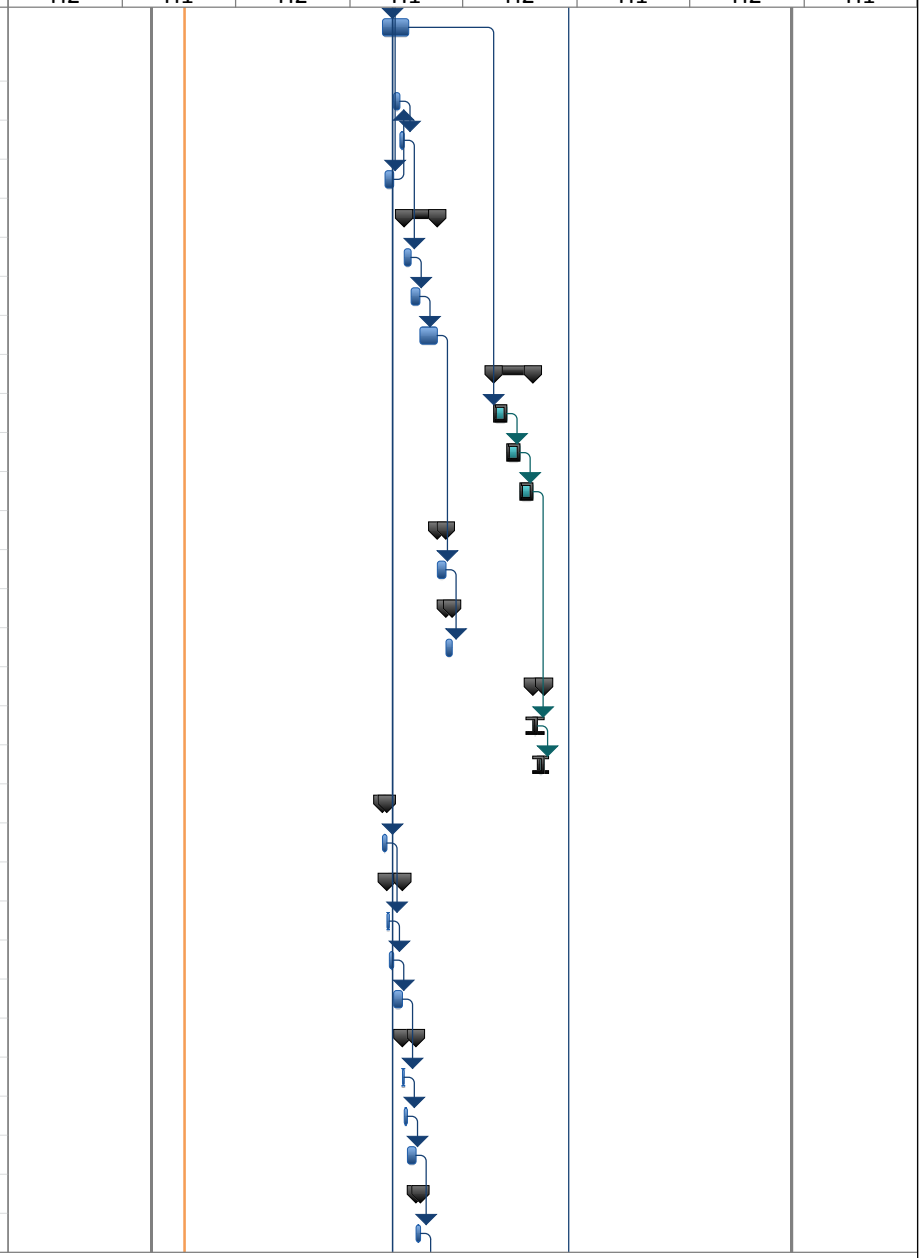
Iatan 1 Dismantlement

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



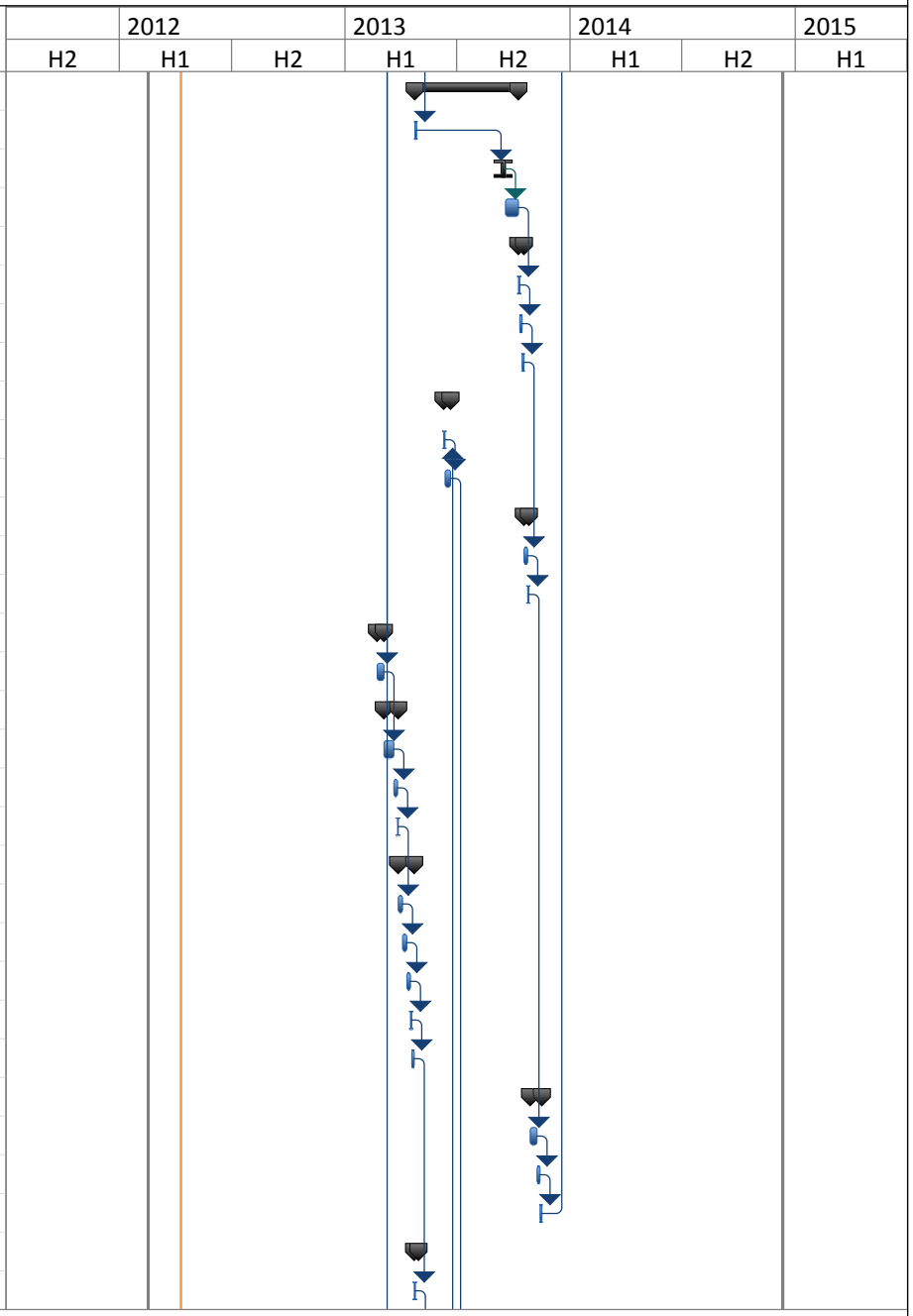
Iatan 1 Dismantlement

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



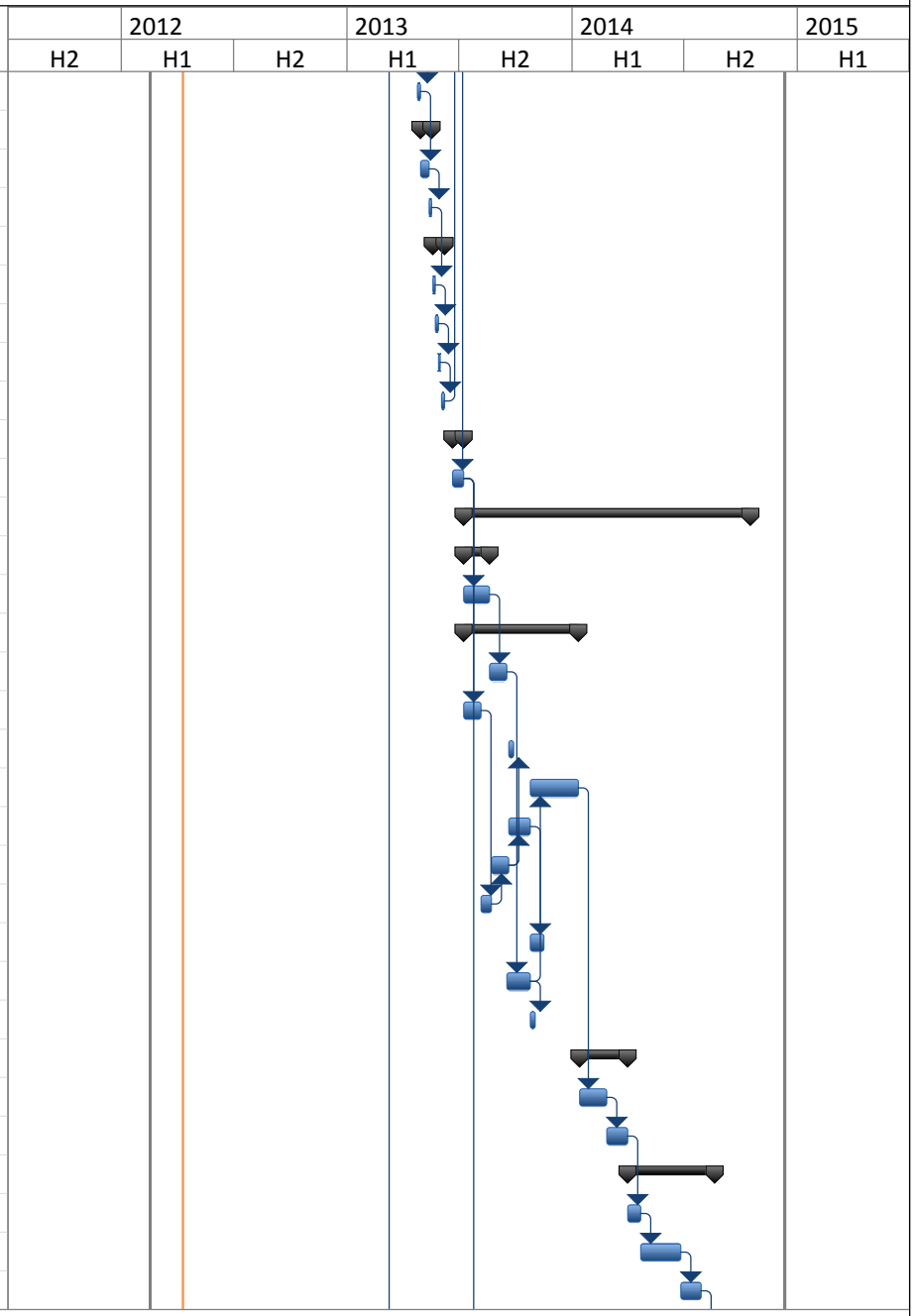
Iatan 1 Dismantlement

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



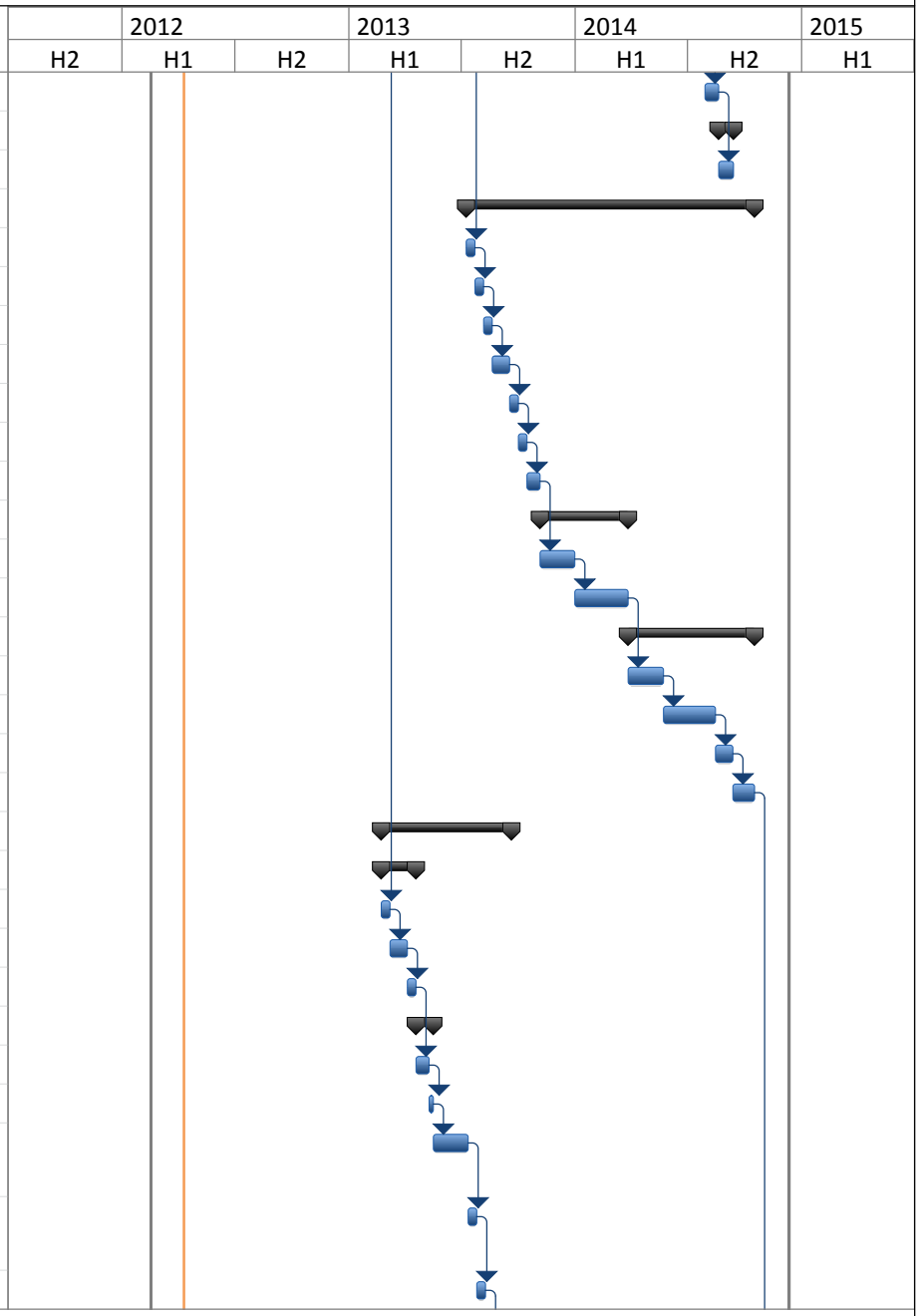
Iatan 1 Dismantlement

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



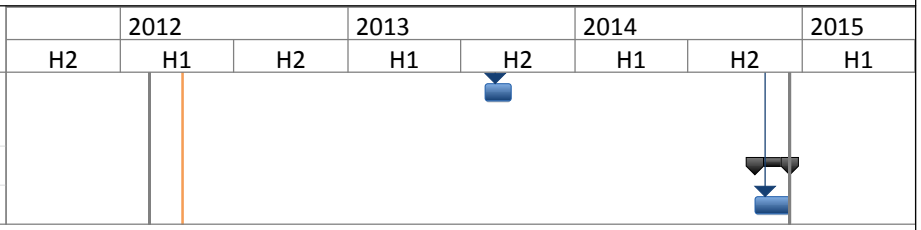
Iatan 1 Dismantlement

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 Unit 1 AQCS Dismantlement

ID	Task Name	Cost
1	**Iatan Unit 1 AQCS Dismantlement**	**$3,253,264.96**
2	**Common Removal Overheads**	**$326,400.00**
3	Added Overhead Staff for Common Removals	$326,400.00
4	**Scrap Crew**	**$591,464.00**
5	Crew(s) to Handle Scrap Material	$591,464.00
6	**Demolition Contractor Consummables**	**$780,640.00**
7	Consummables	$780,640.00
8	**Demolition Contractor Equipment Rental Costs**	**$587,520.00**
9	Equipment Rental	$587,520.00
10	**Dismantlement**	**$967,240.88**
11	**Initial Structural**	**$126,549.20**
12	Remove SCR box & ductwork lagging & insulation	$17,396.00
13	Remove SCR expansion joints	$10,437.60
14	Remove ductwork lagging & insulation	$7,723.20
15	Remove ductwork expansion joints	$17,396.00
16	Remove ductwork access platforms & ladders	$17,396.00
17	Remove FF lagging, insulation, wall panel, & roof panels	$34,792.00
18	Remove ID fan lagging & insulation	$6,958.40
19	Removal all HVAC equipment located on FGD Bldg roof	$5,218.80
20	Remove FGD Bldg lagging, insulation, wall panel, & roof	$9,231.20
21	**General Electric**	**$196,574.80**
22	Remove breakers serving all FF equipment	$869.80
23	Remove breakers serving all FGD equipment	$1,739.60
24	Remove breakers serving all ID fan equipment	$869.80
25	Remove breakers serving all SCR equipment	$869.80
26	Remove breakers serving all comp air equipment	$869.80
27	Remove all ductwork primary instrumentation, controls & assoc'd cables, and conduit	$8,698.00
28	Remove all FGD primary instrumentation, controls & assoc'd cables, and conduit	$26,094.00
29	Remove all FF primary instrumentation, controls & assoc'd cables, and conduit	$17,396.00
30	Remove SCR primary instrumentation, controls, & assoc'd cable & conduit	$8,698.00
31	Remove NH3 supply primary instrumentation, controls, & assoc'd cable & conduit	$8,698.00
32	Remove wiring and conduit serving FGD equipment, HVAC, lighting and convenience outlets	$34,792.00
33	Remove wiring and conduit serving FF equipment, HVAC, lighting and convenience outlets	$17,396.00
34	Remove wiring and conduit serving the ID fans and assoc'd equipment	$20,875.20
35	Remove wiring & conduit serving SCR vaporization & injection equipment	$5,218.80

Iatan Unit 1 AQCS Dismantlement

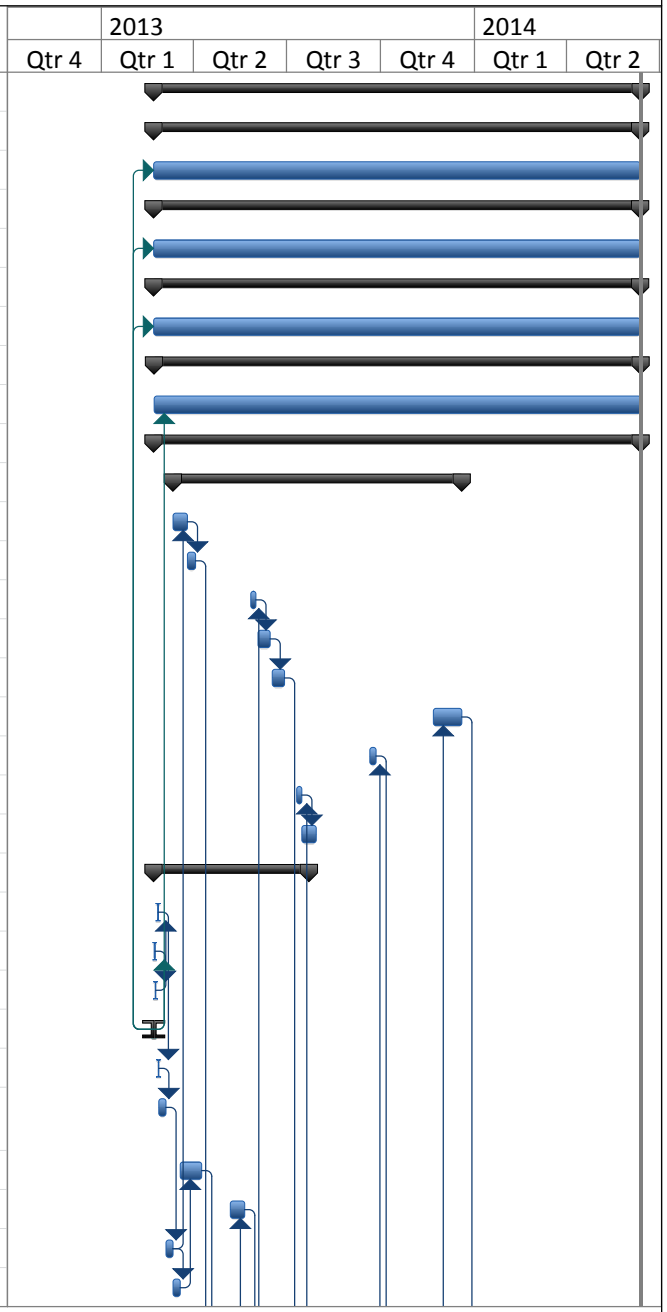
ID	Task Name	Cost
36	Remove wiring & conduit serving compressed air equipment	$5,218.80
37	Remove wiring & conduit serving comp air equipment	$3,479.20
38	Remove electrial control cabinets & switchgear	$17,396.00
39	Demolish electrical control room	$17,396.00
40	**FGD System**	**$195,300.04**
41	Remove ductwork between FGD module and chimney	$7,723.20
42	Remove support steel and access platforms between FGD and chimney	$5,218.80
43	Remove FGD elevator	$8,698.00
44	Remove all mechanical equipment, pumps, and motors and tanks in FGD Bldg	$34,792.00
45	Remove oxi air blowers	$869.80
46	Remove all FGD piping & valves other than recirc piping	$26,094.00
47	Remove ox air lines	$5,218.80
48	Remove FGD MEs panels	$9,267.84
49	Remove FGD outlet duct and top cone	$5,218.80
50	Remove FGD internal wash ME piping and ME supports	$5,218.80
51	Remove FGD internal spray header piping	$8,698.00
52	Remove FGD support steel, access provisions, stair tower, and recirc piping from top down	$34,792.00
53	Remove FGD module walls	$17,396.00
54	Remove FGD inlet duct	$5,218.80
55	Remove FGD reaction tank walls and floor	$17,396.00
56	Remove FGD Bldg trench floor grating	$3,479.20
57	**ID Fans**	**$76,542.40**
58	Remove ductwork between ID fan outlets and FGD module	$12,177.20
59	Remove support steel and access platforms between ID fan outlets and FGD module	$5,218.80
60	Remove ductwork between FF outlet and ID fan inlets	$12,177.20
61	Remove support steel between FF outlet and ID fan inlets	$5,218.80
62	Removed ID fan isolation dampers	$13,916.80
63	Removed ID fan drive motor	$6,958.40
64	Remove ID fan seal air system	$6,958.40
65	Remove fan casing & rotor	$13,916.80
66	**Fabric Filters**	**$300,950.80**
67	Remove ductwork between air heater and FF	$8,698.00
68	Remove ductwork structural steel between AH and FF	$5,218.80
69	Remove FF penthouse hoists and trolleys	$6,958.40
70	Remove FF hopper heaters, HVAC, lighting and convenience outlets	$17,396.00
71	Remove FF ash handling piping	$26,094.00
72	Remove compress air blower, dryers, and receivers, piping & valves	$17,396.00
73	Remove FF penthouse roof panels supporting steel	$17,396.00

Iatan Unit 1 AQCS Dismantlement

ID	Task Name	Cost
74	Remove FF compartment roof hatches	$5,218.80
75	Remove FF compartment pulse air piping	$5,218.80
76	Remove FF compartment pulse air and compressed air supply piping	$10,437.60
77	Remove FF outlet poppet damper operators	$12,177.20
78	Remove FF bags & cages	$24,354.40
79	Remove FF bag support sheets	$24,354.40
80	Remove remaining FF roof	$6,958.40
81	Remove FF outlet dampers	$6,958.40
82	Remove ductwork between air heater and FF	$8,698.00
83	Remove FF wall panels to hopper level	$48,708.80
84	Remove ductwork structural steel between AH and FF	$5,218.80
85	Remove FF stair tower(s)	$17,396.00
86	Remove FF inlet dampers	$6,958.40
87	Remove FF hoppers	$12,177.20
88	Remove FF support steel	$6,958.40
89	**SCR and Ammonia Supply**	**$71,323.60**
90	Vacuum SCR catalyst	$3,479.20
91	Remove SCR catalyst	$15,656.40
92	Remove ammonia injection grid	$3,479.20
93	Remove NH3 piping between storage & injection	$3,479.20
94	Remove air horn air receiver & supply piping	$3,479.20
95	Remove SCR guillotine dampers	$6,958.40
96	Remove SCr muliti-louver dampers	$3,479.20
97	Remove SCR box, internal supports, & assoc'd ductwork	$26,094.00
98	Remove NH3 piping between storage & vaporizors	$5,218.80
99	**Site Preperation Work**	**$0.00**
100	<New Task>	$0.00

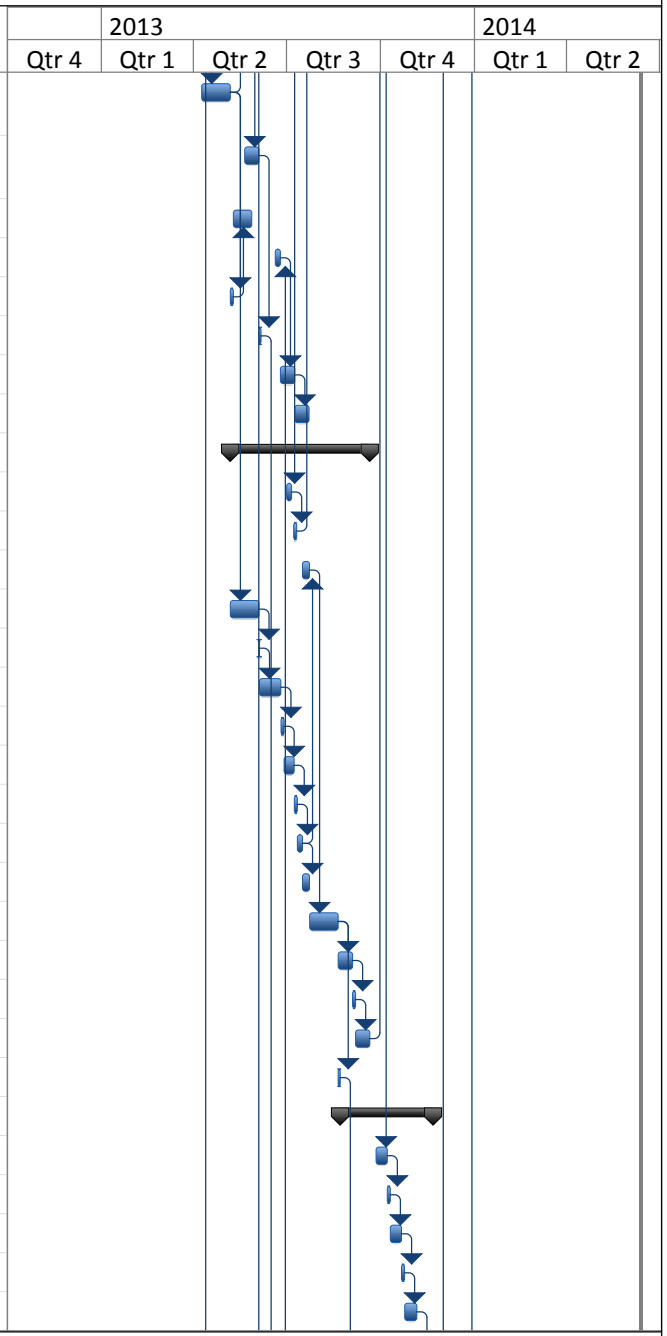
Iatan 1 AQCS Dismantlement

ID	Task Name	Duration
1	**Iatan Unit 1 AQCS Dismantlement**	**340.5 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 conduit	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



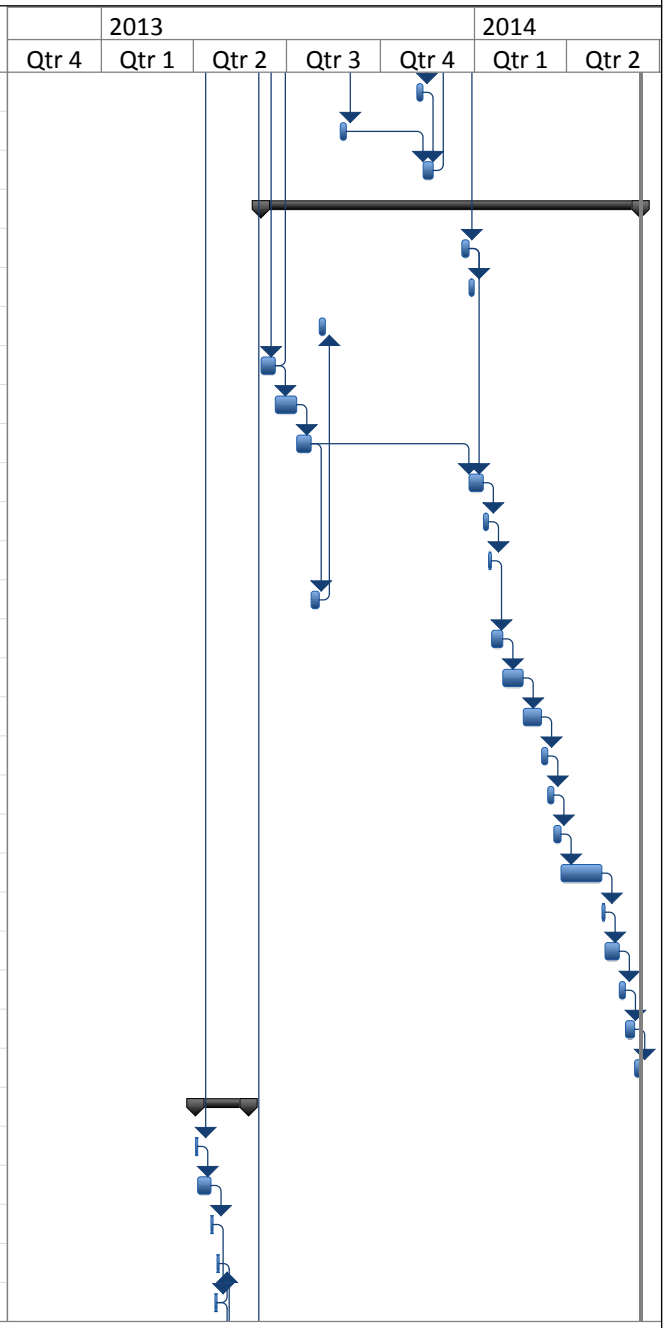
Iatan 1 AQCS Dismantlement

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



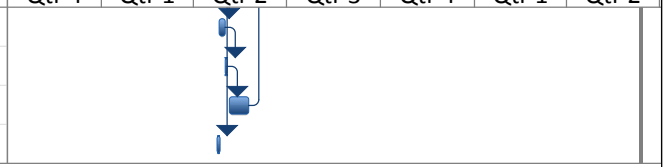
Iatan 1 AQCS Dismantlement

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



UNIT 2

Iatan 2 Retirement

Owner Costs			
Pre-Retirement Activities		$95,040	
Retirement Activities		$627,132	
Post-Retirement Activities		$25,040	
Owner Direct Total			$747,212
Owner Internal Costs	5.00%		$37,361
Owner Contingency:	25.00%		$196,143

Iatan 2 Retirement Opinion of Probable Cost: $943,355.15

Iatan 2 Retirement

ID	Task Name	Cost
1	**Iatan 2 Retirement**	**$747,212.11**
2	**Pre-Engineering**	**$95,040.00**
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**	**$107,456.00**
5	KCP&L Retirement Manager	$107,456.00
6	**Equipment Rentals**	**$36,800.00**
7	Vacuum truck	$36,800.00
8	**Retirement**	**$482,876.11**
9	**Electrical**	**$18,367.04**
10	**Medium and Low Voltage Draw out Switchgear**	**$2,607.84**
11	De-energize all buses at the source.	$434.64
12	Open all circuit breakers.	$434.64
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$434.64
14	Verify that the closing/tripping springs are discharged.	$434.64
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.	$869.28
16	**Motor Control Centers**	**$1,738.56**
17	De-energize all buses at the source.	$434.64
18	Open all circuit breakers and disconnect switches.	$434.64
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$869.28**
21	De-energize all buses at the source.	$434.64
22	Open all circuit breakers and disconnect switches.	$434.64
23	**Oil-Filled Power Transformers**	**$5,382.08**
24	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
26	Drain and dispose of oil.	$2,553.60
27	Clean up and dispose of oil on surface areas around the transformers on in containment pits.	$1,089.92
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$6,030.72**
32	De-energize all primary power at the source.	$1,738.56

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.	$1,738.56
34	Drain lube oil system (if applicable) and dispose of oil.	$2,553.60
35	**Coal Handling**	**$26,734.00**
36	Empty all transfer hoppers.	$1,655.60
37	Burn out coal silos.	$1,640.00
38	Confirm all fuel lines, conveyors and trippers are clear of fuel.	$1,640.00
39	Perform cleaning of the coal handling equipment to assure that all coal and coal dust has been removed from site.	$21,798.40
40	**Fuel Oil and Igniter System**	**$2,460.00**
41	Drain fuel oil system	$2,460.00
42	**Boiler Chemical Feed**	**$1,640.00**
43	Drain all chemical feed tanks.	$1,640.00
44	**Boiler**	**$26,734.11**
45	Open boiler doors.	$851.20
46	Gas side - perform cleaning of the boiler and bottom ash system.	$21,798.40
47	Drain boiler, drum, downcomers and headers.	$820.00
48	Open drum doors.	$851.20
49	Drain and clean the submerged flight conveyor system.	$2,413.31
50	**Stack and Ductwork**	**$311,750.40**
51	Open ductwork doors.	$851.20
52	Perform extensive cleaning of the ductwork.	$10,899.20
53	Place cap over stack opening to keep moisture out.	$300,000.00
54	**Condensate and Feedwater Piping**	**$1,640.00**
55	Drain water from the system.	$820.00
56	Leave open vents and drains.	$820.00
57	**Feedwater heaters**	**$2,460.00**
58	Drain feedwater heaters	$820.00
59	Leave open vents and drains.	$1,640.00
60	**Deaerator and Deaerator Storage Tank**	**$1,640.00**
61	Drain Deaerator and Storage	$820.00
62	Leave open vents and drains.	$820.00
63	**Baghouse**	**$16,664.16**
64	Multiple cleaning cycles for filter bags.	$2,460.00
65	Open all vent and drain lines on bag cleaning air and control air lines. Leave in open position or remove vent valves.	$820.00
66	Remove all filter bags and cages.	$851.20
67	Clear hoppers of all ash	$2,729.92
68	Mechanically secure all compartment dampers and hopper outlet valves in open position.	$851.20
69	Disconnect ash transport piping and washdown baghouse hoppers and interior of casing.	$1,380.56
70	Install bird screens across hopper ash outlet and ash line flanges.	$851.20

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.)	$851.20
72	If walk-in plenum, padlock or tack weld all outlet plenum doors and compartment ventilation dampers shut.	$851.20
73	If top-door plenum, close and secure top doors and remove/disable door lift hoist.	$1,671.20
74	If top-door plenum, establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in penthouse enclosure.	$738.64
75	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
76	**Wet FGD system**	**$22,340.64**
77	Multiple mist eliminator wash cycles. Remove ME's from absorber.	$2,081.20
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.	$1,671.20
79	Drain and wash out the reaction tank, reagent storage tank, recycle water tank, absorber blowdown tank, etc.	$4,499.76
80	Leave all tank drain valves open or remove. Install bird screens across openings.	$1,702.40
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.	$2,522.40
82	Mechanically secure all flue gas isolation dampers in open position or remove damper blades.	$1,702.40
83	Remove solids from all inlet and outlet ductwork as necessary	$2,179.84
84	Open all vent station air and control air lines. Leave in open position or remove vent valves	$1,671.20
85	Padlock or tack weld all access doors to modules and ductwork shut.	$851.20
86	Remove access doors to open-top tanks.	$851.20
87	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
88	**FGD Reagent Preparation-Limestone wet Scrubber**	**$8,938.80**
89	Remove limestone from day bins.	$1,364.96
90	Removed cartridges/bags from bin vent filters	$1,364.96
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.)	$425.60
92	Remove bin discharge isolation valve and install bird screen.	$425.60
93	Thoroughly wash and drain mills	$1,364.96
94	Remove balls from any ball mills	$1,089.92
95	Padlock or tack weld mill access doors closed.	$425.60

Iatan 2 Retirement

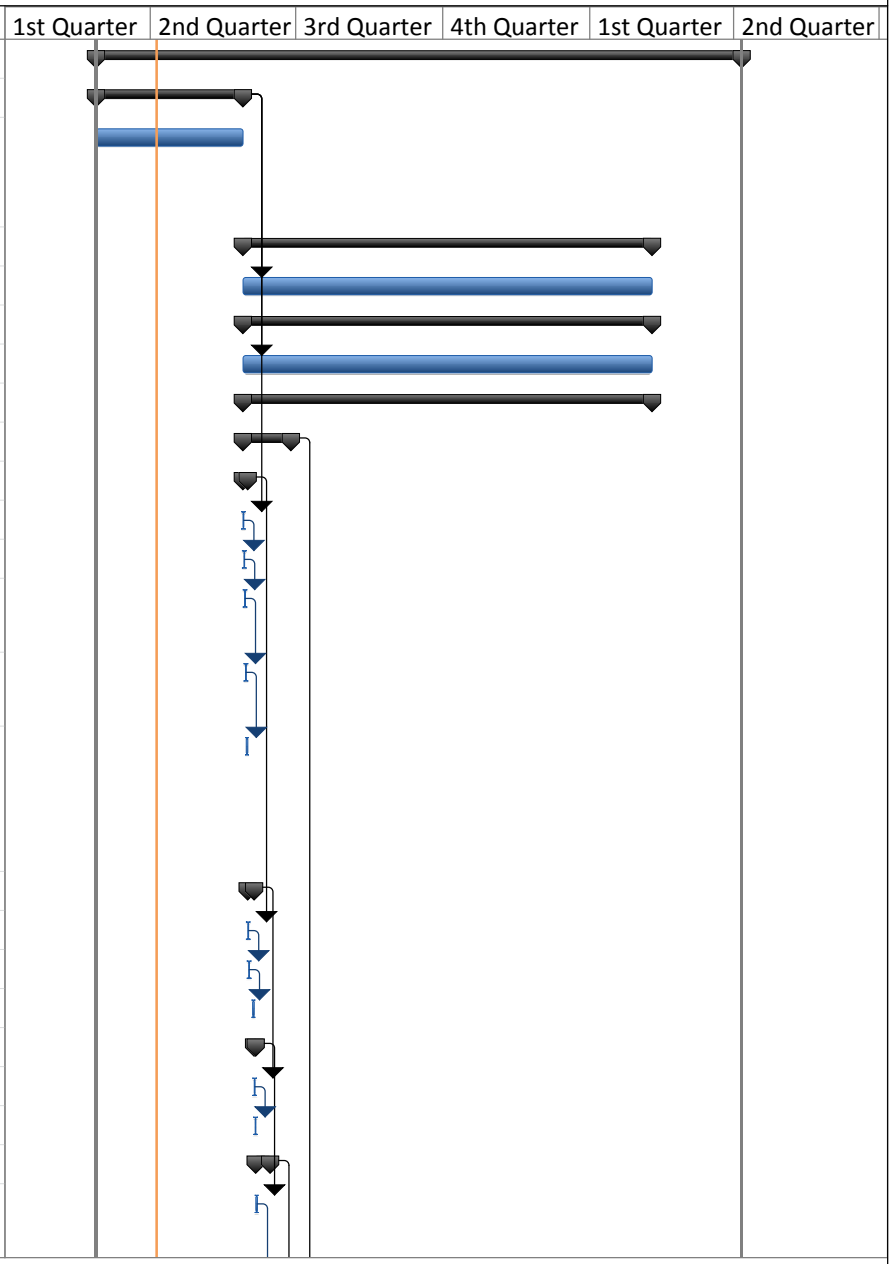
ID	Task Name	Cost
96	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$738.64
97	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,738.56
98	**FGD Byproduct Dewatering - Hydrocyclones and Vacuum Filters**	**$6,906.88**
99	Wash vacuum filter belt and remove all accumulated solids	$2,179.84
100	Wash out vacuum receiver, remove pressure relief valve and access door. Install bird screens.	$1,380.56
101	Establish natural ventilation or maintain HVAC fan to provide minimum air changes per hour in building.	$738.64
102	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$2,607.84
103	**SCR**	**$9,762.48**
104	Vacuum fly ash from catalyst.	$2,179.84
105	Remove catalyst of salvage or disposal.	$2,792.32
106	Padlock or tack weld access doors shut.	$851.20
107	Remove ammonia from storage tank for resale.	$682.48
108	Wash out and drain storage tank and supply piping.	$682.48
109	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$835.60
110	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$1,738.56
111	**Turbine(s) and Condenser**	**$5,091.60**
112	Drain hotwell and leave doors open.	$835.60
113	Open main turbine doors.	$851.20
114	Open bfp turbine doors.	$851.20
115	Remove lube oil.	$2,553.60
116	**Generator**	**$5,916.56**
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.	$434.64
118	Verify that generator field breaker or contactor (if applicable) is open.	$434.64
119	De-energize power supplies to generator excitation system at the source.	$434.64
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.	$434.64
121	Drain generator and exciter cooling water systems (if applicable).	$835.60
122	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$1,640.00
123	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,702.40

Iatan 2 Retirement

ID	Task Name	Cost
124	**Circulation Water and Turbine Cooling Water System**	**$3,311.20**
125	Drain.	$1,640.00
126	Open water box doors.	$851.20
127	Drain any circulating water chemical feed tanks.	$820.00
128	**Compressed Air System**	**$2,279.20**
129	Open vents and drains.	$820.00
130	Remove desiccant from desiccant dryers.	$1,459.20
131	**Auxiliary Steam System**	**$1,640.00**
132	Drain water from system.	$820.00
133	Remove aux boiler chemicals.	$820.00
134	**Auxiliary Cooling Water System**	**$820.00**
135	Drain water from system.	$820.00
136	**Condenser Air Extraction and Waterbox Priming System**	**$820.00**
137	Drain water from system.	$820.00
138	**Building Heating System**	**$820.00**
139	Drain water from system.	$820.00
140	**Battery System**	**$4,139.04**
141	De-energize all battery chargers from the source.	$434.64
142	Open all AC and DC circuit breakers and/or fused switches on battery chargers and disconnect cables from batteries.	$434.64
143	Remove and dispose of battery electrolyte.	$1,634.88
144	Remove and dispose of battery cells.	$1,089.92
145	Clean up and dispose of electrolyte on surface areas around batteries.	$544.96
146	**Post Retirement Activities**	**$25,040.00**
147	Post Retirement Activities	$25,040.00

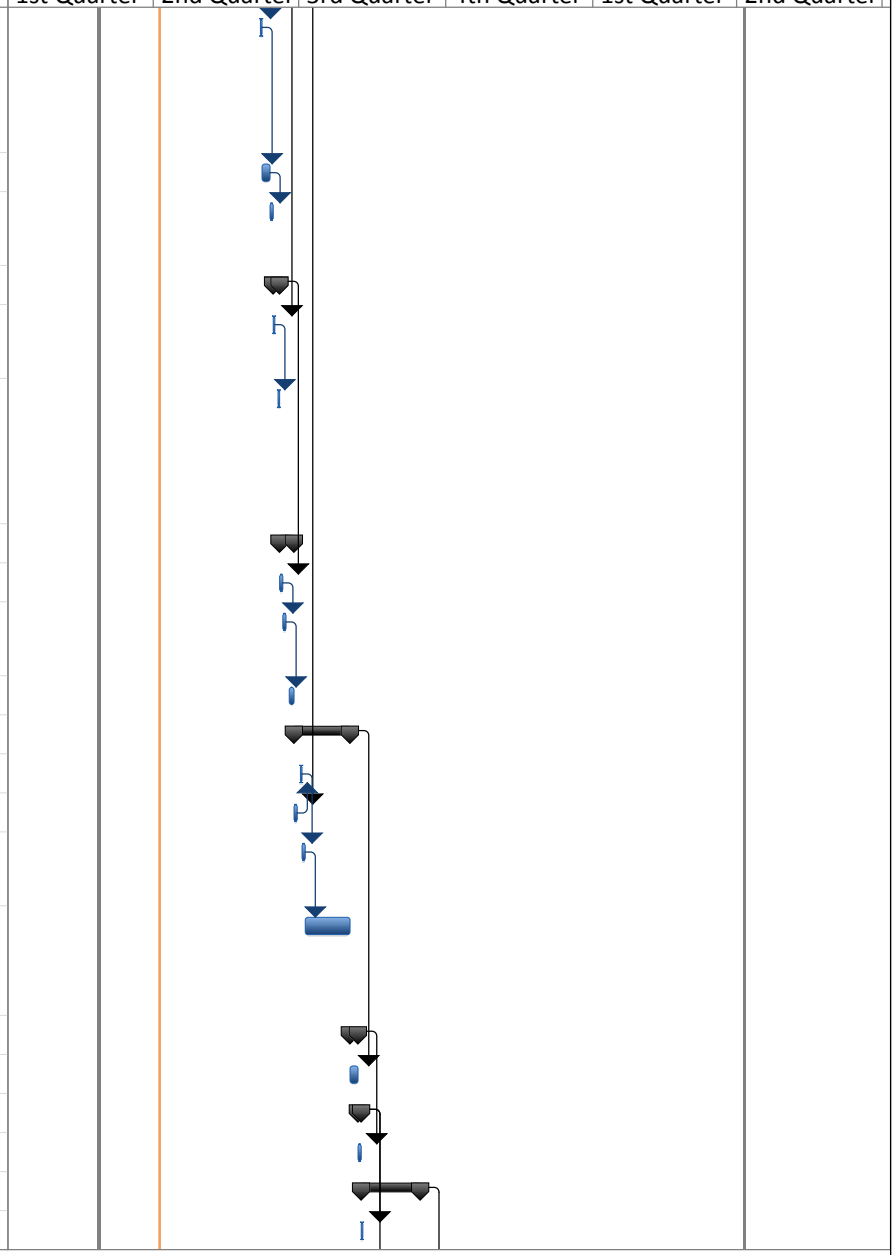
Iatan 2 Retirement

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



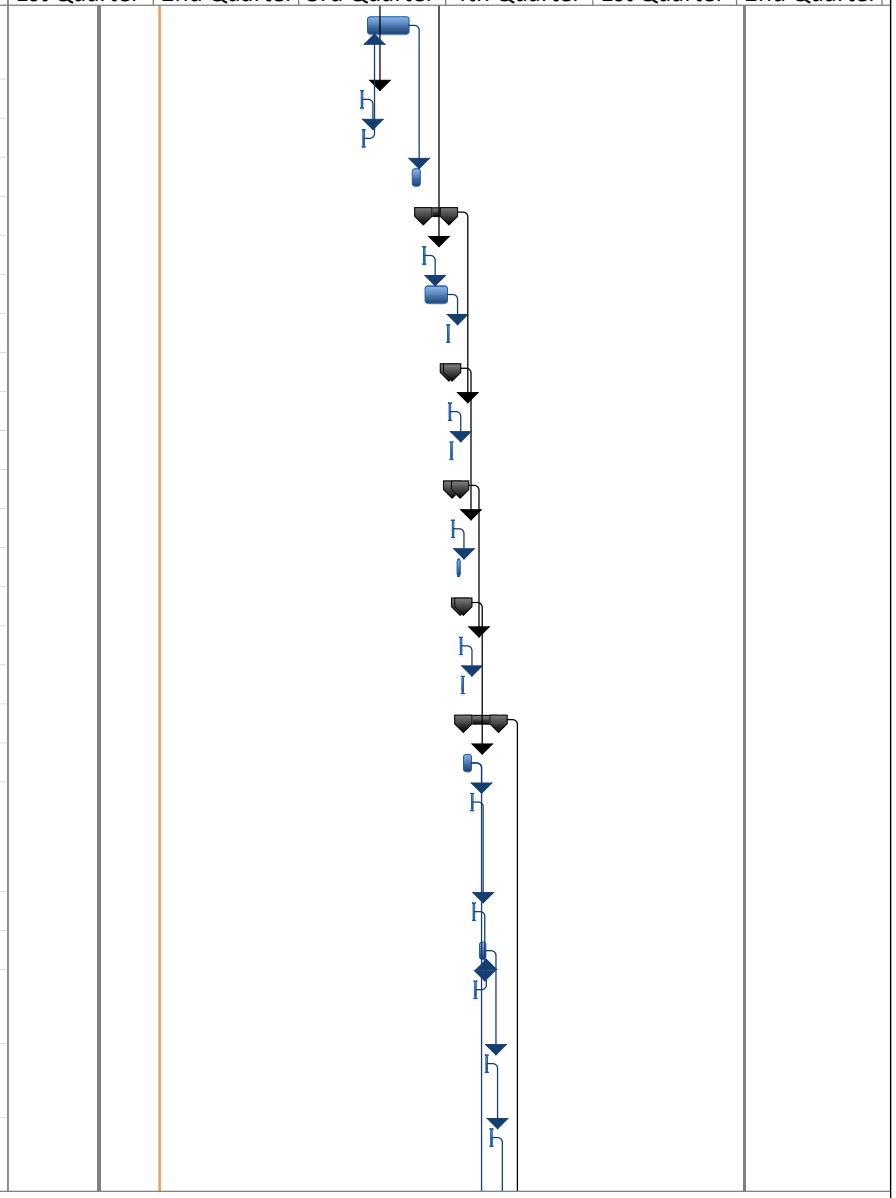
Iatan 2 Retirement

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



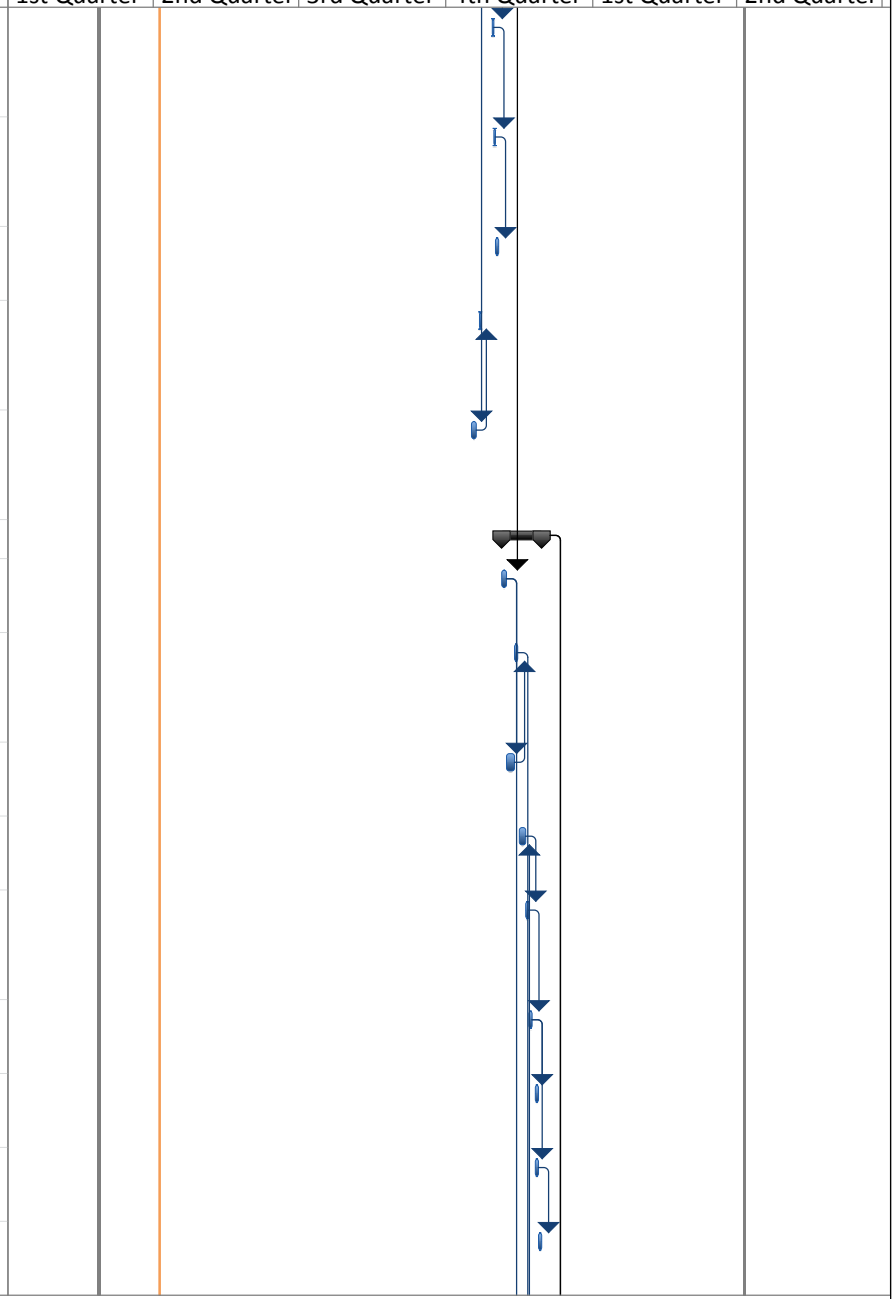
Iatan 2 Retirement

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



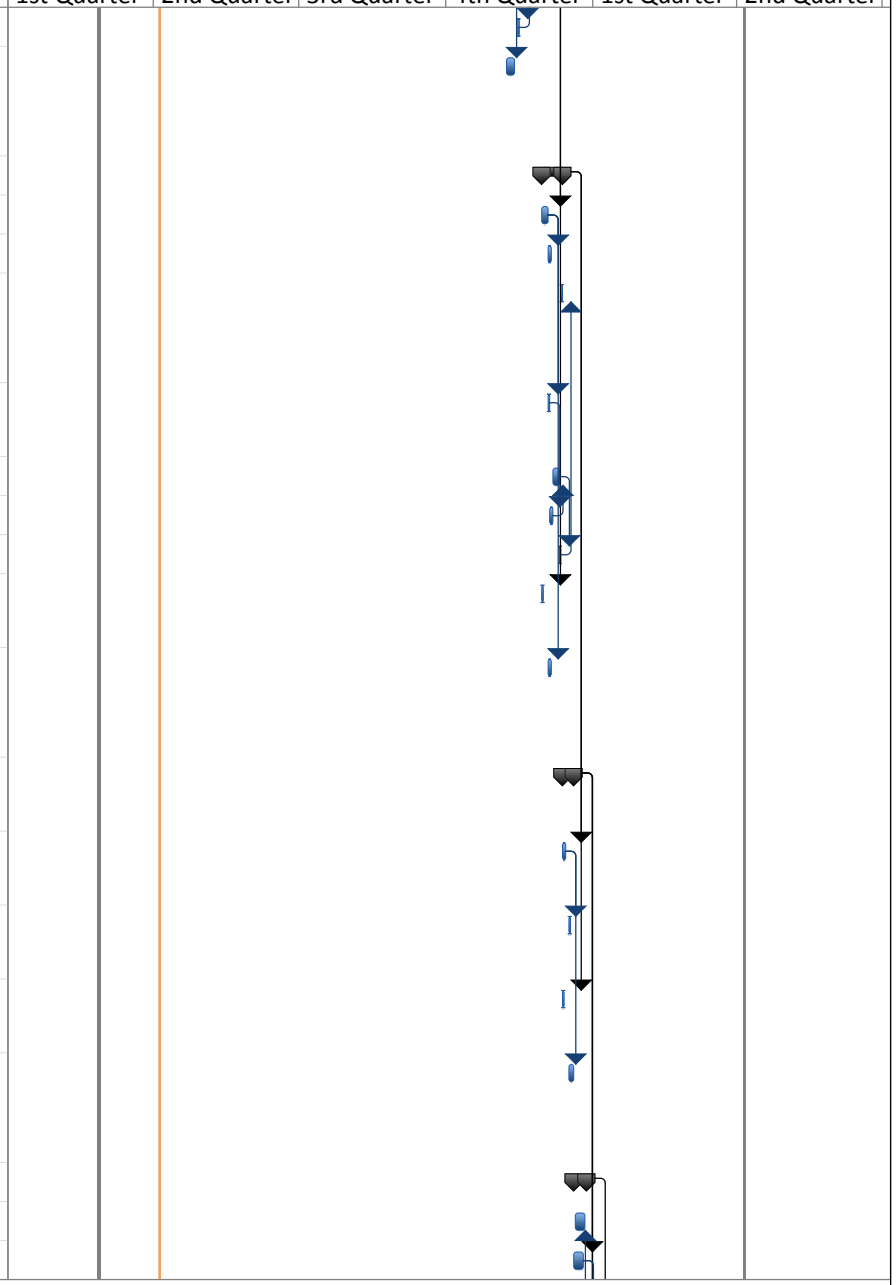
Iatan 2 Retirement

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



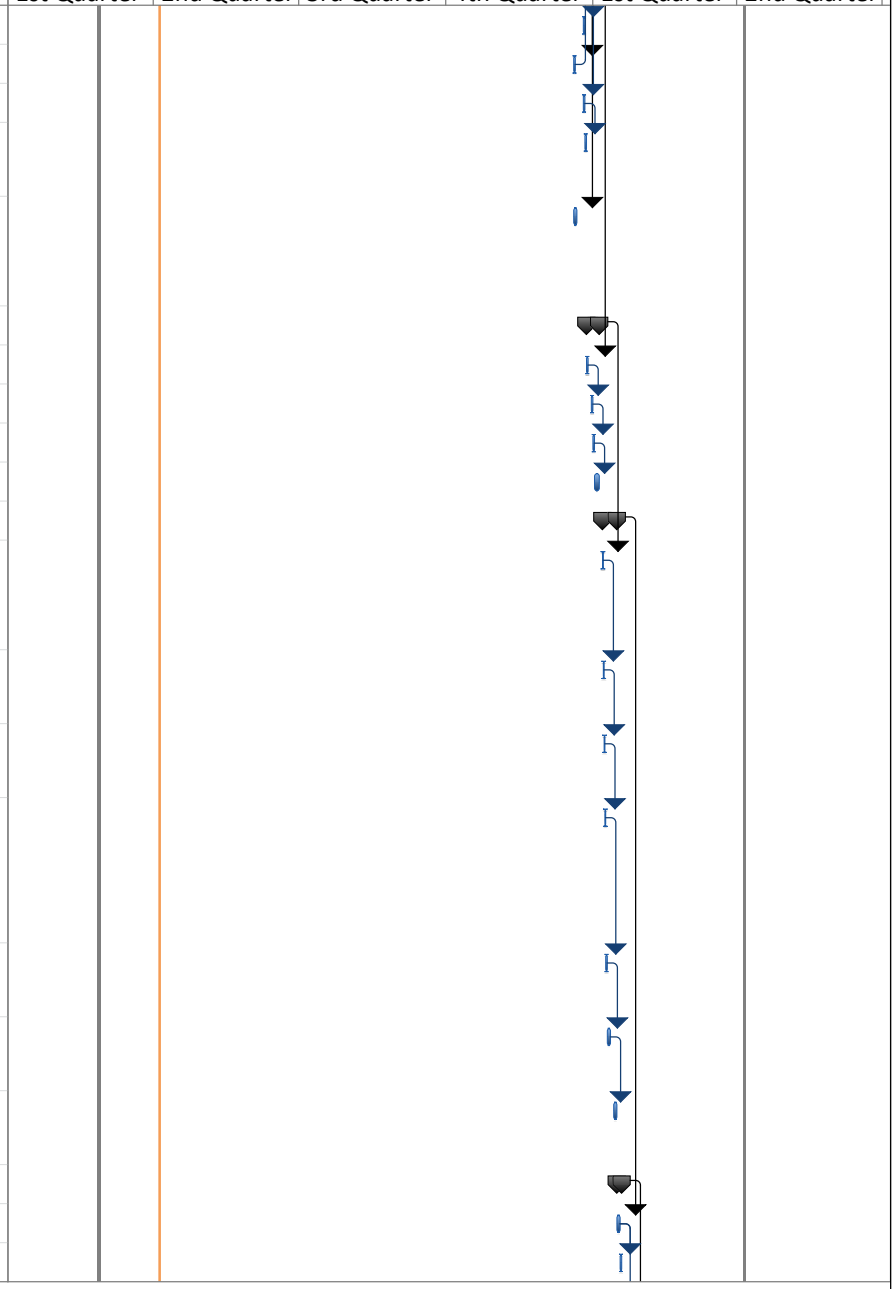
Iatan 2 Retirement

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



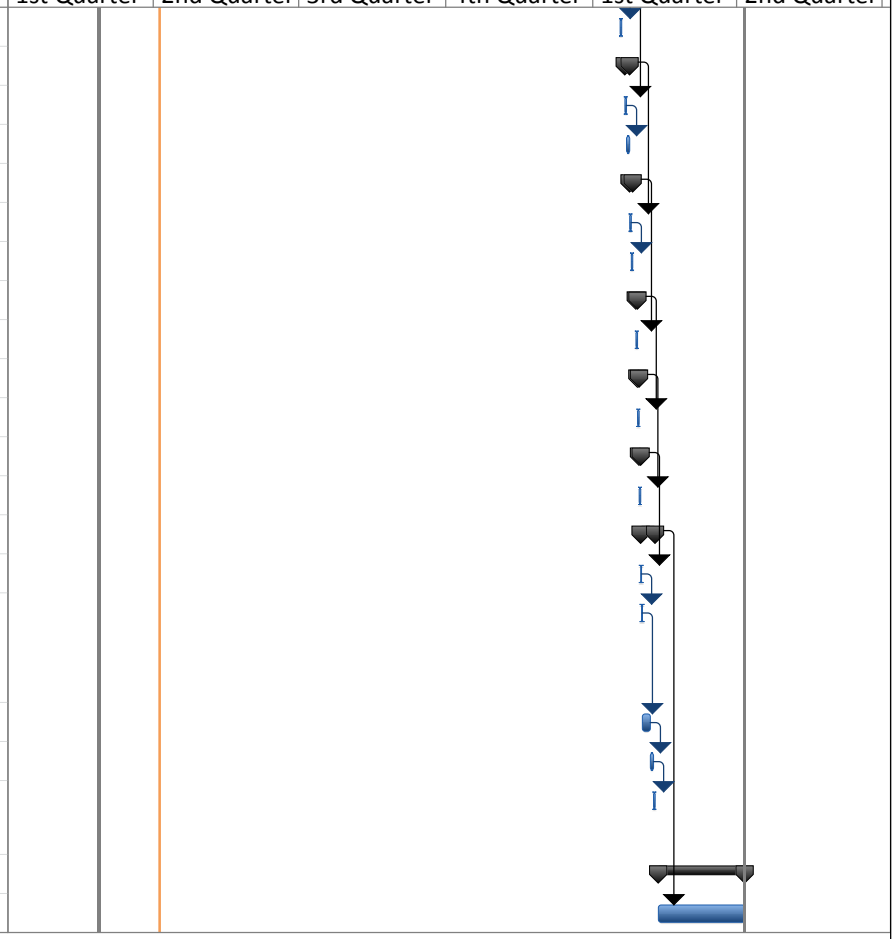
Iatan 2 Retirement

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 Unit 2 Dismantlement

Owner Additional Costs				
Pre-Dismantlement Activities		$893,957		
Overhead During Dismantlement		$1,889,491		
Post-Dismantlement Activities		$70,596		
Owner Costs Total			$2,783,448	
Demolition General Contractor (DGC) Costs				
Additional Site Management		$1,387,593		
Equipment Rental		$2,366,334		
Consummables		$2,583,151		
Scrap Crew(s)		$2,386,177		
Dismantlement*		$5,756,052		
DGC Insurance	2.00%	$289,586		
Contingency/Profit	15.00%	$2,215,334		
Performance Bond	2.00%	$339,684.54		
Contractor Costs Total:			$17,323,912	
Total:				$20,107,360
Owner Internal Costs:	5.00%			$1,005,368
Owner Contingency:	25.00%			$5,278,182
Iatan Unit 2 Dismantlement Opinion of Probable Cost:				$26,390,910

COMMON

Iatan Common Retirement

Owner Costs			
Pre-Retirement Activities		$49,440	
Retirement Activities		$331,556	
Post-Retirement Activities		$30,240	
Owner Direct Total			$411,236
Owner Internal Costs	5.00%		$20,562
Owner Contingency:	25.00%		$107,949

Iatan Common Retirement Opinion of Probable Cost: $519,185.45

Activities Required by Permit or Regulation

Iatan Fuel Oil Tank Removal	$173,212
Iatan Landfill Retirement	$17,447,100

Activities Required by Permit or Regulation: $17,620,312

Iatan Common Retirement

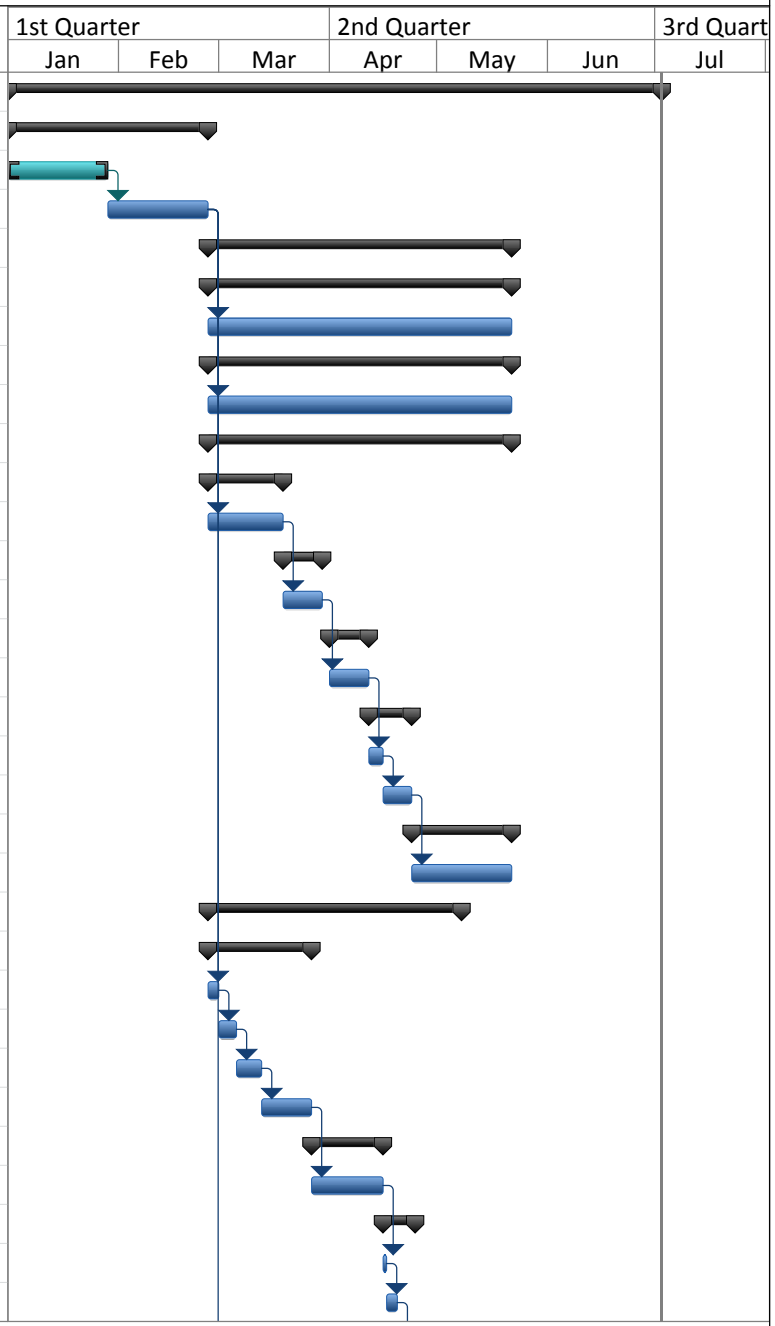
ID	Task Name	Cost
1	**Iatan Common Retirement**	**$411,236.96**
2	**Pre-Retirement Activities**	**$49,440.00**
3	Permitting Review	$24,720.00
4	Develop Detailed Retirement Plan	$24,720.00
5	**Overheads**	**$97,273.04**
6	**Common Retirement Overheads**	**$85,073.04**
7	Added Overhead Staff for Common Retirement	$85,073.04
8	**Common Retirment Equipment Rental**	**$12,200.00**
9	Common Removal Equipment Rental	$12,200.00
10	**Retirement Activities**	**$234,283.92**
11	**Administration Building**	**$16,698.80**
12	Secure Administration Building	$16,698.80
13	**Fuel Yard Office Building**	**$10,019.28**
14	Secure Fuel Yard Office Building	$10,019.28
15	**Training Building**	**$10,019.28**
16	Secure Training Building	$10,019.28
17	**Warehouse(s)**	**$10,309.92**
18	Secure Unit 1 Warehouse	$3,630.40
19	Secure Unit 2 Warehouse	$6,679.52
20	**Maintenance Shop**	**$25,223.20**
21	Secure Maintenance Shop	$25,223.20
22	**Fuel Yard**	**$127,707.60**
23	**Transfer Towers**	**$78,363.60**
24	Clean Transfer Tower 1	$3,682.32
25	Clean Transfer Tower 2	$3,682.32
26	Clean and Secure Crusher Building	$6,137.20
27	Clean Stockout Conveyor Reclaim Pit	$12,274.40
28	**Conveyors**	**$17,184.16**
29	Clean Conveyor 2A, 4, 5B 6A, 6B, 7A and 7B	$17,184.16
30	**Car Dumper**	**$8,592.08**
31	Empty Car Dumper Hoppers	$1,227.44
32	Clean Car Dumper	$3,682.32
33	Secure Dumper Building	$3,682.32
34	**Remove Stacker/Reclaimer**	**$18,658.00**
35	Clean and Secure Stacker/Reclaimer	$6,137.20
36	**Unit 1 Reclaim**	**$4,909.76**
37	Clean Unit 1 Reclaim	$2,454.88
38	Secure Unit 1 Reclaim Building	$2,454.88
39	**Sewage Treatment**	**$4,089.76**
40	Clean Sewage Treatment and Transfer Points	$4,089.76
41	**Fuel Oil Storage and Unloading**	**$820.00**
42	Remove Fuel Oil from Fuel Oil Storage and Vent	$820.00
43	**Yard Fire Water Systems**	**$820.00**
44	Drain Yard Fire Water System	$820.00

Iatan Common Retirement

ID	Task Name	Cost
45	**Reagent Prep and Gypsum Handling**	**$28,576.08**
46	Clean and Secure Limestone Unloading Facility	$3,682.32
47	Clean and Secure Limestone Storage Facility	$3,682.32
48	Clean Limestone Conveyor	$3,756.24
49	Clean and Secure Limestone Prep Building	$6,260.40
50	Clean Gypsum Stackout Conveyor	$2,504.16
51	Clean and Secure PCM-1	$2,504.16
52	Clean and Secure PCM-2	$2,504.16
53	Clean and Secure the Vacuum Pump and Air Compressor Building	$3,682.32
54	**Post Retirement Closure Activities**	**$30,240.00**
55	Post Retirement Closure Activities	$30,240.00

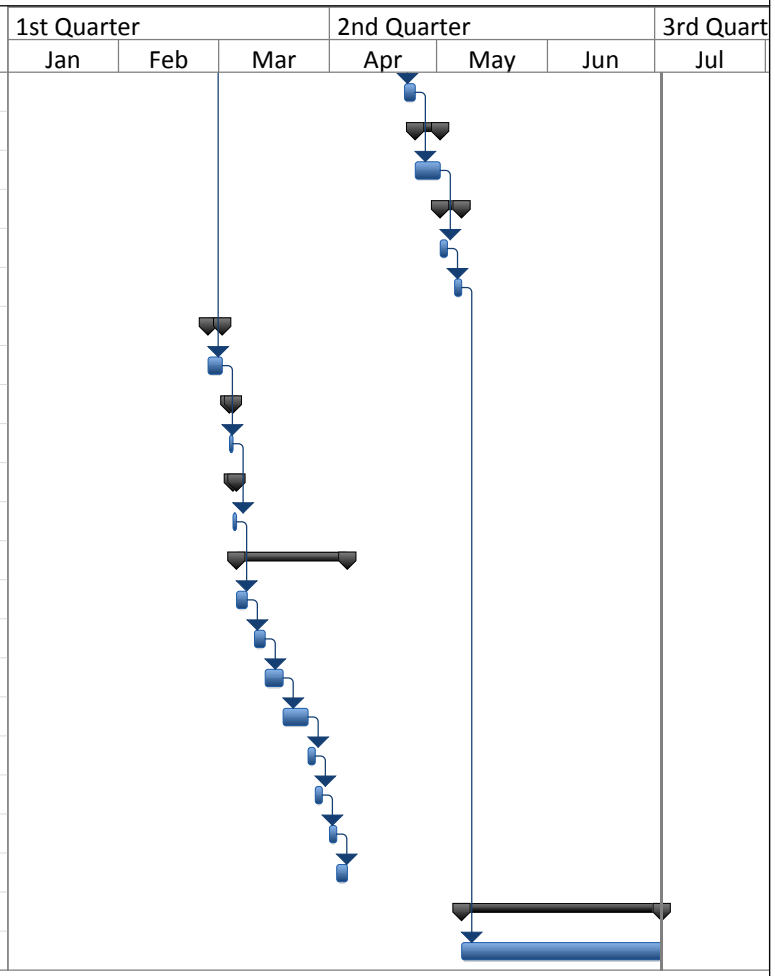
Iatan Common Retirement Gantt

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 Gantt

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	**Post Retirement Closure Activities**	**40 days**
55	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		$83,519		
Equipment Rental		$300,672		
Consummables		$399,504		
Scrap Crew(s)		$605,380		
Dismantlement		$13,326,501		
DGC Insurance	2.00%	$294,312		
Contingency/Profit	15.00%	$2,251,483		
Performance Bond	2.00%	$345,227.41		
Contractor Costs Total:			$17,606,598	
Total:				$17,606,598
Owner Internal Costs:	5.00%			$880,330
Owner Contingency:	25.00%			$4,621,732
Iatan Common Dismantlement Opinion of Probable Cost:				$23,108,660

Iatan Common Dismantlement

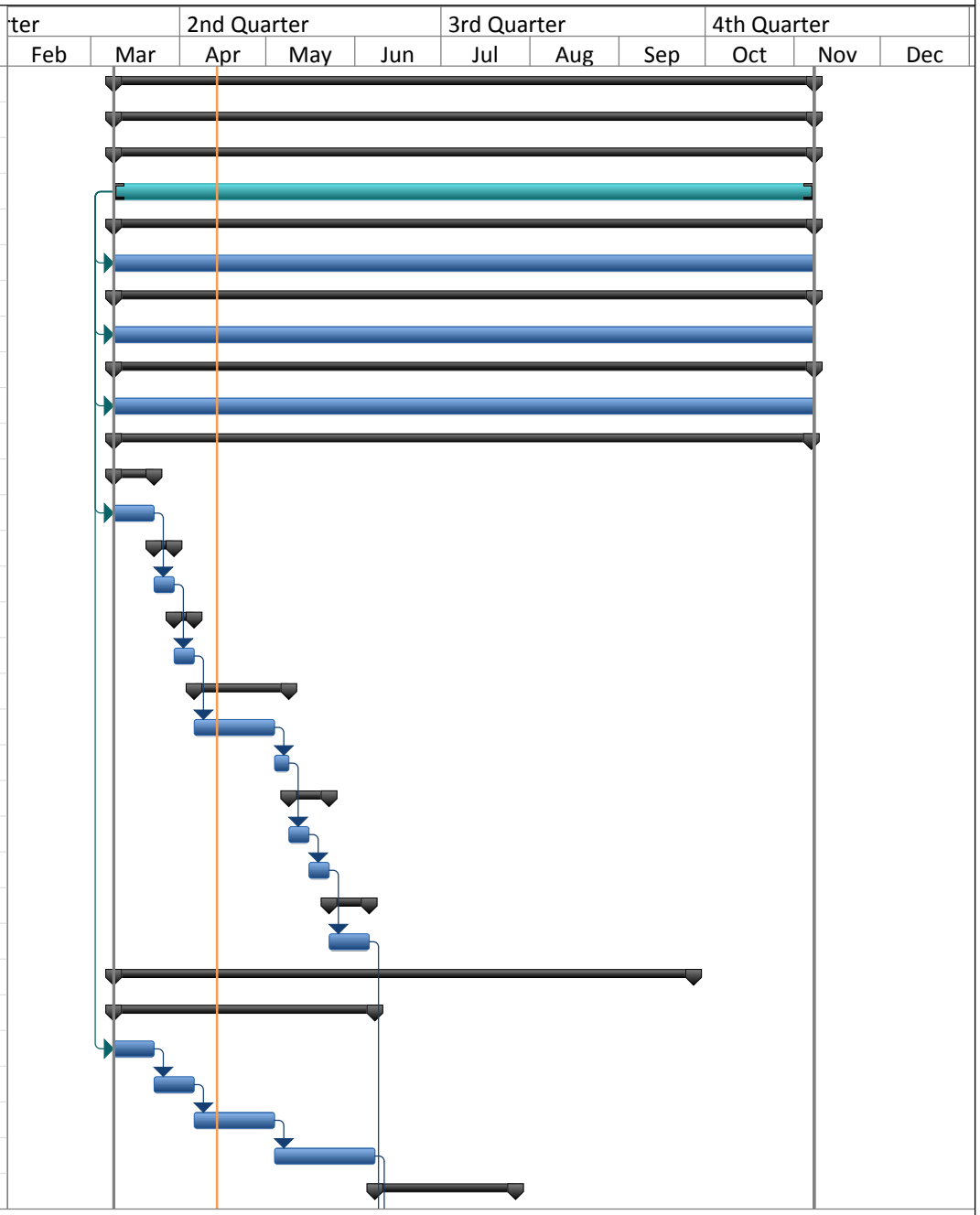
ID	Task Name	Cost
1	**Iatan Common Dismantlement**	**$14,715,577.60**
2	**Overheads**	**$1,389,076.80**
3	**Common Removal Overheads**	**$83,519.99**
4	Added Overhead Staff for Common Removals	$83,519.99
5	**Common Removal Equipment Rental**	**$300,672.00**
6	Common Removal Equipment Rental	$300,672.00
7	**Scrap Crew**	**$605,380.88**
8	Crew(s) to Handle Scrap Material	$605,380.88
9	**Demolition Contractor Consummables**	**$399,504.00**
10	Consummables	$399,504.00
11	**Dismantlement Activities**	**$13,326,501.12**
12	**Administration Building**	**$34,792.00**
13	Remove Administration Building	$34,792.00
14	**Fuel Yard Office Building**	**$17,396.00**
15	Remove Fuel Yard Office Building	$17,396.00
16	**Training Building**	**$17,396.00**
17	Remove Training Building	$17,396.00
18	**Parking Lots and Plant Roads**	**$80,021.60**
19	Plant Roads and Parking Areas	$69,584.00
20	Guard Shack	$10,437.60
21	**Warehouse(s)**	**$34,792.00**
22	Remove Unit 1 Warehouse	$17,396.00
23	Remove Unit 2 Warehouse	$17,396.00
24	**Maintenance Shop**	**$22,544.80**
25	Remove Maintenance Shop	$22,544.80
26	**Fuel Yard**	**$730,632.00**
27	**Remove Transfer Towers**	**$452,296.00**
28	Transfer Tower 1	$34,792.00
29	Transfer Tower 2	$34,792.00
30	Crusher Building	$69,584.00
31	Stockout Conveyor Reclaim Pit	$86,980.00
32	**Remove Conveyors**	**$121,772.00**
33	Conveyor 2A, 4, 5B 6A, 6B, 7A and 7B	$121,772.00
34	**Remove Car Dumper**	**$86,980.00**
35	Remove Underground Equipment	$17,396.00
36	Remove Above Ground Equipment	$34,792.00
37	Remove Building	$17,396.00
38	Backfill Dumper Structure	$17,396.00
39	**Remove Stacker/Reclaimer**	**$6,958.40**
40	Remove Stacker/Reclaimer	$3,479.20
41	**Remove Unit 1 Reclaim**	**$62,625.60**
42	Remove Underground Equipment	$17,396.00
43	Remove Above Ground Equipment	$17,396.00
44	Remove Building	$13,916.80

Iatan Common Dismantlement

ID	Task Name	Cost
45	Backfill Structure	$13,916.80
46	**Sewage Treatment**	**$20,875.20**
47	Remove Sewage Treatment Pumps and Miscellaneous Equipment	$6,958.40
48	Remove Sewage Treatment Concrete Structures	$13,916.80
49	**Yard Fire Water Systems**	**$34,792.00**
50	Remove Hydrants and Fire Water System Piping Down to 3' Below Grade	$34,792.00
51	**Stacks**	**$10,506,215.04**
52	Remove Unit 1 Stack to Grade	$4,000,000.00
53	Remove Common Stack to Grade	$6,506,215.04
54	**Reagent Prep and Gypsum Handling**	**$327,044.80**
55	Remove Limestone Unloading Facility	$34,792.00
56	Remove Limestone Storage Facility	$17,396.00
57	Remove Limestone Conveyor	$17,396.00
58	Remove Limestone Prep Building	$139,168.00
59	Remove Gypsum Stackout Conveyor	$17,396.00
60	Remove PCM-1	$6,958.40
61	Remove PCM-2	$6,958.40
62	Remove the Vacuum Pump and Air Compressor Building	$69,584.00
63	Remove Miscellaneous Equipment	$17,396.00
64	**Final Site Grading and Drainage**	**$1,500,000.00**
65	Final Site Grading and Drainage	$1,500,000.00

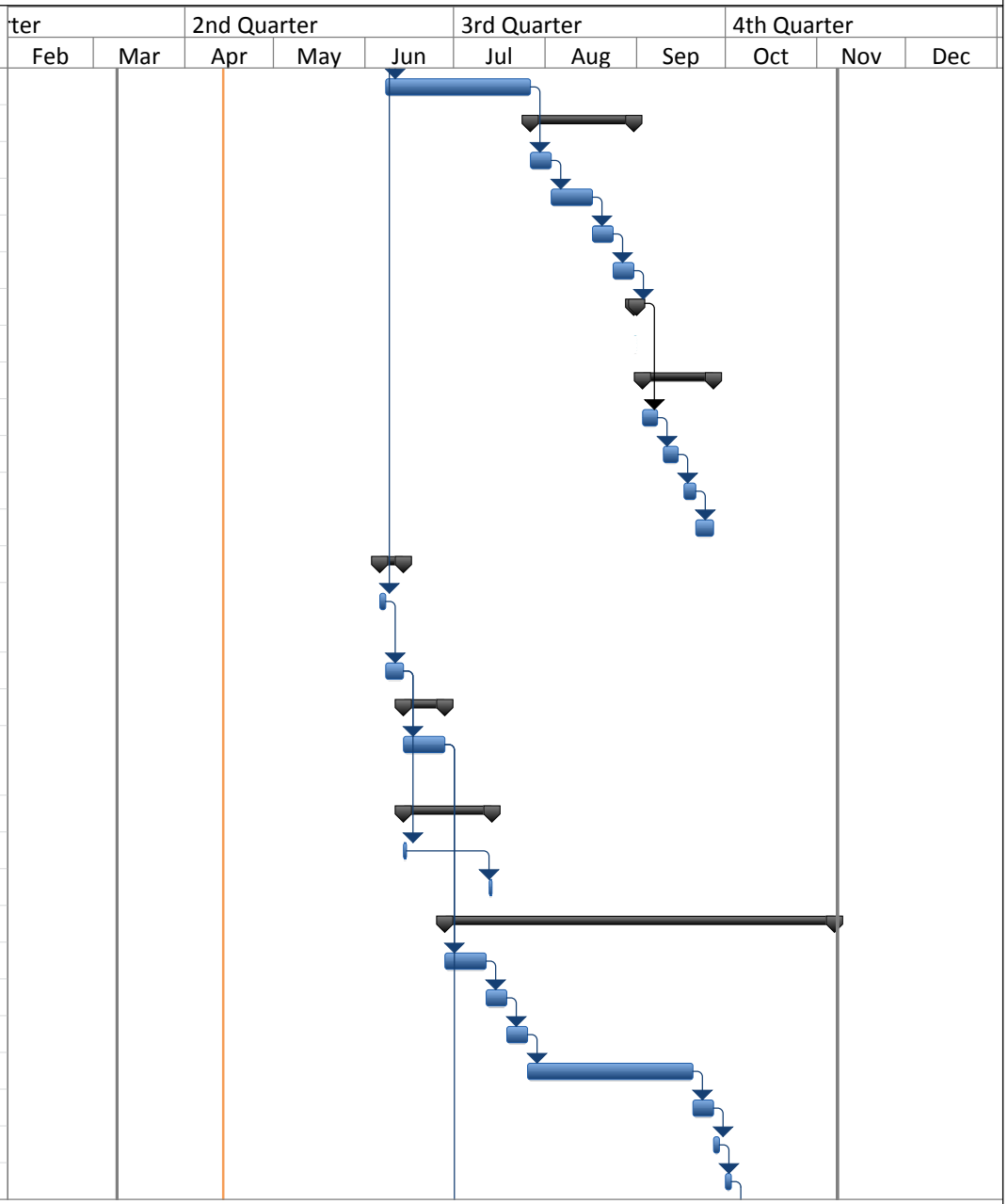
Iatan Common Dismantlement

ID	Task Name	Duration
1	**Iatan Common Dismantlement**	**174 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**	**173 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**



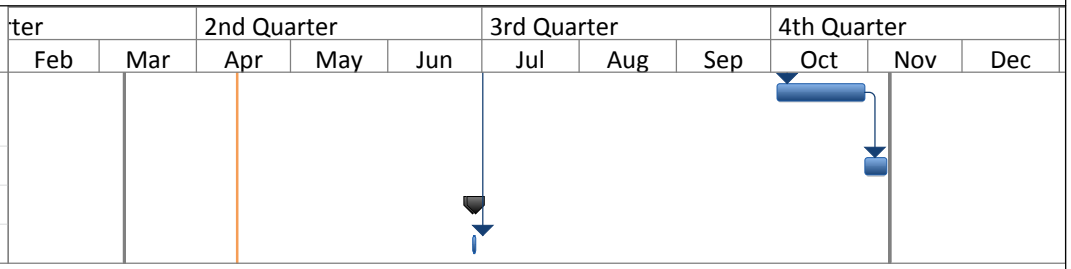
Iatan Common Dismantlement

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	1 day
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	**Stacks**	**22 days**
52	Remove Unit 1 Stack to Grade	1 day
53	Remove Common Stack to Grade	1 day
54	**Reagent Prep and Gypsum Handling**	**94 days**
55	Remove Limestone Unloading Facility	10 days
56	Remove Limestone Storage Facility	5 days
57	Remove Limestone Conveyor	5 days
58	Remove Limestone Prep Building	40 days
59	Remove Gypsum Stackout Conveyor	5 days
60	Remove PCM-1	2 days
61	Remove PCM-2	2 days



Iatan Common Dismantlement

ID	Task Name	Duration
62	Remove the Vacuum Pump and Air Compressor Building	20 days
63	Remove Miscellaneous Equipment	5 days
64	**Final Site Grading and Drainage**	**1 day**
65	Final Site Grading and Drainage	1 day



NORTHEAST

NORTHEAST

The Northeast Generating Station consists of eight fuel oil-fired combustion turbine generator sets.

Together these Combustion turbines have a total SPP-accredited unit rating of 408 MW. The units are designated numbers 11 through 18, and were added to an existing steam electric generating plant site during the 1970s. Units 11 and 12 began service in 1972; Units 13 and 14 in 1975; Units 15 and 16 in 1976; and Units 17 and 18 in 1977. Each unit is comprised of a General Electric Model 7B combustion turbine and each pair of units is connected to a three-winding generator step-up transformer and is provided with auxiliary power through a common bus. Each combustion turbine employs standard annular combustor technology and burns only distillate or ultra-low sulfur fuel oil. Diesel starting means is provided and Northeast is a designated black-start facility.

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).

NORTHEAST UNITS 11 THROUGH 18

1. Combustion turbine generator sets and auxiliaries (eight).
2. Generator step-up and auxiliary transformers (four).
3. Exhaust stacks (eight).

COMMON

1. Service building.
2. Fuel oil unloading, storage, and forwarding equipment.
3. Service/Instrument air compressors.

Northeast Retirement

Owner Costs			
Pre-Retirement Activities		$41,320	
Retirement Activities		$292,166	
Post Retirement Activities		$42,560	
Owner Direct Total			$376,046
Owner Internal Costs	5.00%		$18,802
Owner Contingency:	25.00%		$98,712
Northeast Retirement Opinion of Probable Cost:			$493,560.38

Activities Required by Permit or Regulation

Northeast Fuel Oil Tank Removal	$497,984	
Activities Required by Permit or Regulation:		$497,984

Northeast Retirement

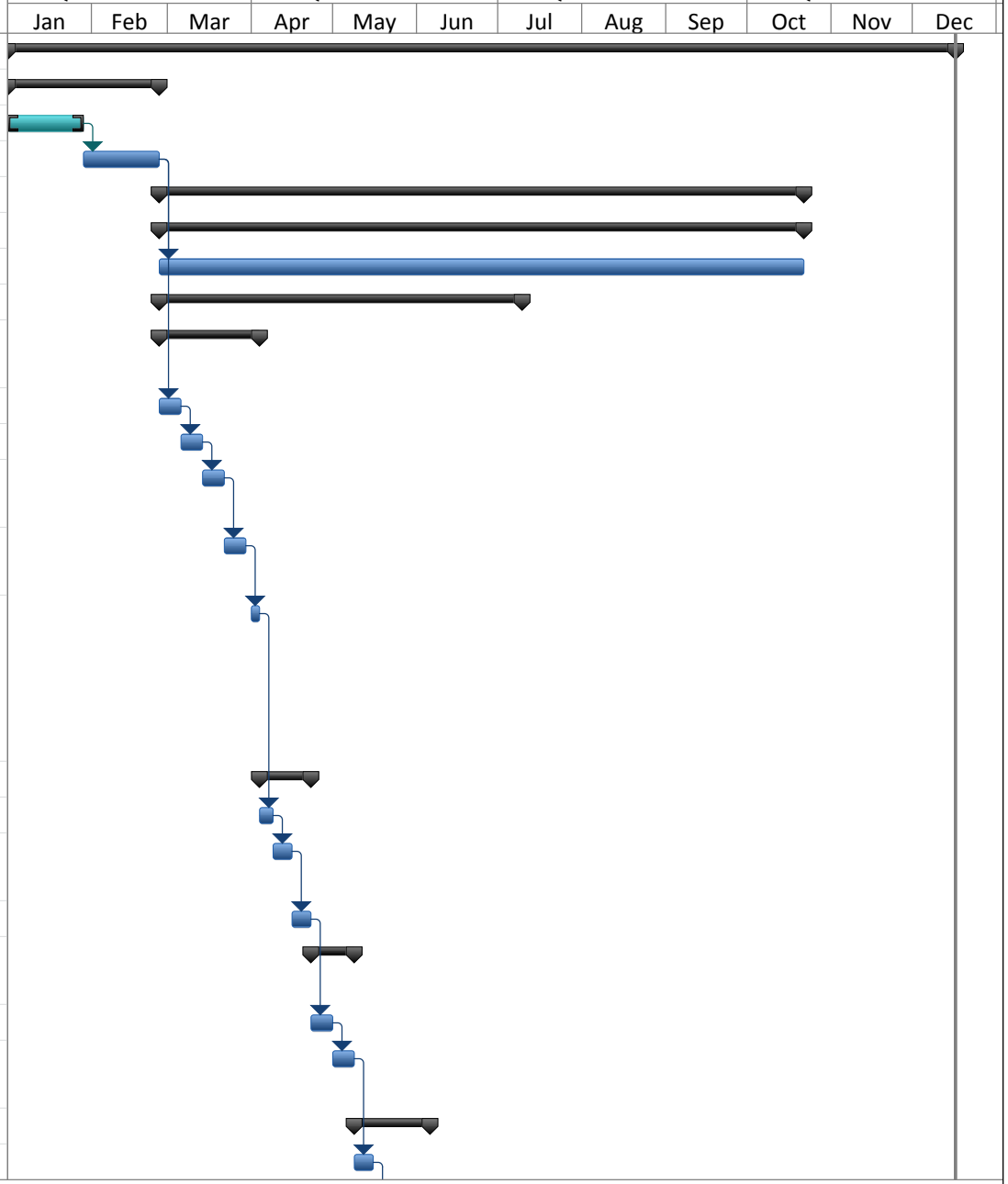
ID	Task Name	Cost
1	**Northeast Retirement**	**$376,046.40**
2	**Pre-Retirement Activities**	**$41,320.00**
3	Permitting Review	$22,120.00
4	Develop Detailed Retirement Plan	$19,200.00
5	**Retirement Activities**	**$292,166.40**
6	**Project Management During Retirement**	**$128,520.00**
7	Project Management During Retirement	$128,520.00
8	**Electrical**	**$83,450.88**
9	**Medium and Low Voltage Drawout Switchgear**	**$23,470.56**
10	De-energize all buses at the source.	$5,215.68
11	Open all circuit breakers.	$5,215.68
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	$5,215.68
13	Verify that the closing/tripping springs are discharged.	$5,215.68
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.	$2,607.84
15	**Motor Control Centers**	**$11,300.64**
16	De-energize all buses at the source.	$2,607.84
17	Open all circuit breakers and disconnect switches.	$4,346.40
18	Remove all fuses in control circuits.	$4,346.40
19	**Low-voltage Switchboards and Panelboards**	**$10,431.36**
20	De-energize all buses at the source.	$5,215.68
21	Open all circuit breakers and disconnect switches.	$5,215.68
22	**Oil-Filled Power Transformers**	**$17,385.60**
23	De-energize all buses at the source.	$4,346.40
24	Open all circuit breakers and disconnect switches.	$4,346.40
25	De-energize all buses at the source.	$4,346.40
26	Open all circuit breakers and disconnect switches.	$4,346.40
27	**Dry-type Power Transformers**	**$7,823.52**
28	De-energize all transformer primaries and verify that the secondary is de-energized.	$4,346.40
29	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.	$3,477.12
30	**Motors**	**$13,039.20**
31	De-energize all primary power at the source.	$4,346.40
32	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$4,346.40
33	Drain lube oil system (if applicable) and dispose of oil.	$4,346.40
34	**Fuel Oil System**	**$5,464.40**
35	Isolate Fuel Oil System	$3,793.20

Northeast Retirement

ID	Task Name	Cost
36	Drain and Vent Fuel Oil Piping	$1,671.20
37	**Lube Oil Cooling Water System**	**$9,191.60**
38	Open and Drain the Water Side of the Lube Oil Coolers	$6,684.80
39	Open and Vent the Coolers and Expansion Tank	$2,506.80
40	**Oily Drain Tank**	**$3,810.72**
41	Open and Pump Out the Oily Drain Tank	$3,810.72
42	**Compressed Air**	**$3,342.40**
43	Empty Dessiccant Air Dryers and Vent	$1,671.20
44	Open and Vent the Air Reciever	$1,671.20
45	**Miscelleaneous Piping**	**$14,205.20**
46	Open and Vent the Exhaust Frame Cooling Piping	$2,506.80
47	Open and Vent the Inlet Air Heating Piping	$2,506.80
48	Open & Vent the CT Air Process Piping	$6,684.80
49	Open and Vent the CT Air Processing Piping	$2,506.80
50	**Fire Protection Piping**	**$6,653.60**
51	Empty the CO2 Storage Tank	$4,982.40
52	Open and Vent the Fire Protection Piping	$1,671.20
53	**Lube Oil System**	**$28,711.20**
54	Empty and Remove from Site the Lubricating Oil	$18,684.00
55	Drain Lubricating Oil Piping	$8,356.00
56	Open and Vent Lubricating Oil Piping	$1,671.20
57	**Potable Water**	**$2,563.20**
58	Disconnect Potable Water at Property Boundary	$2,563.20
59	**Waste Water**	**$3,793.20**
60	Disconnect Waste Water at Property Boundary	$3,793.20
61	**Unleaded Gasoline Fueling Station**	**$2,460.00**
62	Drain the Unleaded Gasoline Fueling Station	$2,460.00
63	**Post Retirement Closure Activity**	**$42,560.00**
64	Post Retirement Closure Activity	$42,560.00

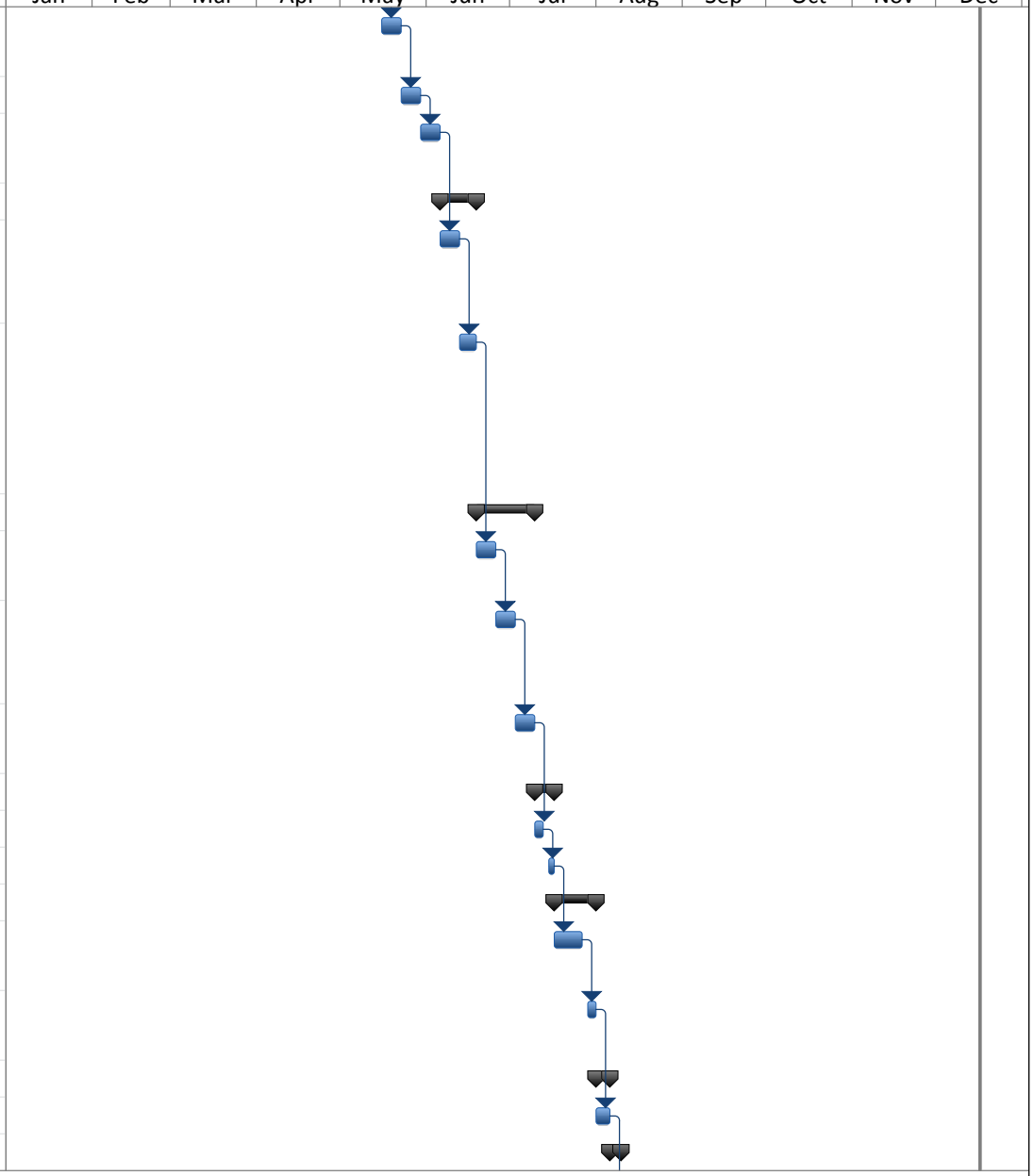
Northeast Retirement

ID	Task Name	Duration
1	**Northeast Retirement**	**250 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement Activities**	**170 days**
6	**Project Management During Retirement**	**170 days**
7	Project Management During Retirement	170 days
8	**Electrical**	**96 days**
9	**Medium and Low Voltage Drawout Switchgear**	**27 days**
10	De-energize all buses at the source.	6 days
11	Open all circuit breakers.	6 days
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	6 days
13	Verify that the closing/tripping springs are discharged.	6 days
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.	3 days
15	**Motor Control Centers**	**13 days**
16	De-energize all buses at the source.	3 days
17	Open all circuit breakers and disconnect switches.	5 days
18	Remove all fuses in control circuits.	5 days
19	**Low-voltage Switchboards and Panelboards**	**12 days**
20	De-energize all buses at the source.	6 days
21	Open all circuit breakers and disconnect switches.	6 days
22	**Oil-Filled Power Transformers**	**20 days**
23	De-energize all buses at the source.	5 days



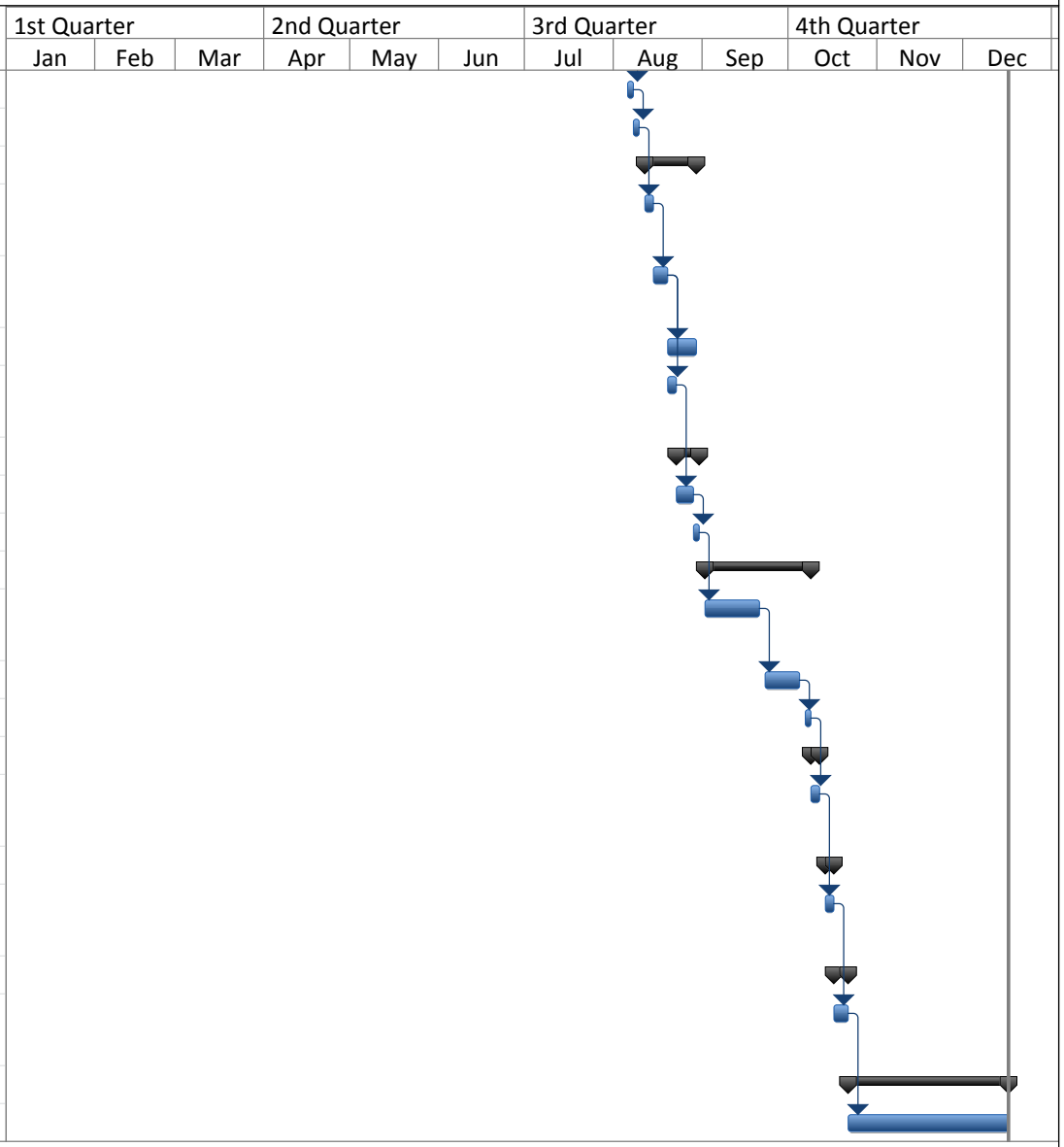
Northeast Retirement

ID	Task Name	Duration
24	Open all circuit breakers and disconnect switches.	5 days
25	De-energize all buses at the source.	5 days
26	Open all circuit breakers and disconnect switches.	5 days
27	**Dry-type Power Transformers**	**9 days**
28	De-energize all transformer primaries and verify that the secondary is de-energized.	5 days
29	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
30	**Motors**	**15 days**
31	De-energize all primary power at the source.	5 days
32	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	5 days
33	Drain lube oil system (if applicable) and dispose of oil.	5 days
34	**Fuel Oil System**	**5 days**
35	Isolate Fuel Oil System	3 days
36	Drain and Vent Fuel Oil Piping	2 days
37	**Lube Oil Cooling Water System**	**11 days**
38	Open and Drain the Water Side of the Lube Oil Coolers	8 days
39	Open and Vent the Coolers and Expansion Tank	3 days
40	**Oily Drain Tank**	**3 days**
41	Open and Pump Out the Oily Drain Tank	3 days
42	**Compressed Air**	**4 days**



Northeast Retirement

ID	Task Name	Duration
43	Empty Dessiccant Air Dryers and Vent	2 days
44	Open and Vent the Air Reciever	2 days
45	**Miscelleaneous Piping**	**14 days**
46	Open and Vent the Exhaust Frame Cooling Piping	3 days
47	Open and Vent the Inlet Air Heating Piping	3 days
48	Open & Vent the CT Air Process Piping	8 days
49	Open and Vent the CT Air Processing Piping	3 days
50	**Fire Protection Piping**	**6 days**
51	Empty the CO2 Storage Tank	4 days
52	Open and Vent the Fire Protection Piping	2 days
53	**Lube Oil System**	**27 days**
54	Empty and Remove from Site the Lubricating Oil	15 days
55	Drain Lubricating Oil Piping	10 days
56	Open and Vent Lubricating Oil Piping	2 days
57	**Potable Water**	**3 days**
58	Disconnect Potable Water at Property Boundary	3 days
59	**Waste Water**	**3 days**
60	Disconnect Waste Water at Property Boundary	3 days
61	**Unleaded Gasoline Fueling Station**	**3 days**
62	Drain the Unleaded Gasoline Fueling Station	3 days
63	**Post Retirement Closure Activity**	**40 days**
64	Post Retirement Closure Activity	40 days



Northeast Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$782,068		
Overhead During Dismantlement		$1,148,400		
Post-Dismantlement Activities		$61,760		
Owner Costs Total			$1,992,228	
Demolition General Contractor (DGC) Costs				
Site Management		$681,120		
Equipment Rental		$1,137,840		
Consummables		$1,135,200		
Scrap Crew(s)		$304,629		
Dismantlement		$1,060,108		
DGC Insurance	2.00%	$86,378		
Contingency/Profit	15.00%	$660,791		
Performance Bond	2.00%	$101,321		
Contractor Costs Total:			$5,167,388	
Total:				$7,159,616
Owner Internal Costs:	5.00%			$357,981
Owner Contingency:	25.00%			$1,879,399
Northeast Dismantlement Opinion of Probable Cost:				$9,396,995

Northeast CT Dismantlement

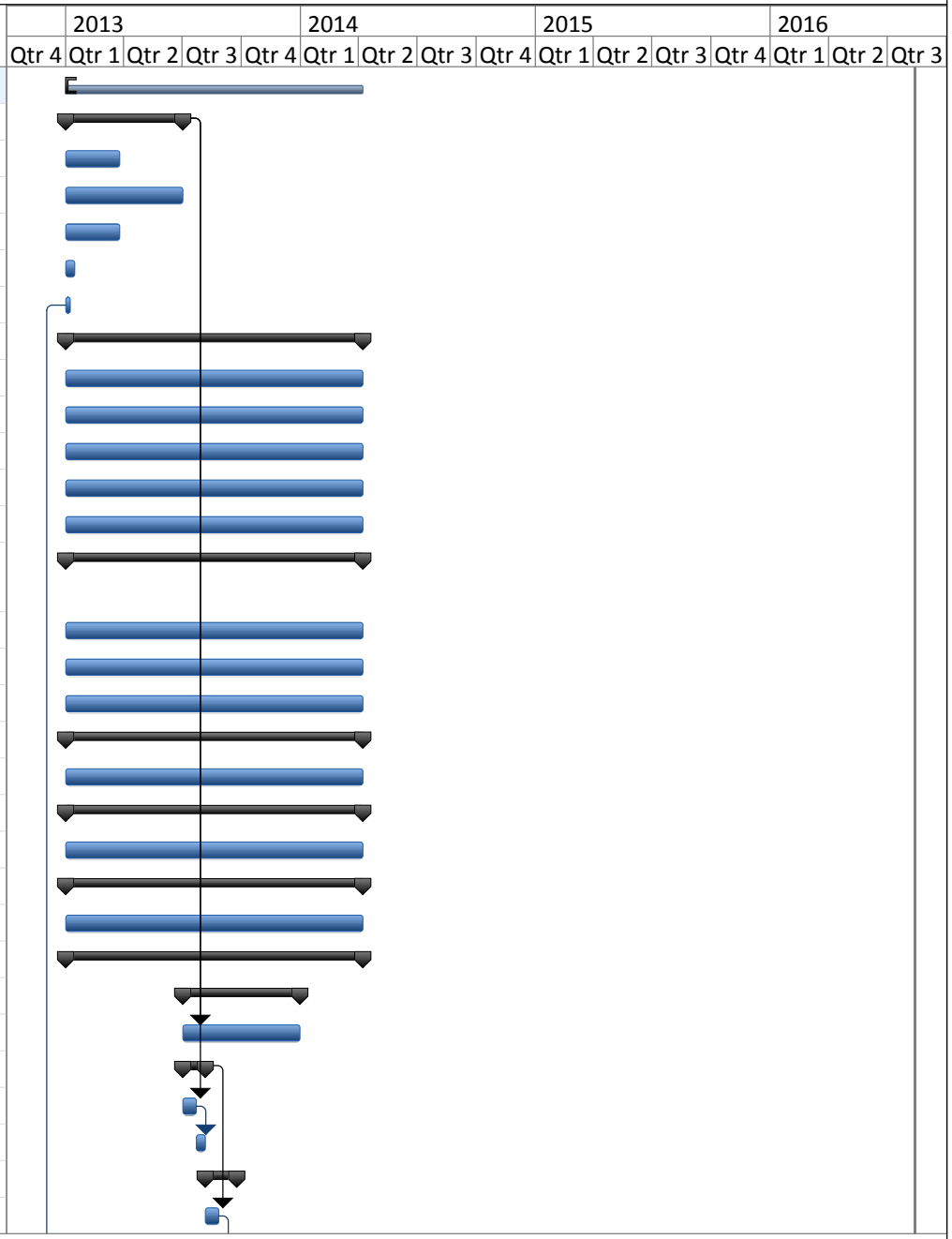
ID	Task Name	Cost
1	**Northeast CT Dismantlement**	**$6,311,126.24**
2	**Pre-Demolition Activities**	**$782,068.00**
3	Detailed Planning & Hire Owner's Engineer	$98,448.00
4	Detailed Site Characterization Study	$525,148.00
5	Hire Demolition general Contractor	$149,544.00
6	KCP&L Prepares Unit for Dismantlement	$8,928.00
7	Demolition Contractor Mobilizes on Sit	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,148,400.00**
9	KCP&L Project Manager	$192,720.00
10	KCP&L Administrative Support	$71,280.00
11	KCP&L Engineer	$316,800.00
12	Owners Engineer Project Manager	$92,400.00
13	Owners Engineer - Engineer	$475,200.00
14	**Demolition Contractor Overhead during Dismantlement**	**$681,120.00**
15	Demolition Contractor Project Manager	$192,720.00
16	Demolition Contractor Safety Manager	$171,600.00
17	Demolition Contractor Superintendent	$316,800.00
18	**Demolition Contractor Equipment Rental Cost**	**$1,137,840.00**
19	Equipment Rental	$1,137,840.00
20	**Demolition Contractor Consumables**	**$1,135,200.00**
21	Consumables	$1,135,200.00
22	**Scrap Crews**	**$304,629.60**
23	Crew to Handle Scrap Material(s)	$304,629.60
24	**Dismantlement**	**$1,060,108.64**
25	**Electrical**	**$226,148.00**
26	Electrical Demolition of Equipment	$226,148.00
27	**Fuel Oil System**	**$25,527.44**
28	Remove Above Ground Fuel Oil Piping	$8,131.44
29	Fuel Skids	$17,396.00
30	**Lube Oil System**	**$60,886.00**
31	Lube Oil Piping	$26,094.00
32	Lube Oil Pumps	$17,396.00
33	Lube Oil Tanks	$17,396.00
34	**Fire Protection**	**$57,406.80**
35	Fire Protection Piping	$27,833.60
36	Firewater Tank	$15,656.40
37	CO2 Storage Tank	$13,916.80
38	**Miscellaneous Piping**	**$81,761.20**
39	Exhaust Frame Cooling Piping	$26,094.00
40	CT Air Processing Piping	$29,573.20
41	Inlet Air Heating Piping	$26,094.00
42	**Generator**	**$86,980.00**
43	Generator	$86,980.00
44	**Combustion Turbine**	**$247,023.20**

Northeast CT Dismantlement

ID	Task Name	Cost
45	Inlet Heater	$17,396.00
46	Inlet duct	$29,573.20
47	Exhaust duct	$34,792.00
48	Combustion Turbine	$104,376.00
49	Combustion Turbine Foundation	$26,094.00
50	Enclosure	$34,792.00
51	**CEMS**	**$17,396.00**
52	CEMS Building	$8,698.00
53	CEMS Building Foundation	$8,698.00
54	**Stack**	**$69,584.00**
55	Stacks	$69,584.00
56	**Site Buildings**	**$17,396.00**
57	Remove Site Buildings	$17,396.00
58	**Site Prep**	**$170,000.00**
59	Final Grading and Drainage	$170,000.00
60	**Post Dismantlement Activities**	**$61,760.00**
61	Post Dismantlement Activities	$61,760.00

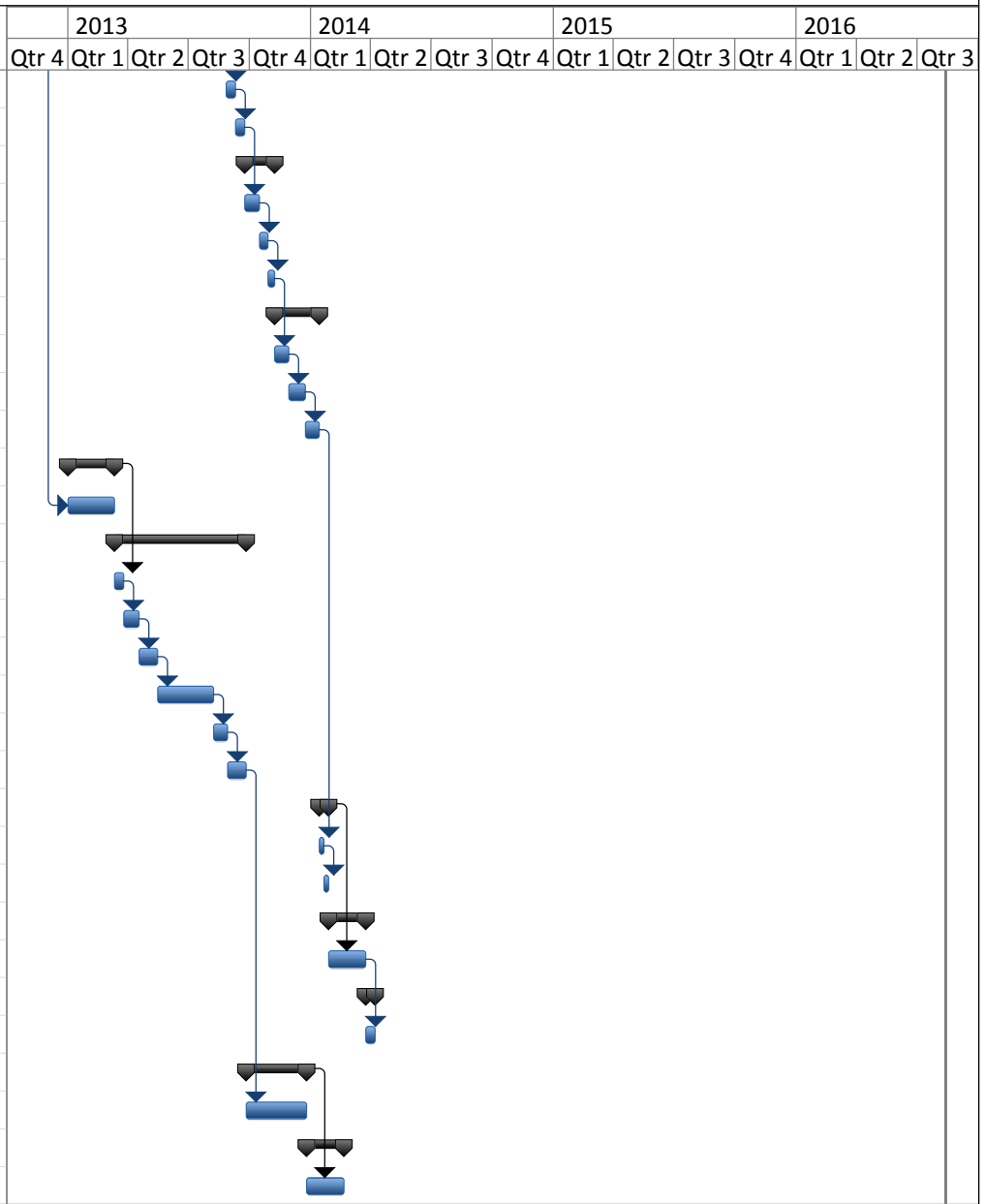
Northeast Dismantlement

ID	Task Name	Duration
1	**Northeast CT Dismantlement**	
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**	**330 days**
9	KCP&L Project Manager	330 days
10	KCP&L Administrative Support	330 days
11	KCP&L Engineer	330 days
12	Owners Engineer Project Manager	330 days
13	Owners Engineer - Engineer	330 days
14	**Demolition Contractor Overhead during Dismantlement**	**330 days**
15	Demolition Contractor Project Manager	330 days
16	Demolition Contractor Safety Manager	330 days
17	Demolition Contractor Superintendent	330 days
18	**Demolition Contractor Equipment Rental Cost**	**330 days**
19	Equipment Rental	330 days
20	**Demolition Contractor Consumables**	**330 days**
21	Consumables	330 days
22	**Scrap Crews**	**330 days**
23	Crew to Handle Scrap Material(s)	330 days
24	**Dismantlement**	**330 days**
25	**Electrical**	**130 days**
26	Electrical Demolition of Equipment	130 days
27	**Fuel Oil System**	**25 days**
28	Remove Above Ground Fuel Oil Piping	15 days
29	Fuel Skids	10 days
30	**Lube Oil System**	**35 days**
31	Lube Oil Piping	15 days



Northeast Dismantlement

ID	Task Name	Duration
32	Lube Oil Pumps	10 days
33	Lube Oil Tanks	10 days
34	**Fire Protection**	**33 days**
35	Fire Protection Piping	16 days
36	Firewater Tank	9 days
37	CO2 Storage Tank	8 days
38	**Miscellaneous Piping**	**47 days**
39	Exhaust Frame Cooling Piping	15 days
40	CT Air Processing Piping	17 days
41	Inlet Air Heating Piping	15 days
42	**Generator**	**50 days**
43	Generator	50 days
44	**Combustion Turbine**	**142 days**
45	Inlet Heater	10 days
46	Inlet duct	17 days
47	Exhaust duct	20 days
48	Combustion Turbine	60 days
49	Combustion Turbine Foundation	15 days
50	Enclosure	20 days
51	**CEMS**	**10 days**
52	CEMS Building	5 days
53	CEMS Building Foundation	5 days
54	**Stack**	**40 days**
55	Stacks	40 days
56	**Site Buildings**	**10 days**
57	Remove Site Buildings	10 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



HAWTHORN UNITS 7 AND 8

HAWTHORN UNITS 7 AND 8

Hawthorn Units 7 and 8 are twin natural gas-fired combustion turbine generator sets that were added to the existing Hawthorn Generating Station in 2000.

Each of these combustion turbines has an SPP-accredited unit rating of 77 MW and is comprised of a General Electric Model 7EA combustion turbine. The pair is interconnected to the grid through a single, three-winding generator step-up transformer arrangement. Each combustion turbine employs dry low NO_X burner technology and burns only natural gas fuel.

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).

HAWTHORN UNITS 7 AND 8

1. Combustion turbine generator sets and auxiliaries (two).
2. Generator step-up and auxiliary transformers (one).
3. Freestanding outdoor switchgear.
4. Exhaust stacks.

COMMON

1. Natural gas filtering skid.
2. Service/Instrument air compressors.

Hawthorn 7 & 8 Retirement

Owner Costs			
Pre-Retirement Activities		$41,320	
Retirement Activities		$164,393	
Post-Retirement Activities		$42,560	
Owner Direct Total			$248,273
Owner Internal Costs	5.00%		$12,414
Owner Contingency:	25.00%		$65,172

Hawthorn 7 & 8 Retirement Opinion of Probable Cost: $313,444.66

Hawthorn 7 & 8 Retirement

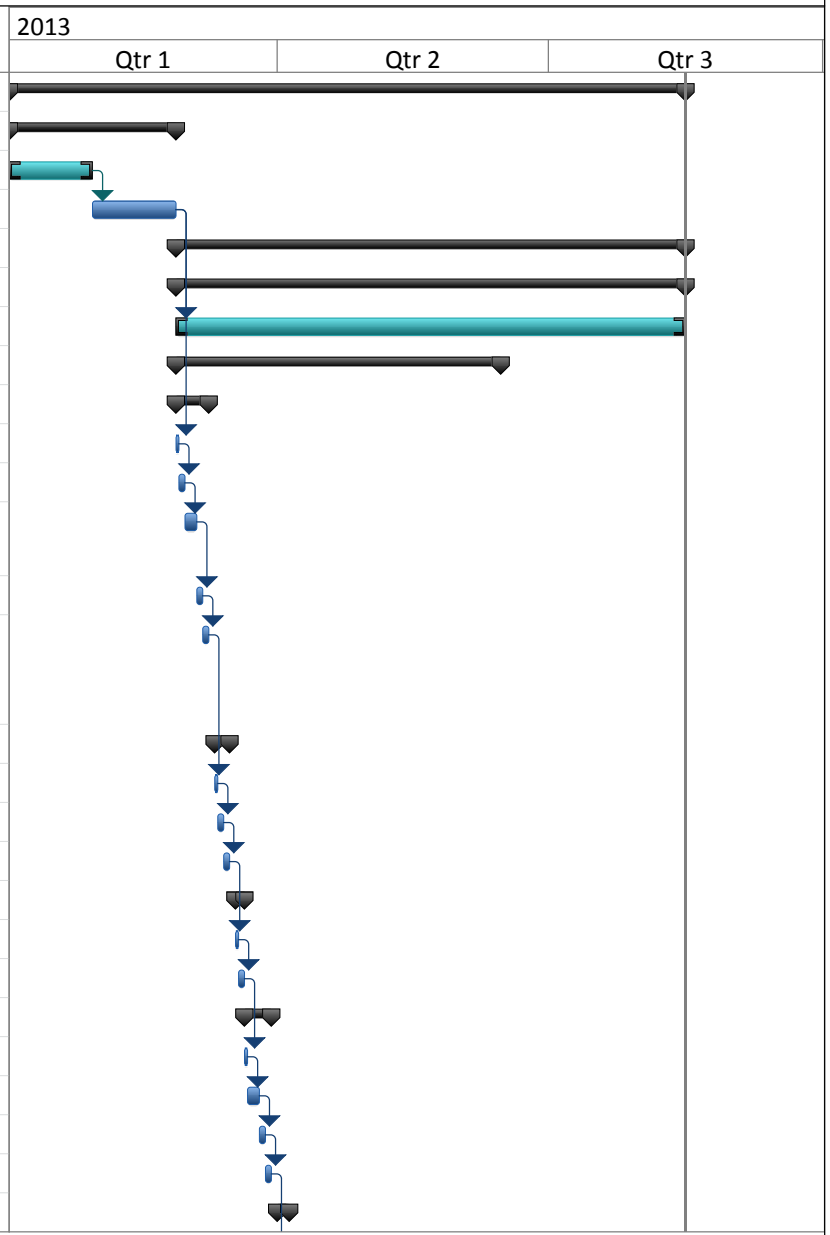
ID	Task Name	Cost
1	**Hawthorn 7&8 Retirement**	**$248,273.92**
2	**Pre-Retirement Activities**	**$41,320.00**
3	Permitting Review	$22,120.00
4	Develop Detailed Retirement Plan	$19,200.00
5	**Retirement Activities**	**$164,393.92**
6	**Project Management During Retirement**	**$91,758.00**
7	Project Management During Retirement	$91,758.00
8	**Electrical**	**$72,635.92**
9	**Medium and Low Voltage Drawout Switchgear**	**$7,823.52**
10	De-energize all buses at the source.	$869.28
11	Open all circuit breakers.	$1,738.56
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	$1,738.56
13	Verify that the closing/tripping springs are discharged.	$1,738.56
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.	$1,738.56
15	**Motor Control Centers**	**$4,346.40**
16	De-energize all buses at the source.	$869.28
17	Open all circuit breakers and disconnect switches.	$1,738.56
18	Remove all fuses in control circuits.	$1,738.56
19	**Low-voltage Switchboards and Panelboards**	**$2,607.84**
20	De-energize all buses at the source.	$869.28
21	Open all circuit breakers and disconnect switches.	$1,738.56
22	**Oil-Filled Power Transformers**	**$6,084.96**
23	De-energize all buses at the source.	$869.28
24	Open all circuit breakers and disconnect switches.	$1,738.56
25	De-energize all buses at the source.	$1,738.56
26	Open all circuit breakers and disconnect switches.	$1,738.56
27	**Dry-type Power Transformers**	**$3,477.12**
28	De-energize all transformer primaries and verify that the secondary is de-energized.	$1,738.56
29	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.	$1,738.56
30	**Motors**	**$6,084.96**
31	De-energize all primary power at the source.	$869.28
32	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$1,738.56
33	Drain lube oil system (if applicable) and dispose of oil.	$3,477.12
34	**Fuel Gas System**	**$10,462.40**
35	Isolate Fuel Gas System	$3,793.20
36	Vent Fuel Gas Piping and Equipment	$2,460.00
37	Open and Vent Knock-Out Drum	$835.60

Hawthorn 7 & 8 Retirement

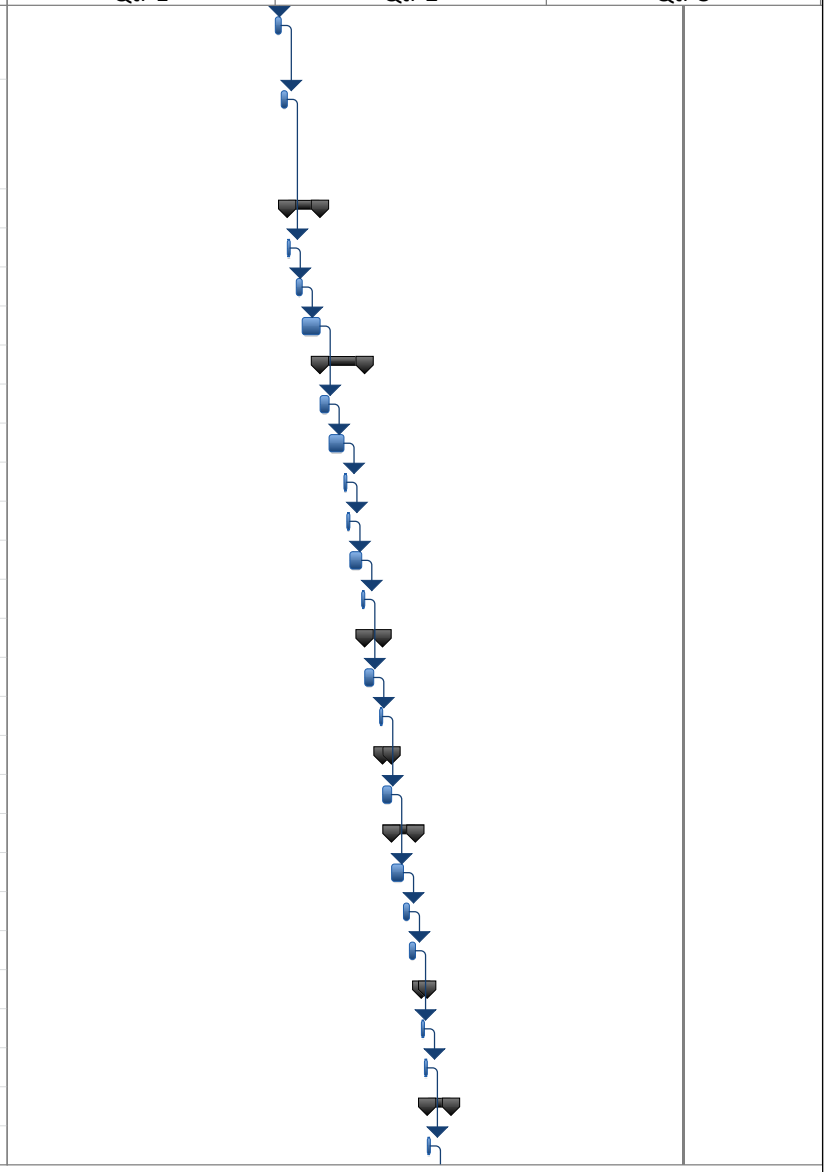
ID	Task Name	Cost
38	Drain, Open and Vent the Drain Tank	$835.60
39	Empty the Coalescing Filter	$1,702.40
40	Open and Vent Equipment on the CT Gas Valve Module	$835.60
41	**Lube Oil Cooling Water System**	**$3,342.40**
42	Open and Drain the Water Side of the Lube Oil Coolers	$2,506.80
43	Open and Vent the Coolers and Expansion Tank	$835.60
44	**Oily Drain Tank**	**$3,810.72**
45	Open and Pump Out the Oily Drain Tank	$3,810.72
46	**Wash Water Skid**	**$5,013.60**
47	Open and Drain the Detergent Tank	$1,671.20
48	Open and Drain the Demineralized Water Tank	$1,671.20
49	Empty the Demineralized Water Tank	$1,671.20
50	**Compressed Air**	**$1,671.20**
51	Empty Dessiccant Air Dryers and Vent	$835.60
52	Open and Vent the Air Reciever	$835.60
53	**Miscelleaneous Piping**	**$5,013.60**
54	Open and Vent the Exhaust Frame Cooling Piping	$835.60
55	Open and Vent the CT Air Processing Piping	$1,671.20
56	Open and Vent the Inlet Air Heating Piping	$835.60
57	Open and Vent the CT Air Processing Piping	$1,671.20
58	**Fire Protection Piping**	**$3,326.80**
59	Empty the CO2 Storage Tank	$2,491.20
60	Open and Vent the Fire Protection Piping	$835.60
61	**Lube Oil System**	**$9,570.40**
62	Empty and Remove from Site the Lubricating Oil	$6,228.00
63	Drain Lubricating Oil Piping	$2,506.80
64	Open and Vent Lubricating Oil Piping	$835.60
65	**Post Retirement Closure Activity**	**$42,560.00**
66	Post Retirement Closure Activity	$42,560.00

Hawthorn 7 & 8 Retirement

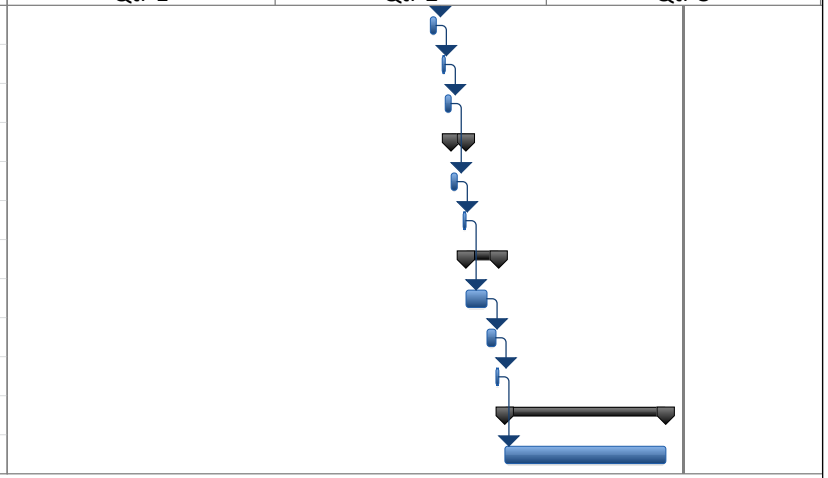
ID	Task Name	Duration
1	**Hawthorn 7&8 Retirement**	**163 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement Activities**	**123 days**
6	**Project Management During Retirement**	**123 days**
7	Project Management During Retirement	123 days
8	**Electrical**	**79 days**
9	**Medium and Low Voltage Drawout Switchgear**	**9 days**
10	De-energize all buses at the source.	1 day
11	Open all circuit breakers.	2 days
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	2 days
13	Verify that the closing/tripping springs are discharged.	2 days
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.	2 days
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	**Oil-Filled Power Transformers**	**7 days**
23	De-energize all buses at the source.	1 day
24	Open all circuit breakers and disconnect switches.	2 days
25	De-energize all buses at the source.	2 days
26	Open all circuit breakers and disconnect switches.	2 days
27	**Dry-type Power Transformers**	**4 days**



ID	Task Name	Duration
28	De-energize all transformer primaries and verify that the secondary is de-energized.	2 days
29	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.	2 days
30	**Motors**	**7 days**
31	De-energize all primary power at the source.	1 day
32	De-energize all low-voltage power sources for space heaters or	2 days
33	Drain lube oil system (if applicable) and dispose of oil.	4 days
34	**Fuel Gas System**	**11 days**
35	Isolate Fuel Gas System	3 days
36	Vent Fuel Gas Piping and Equipment	3 days
37	Open and Vent Knock-Out Drum	1 day
38	Drain, Open and Vent the Drain Tank	1 day
39	Empty the Coalescing Filter	2 days
40	Open and Vent Equipment on the CT Gas Valve Module	1 day
41	**Lube Oil Cooling Water System**	**4 days**
42	Open and Drain the Water Side of the Lube Oil Coolers	3 days
43	Open and Vent the Coolers and Expansion Tank	1 day
44	**Oily Drain Tank**	**3 days**
45	Open and Pump Out the Oily Drain Tank	3 days
46	**Wash Water Skid**	**6 days**
47	Open and Drain the Detergent Tank	2 days
48	Open and Drain the Demineralized Water Tank	2 days
49	Empty the Demineralized Water Tank	2 days
50	**Compressed Air**	**2 days**
51	Empty Dessiccant Air Dryers and Vent	1 day
52	Open and Vent the Air Reciever	1 day
53	**Miscelleaneous Piping**	**6 days**
54	Open and Vent the Exhaust Frame Cooling Piping	1 day



ID	Task Name	Duration
55	Open and Vent the CT Air Processing Piping	2 days
56	Open and Vent the Inlet Air Heating Piping	1 day
57	Open and Vent the CT Air Processing Piping	2 days
58	**Fire Protection Piping**	**3 days**
59	Empty the CO2 Storage Tank	2 days
60	Open and Vent the Fire Protection Piping	1 day
61	**Lube Oil System**	**9 days**
62	Empty and Remove from Site the Lubricating Oil	5 days
63	Drain Lubricating Oil Piping	3 days
64	Open and Vent Lubricating Oil Piping	1 day
65	**Post Retirement Closure Activity**	**40 days**
66	Post Retirement Closure Activity	40 days



Hawthorn 7 & 8 Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$782,068		
Overhead During Dismantlement		$817,800		
Post-Dismantlement Activities		$30,880		
Owner Costs Total			$1,630,748	
Demolition General Contractor (DGC) Costs				
Site Management		$485,040		
Equipment Rental		$810,280		
Consummables		$808,400		
Scrap Crew(s)		$216,933		
Dismantlement		$542,063		
DGC Insurance	2.00%	$57,254		
Contingency/Profit	15.00%	$437,996		
Performance Bond	2.00%	$67,159		
Contractor Costs Total:			$3,425,125	
Total:				$5,055,873
Owner Internal Costs:	5.00%			$252,794
Owner Contingency:	25.00%			$1,327,167
Hawthorn 7 & 8 Dismantlement Opinion of Probable Cost:				$6,635,834

Hawthorn 7 & 8 Dismantlement

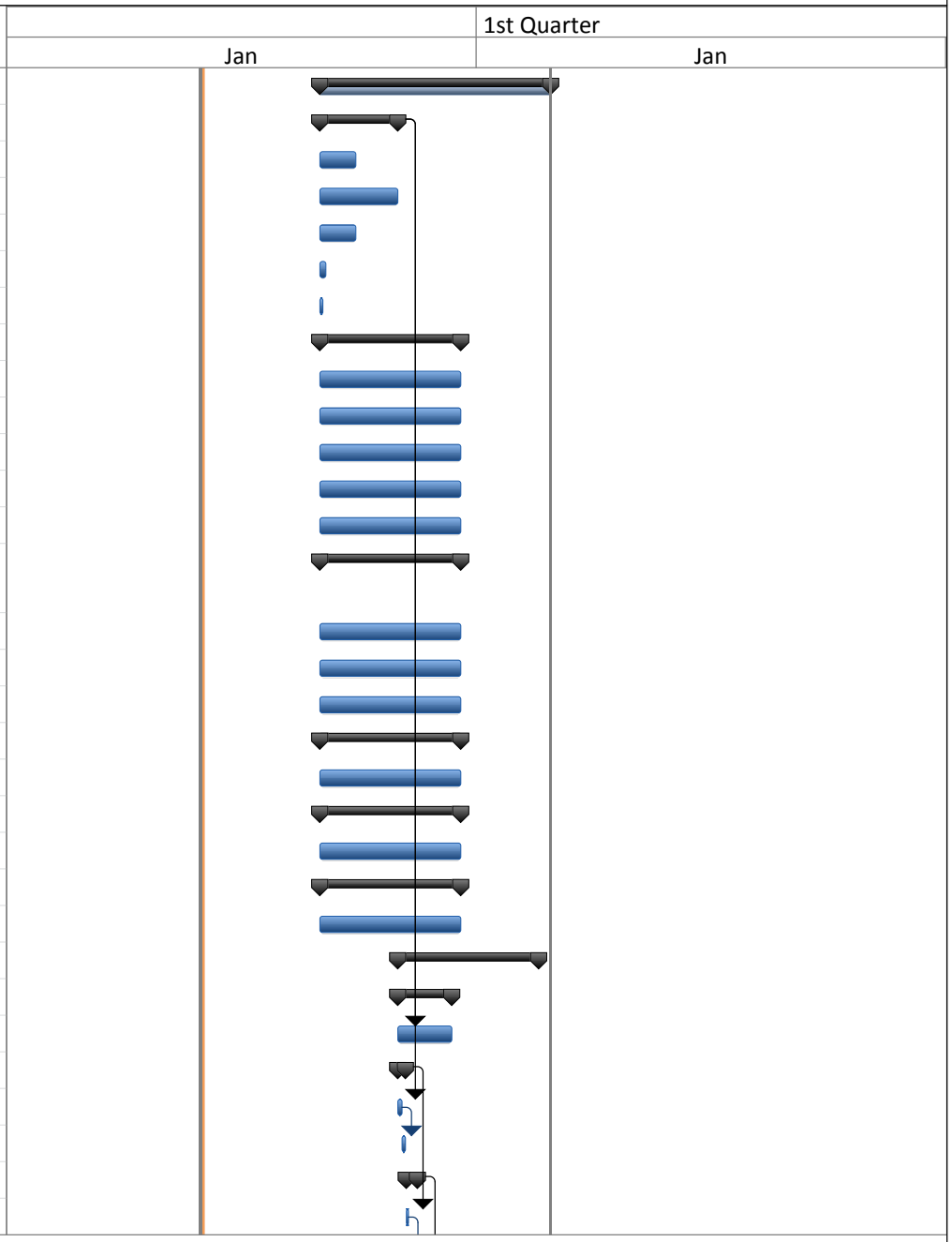
ID	Task Name	Cost
1	**Hawthorn 7&8 Dismantlement**	**$4,493,465.15**
2	**Pre-Demolition Activities**	**$782,068.00**
3	Detailed Planning & Hire Owner's Engineer	$98,448.00
4	Detailed Site Characterization Study	$525,148.00
5	Hire Demolition general Contractor	$149,544.00
6	KCP&L Prepares Unit for Dismantlement	$8,928.00
7	Demolition Contractor Mobilizes on Sit	$0.00
8	**KCP&L Overhead during Dismantlement**	**$817,800.04**
9	KCP&L Project Manager	$137,240.01
10	KCP&L Administrative Support	$50,760.00
11	KCP&L Engineer	$225,600.02
12	Owners Engineer Project Manager	$65,800.00
13	Owners Engineer - Engineer	$338,400.00
14	**Demolition Contractor Overhead during Dismantlement**	**$485,040.05**
15	Demolition Contractor Project Manager	$137,240.01
16	Demolition Contractor Safety Manager	$122,200.01
17	Demolition Contractor Superintendent	$225,600.02
18	**Demolition Contractor Equipment Rental Cost**	**$810,280.08**
19	Equipment Rental	$810,280.08
20	**Demolition Contractor Consumables**	**$808,400.08**
21	Consumables	$808,400.08
22	**Scrap Crews**	**$216,933.22**
23	Crew to Handle Scrap Material(s)	$216,933.22
24	**Dismantlement**	**$542,063.68**
25	**Electrical**	**$156,564.00**
26	Electrical Demolition of Equipment	$156,564.00
27	**Fuel Gas System**	**$14,964.88**
28	Remove all above grade fuel gas piping.	$4,527.28
29	Gas Filter Skid	$10,437.60
30	**Lube Oil System**	**$34,792.00**
31	Lube Oil Piping	$8,698.00
32	Lube Oil Pumps	$8,698.00
33	Lube Oil Tanks	$17,396.00
34	**Fire Protection**	**$38,271.20**
35	Fire Protection Piping	$17,396.00
36	Firewater Tank	$13,916.80
37	CO2 Storage Tank	$6,958.40
38	**Wash Water Skid**	**$13,916.80**
39	Detergent Tank	$6,958.40
40	Demineralized Water Tank	$6,958.40
41	**Miscellaneous Piping**	**$48,708.80**
42	Exhaust Frame Cooling Piping	$13,916.80
43	CT Air Processing Piping	$17,396.00
44	Inlet Air Heating Piping	$17,396.00

Hawthorn 7 & 8 Dismantlement

ID	Task Name	Cost
45	**Generator**	**$0.00**
46	Generator	$0.00
47	**Combustion Turbine**	**$165,262.00**
48	Inlet Heater	$13,916.80
49	Inlet duct	$20,875.20
50	Exhaust duct	$26,094.00
51	Combustion Turbine	$53,927.60
52	Combustion Turbine Foundation	$22,614.80
53	Enclosure	$27,833.60
54	**CEMS**	**$24,354.40**
55	CEMS Building	$12,177.20
56	CEMS Building Foundation	$12,177.20
57	**Stack**	**$45,229.60**
58	Stack	$45,229.60
59	**Post Dismantlement Activities**	**$30,880.00**
60	Post Dismantlement Activities	$30,880.00

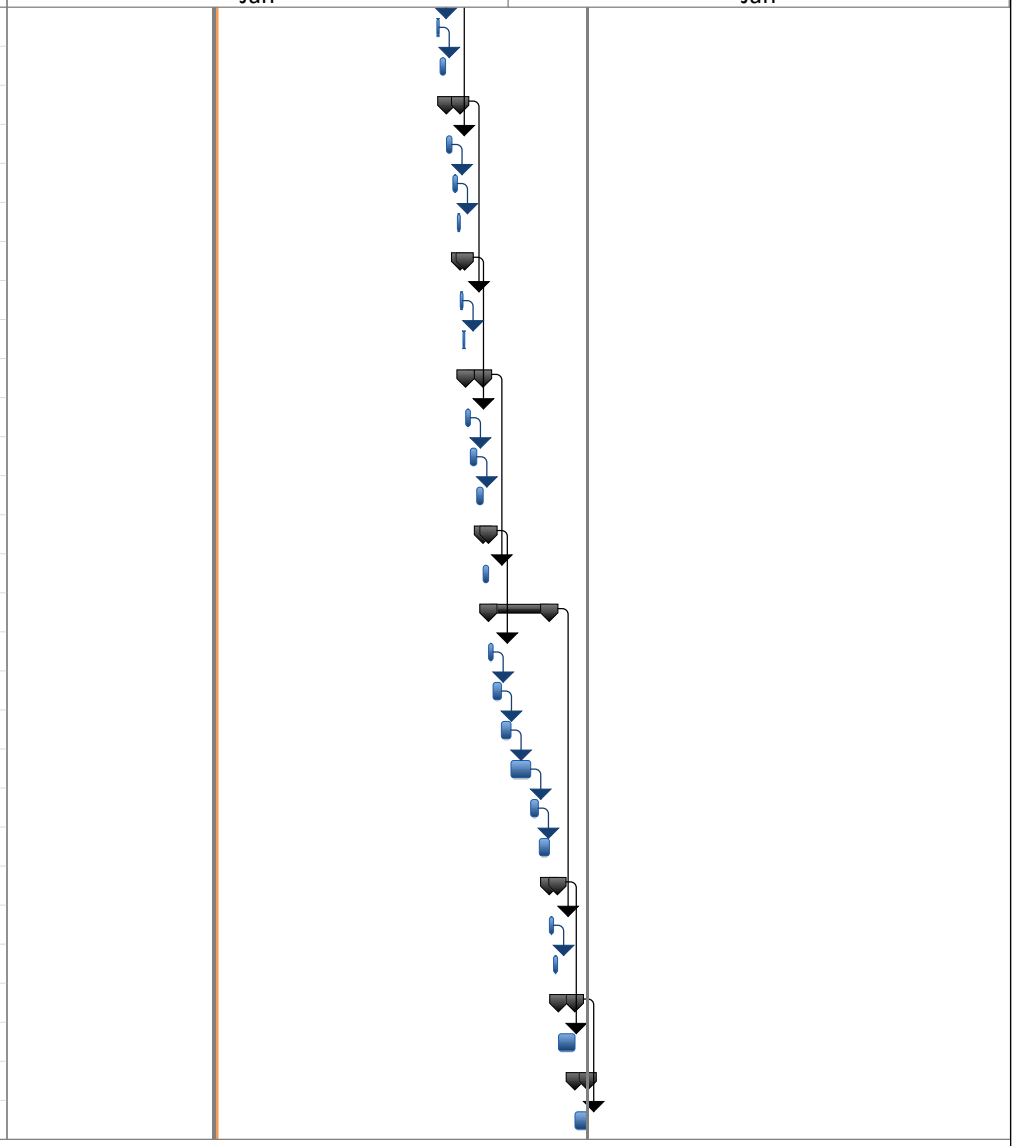
Hawthorn 7 & 8 Dismantlement

ID	Task Name	Duration
1	**Hawthorn 7&8 Dismantlement**	**385 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**	**235 days**
9	KCP&L Project Manager	235 days
10	KCP&L Administrative Support	235 days
11	KCP&L Engineer	235 days
12	Owners Engineer Project Manager	235 days
13	Owners Engineer - Engineer	235 days
14	**Demolition Contractor Overhead during Dismantlement**	**235 days**
15	Demolition Contractor Project Manager	235 days
16	Demolition Contractor Safety Manager	235 days
17	Demolition Contractor Superintendent	235 days
18	**Demolition Contractor Equipment Rental Cost**	**235 days**
19	Equipment Rental	235 days
20	**Demolition Contractor Consumables**	**235 days**
21	Consumables	235 days
22	**Scrap Crews**	**235 days**
23	Crew to Handle Scrap Material(s)	235 days
24	**Dismantlement**	**235 days**
25	**Electrical**	**90 days**
26	Electrical Demolition of Equipment	90 days
27	**Fuel Gas System**	**14 days**
28	Remove all above grade fuel gas piping.	8 days
29	Gas Filter Skid	6 days
30	**Lube Oil System**	**20 days**
31	Lube Oil Piping	5 days



Hawthorn 7 & 8 Dismantlement

ID	Task Name	Duration
32	Lube Oil Pumps	5 days
33	Lube Oil Tanks	10 days
34	**Fire Protection**	**22 days**
35	Fire Protection Piping	10 days
36	Firewater Tank	8 days
37	CO2 Storage Tank	4 days
38	**Wash Water Skid**	**8 days**
39	Detergent Tank	4 days
40	Demineralized Water Tank	4 days
41	**Miscellaneous Piping**	**28 days**
42	Exhaust Frame Cooling Piping	8 days
43	CT Air Processing Piping	10 days
44	Inlet Air Heating Piping	10 days
45	**Generator**	**8 days**
46	Generator	8 days
47	**Combustion Turbine**	**95 days**
48	Inlet Heater	8 days
49	Inlet duct	12 days
50	Exhaust duct	15 days
51	Combustion Turbine	31 days
52	Combustion Turbine Foundation	13 days
53	Enclosure	16 days
54	**CEMS**	**14 days**
55	CEMS Building	7 days
56	CEMS Building Foundation	7 days
57	**Stack**	**26 days**
58	Stack	26 days
59	**Post Dismantlement Activities**	**20 days**
60	Post Dismantlement Activities	20 days



WEST GARDNER

WEST GARDNER

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

Combined these combustion turbines have an SPP-accredited unit rating of 310 MW. West Gardner was placed in service in 2003. Each unit is comprised of a General Electric Model 7EA CT, with a generator step-up transformer and auxiliary power transformer. Each combustion turbine employs dry low NO_X burner technology and burns only natural gas fuel.

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).

WEST GARDNER UNITS 1 THROUGH 4

1. Combustion turbine generator sets and auxiliaries.
2. Generator step-up and auxiliary transformers.
3. Freestanding outdoor switchgear.
4. Exhaust stacks.

COMMON

1. Service building.
2. Natural gas filtering skid.
3. Service/Instrument air compressors.

West Gardner Retirement

Owner Costs			
Pre-Retirement Activities		$41,320	
Retirement Activities		$206,410	
Post-Retirement Activities		$42,560	
Owner Direct Total			$290,290
Owner Internal Costs:	5.00%		$14,515
Owner Contingency:	25.00%		$76,201

West Gardner Retirement Opinion of Probable Cost: $381,005.63

West Gardner Retirement

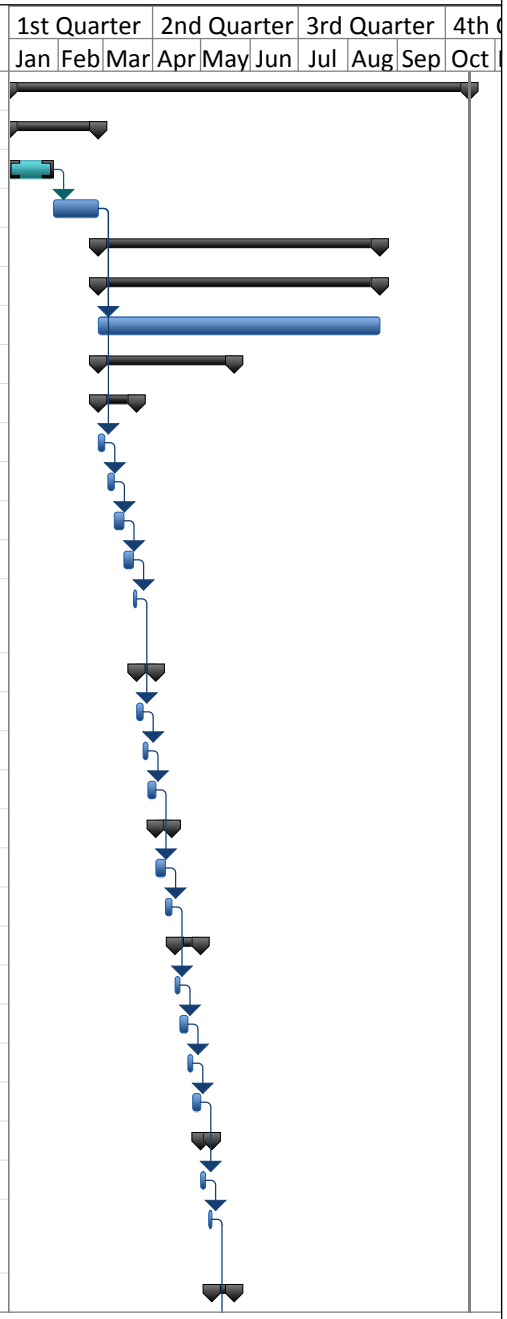
ID	Task Name	Cost
1	**West Gardner Retirement**	**$290,290.40**
2	**Pre-Retirement Activities**	**$41,320.00**
3	Permitting Review	$22,120.00
4	Develop Detailed Retirement Plan	$19,200.00
5	**Retirement Activities**	**$206,410.40**
6	**Project Management During Retirement**	**$95,256.00**
7	Project Management During Retirement	$95,256.00
8	**Electrical**	**$53,026.08**
9	**Medium and Low Voltage Drawout Switchgear**	**$15,647.04**
10	De-energize all buses at the source.	$3,477.12
11	Open all circuit breakers.	$3,477.12
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	$3,477.12
13	Verify that the closing/tripping springs are discharged.	$3,477.12
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.	$1,738.56
15	**Motor Control Centers**	**$6,954.24**
16	De-energize all buses at the source.	$1,738.56
17	Open all circuit breakers and disconnect switches.	$2,607.84
18	Remove all fuses in control circuits.	$2,607.84
19	**Low-voltage Switchboards and Panelboards**	**$6,954.24**
20	De-energize all buses at the source.	$3,477.12
21	Open all circuit breakers and disconnect switches.	$3,477.12
22	**Oil-Filled Power Transformers**	**$10,431.36**
23	De-energize all buses at the source.	$2,607.84
24	Open all circuit breakers and disconnect switches.	$2,607.84
25	De-energize all buses at the source.	$2,607.84
26	Open all circuit breakers and disconnect switches.	$2,607.84
27	**Dry-type Power Transformers**	**$4,346.40**
28	De-energize all transformer primaries and verify that the secondary is de-energized.	$2,607.84
29	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.	$1,738.56
30	**Motors**	**$8,692.80**
31	De-energize all primary power at the source.	$2,607.84
32	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$2,607.84
33	Drain lube oil system (if applicable) and dispose of oil.	$3,477.12
34	**Fuel Gas System**	**$10,462.40**
35	Isolate Fuel Gas System	$3,793.20
36	Vent Fuel Gas Piping and Equipment	$2,460.00
37	Open and Vent Knock-Out Drum	$835.60

West Gardner Retirement

ID	Task Name	Cost
38	Drain, Open and Vent the Drain Tank	$835.60
39	Empty the Coalescing Filter	$1,702.40
40	Open and Vent Equipment on the CT Gas Valve Module	$835.60
41	**Lube Oil Cooling Water System**	**$7,520.40**
42	Open and Drain the Water Side of the Lube Oil Coolers	$5,013.60
43	Open and Vent the Coolers and Expansion Tank	$2,506.80
44	**Oily Drain Tank**	**$3,810.72**
45	Open and Pump Out the Oily Drain Tank	$3,810.72
46	**Wash Water Skid**	**$5,013.60**
47	Open and Drain the Detergent Tank	$1,671.20
48	Open and Drain the Demineralized Water Tank	$1,671.20
49	Empty the Demineralized Water Tank	$1,671.20
50	**Compressed Air**	**$3,342.40**
51	Empty Dessiccant Air Dryers and Vent	$1,671.20
52	Open and Vent the Air Reciever	$1,671.20
53	**Miscelleaneous Piping**	**$7,520.40**
54	Open and Vent the Exhaust Frame Cooling Piping	$2,506.80
55	Open and Vent the CT Air Processing Piping	$0.00
56	Open and Vent the Inlet Air Heating Piping	$2,506.80
57	Open and Vent the CT Air Processing Piping	$2,506.80
58	**Fire Protection Piping**	**$6,653.60**
59	Empty the CO2 Storage Tank	$4,982.40
60	Open and Vent the Fire Protection Piping	$1,671.20
61	**Lube Oil System**	**$11,241.60**
62	Empty and Remove from Site the Lubricating Oil	$6,228.00
63	Drain Lubricating Oil Piping	$3,342.40
64	Open and Vent Lubricating Oil Piping	$1,671.20
65	**Potable Water**	**$2,563.20**
66	Disconnect Potable Water at Property Boundary	$2,563.20
67	**Post Retirement Closure Activity**	**$42,560.00**
68	Post Retirement Closure Activity	$42,560.00

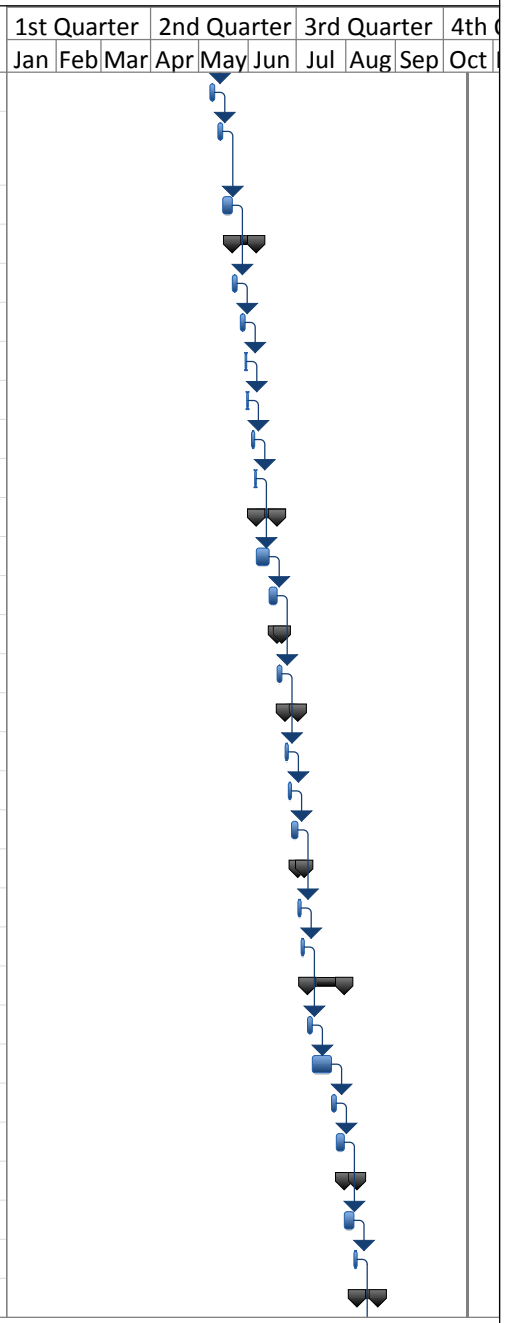
West Gardner Retirement

ID	Task Name	Duration
1	**West Gardner Retirement**	**206 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement Activities**	**126 days**
6	**Project Management During Retirement**	**126 days**
7	Project Management During Retirement	126 days
8	**Electrical**	**61 days**
9	**Medium and Low Voltage Drawout Switchgear**	**18 days**
10	De-energize all buses at the source.	4 days
11	Open all circuit breakers.	4 days
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	4 days
13	Verify that the closing/tripping springs are discharged.	4 days
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	2 days
15	**Motor Control Centers**	**8 days**
16	De-energize all buses at the source.	2 days
17	Open all circuit breakers and disconnect switches.	3 days
18	Remove all fuses in control circuits.	3 days
19	**Low-voltage Switchboards and Panelboards**	**8 days**
20	De-energize all buses at the source.	4 days
21	Open all circuit breakers and disconnect switches.	4 days
22	**Oil-Filled Power Transformers**	**12 days**
23	De-energize all buses at the source.	3 days
24	Open all circuit breakers and disconnect switches.	3 days
25	De-energize all buses at the source.	3 days
26	Open all circuit breakers and disconnect switches.	3 days
27	**Dry-type Power Transformers**	**5 days**
28	De-energize all transformer primaries and verify that the secondary is de-energized.	3 days
29	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	2 days
30	**Motors**	**10 days**



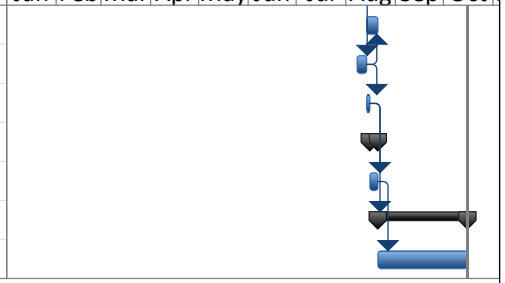
West Gardner Retirement

ID	Task Name	Duration
31	De-energize all primary power at the source.	3 days
32	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	3 days
33	Drain lube oil system (if applicable) and dispose of oil.	4 days
34	**Fuel Gas System**	**11 days**
35	Isolate Fuel Gas System	3 days
36	Vent Fuel Gas Piping and Equipment	3 days
37	Open and Vent Knock-Out Drum	1 day
38	Drain, Open and Vent the Drain Tank	1 day
39	Empty the Coalescing Filter	2 days
40	Open and Vent Equipment on the CT Gas Valve Module	1 day
41	**Lube Oil Cooling Water System**	**9 days**
42	Open and Drain the Water Side of the Lube Oil Coolers	6 days
43	Open and Vent the Coolers and Expansion Tank	3 days
44	**Oily Drain Tank**	**3 days**
45	Open and Pump Out the Oily Drain Tank	3 days
46	**Wash Water Skid**	**6 days**
47	Open and Drain the Detergent Tank	2 days
48	Open and Drain the Demineralized Water Tank	2 days
49	Empty the Demineralized Water Tank	2 days
50	**Compressed Air**	**4 days**
51	Empty Dessiccant Air Dryers and Vent	2 days
52	Open and Vent the Air Reciever	2 days
53	**Miscelleaneous Piping**	**17 days**
54	Open and Vent the Exhaust Frame Cooling Piping	3 days
55	Open and Vent the CT Air Processing Piping	8 days
56	Open and Vent the Inlet Air Heating Piping	3 days
57	Open and Vent the CT Air Processing Piping	3 days
58	**Fire Protection Piping**	**6 days**
59	Empty the CO2 Storage Tank	4 days
60	Open and Vent the Fire Protection Piping	2 days
61	**Lube Oil System**	**9 days**



West Gardner Retirement

ID	Task Name	Duration
62	Empty and Remove from Site the Lubricating Oil	5 days
63	Drain Lubricating Oil Piping	4 days
64	Open and Vent Lubricating Oil Piping	2 days
65	**Potable Water**	**3 days**
66	Disconnect Potable Water at Property Boundary	3 days
67	**Post Retirement Closure Activity**	**40 days**
68	Post Retirement Closure Activity	40 days



West Gardner Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$782,068		
Overhead During Dismantlement		$1,458,120		
Post-Dismantlement Activities		$46,320		
Owner Costs Total			$2,286,508	
Demolition General Contractor (DGC) Costs				
Site Management		$864,816		
Equipment Rental		$1,444,712		
Consummables		$1,441,360		
Scrap Crew(s)		$386,787		
Dismantlement		$900,927		
DGC Insurance	2.00%	$100,772		
Contingency/Profit	15.00%	$770,906		
Performance Bond	2.00%	$118,206		
Contractor Costs Total:			$6,028,486	
Total:				$8,314,994
Owner Internal Costs:	5.00%			$415,750
Owner Contingency:	25.00%			$2,182,686
West Gardner Dismantlement Opinion of Probable Cost:				$10,913,429

West Gardner CT Dismantlement

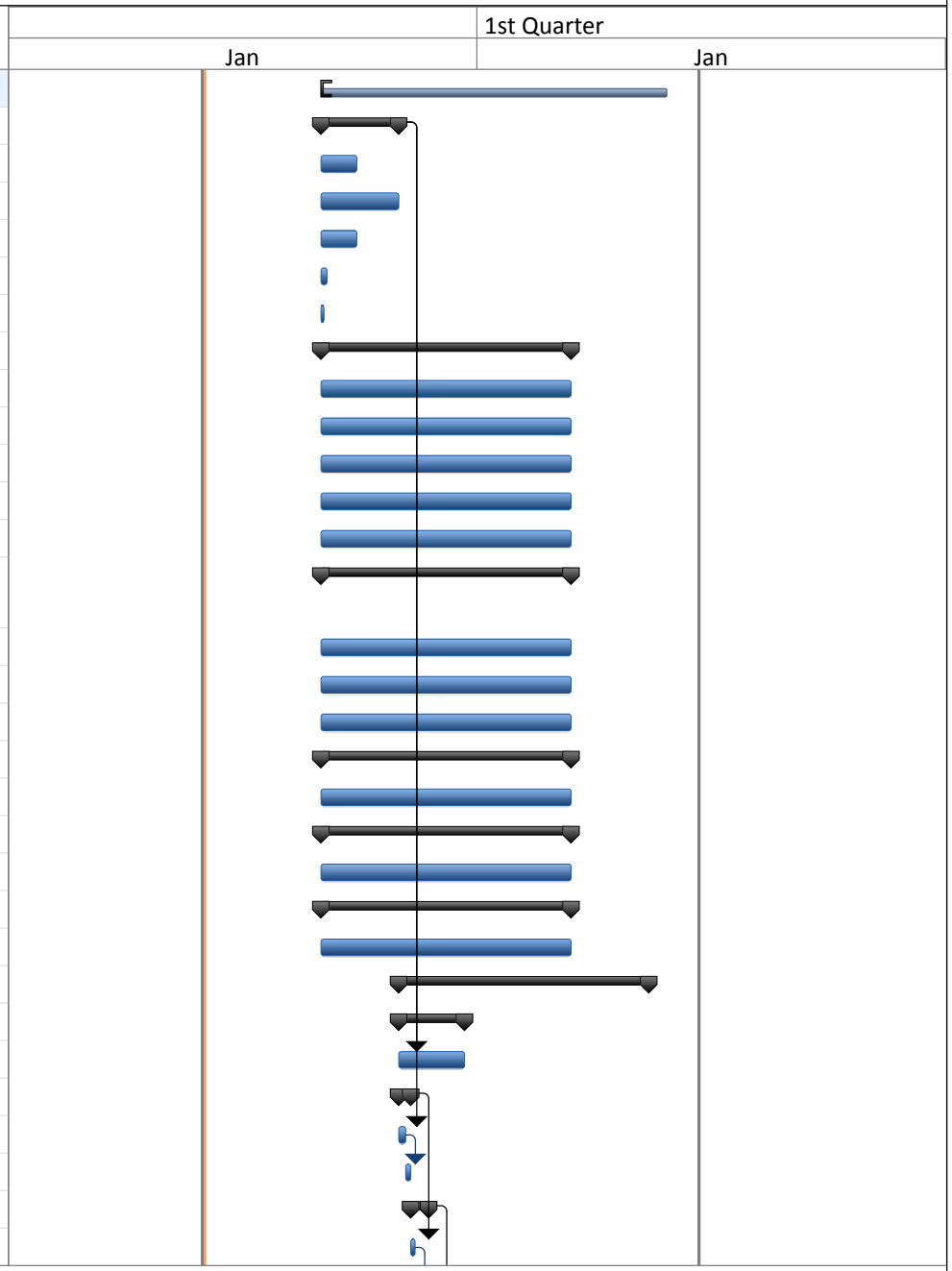
ID	Task Name	Cost
1	**West Gardner CT Dismantlement**	**$7,325,110.88**
2	**Pre-Demolition Activities**	**$782,068.00**
3	Detailed Planning & Hire Owner's Engineer	$98,448.00
4	Detailed Site Characterization Study	$525,148.00
5	Hire Demolition general Contractor	$149,544.00
6	KCP&L Prepares Unit for Dismantlement	$8,928.00
7	Demolition Contractor Mobilizes on Sit	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,458,120.00**
9	KCP&L Project Manager	$244,696.00
10	KCP&L Administrative Support	$90,504.00
11	KCP&L Engineer	$402,240.00
12	Owners Engineer Project Manager	$117,320.00
13	Owners Engineer - Engineer	$603,360.00
14	**Demolition Contractor Overhead during Dismantlement**	**$864,816.00**
15	Demolition Contractor Project Manager	$244,696.00
16	Demolition Contractor Safety Manager	$217,880.00
17	Demolition Contractor Superintendent	$402,240.00
18	**Demolition Contractor Equipment Rental Cost**	**$1,444,712.00**
19	Equipment Rental	$1,444,712.00
20	**Demolition Contractor Consumables**	**$1,441,360.00**
21	Consumables	$1,441,360.00
22	**Scrap Crews**	**$386,787.28**
23	Crew to Handle Scrap Material(s)	$386,787.28
24	**Dismantlement**	**$900,927.60**
25	**Electrical**	**$191,356.00**
26	Electrical Demolition of Equipment	$191,356.00
27	**Fuel Gas System**	**$20,503.60**
28	Remove all above grade fuel gas piping.	$6,586.80
29	Gas Filter Skid	$13,916.80
30	**Lube Oil System**	**$52,188.00**
31	Lube Oil Piping	$13,916.80
32	Lube Oil Pumps	$17,396.00
33	Lube Oil Tanks	$20,875.20
34	**Compressed Air System**	**$20,875.20**
35	Compressed Air Piping	$10,437.60
36	Compressors	$5,218.80
37	Air Receiver	$3,479.20
38	Dryer	$1,739.60
39	**Fire Protection**	**$40,010.80**
40	Fire Protection Piping	$19,135.60
41	Firewater Tank	$13,916.80
42	CO2 Storage Tank	$6,958.40
43	**Wash Water Skid**	**$24,354.40**
44	Detergent Tank	$10,437.60

West Gardner CT Dismantlement

ID	Task Name	Cost
45	Demineralized Water Tank	$13,916.80
46	**Miscellaneous Piping**	**$60,886.00**
47	Exhaust Frame Cooling Piping	$17,396.00
48	CT Air Processing Piping	$20,875.20
49	Inlet Air Heating Piping	$22,614.80
50	**Generator**	**$0.00**
51	Generator	$0.00
52	**Combustion Turbine**	**$255,721.20**
53	Inlet Heater	$17,396.00
54	Inlet duct	$26,094.00
55	Exhaust duct	$34,792.00
56	Combustion Turbine	$60,886.00
57	Combustion Turbine Foundation	$64,365.20
58	Enclosure	$52,188.00
59	**CEMS**	**$41,750.40**
60	CEMS Building	$20,875.20
61	CEMS Building Foundation	$20,875.20
62	**Stack**	**$78,282.00**
63	Stack	$78,282.00
64	**Site Prep**	**$115,000.00**
65	Final Grading and Drainage	$115,000.00
66	**Post Dismantlement Activities**	**$46,320.00**
67	Post Dismantlement Activities	$46,320.00

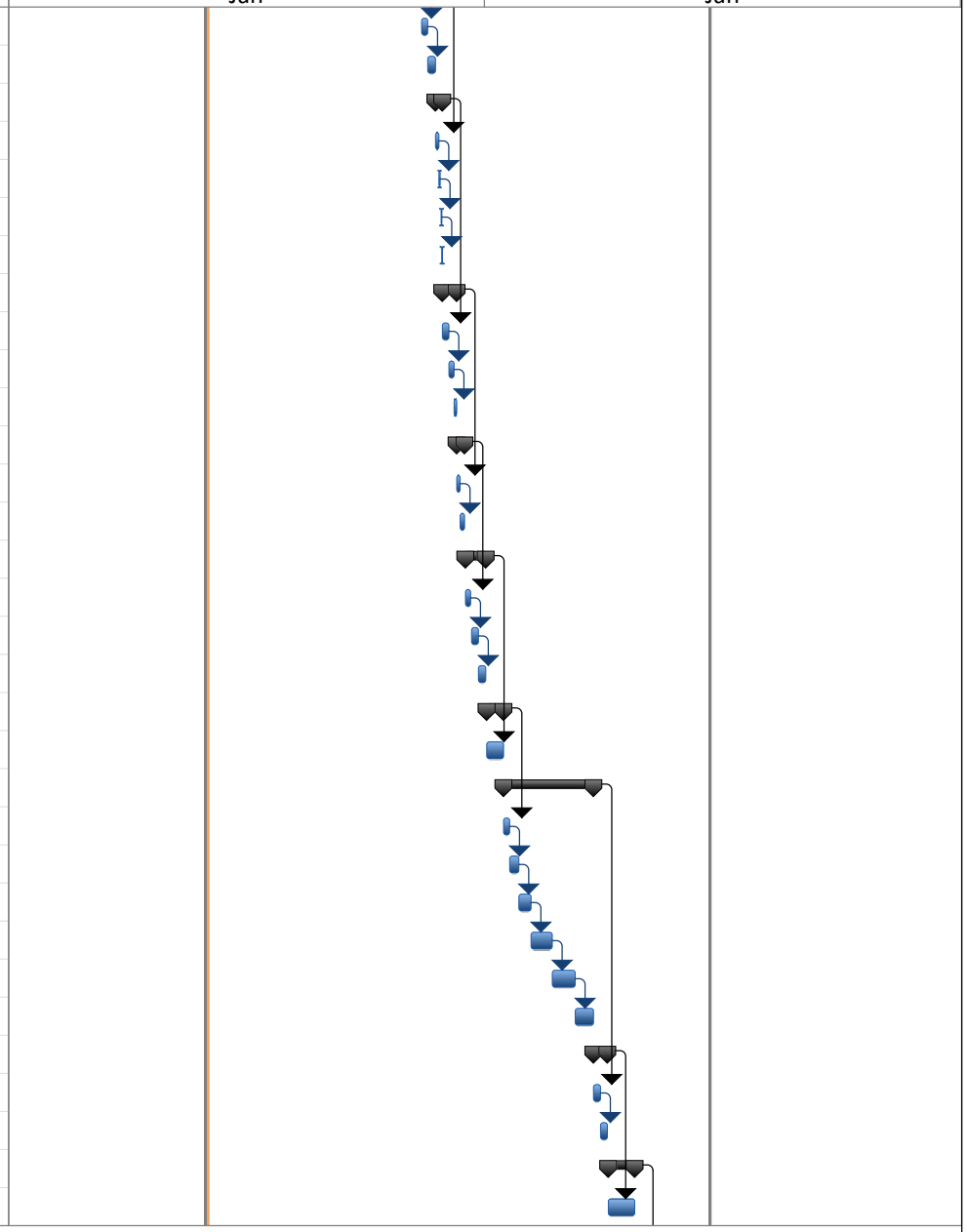
West Gardner Dismantlement

ID	Task Name	Duration
1	**West Gardner CT Dismantlement**	
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**	**419 days**
9	KCP&L Project Manager	419 days
10	KCP&L Administrative Support	419 days
11	KCP&L Engineer	419 days
12	Owners Engineer Project Manager	419 days
13	Owners Engineer - Engineer	419 days
14	**Demolition Contractor Overhead during Dismantlement**	**419 days**
15	Demolition Contractor Project Manager	419 days
16	Demolition Contractor Safety Manager	419 days
17	Demolition Contractor Superintendent	419 days
18	**Demolition Contractor Equipment Rental Cost**	**419 days**
19	Equipment Rental	419 days
20	**Demolition Contractor Consumables**	**419 days**
21	Consumables	419 days
22	**Scrap Crews**	**419 days**
23	Crew to Handle Scrap Material(s)	419 days
24	**Dismantlement**	**419 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



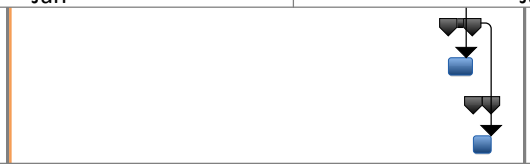
West Gardner Dismantlement

ID	Task Name	Duration
32	Lube Oil Pumps	10 days
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**	**23 days**
40	Fire Protection Piping	11 days
41	Firewater Tank	8 days
42	CO2 Storage Tank	4 days
43	**Wash Water Skid**	**14 days**
44	Detergent Tank	6 days
45	Demineralized Water Tank	8 days
46	**Miscellaneous Piping**	**35 days**
47	Exhaust Frame Cooling Piping	10 days
48	CT Air Processing Piping	12 days
49	Inlet Air Heating Piping	13 days
50	**Generator**	**29 days**
51	Generator	29 days
52	**Combustion Turbine**	**147 days**
53	Inlet Heater	10 days
54	Inlet duct	15 days
55	Exhaust duct	20 days
56	Combustion Turbine	35 days
57	Combustion Turbine Foundation	37 days
58	Enclosure	30 days
59	**CEMS**	**24 days**
60	CEMS Building	12 days
61	CEMS Building Foundation	12 days
62	**Stack**	**45 days**
63	Stack	45 days



West Gardner Dismantlement

ID	Task Name	Duration
64	**Site Prep**	**40 days**
65	Final Grading and Drainage	40 days
66	**Post Dismantlement Activities**	**30 days**
67	Post Dismantlement Activities	30 days



OSAWATOMIE

OSAWATOMIE

The Osawatomie Generating Station is a single natural gas-fired combustion turbine generator set.

This combustion turbine has an SPP-accredited unit rating of 75 MW and was placed in service in 2003. This unit is comprised of a General Electric Model 7EA CT, with a generator step-up transformer and auxiliary power transformer. The combustion turbine employs dry low NO_X burner technology and burns only natural gas fuel.

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

OSAWATOMIE

1. Combustion turbine generator set with auxiliaries.
2. Generator step-up and auxiliary transformers.
3. Freestanding outdoor switchgear.
4. Exhaust stack.
5. Natural gas filtering skid.
6. Service/Instrument air compressors.

Osawatomie Retirement

Owner Costs			
Pre-Retirement Activities		$41,320	
Retirement Activities		$114,720	
Post-Retirement Activities		$42,560	
Owner Direct Total:			$198,600
Owner Internal Costs:	5.00%		$9,930
Owner Contingency:	25.00%		$52,133

Osawatomie Retirement Opinion of Probable Cost: $260,663.13

Osawatomie Retirement

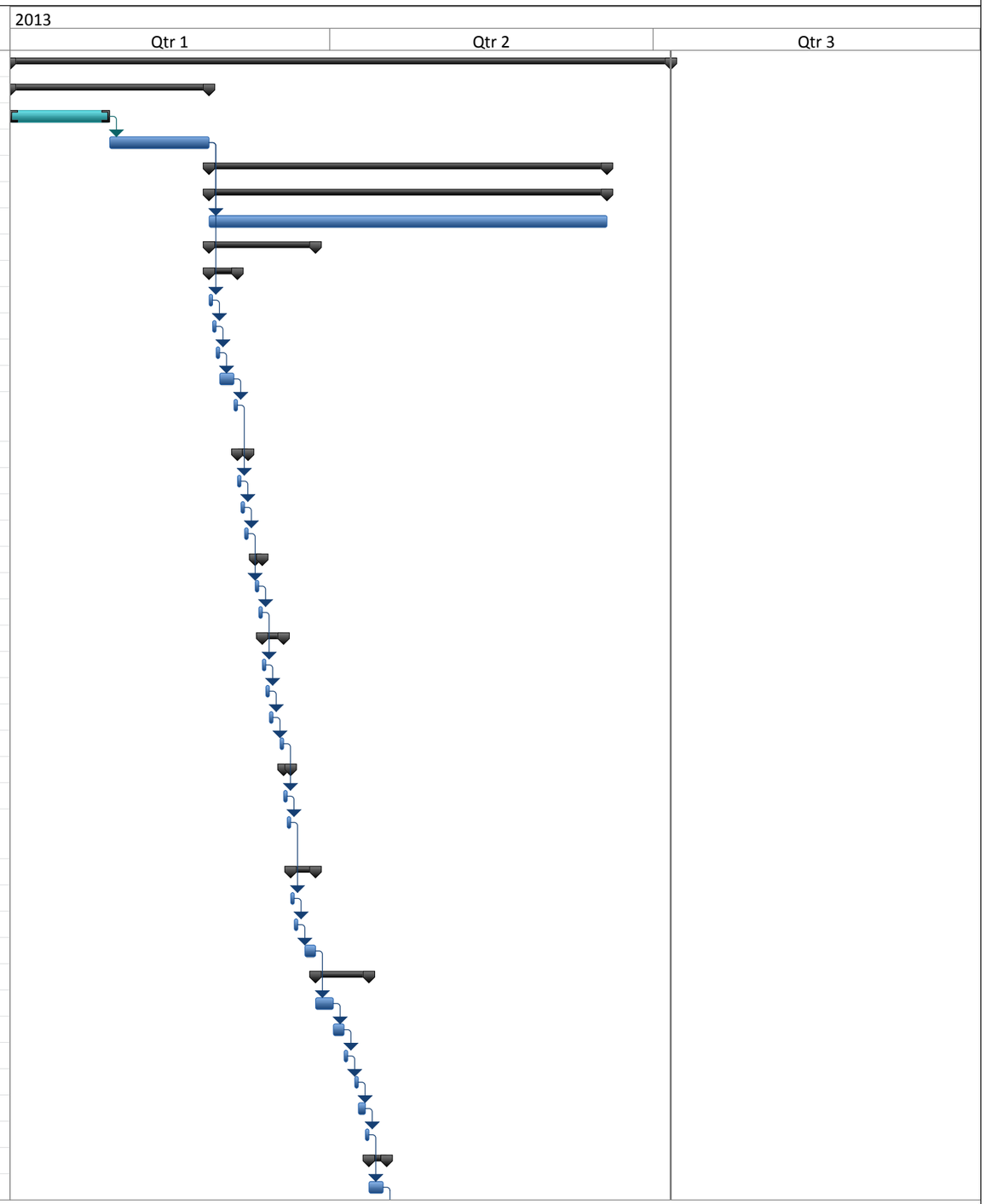
ID	Task Name	Cost
1	**Osawatomie Retirement**	**$198,600.48**
2	**Pre-Retirement Activities**	**$41,320.00**
3	Permitting Review	$22,120.00
4	Develop Detailed Retirement Plan	$19,200.00
5	**Retirement Activities**	**$114,720.48**
6	**Project Management During Retirement**	**$60,480.00**
7	Project Management During Retirement	$60,480.00
8	**Electrical**	**$19,124.16**
9	**Medium and Low Voltage Drawout Switchgear**	**$5,215.68**
10	De-energize all buses at the source.	$869.28
11	Open all circuit breakers.	$869.28
12	Rack all circuit breakers into the fully withdrawn, disconnected position.	$869.28
13	Verify that the closing/tripping springs are discharged.	$1,738.56
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.	$869.28
15	**Motor Control Centers**	**$2,607.84**
16	De-energize all buses at the source.	$869.28
17	Open all circuit breakers and disconnect switches.	$869.28
18	Remove all fuses in control circuits.	$869.28
19	**Low-voltage Switchboards and Panelboards**	**$1,738.56**
20	De-energize all buses at the source.	$869.28
21	Open all circuit breakers and disconnect switches.	$869.28
22	**Oil-Filled Power Transformers**	**$3,477.12**
23	De-energize all buses at the source.	$869.28
24	Open all circuit breakers and disconnect switches.	$869.28
25	De-energize all buses at the source.	$869.28
26	Open all circuit breakers and disconnect switches.	$869.28
27	**Dry-type Power Transformers**	**$1,738.56**
28	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
29	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.	$869.28
30	**Motors**	**$4,346.40**
31	De-energize all primary power at the source.	$869.28
32	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$869.28
33	Drain lube oil system (if applicable) and dispose of oil.	$2,607.84
34	**Fuel Gas System**	**$10,462.40**
35	Isolate Fuel Gas System	$3,793.20
36	Vent Fuel Gas Piping and Equipment	$2,460.00

Osawatomie Retirement

ID	Task Name	Cost
37	Open and Vent Knock-Out Drum	$835.60
38	Drain, Open and Vent the Drain Tank	$835.60
39	Empty the Coalescing Filter	$1,702.40
40	Open and Vent Equipment on the CT Gas Valve Module	$835.60
41	**Lube Oil Cooling Water System**	**$2,506.80**
42	Open and Drain the Water Side of the Lube Oil Coolers	$1,671.20
43	Open and Vent the Coolers and Expansion Tank	$835.60
44	**Oily Drain Tank**	**$3,810.72**
45	Open and Pump Out the Oily Drain Tank	$3,810.72
46	**Wash Water Skid**	**$2,506.80**
47	Open and Drain the Detergent Tank	$835.60
48	Open and Drain the Demineralized Water Tank	$835.60
49	Empty the Demineralized Water Tank	$835.60
50	**Compressed Air**	**$1,671.20**
51	Empty Dessiccant Air Dryers and Vent	$835.60
52	Open and Vent the Air Reciever	$835.60
53	**Miscelleaneous Piping**	**$3,342.40**
54	Open and Vent the Exhaust Frame Cooling Piping	$835.60
55	Open and Vent the CT Air Processing Piping	$835.60
56	Open and Vent the Inlet Air Heating Piping	$835.60
57	Open and Vent the CT Air Processing Piping	$835.60
58	**Fire Protection Piping**	**$3,326.80**
59	Empty the CO2 Storage Tank	$2,491.20
60	Open and Vent the Fire Protection Piping	$835.60
61	**Lube Oil System**	**$7,489.20**
62	Empty and Remove from Site the Lubricating Oil	$4,982.40
63	Drain Lubricating Oil Piping	$1,671.20
64	Open and Vent Lubricating Oil Piping	$835.60
65	**Post Retirement Closure Activity**	**$42,560.00**
66	Post Retirement Closure Activity	$42,560.00

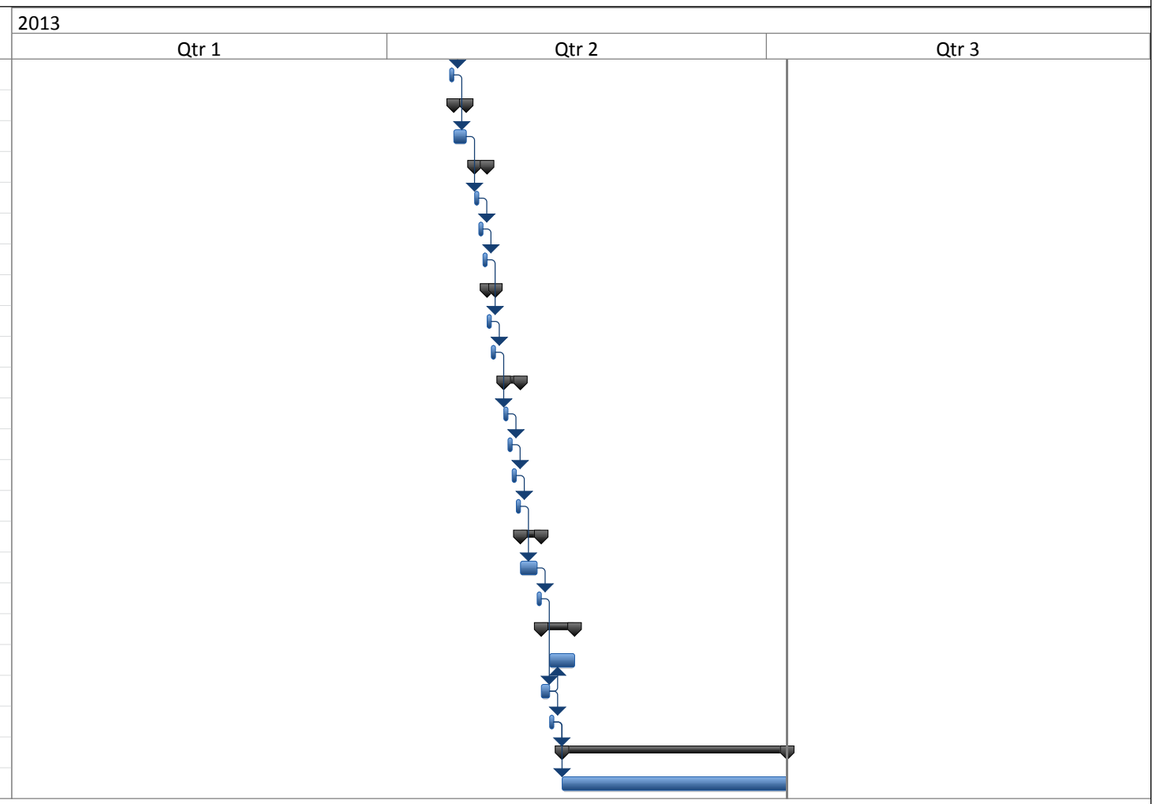
Osawatomie Retirement

ID	Task Name	Duration
1	**Osawatomie Retirement**	**134 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement Activities**	**80 days**
6	**Project Management During Retirement**	**80 days**
7	Project Management During Retirement	80 days
8	**Electrical**	**22 days**
9	**Medium and Low Voltage Drawout Switchgear**	**6 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.	2 days
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**	**3 days**
16	De-energize all buses at the source.	1 day
17	Open all circuit breakers and disconnect switches.	1 day
18	Remove all fuses in control circuits.	1 day
19	**Low-voltage Switchboards and Panelboards**	**2 days**
20	De-energize all buses at the source.	1 day
21	Open all circuit breakers and disconnect switches.	1 day
22	**Oil-Filled Power Transformers**	**4 days**
23	De-energize all buses at the source.	1 day
24	Open all circuit breakers and disconnect switches.	1 day
25	De-energize all buses at the source.	1 day
26	Open all circuit breakers and disconnect switches.	1 day
27	**Dry-type Power Transformers**	**2 days**
28	De-energize all transformer primaries and verify that the secondary is de-energized.	1 day
29	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
30	**Motors**	**5 days**
31	De-energize all primary power at the source.	1 day
32	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	1 day
33	Drain lube oil system (if applicable) and dispose of oil.	3 days
34	**Fuel Gas System**	**11 days**
35	Isolate Fuel Gas System	3 days
36	Vent Fuel Gas Piping and Equipment	3 days
37	Open and Vent Knock-Out Drum	1 day
38	Drain, Open and Vent the Drain Tank	1 day
39	Empty the Coalescing Filter	2 days
40	Open and Vent Equipment on the CT Gas Valve Module	1 day
41	**Lube Oil Cooling Water System**	**3 days**
42	Open and Drain the Water Side of the Lube Oil Coolers	2 days



Osawatomie Retirement

ID	Task Name	Duration
43	Open and Vent the Coolers and Expansion Tank	1 day
44	**Oily Drain Tank**	**3 days**
45	Open and Pump Out the Oily Drain Tank	3 days
46	**Wash Water Skid**	**3 days**
47	Open and Drain the Detergent Tank	1 day
48	Open and Drain the Demineralized Water Tank	1 day
49	Empty the Demineralized Water Tank	1 day
50	**Compressed Air**	**2 days**
51	Empty Dessiccant Air Dryers and Vent	1 day
52	Open and Vent the Air Reciever	1 day
53	**Miscelleaneous Piping**	**4 days**
54	Open and Vent the Exhaust Frame Cooling Piping	1 day
55	Open and Vent the CT Air Processing Piping	1 day
56	Open and Vent the Inlet Air Heating Piping	1 day
57	Open and Vent the CT Air Processing Piping	1 day
58	**Fire Protection Piping**	**3 days**
59	Empty the CO2 Storage Tank	2 days
60	Open and Vent the Fire Protection Piping	1 day
61	**Lube Oil System**	**6 days**
62	Empty and Remove from Site the Lubricating Oil	4 days
63	Drain Lubricating Oil Piping	2 days
64	Open and Vent Lubricating Oil Piping	1 day
65	**Post Retirement Closure Activity**	**40 days**
66	Post Retirement Closure Activity	40 days



Osawatomie Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$782,068		
Overhead During Dismantlement		$588,120		
Post-Dismantlement Activities		$30,880		
Owner Costs Total			$1,401,068	
Demolition General Contractor (DGC) Costs				
Site Management		$348,816		
Equipment Rental		$582,712		
Consummables		$581,360		
Scrap Crew(s)		$156,007		
Dismantlement		$412,423		
DGC Insurance	2.00%	$41,626		
Contingency/Profit	15.00%	$318,442		
Performance Bond	2.00%	$48,828		
Contractor Costs Total:			$2,490,214	
Total:				$3,891,282
Owner Internal Costs:	5.00%			$194,564
Owner Contingency:	25.00%			$1,021,461
Osawatomie Dismantlement Opinion of Probable Cost:				$5,107,307

Osawatomie Dismantlement

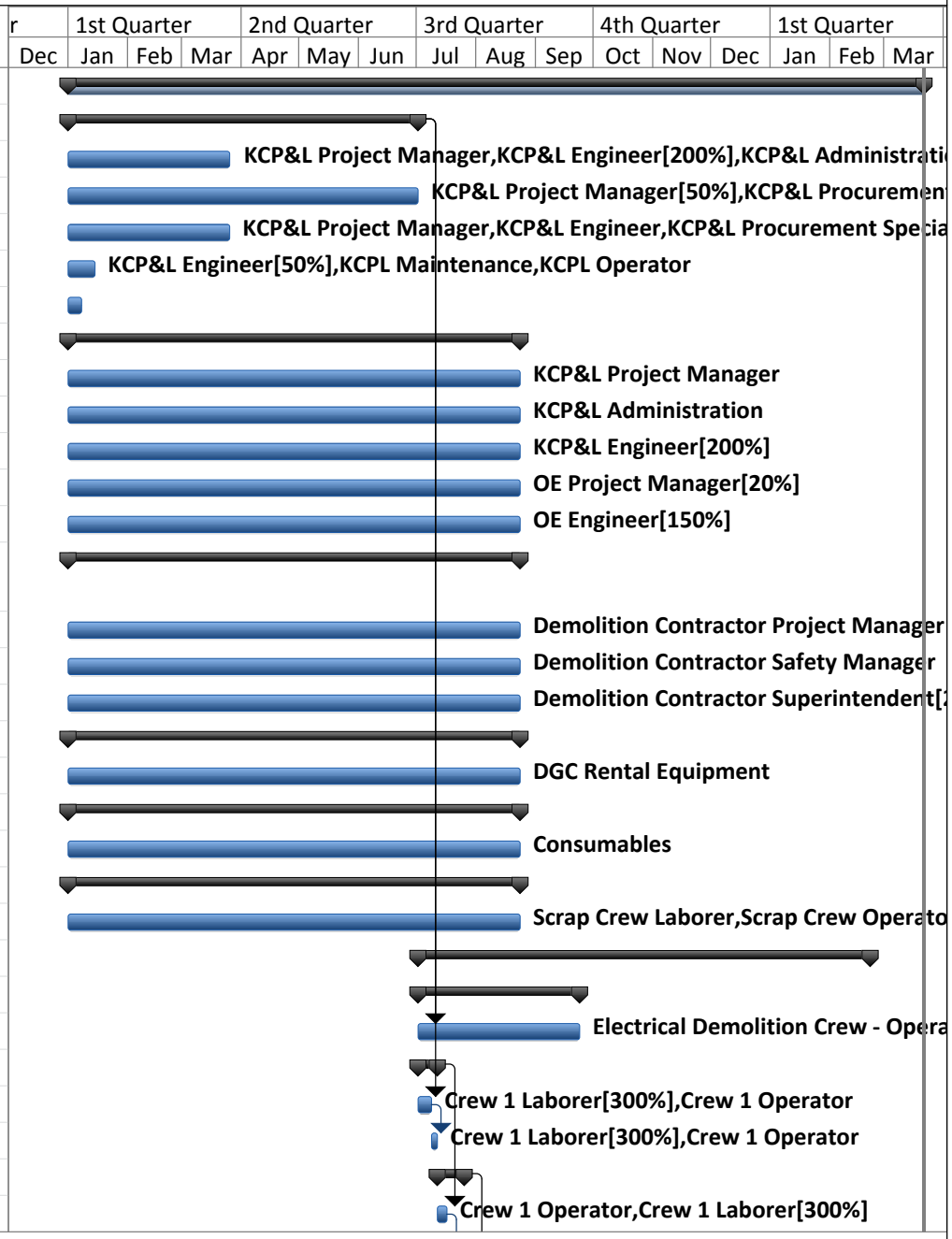
ID	Task Name	Cost
1	**Osawatomie Dismantlement**	**$3,482,386.72**
2	**Pre-Demolition Activities**	**$782,068.00**
3	Detailed Planning & Hire Owner's Engineer	$98,448.00
4	Detailed Site Characterization Study	$525,148.00
5	Hire Demolition general Contractor	$149,544.00
6	KCP&L Prepares Unit for Dismantlement	$8,928.00
7	Demolition Contractor Mobilizes on Sit	$0.00
8	**KCP&L Overhead during Dismantlement**	**$588,120.00**
9	KCP&L Project Manager	$98,696.00
10	KCP&L Administrative Support	$36,504.00
11	KCP&L Engineer	$162,240.00
12	Owners Engineer Project Manager	$47,320.00
13	Owners Engineer - Engineer	$243,360.00
14	**Demolition Contractor Overhead during Dismantlement**	**$348,816.00**
15	Demolition Contractor Project Manager	$98,696.00
16	Demolition Contractor Safety Manager	$87,880.00
17	Demolition Contractor Superintendent	$162,240.00
18	**Demolition Contractor Equipment Rental Cost**	**$582,712.00**
19	Equipment Rental	$582,712.00
20	**Demolition Contractor Consumables**	**$581,360.00**
21	Consumables	$581,360.00
22	**Scrap Crews**	**$156,007.28**
23	Crew to Handle Scrap Material(s)	$156,007.28
24	**Dismantlement**	**$412,423.44**
25	**Electrical**	**$104,376.00**
26	Electrical Demolition of Equipment	$104,376.00
27	**Fuel Gas System**	**$8,201.44**
28	Remove all above grade fuel gas piping.	$2,982.64
29	Gas Filter Skid	$5,218.80
30	**Lube Oil System**	**$17,396.00**
31	Lube Oil Piping	$5,218.80
32	Lube Oil Pumps	$5,218.80
33	Lube Oil Tanks	$6,958.40
34	**Compressed Air System**	**$22,614.80**
35	Compressed Air Piping	$5,218.80
36	Compressors	$8,698.00
37	Air Receiver	$3,479.20
38	Dryer	$5,218.80
39	**Fire Protection**	**$26,094.00**
40	Fire Protection Piping	$10,437.60
41	Firewater Tank	$8,698.00
42	CO2 Storage Tank	$6,958.40
43	**Wash Water Skid**	**$13,916.80**
44	Detergent Tank	$6,958.40

Osawatomie Dismantlement

ID	Task Name	Cost
45	Demineralized Water Tank	$6,958.40
46	**Miscellaneous Piping**	**$24,354.40**
47	Exhaust Frame Cooling Piping	$6,958.40
48	CT Air Processing Piping	$8,698.00
49	Inlet Air Heating Piping	$8,698.00
50	**Generator**	**$0.00**
51	Generator	$0.00
52	**Combustion Turbine**	**$90,459.20**
53	Inlet Heater	$5,218.80
54	Inlet duct	$10,437.60
55	Exhaust duct	$13,916.80
56	Combustion Turbine	$27,833.60
57	Combustion Turbine Foundation	$15,656.40
58	Enclosure	$17,396.00
59	**CEMS**	**$13,916.80**
60	CEMS Building	$6,958.40
61	CEMS Building Foundation	$6,958.40
62	**Stack**	**$26,094.00**
63	Stack	$26,094.00
64	**Site Prep**	**$65,000.00**
65	Final Grading and Drainage	$65,000.00
66	**Post Dismantlement Activities**	**$30,880.00**
67	Post Dismantlement Activities	$30,880.00

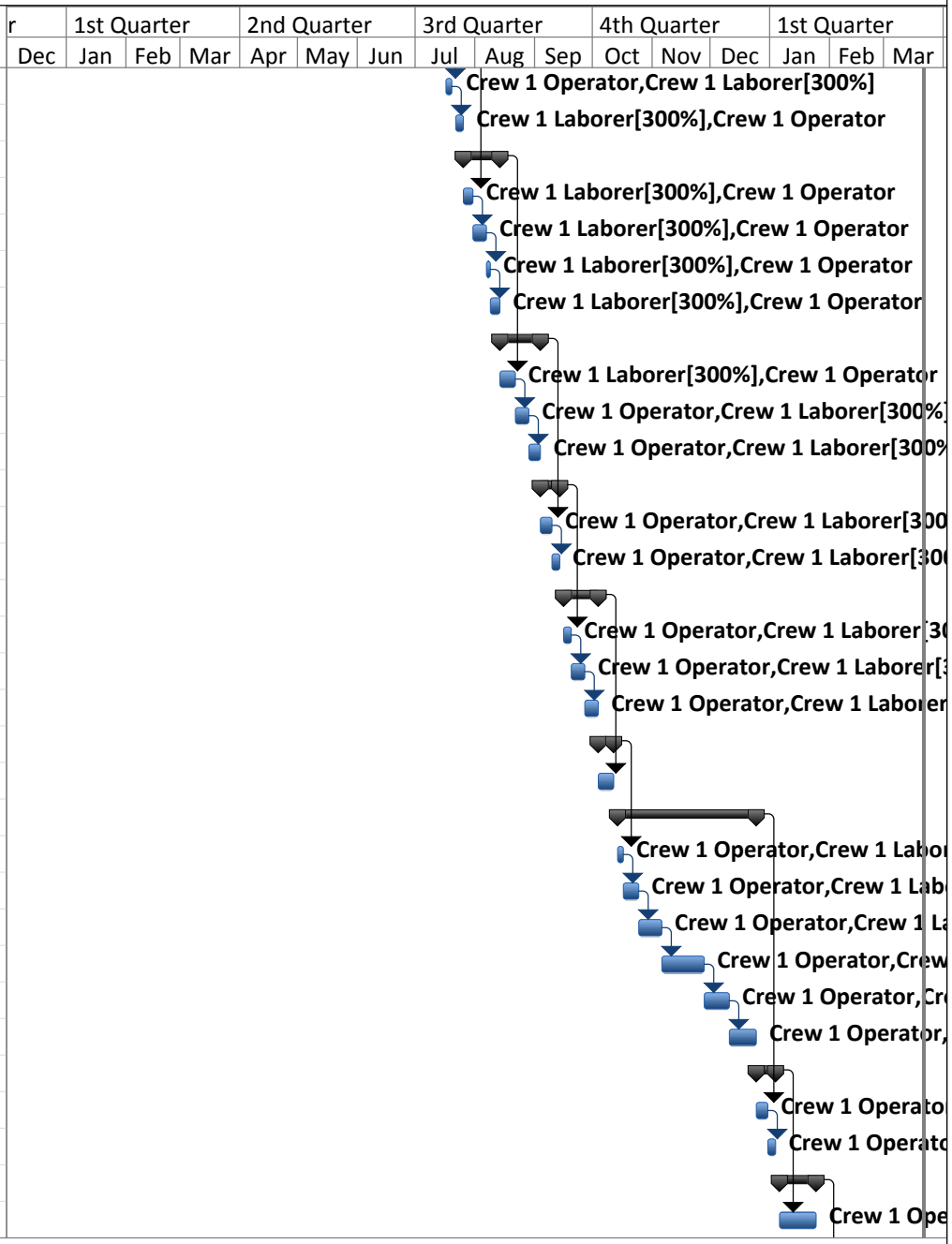
Osawatomie Dismantlement

ID	Task Name	Duration
1	**Osawatomie 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**	**169 days**
9	KCP&L Project Manager	169 days
10	KCP&L Administrative Support	169 days
11	KCP&L Engineer	169 days
12	Owners Engineer Project Manager	169 days
13	Owners Engineer - Engineer	169 days
14	**Demolition Contractor Overhead during Dismantlement**	**169 days**
15	Demolition Contractor Project Manager	169 days
16	Demolition Contractor Safety Manager	169 days
17	Demolition Contractor Superintendent	169 days
18	**Demolition Contractor Equipment Rental Cost**	**169 days**
19	Equipment Rental	169 days
20	**Demolition Contractor Consumables**	**169 days**
21	Consumables	169 days
22	**Scrap Crews**	**169 days**
23	Crew to Handle Scrap Material(s)	169 days
24	**Dismantlement**	**169 days**
25	**Electrical**	**60 days**
26	Electrical Demolition of Equipment	60 days
27	**Fuel Gas System**	**8 days**
28	Remove all above grade fuel gas piping.	5 days
29	Gas Filter Skid	3 days
30	**Lube Oil System**	**10 days**
31	Lube Oil Piping	3 days



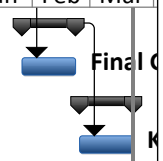
Osawatomie Dismantlement

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



Osawatomie Dismantlement

ID	Task Name	Duration
64	**Site Prep**	**20 days**
65	Final Grading and Drainage	20 days
66	**Post Dismantlement Activities**	**20 days**
67	Post Dismantlement Activities	20 days



HAWTHORN UNITS 6 AND 9

HAWTHORN UNITS 6 AND 9

Hawthorn Units 6 and 9 are a combined-cycle plant that utilizes a combustion turbine generator set equipped with a heat recovery steam generator (HRSG) that utilizes waste heat to produce steam to repower the existing steam turbine generator from the former Unit 4 (re-designated Unit 9) at the Hawthorn Generating Station.

Unit 6 is a Siemens Model V84.3A combustion turbine set that has an SPP-accredited unit rating of 151 MW in simple-cycle configuration when utilizing a bypass damper and stack arrangement. Unit 6 began service in 1997. When Unit 6 is operated in combined-cycle configuration exhausting through the HRSG to produce steam to power the Unit 9 steam turbine generator, the combined SPP-accredited plant rating increases to 232 MW, net. Unit 9 began service in 2000. Each unit is interconnected to the grid through its own generator step-up transformer arrangement. The combustion turbine employs dry low NO_x burner technology and burns only natural gas fuel. The HRSG has an ammonia SCR arrangement to further reduce NO_x emissions.

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).

HAWTHORN UNITS 6 AND 9

1. Combustion turbine generator set and auxiliaries (one)
2. Steam turbine generator set and auxiliaries (one).
2. Generator step-up and auxiliary transformers (two).
3. HRSG and auxiliaries (one).
4. Selective catalytic reduction system, including catalyst and reagent systems (one).

5. Combustion turbine bypass damper and exhaust stack (one).

6. HRSG exhaust stack (one).

7. Circulating water intake structure, circulating water piping, and circulating water equipment (formerly Unit 4).

8. Natural gas filtering skid.

9. Service/Instrument air compressors.

Hawthorn 6 & 9 Retirement

Owner Costs				
Pre-Retirement Activities		$41,320		
Retirement Activities		$206,531		
Post-Retirement Activities		$44,240		
Owner Direct Total			$292,091	
Owner Internal Costs	5.00%		$14,605	
Owner Contingency:	25.00%		$76,674	
Hawthorn 6 & 9 Retirement Opinion of Probable Cost:				$368,764.89
Activities Required by Permit or Regulation				
Hawthorn 9 Intake Removal		$604,110		
Activities Required by Permit or Regulation:				$604,110

Hawthorn 6 & 9 Retirement

ID	Task Name	Cost
1	**Hawthorn 6 & 9 Retirement**	**$292,091.68**
2	**Pre-Retirement Activities**	**$41,320.00**
3	Permitting Review	$22,120.00
4	Develop Detailed Retirement Plan	$19,200.00
5	**Retirement Activities**	**$206,531.68**
6	**Project Management During Retirement**	**$206,531.68**
7	Project Management During Retirement	$90,720.00
8	**CT-6 Retirement Activities**	**$48,758.56**
9	**Electrical**	**$19,124.16**
10	**Medium and Low Voltage Drawout Switchgear**	**$5,215.68**
11	De-energize all buses at the source.	$869.28
12	Open all circuit breakers.	$869.28
13	Rack all circuit breakers into the fully withdrawn, disconnected position.	$869.28
14	Verify that the closing/tripping springs are discharged.	$1,738.56
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.	$869.28
16	**Motor Control Centers**	**$2,607.84**
17	De-energize all buses at the source.	$869.28
18	Open all circuit breakers and disconnect switches.	$869.28
19	Remove all fuses in control circuits.	$869.28
20	**Low-voltage Switchboards and Panelboards**	**$1,738.56**
21	De-energize all buses at the source.	$869.28
22	Open all circuit breakers and disconnect switches.	$869.28
23	**Oil-Filled Power Transformers**	**$3,477.12**
24	De-energize all buses at the source.	$869.28
25	Open all circuit breakers and disconnect switches.	$869.28
26	De-energize all buses at the source.	$869.28
27	Open all circuit breakers and disconnect switches.	$869.28
28	**Dry-type Power Transformers**	**$1,738.56**
29	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
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.	$869.28
31	**Motors**	**$4,346.40**
32	De-energize all primary power at the source.	$869.28
33	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$869.28
34	Drain lube oil system (if applicable) and dispose of oil.	$2,607.84
35	**Fuel Gas System**	**$10,462.40**

Hawthorn 6 & 9 Retirement

ID	Task Name	Cost
36	Isolate Fuel Gas System	$3,793.20
37	Vent Fuel Gas Piping and Equipment	$2,460.00
38	Open and Vent Knock-Out Drum	$835.60
39	Drain, Open and Vent the Drain Tank	$835.60
40	Empty the Coalescing Filter	$1,702.40
41	Open and Vent Equipment on the CT Gas Valve Module	$835.60
42	**Lube Oil Cooling Water System**	**$2,506.80**
43	Open and Drain the Water Side of the Lube Oil Coolers	$1,671.20
44	Open and Vent the Coolers and Expansion Tank	$835.60
45	**Wash Water Skid**	**$2,506.80**
46	Open and Drain the Detergent Tank	$835.60
47	Open and Drain the Demineralized Water Tank	$835.60
48	Empty the Demineralized Water Tank	$835.60
49	**Miscelleaneous Piping**	**$3,342.40**
50	Open and Vent the Exhaust Frame Cooling Piping	$835.60
51	Open and Vent the CT Air Processing Piping	$835.60
52	Open and Vent the Inlet Air Heating Piping	$835.60
53	Open and Vent the CT Air Processing Piping	$835.60
54	**Fire Protection Piping**	**$3,326.80**
55	Empty the CO2 Storage Tank	$2,491.20
56	Open and Vent the Fire Protection Piping	$835.60
57	**Lube Oil System**	**$7,489.20**
58	Empty and Remove from Site the Lubricating Oil	$4,982.40
59	Drain Lubricating Oil Piping	$1,671.20
60	Open and Vent Lubricating Oil Piping	$835.60
61	**Hawthorn 9 Retirement Activities**	**$67,053.12**
62	**Electrical**	**$19,124.16**
63	**Medium and Low Voltage Drawout Switchgear**	**$5,215.68**
64	De-energize all buses at the source.	$869.28
65	Open all circuit breakers.	$869.28
66	Rack all circuit breakers into the fully withdrawn, disconnected position.	$869.28
67	Verify that the closing/tripping springs are discharged.	$1,738.56
68	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.	$869.28
69	**Motor Control Centers**	**$2,607.84**
70	De-energize all buses at the source.	$869.28
71	Open all circuit breakers and disconnect switches.	$869.28
72	Remove all fuses in control circuits.	$869.28
73	**Low-voltage Switchboards and Panelboards**	**$1,738.56**
74	De-energize all buses at the source.	$869.28
75	Open all circuit breakers and disconnect switches.	$869.28

Hawthorn 6 & 9 Retirement

ID	Task Name	Cost
76	**Oil-Filled Power Transformers**	**$3,477.12**
77	De-energize all buses at the source.	$869.28
78	Open all circuit breakers and disconnect switches.	$869.28
79	De-energize all buses at the source.	$869.28
80	Open all circuit breakers and disconnect switches.	$869.28
81	**Dry-type Power Transformers**	**$1,738.56**
82	De-energize all transformer primaries and verify that the secondary is de-energized.	$869.28
83	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.	$869.28
84	**Motors**	**$4,346.40**
85	De-energize all primary power at the source.	$869.28
86	De-energize all low-voltage power sources for space heaters or other auxiliary equipment at the source.	$869.28
87	Drain lube oil system (if applicable) and dispose of oil.	$2,607.84
88	**Boiler Chemical Feed**	**$1,640.00**
89	Drain all chemical feed tanks.	$1,640.00
90	**HRSG**	**$2,522.40**
91	Open HRSG doors.	$851.20
92	Drain boiler, drums, downcomers and headers.	$820.00
93	Open drum doors.	$851.20
94	**Stack and Ductwork**	**$851.20**
95	Open ductwork doors.	$851.20
96	Place cap over stack opening to keep moisture out.	$0.00
97	**Condensate and Feedwater Piping**	**$1,640.00**
98	Drain water from the system.	$820.00
99	Leave open vents and drains.	$820.00
100	**SCR**	**$7,632.08**
101	Remove catalyst of salvage or disposal.	$3,404.80
102	Padlock or tack weld access doors shut.	$851.20
103	Remove ammonia from storage tank for resale.	$835.60
104	Wash out and drain storage tank and supply piping.	$835.60
105	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	$835.60
106	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	$869.28
107	**Turbine(s) and Condenser**	**$2,963.60**
108	Drain hotwell and leave doors open.	$835.60
109	Open main turbine doors.	$425.60
110	Open bfp turbine doors.	$425.60
111	Remove lube oil.	$1,276.80

Hawthorn 6 & 9 Retirement

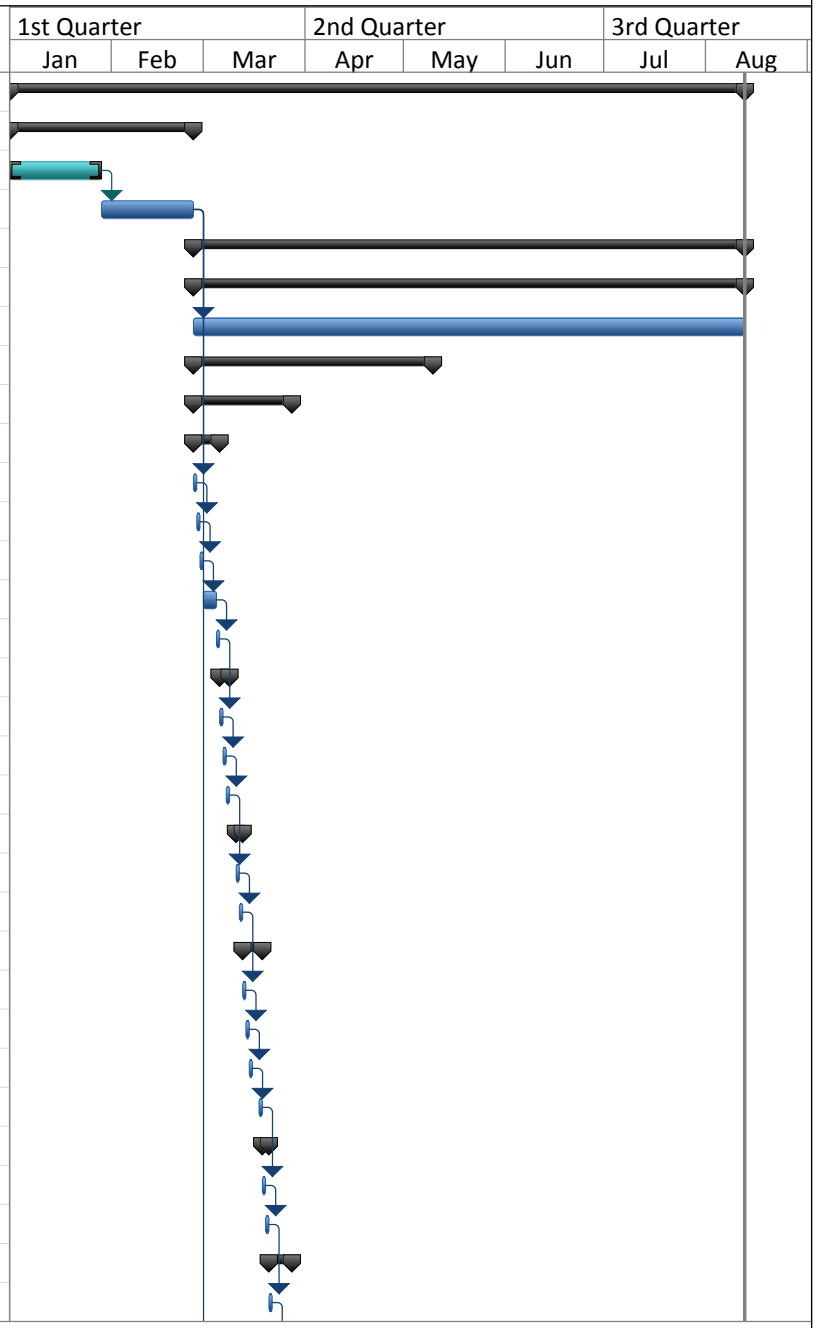
ID	Task Name	Cost
112	**Generator**	**$12,084.48**
113	Verify that generator circuit breaker is open and racked out or that high-voltage disconnect switch on substation side of GSU transformer is locked in the open position.	$869.28
114	Verify that generator field breaker or contactor (if applicable) is open.	$869.28
115	De-energize power supplies to generator excitation system at the source.	$869.28
116	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.	$1,738.56
117	Drain lubricating oil system and dispose of oil.	$2,607.84
118	Drain generator and exciter cooling water systems (if applicable).	$2,522.40
119	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	$869.28
120	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	$1,738.56
121	**Circulating Water and Turbine Cooling Water System**	**$3,280.00**
122	Drain.	$1,640.00
123	Open water box doors.	$820.00
124	Drain any circulating water chemical feed tanks.	$820.00
125	**Compressed Air System**	**$3,342.40**
126	Open vents and drains.	$820.00
127	Remove desiccant from desiccant dryers.	$2,522.40
128	**Auxiliary Steam System**	**$1,640.00**
129	Drain water from system.	$820.00
130	Remove aux boiler chemicals.	$820.00
131	**Auxiliary Cooling Water System**	**$820.00**
132	Drain water from system.	$820.00
133	**Condenser Air Extraction and Waterbox Priming System**	**$820.00**
134	Drain water from system.	$820.00
135	**Battery System**	**$8,692.80**
136	Turn off battery charger and disconnect cables from batteries.	$1,738.56
137	De-energize all battery chargers from the source.	$869.28
138	Open all AC and DC circuit breakers and/or fused switches on battery chargers.	$869.28
139	Remove and dispose of battery electrolyte.	$2,607.84
140	Remove and dispose of battery cells.	$1,738.56
141	Clean up and dispose of electrolyte on surface areas around batteries.	$869.28
142	**Post Retirement Activities**	**$44,240.00**

Hawthorn 6 & 9 Retirement

ID	Task Name	Cost
143	Post Retirement Activities	$44,240.00

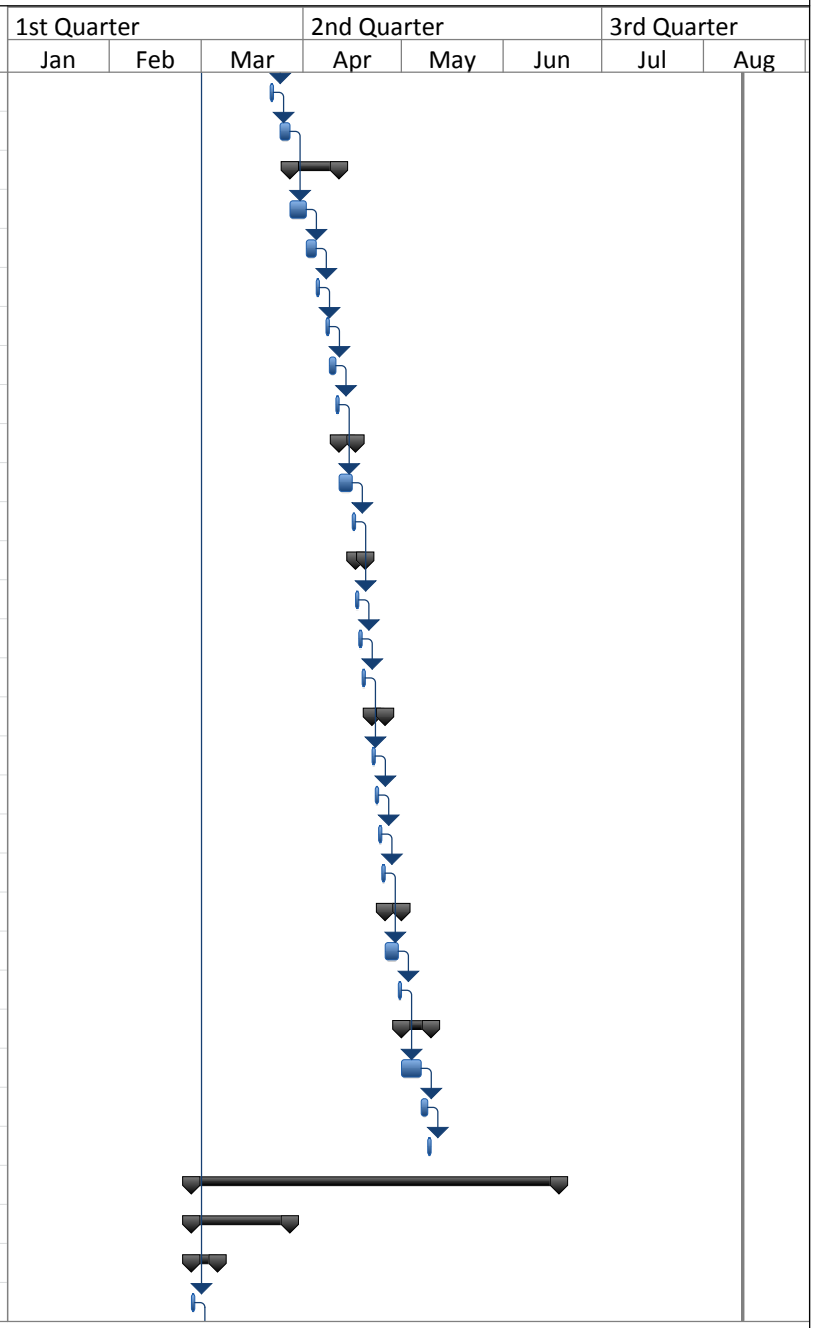
Hawthorn 6 & 9 Retirement

ID	Task Name	Duration
1	**Hawthorn 6 & 9 Retirement**	**160 days**
2	**Pre-Retirement Activities**	**40 days**
3	Permitting Review	20 days
4	Develop Detailed Retirement Plan	20 days
5	**Retirement Activities**	**120 days**
6	**Project Management During Retirement**	**120 days**
7	Project Management During Retirement	120 days
8	**CT-6 Retirement Activities**	**53 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, disconne	1 day
14	Verify that the closing/tripping springs are discharged.	2 days
15	De-energize control power and auxiliary power circuits of	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**
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 s	1 day
30	De-energize all low-voltage AC or DC power sources for sp	1 day
31	**Motors**	**5 days**
32	De-energize all primary power at the source.	1 day



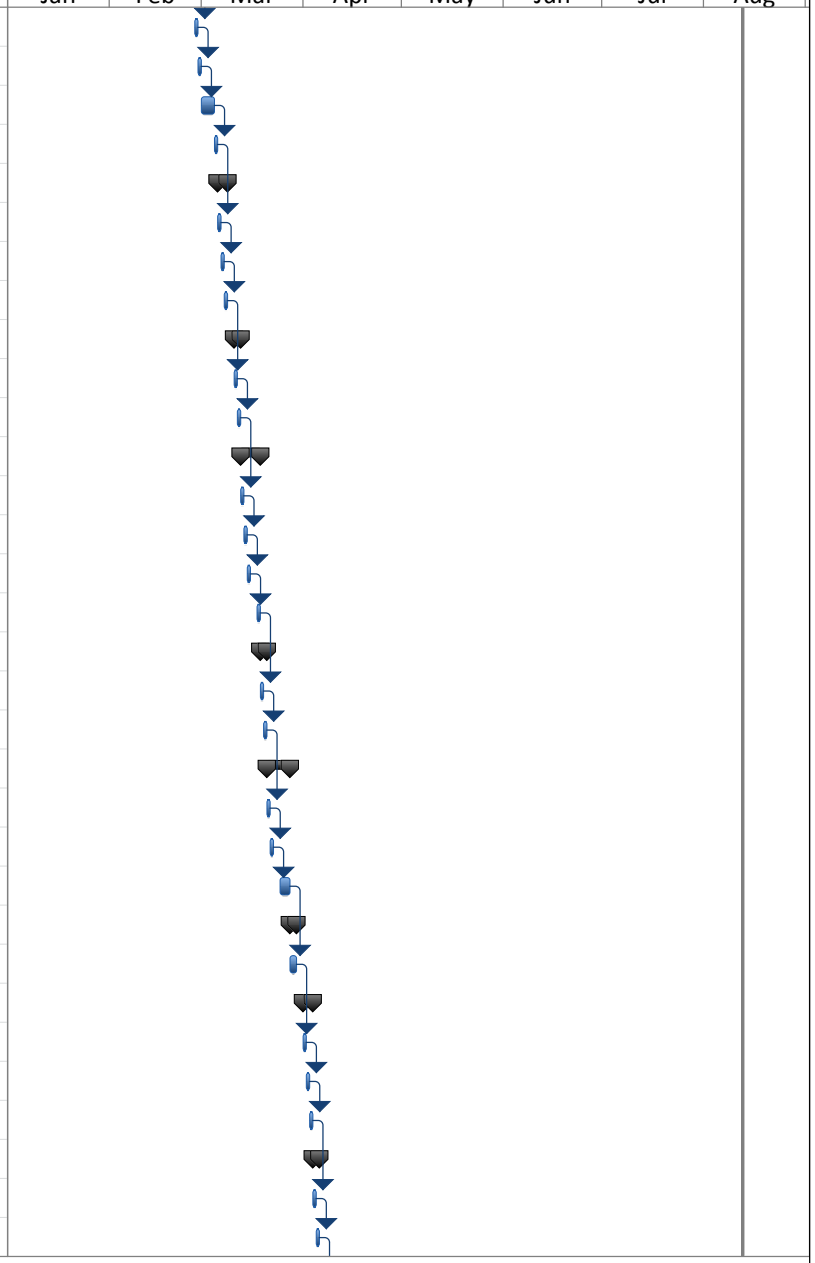
Hawthorn 6 & 9 Retirement

ID	Task Name	Duration
33	De-energize all low-voltage power sources for space heate	1 day
34	Drain lube oil system (if applicable) and dispose of oil.	3 days
35	**Fuel Gas System**	**11 days**
36	Isolate Fuel Gas System	3 days
37	Vent Fuel Gas Piping and Equipment	3 days
38	Open and Vent Knock-Out Drum	1 day
39	Drain, Open and Vent the Drain Tank	1 day
40	Empty the Coalescing Filter	2 days
41	Open and Vent Equipment on the CT Gas Valve Module	1 day
42	**Lube Oil Cooling Water System**	**3 days**
43	Open and Drain the Water Side of the Lube Oil Coolers	2 days
44	Open and Vent the Coolers and Expansion Tank	1 day
45	**Wash Water Skid**	**3 days**
46	Open and Drain the Detergent Tank	1 day
47	Open and Drain the Demineralized Water Tank	1 day
48	Empty the Demineralized Water Tank	1 day
49	**Miscelleaneous Piping**	**4 days**
50	Open and Vent the Exhaust Frame Cooling Piping	1 day
51	Open and Vent the CT Air Processing Piping	1 day
52	Open and Vent the Inlet Air Heating Piping	1 day
53	Open and Vent the CT Air Processing Piping	1 day
54	**Fire Protection Piping**	**3 days**
55	Empty the CO2 Storage Tank	2 days
56	Open and Vent the Fire Protection Piping	1 day
57	**Lube Oil System**	**7 days**
58	Empty and Remove from Site the Lubricating Oil	4 days
59	Drain Lubricating Oil Piping	2 days
60	Open and Vent Lubricating Oil Piping	1 day
61	**Hawthorn 9 Retirement Activities**	**80 days**
62	**Electrical**	**22 days**
63	**Medium and Low Voltage Drawout Switchgear**	**6 days**
64	De-energize all buses at the source.	1 day



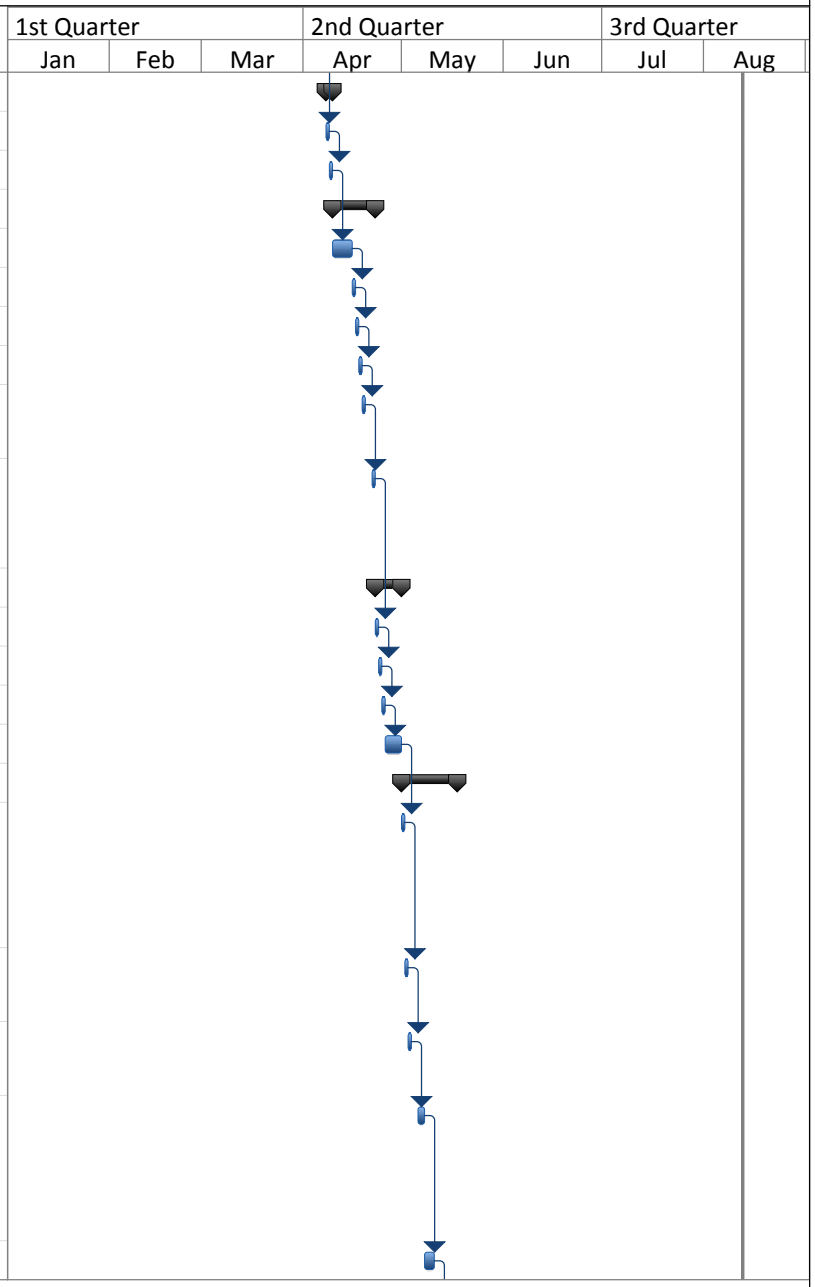
Hawthorn 6 & 9 Retirement

ID	Task Name	Duration
65	Open all circuit breakers.	1 day
66	Rack all circuit breakers into the fully withdrawn, disconne	1 day
67	Verify that the closing/tripping springs are discharged.	2 days
68	De-energize control power and auxiliary power circuits of	1 day
69	**Motor Control Centers**	**3 days**
70	De-energize all buses at the source.	1 day
71	Open all circuit breakers and disconnect switches.	1 day
72	Remove all fuses in control circuits.	1 day
73	**Low-voltage Switchboards and Panelboards**	**2 days**
74	De-energize all buses at the source.	1 day
75	Open all circuit breakers and disconnect switches.	1 day
76	**Oil-Filled Power Transformers**	**4 days**
77	De-energize all buses at the source.	1 day
78	Open all circuit breakers and disconnect switches.	1 day
79	De-energize all buses at the source.	1 day
80	Open all circuit breakers and disconnect switches.	1 day
81	**Dry-type Power Transformers**	**2 days**
82	De-energize all transformer primaries and verify that the s	1 day
83	De-energize all low-voltage AC or DC power sources for sp	1 day
84	**Motors**	**5 days**
85	De-energize all primary power at the source.	1 day
86	De-energize all low-voltage power sources for space heate	1 day
87	Drain lube oil system (if applicable) and dispose of oil.	3 days
88	**Boiler Chemical Feed**	**2 days**
89	Drain all chemical feed tanks.	2 days
90	**HRSG**	**3 days**
91	Open HRSG doors.	1 day
92	Drain boiler, drums, downcomers and headers.	1 day
93	Open drum doors.	1 day
94	**Stack and Ductwork**	**2 days**
95	Open ductwork doors.	1 day
96	Place cap over stack opening to keep moisture out.	1 day



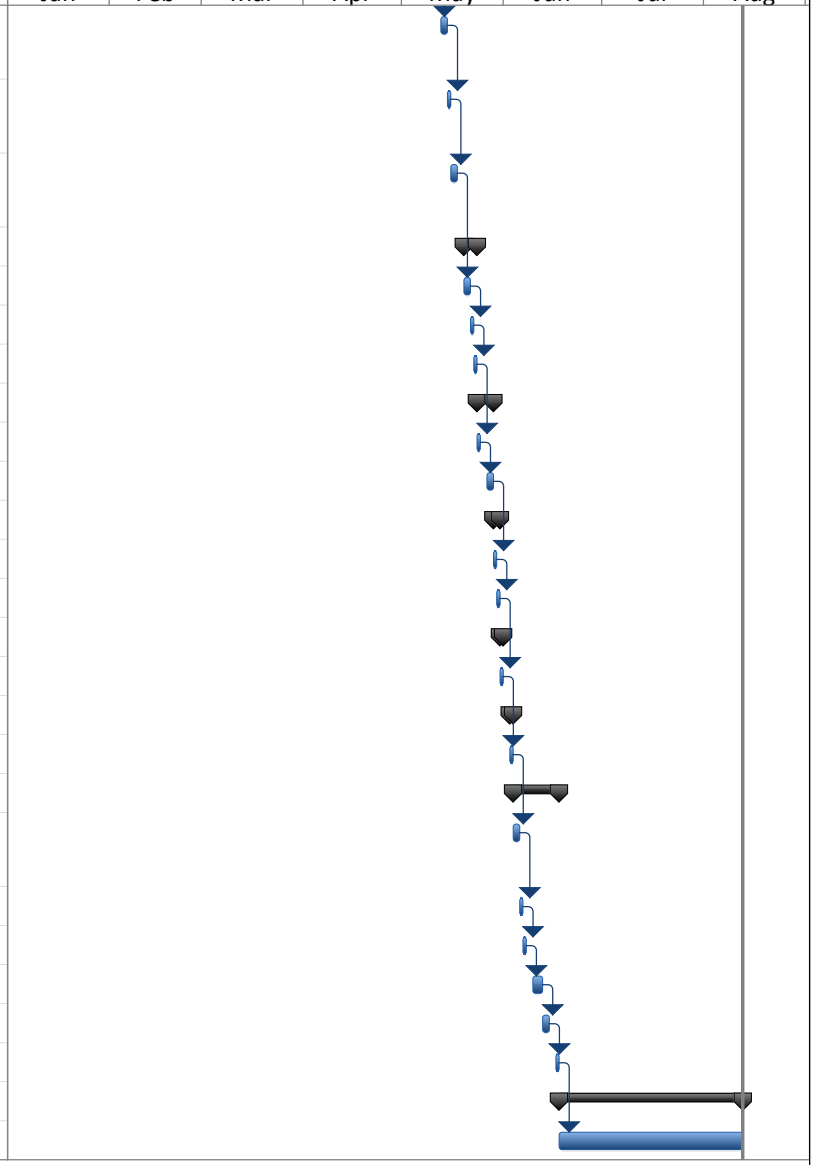
Hawthorn 6 & 9 Retirement

ID	Task Name	Duration
97	**Condensate and Feedwater Piping**	**2 days**
98	Drain water from the system.	1 day
99	Leave open vents and drains.	1 day
100	**SCR**	**9 days**
101	Remove catalyst of salvage or disposal.	4 days
102	Padlock or tack weld access doors shut.	1 day
103	Remove ammonia from storage tank for resale.	1 day
104	Wash out and drain storage tank and supply piping.	1 day
105	Vent storage tank and all piping. Leave vent and drain valves open or remove. Install bird screens.	1 day
106	Pull electrical supply breakers on all electrical equipment except lighting and HVAC components that are to remain in service.	1 day
107	**Turbine(s) and Condenser**	**6 days**
108	Drain hotwell and leave doors open.	1 day
109	Open main turbine doors.	1 day
110	Open bfp turbine doors.	1 day
111	Remove lube oil.	3 days
112	**Generator**	**13 days**
113	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.	1 day
114	Verify that generator field breaker or contactor (if applicable) is open.	1 day
115	De-energize power supplies to generator excitation system at the source.	1 day
116	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.	2 days
117	Drain lubricating oil system and dispose of oil.	3 days



Hawthorn 6 & 9 Retirement

ID	Task Name	Duration
118	Drain generator and exciter cooling water systems (if applicable).	2 days
119	Disconnect and remove hydrogen gas tanks and purge generator hydrogen system.	1 day
120	Disconnect and remove fire protection system gas/foam tanks and purge fire protection system.	2 days
121	**Circulating Water and Turbine Cooling Water System**	**4 days**
122	Drain.	2 days
123	Open water box doors.	1 day
124	Drain any circulating water chemical feed tanks.	1 day
125	**Compressed Air System**	**3 days**
126	Open vents and drains.	1 day
127	Remove desiccant from desiccant dryers.	2 days
128	**Auxiliary Steam System**	**2 days**
129	Drain water from system.	1 day
130	Remove aux boiler chemicals.	1 day
131	**Auxiliary Cooling Water System**	**1 day**
132	Drain water from system.	1 day
133	**Condenser Air Extraction and Waterbox Priming System**	**1 day**
134	Drain water from system.	1 day
135	**Battery System**	**10 days**
136	Turn off battery charger and disconnect cables from batteries.	2 days
137	De-energize all battery chargers from the source.	1 day
138	Open all AC and DC circuit breakers and/or fused switches or	1 day
139	Remove and dispose of battery electrolyte.	3 days
140	Remove and dispose of battery cells.	2 days
141	Clean up and dispose of electrolyte on surface areas around	1 day
142	**Post Retirement Activities**	**40 days**
143	Post Retirement Activities	40 days



Hawthorn 6 & 9 Dismantlement

Owner Costs				
Pre-Dismantlement Activities		$782,068		
Overhead During Dismantlement		$1,085,760		
Post-Dismantlement Activities		$30,880		
Owner Costs Total			$1,898,708	
Demolition General Contractor (DGC) Costs				
Site Management		$643,968		
Equipment Rental		$1,075,776		
Consummables		$1,073,280		
Scrap Crew(s)		$288,013		
Dismantlement		$938,327		
DGC Insurance	2.00%	$80,387		
Contingency/Profit	15.00%	$614,963		
Performance Bond	2.00%	$94,294		
Contractor Costs Total:			$4,809,008	
Total:				$6,707,716
Owner Internal Costs:	5.00%			$335,386
Owner Contingency:	25.00%			$1,760,776
Hawthorn 6 & 9 Dismantlement Opinion of Probable Cost:				$8,803,878

Hawthorn 6 & 9 Dismantlement

ID	Task Name	Cost
1	**Hawthorn 6 &9 Dismantlement**	**$5,918,072.89**
2	**Pre-Demolition Activities**	**$782,068.00**
3	Detailed Planning & Hire Owner's Engineer	$98,448.00
4	Detailed Site Characterization Study	$525,148.00
5	Hire Demolition general Contractor	$149,544.00
6	KCP&L Prepares Unit for Dismantlement	$8,928.00
7	Demolition Contractor Mobilizes on Sit	$0.00
8	**KCP&L Overhead during Dismantlement**	**$1,085,760.00**
9	KCP&L Project Manager	$182,208.00
10	KCP&L Administrative Support	$67,392.00
11	KCP&L Engineer	$299,520.00
12	Owners Engineer Project Manager	$87,360.00
13	Owners Engineer - Engineer	$449,280.00
14	**Demolition Contractor Overhead during Dismantlement**	**$643,968.00**
15	Demolition Contractor Project Manager	$182,208.00
16	Demolition Contractor Safety Manager	$162,240.00
17	Demolition Contractor Superintendent	$299,520.00
18	**Demolition Contractor Equipment Rental Cost**	**$1,075,776.00**
19	Equipment Rental	$1,075,776.00
20	**Demolition Contractor Consumables**	**$1,073,280.00**
21	Consumables	$1,073,280.00
22	**Scrap Crews**	**$288,013.44**
23	Crew to Handle Scrap Material(s)	$288,013.44
24	**Dismantlement**	**$938,327.45**
25	**Electrical**	**$104,376.01**
26	Electrical Demolition of Equipment	$104,376.01
27	**Fuel Gas System**	**$8,201.44**
28	Remove all above grade fuel gas piping.	$2,982.64
29	Gas Filter Skid	$5,218.80
30	**Lube Oil System**	**$19,135.60**
31	Lube Oil Piping	$5,218.80
32	Lube Oil Pumps	$5,218.80
33	Lube Oil Tanks	$8,698.00
34	**Compressed Air System**	**$22,614.80**
35	Compressed Air Piping	$5,218.80
36	Compressors	$8,698.00
37	Air Receiver	$3,479.20
38	Dryer	$5,218.80
39	**Fire Protection**	**$31,312.80**
40	Fire Protection Piping	$10,437.60
41	Firewater Tank	$13,916.80
42	CO2 Storage Tank	$6,958.40
43	**Wash Water Skid**	**$13,916.80**
44	Detergent Tank	$6,958.40

Hawthorn 6 & 9 Dismantlement

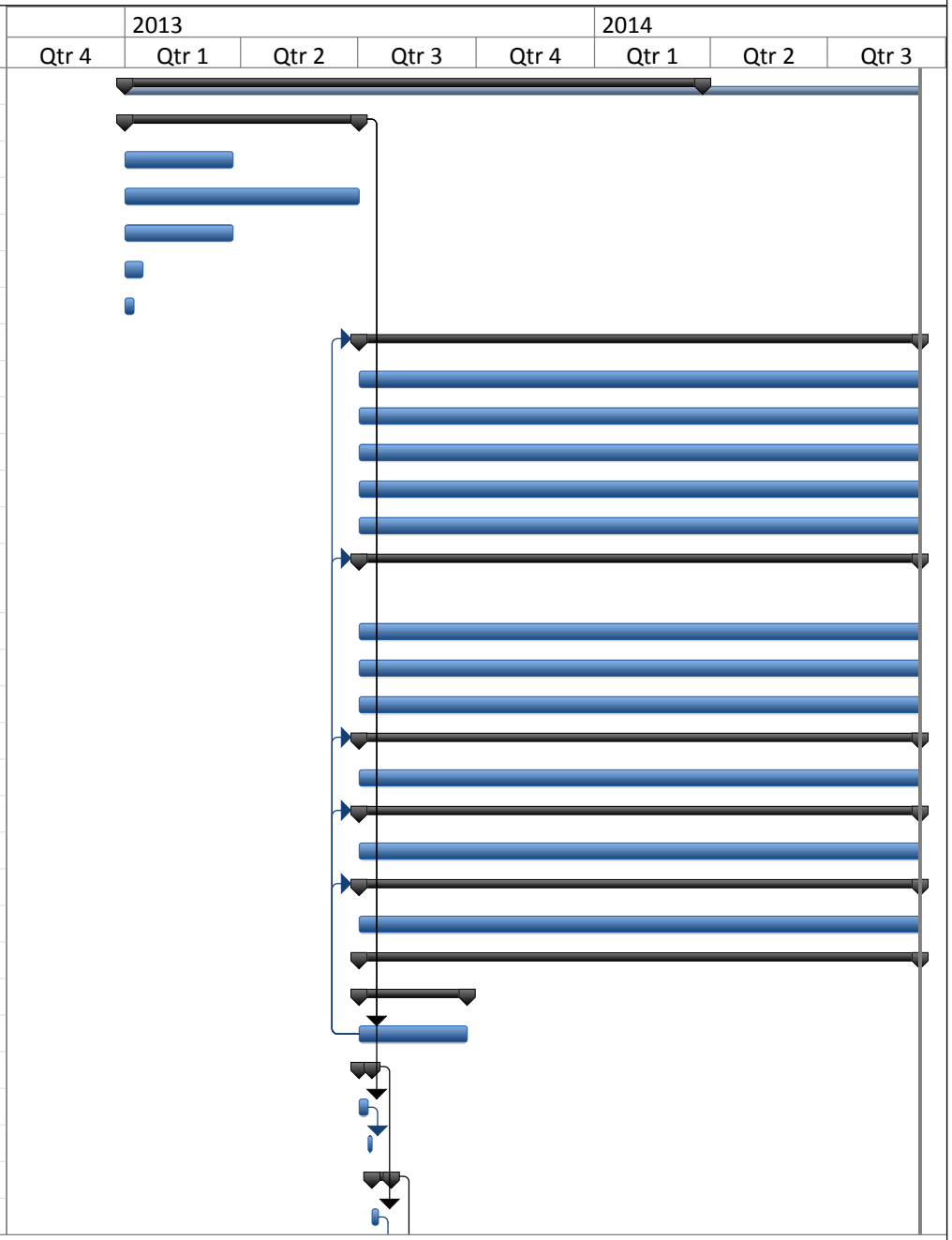
ID	Task Name	Cost
45	Demineralized Water Tank	$6,958.40
46	**Miscellaneous Piping**	**$88,719.60**
47	Exhaust Frame Cooling Piping	$6,958.40
48	CT Air Processing Piping	$8,698.00
49	Inlet Air Heating Piping	$8,698.00
50	Auxiliary Steam Piping	$8,698.00
51	Auxiliary Cooling Piping	$8,698.00
52	Feedwater Piping	$12,177.20
53	Condensate Piping	$13,916.80
54	High Pressure Steam Piping	$20,875.20
55	**Generators**	**$13,916.80**
56	CT Generator	$6,958.40
57	ST Generator	$6,958.40
58	**Steam Turbine and Condenser**	**$26,094.00**
59	Remove Steam Turbine	$17,396.00
60	Remove Condenser	$8,698.00
61	**General Service Pumps**	**$24,354.40**
62	Boiler Feed Pumps	$8,698.00
63	Condensate Pumps	$5,218.80
64	Turbine Cooling Water Pumps	$3,479.20
65	General Service Pumps - Misc.	$6,958.40
66	**Combustion Turbine**	**$90,459.20**
67	Inlet Heater	$5,218.80
68	Inlet duct	$10,437.60
69	Exhaust duct	$13,916.80
70	Combustion Turbine	$27,833.60
71	Combustion Turbine Foundation	$15,656.40
72	Enclosure	$17,396.00
73	**Boiler Chemical Feed**	**$6,958.40**
74	Chemical Feed tanks	$6,958.40
75	**Condenser**	**$29,573.20**
76	Condenser Air Extraction and Waterbox Priming System	$6,958.40
77	Condenser	$22,614.80
78	**HRSG**	**$330,524.00**
79	Remove Boiler Tubes	$104,376.00
80	Remove Boiler Ductwork Casing	$69,584.00
81	Remove Boiler Steel	$156,564.00
82	**Turbine Building**	**$58,586.40**
83	Remove the Turbine Building	$58,586.40
84	**Circulating Water and Turbine Cooling Water System**	**$20,875.20**
85	Chemical Feed tanks	$3,479.20
86	Excavate Collapse and Back Fill Circulation Water Piping	$17,396.00
87	**CEMS**	**$13,916.80**
88	CEMS Building	$6,958.40

Hawthorn 6 & 9 Dismantlement

ID	Task Name	Cost
89	CEMS Building Foundation	$6,958.40
90	**Stack**	**$34,792.00**
91	Stacks and By-Pass Damper	$34,792.00
92	**Post Dismantlement Activities**	**$30,880.00**
93	Post Dismantlement Activities	$30,880.00

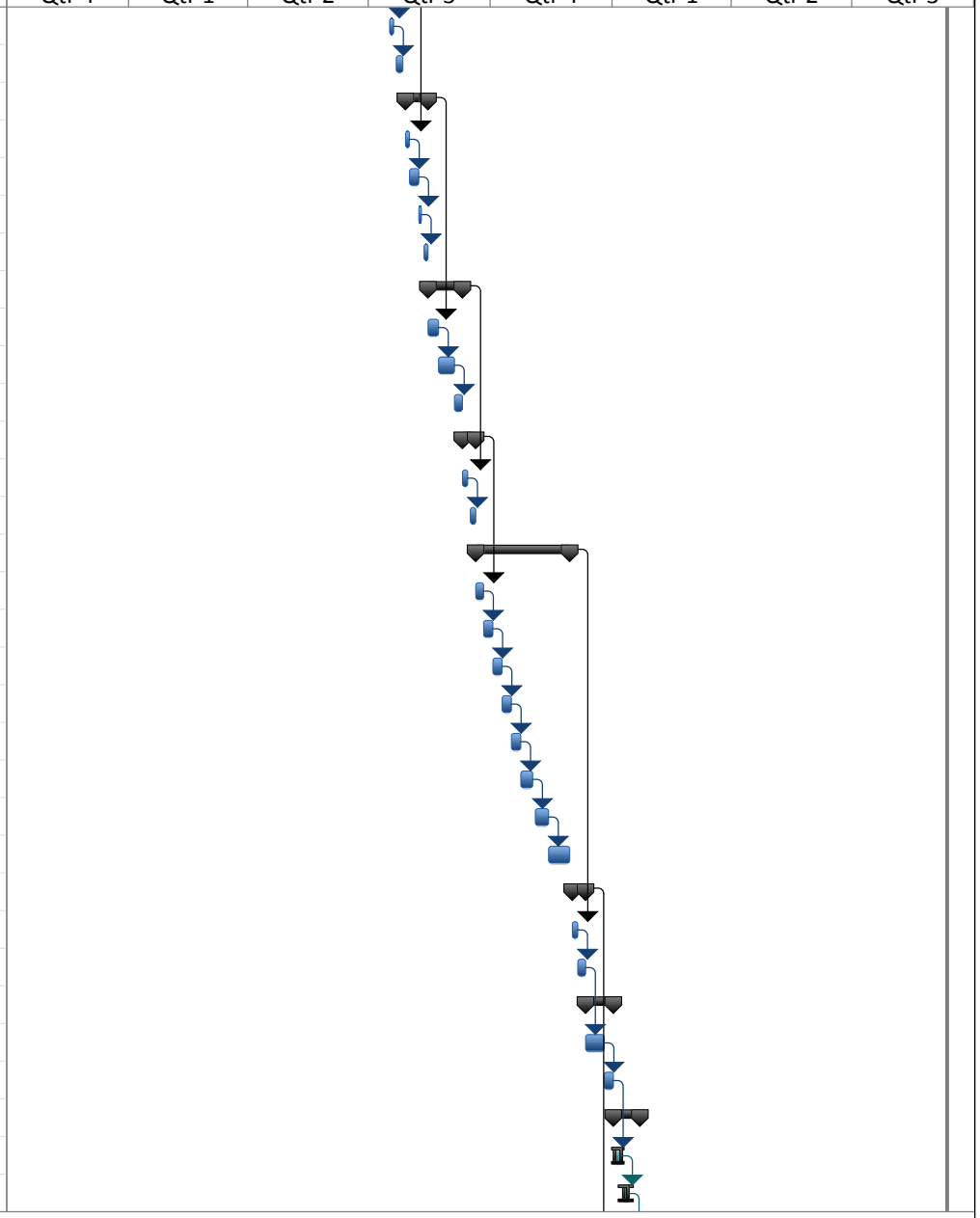
Hawthorn 6 & 9 Dismantlement

ID	Task Name	Duration
1	**Hawthorn 6 &9 Dismantlement**	**321 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**	**312 days**
9	KCP&L Project Manager	312 days
10	KCP&L Administrative Support	312 days
11	KCP&L Engineer	312 days
12	Owners Engineer Project Manager	312 days
13	Owners Engineer - Engineer	312 days
14	**Demolition Contractor Overhead during Dismantlement**	**312 days**
15	Demolition Contractor Project Manager	312 days
16	Demolition Contractor Safety Manager	312 days
17	Demolition Contractor Superintendent	312 days
18	**Demolition Contractor Equipment Rental Cost**	**312 days**
19	Equipment Rental	312 days
20	**Demolition Contractor Consumables**	**312 days**
21	Consumables	312 days
22	**Scrap Crews**	**312 days**
23	Crew to Handle Scrap Material(s)	312 days
24	**Dismantlement**	**312 days**
25	**Electrical**	**60 days**
26	Electrical Demolition of Equipment	60 days
27	**Fuel Gas System**	**8 days**
28	Remove all above grade fuel gas piping.	5 days
29	Gas Filter Skid	3 days
30	**Lube Oil System**	**11 days**
31	Lube Oil Piping	3 days



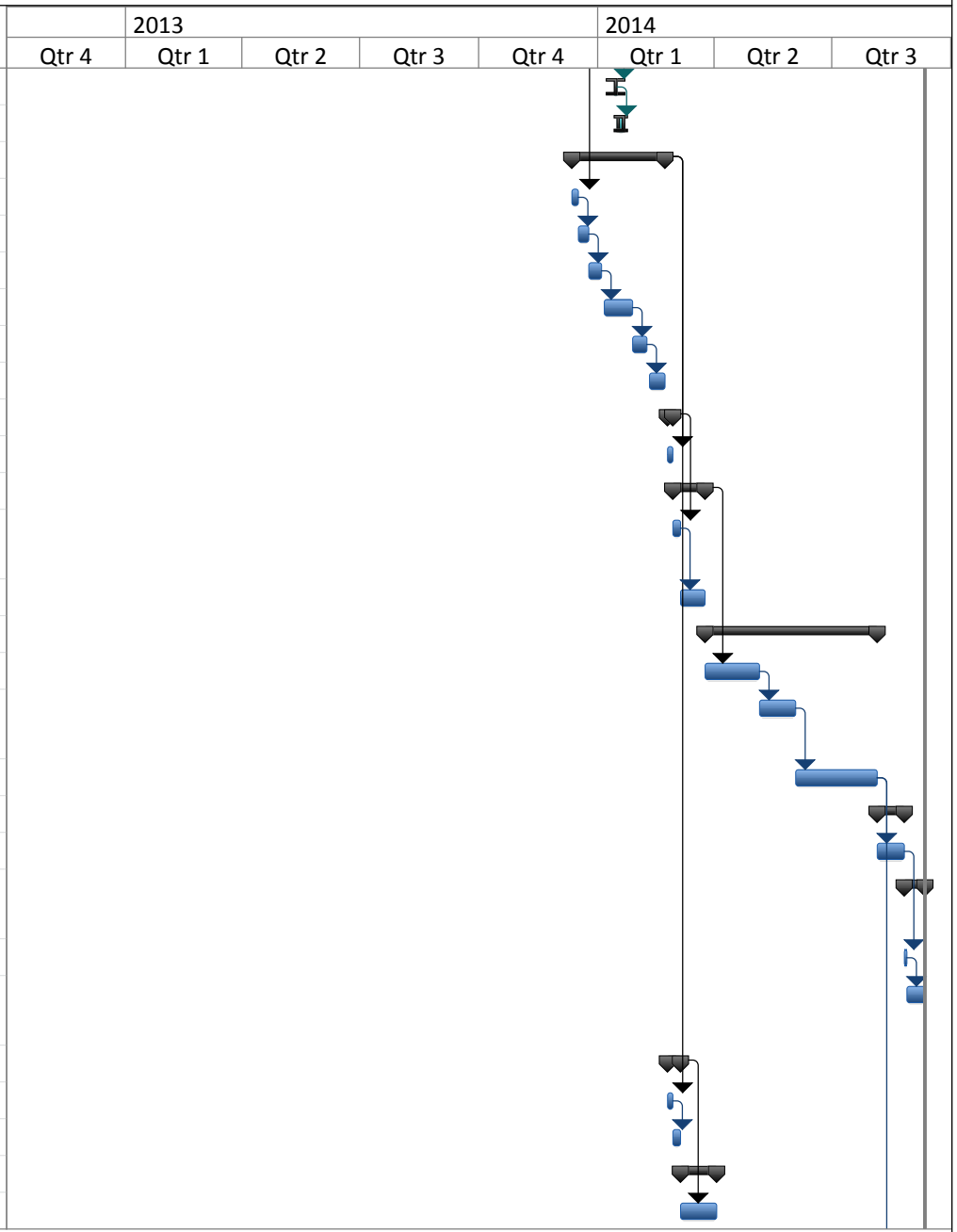
Hawthorn 6 & 9 Dismantlement

ID	Task Name	Duration
32	Lube Oil Pumps	3 days
33	Lube Oil Tanks	5 days
34	**Compressed Air System**	**13 days**
35	Compressed Air Piping	3 days
36	Compressors	5 days
37	Air Receiver	2 days
38	Dryer	3 days
39	**Fire Protection**	**18 days**
40	Fire Protection Piping	6 days
41	Firewater Tank	8 days
42	CO2 Storage Tank	4 days
43	**Wash Water Skid**	**8 days**
44	Detergent Tank	4 days
45	Demineralized Water Tank	4 days
46	**Miscellaneous Piping**	**51 days**
47	Exhaust Frame Cooling Piping	4 days
48	CT Air Processing Piping	5 days
49	Inlet Air Heating Piping	5 days
50	Auxiliary Steam Piping	5 days
51	Auxiliary Cooling Piping	5 days
52	Feedwater Piping	7 days
53	Condensate Piping	8 days
54	High Pressure Steam Piping	12 days
55	**Generators**	**8 days**
56	CT Generator	4 days
57	ST Generator	4 days
58	**Steam Turbine and Condenser**	**15 days**
59	Remove Steam Turbine	10 days
60	Remove Condenser Transition	5 days
61	**General Service Pumps**	**14 days**
62	Boiler Feed Pumps	5 days
63	Condensate Pumps	3 days



Hawthorn 6 & 9 Dismantlement

ID	Task Name	Duration
64	Turbine Cooling Water Pumps	2 days
65	General Service Pumps - Misc.	4 days
66	**Combustion Turbine**	**52 days**
67	Inlet Heater	3 days
68	Inlet duct	6 days
69	Exhaust duct	8 days
70	Combustion Turbine	16 days
71	Combustion Turbine Foundation	9 days
72	Enclosure	10 days
73	**Boiler Chemical Feed**	**4 days**
74	Chemical Feed tanks	4 days
75	**Condenser**	**17 days**
76	Condenser Air Extraction and Waterbox Priming System	4 days
77	Condenser	13 days
78	**HRSG**	**95 days**
79	Remove Boiler Tubes	30 days
80	Remove Boiler Ductwork Casing	20 days
81	Remove Boiler Steel	45 days
82	**Turbine Building**	**15 days**
83	Remove the Turbine Building	15 days
84	**Circulating Water and Turbine Cooling Water System**	**12 days**
85	Chemical Feed tanks	2 days
86	Excavate Collapse and Back Fill Circulation Water Piping	10 days
87	**CEMS**	**8 days**
88	CEMS Building	4 days
89	CEMS Building Foundation	4 days
90	**Stack**	**20 days**
91	Stacks and By-Pass Damper	20 days



Hawthorn 6 & 9 Dismantlement

ID	Task Name	Duration		2013				2014		
			Qtr 4	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 1	Qtr 2	Qtr 3
92	**Post Dismantlement Activities**	**20 days**								
93	Post Dismantlement Activities	20 days								

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: $324.00/GT.
2. Insulated Cables: $1.65/lb.
3. Motors: $0.41/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 is a spreadsheet that was developed from the quantities used to build Iatan Unit 1 to calculate the current scrap value of Iatan Unit 1 value rates. Per the attached spreadsheet:

1. Iatan Unit 1 Scrap Value: $8,500,000.

The AACE International Capacity Factor Method 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)=Iatan1(scrap value)*(CapacityUnitA/CapacityIatan1)^e

Where:

1. UnitA(scrap value) = Unit A Scrap Value.
2. Iatan1(scrap value)= Iatan Unit 1 Scrap Value: $8,500,000.
3. CapacityUnitA = Capacity of Unit A.
4. CapacityIatan1 = Capacity of Iatan Unit 1: 705 MW.
5. e = Proration Factor: 0.6 per the AACE guidelines.

Therefore, the scrap value of the other coal-fired power plants are as follows:

MONTROSE UNIT 1

1. Capacity A = 170 MW.
2. Scrap Value = $3,620,000.

MONTROSE UNIT 2

1. Capacity A = 164 MW.
2. Scrap Value = $3,540,000.

MONTROSE UNIT 3

1. Capacity A = 176 MW.
2. Scrap Value = 3,696,000.

HAWTHORN UNIT 5

1. Capacity A = 564 MW.
2. Scrap Value = $7,434,000.

LA CYGNE UNIT 1

1. Capacity A = 735 MW.
2. Scrap Value = $8,715,000.

LA CYGNE UNIT 2

1. Capacity A = 686 MW.
2. Scrap Value = $8,360,000.

IATAN UNIT 2

1. Capacity A = 881 MW.
2. Scrap Value = $9,700,000.

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. Montrose Common: Scrap Value = $1,340,000.
2. Hawthorn Common: Scrap Value = $952,000.
3. La Cygne Common: Scrap Value = $1,980,000.
4. Iatan Common: Scrap Value = $2,434,000.

The scrap value of the combustion turbines 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 (for One Combustion Turbine):
   (530,000 lbs/2000 lbs/ton) * $324/GT: = $85,860

Therefore:

NORTHEAST

1. (Eight combustion turbines)*$85,860/CT: Scrap Value = $526,000.

HAWTHORN UNITS 7 AND 8

1. (Two combustion turbines)*$85,860/CT: Scrap Value = $171,720.

WEST GARDNER

1. (Four combustion turbines)*$85,860/CT: Scrap Value = $343,440.

OSAWATOMIE

1. (One combustion turbine)*$85,860/CT Scrap Value = $85,440.

The scrap value of Hawthorn Units 6 and 9 was calculated in two parts: the scrap value of the CT (Hawthorn Unit 6) and the scrap value of the steam turbine plant (Hawthorn Unit 9):

HAWTHORN UNIT 6

1. (One combustion turbine)*$85,860/CT: Scrap Value=$85,860.

HAWTHORN UNIT 9

1. Capacity A = 62 MW: Scrap Value = $1,976,698.

Total Hawthorn Units 6 and 9 Scrap Value: $2,114,000.

Iatan Unit 1 Materials from the Final Construction Report										
Mixed Scrap Steel -										
Structural Steel -			11085	Tons				11085	tons	
Handrail -			32647	linear feet		3.65	lbs/ft	60	tons	
Grating -			168244	square feet		10	lbs/ft^2	841		
Coal Silos			285	Tons				285	tons	
Fabricated Pipe 2.5" and Larger	**Pipe (linear feet)**									
Main Steam	911		28"	424	lbs/ft			193.132	tons	
Hot Reheat	1412		36"	552	lbs/ft			389.712	tons	
Cold Reheat	1173		36"	552	lbs/ft			323.748	tons	
High Pressure Extraction	1400	Assume	6"	28.57	lbs/ft			19.999	tons	
Boiler Safety Valve Vents	1022	Assume	6"	28.57	lbs/ft			14.59927	tons	
Auxiliary Steam	2269	Assume	6"	28.57	lbs/ft			32.412665	tons	
Boiler Vents and Drains	1019	Assume	6"	28.57	lbs/ft			14.556415	tons	
Soot Blower Piping	1729	Assume	6"	28.57	lbs/ft			24.698765	tons	
Temporary Blowout	796	Assume	6"	28.57	lbs/ft			11.37086	tons	
Low Pressure Extraction	902	Assume	6"	28.57	lbs/ft			12.88507	tons	
Turbine Seal and Drains	1085	Assume	6"	28.57	lbs/ft			15.499225	tons	
BFPT Exhaust	25	Assume	6"	28.57	lbs/ft			0.357125	tons	
Boiler Feed Discharge	615	Assume	6"	28.57	lbs/ft			8.785275	tons	
BFP Recirc and Desuper Heat	2556	Assume	6"	28.57	lbs/ft			36.51246	tons	
Boiler Feed Suction	414	Assume	6"	28.57	lbs/ft			5.91399	tons	
Condensate	3901	Assume	6"	28.57	lbs/ft			55.725785	tons	
Air Preheater Piping	5634	Assume	6"	28.57	lbs/ft			80.48169	tons	
Heater Vents and Drains	2013	Assume	6"	28.57	lbs/ft			28.755705	tons	
Heater Drips	2717	Assume	6"	28.57	lbs/ft			38.812345	tons	
Water Pretreatment Piping	221	Assume	6"	28.57	lbs/ft			3.156985	tons	
Chemical Feed	85	Assume	6"	28.57	lbs/ft			1.214225	tons	
Make-Up Water	3924	Assume	6"	28.57	lbs/ft			56.05434	tons	
Ash Sluice Water	6510	Assume	6"	28.57	lbs/ft			92.99535	tons	
Chemical Clean	4892	Assume	6"	28.57	lbs/ft			69.88222	tons	
Nitrogen	918	Assume	6"	28.57	lbs/ft			13.11363	tons	
Auxiliary Cooling Water	6462	Assume	6"	28.57	lbs/ft			92.30967	tons	
Extraction Traps and Drains	1279	Assume	6"	28.57	lbs/ft			18.270515	tons	
Condenser Air Extraction	276	Assume	6"	28.57	lbs/ft			3.94266	tons	
Fuel Oil System	804	Assume	6"	28.57	lbs/ft			11.48514	tons	
Fire Protection System	4017	Assume	6"	28.57	lbs/ft			57.382845	tons	
Service Water	5022	Assume	6"	28.57	lbs/ft			71.73927	tons	
Generator Auxiliaries	196	Assume	6"	28.57	lbs/ft			2.79986	tons	
Turbine Lube Oil	925	Assume	6"	28.57	lbs/ft			13.213625	tons	
Waste Water		Assume	6"	28.57	lbs/ft			0	tons	
Compressed Air System	12255	Assume	6"	28.57	lbs/ft			175.062675	tons	
Building Heating	5438	Assume	6"	28.57	lbs/ft			77.68183	tons	
Screen Wash	98	Assume	6"	28.57	lbs/ft			1.39993	tons	
Bottom Ash Overflow	1032	Assume	6"	28.57	lbs/ft			14.74212	tons	
Fly Ash Disposal	4099	Assume	6"	28.57	lbs/ft			58.554215	tons	
Ash Storage	1313	Assume	6"	28.57	lbs/ft			18.756205	tons	
BFP Seal		Assume	6"	28.57	lbs/ft			0	tons	
Equipment Drains	447	Assume	6"	28.57	lbs/ft			6.385395	tons	
Piping Provided With Equipment	**Linear Feet**									
Turbine Generator										
Stator Cooling Water	1072	Assume	8"	43.4	lbs/ft			23.2624	tons	
Lube and Seal Oil	1293	Assume	8"	43.4	lbs/ft			28.0581	tons	
Steam Seal	1700	Assume	8"	43.4	lbs/ft			36.89	tons	
ECH	2000	Assume	8"	43.4	lbs/ft			43.4	tons	
Hydrogen	1735	Assume	8"	43.4	lbs/ft			37.6495	tons	
Main Steam Leads	322	Assume	8"	43.4	lbs/ft			6.9874	tons	
Crossover Pipe	90	Assume	8"	43.4	lbs/ft			1.953	tons	

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Air preheaters														
Primary	tons	536							536	tons				
Secondary	tons	832							832	tons				
Mixed Scrap Steel Total									**33536**	**tons**	**@**	**324**	**$/GT**	**$10,865,529**
Motors	**lbs**								**91943**	**lbs**	**@**	**0.41**	**$/lb**	**$37,696.63**
Cable														
6.9 KV	Linear Feet	115,300		795	lb/1000 ft				91663.5	lbs				
480V,120V AC and 125V DC	Linear Feet	333,000		548	lb/1000 ft				182484	lbs				
Control	Linear Feet	200,200		141	lb/1000 ft				28228.2	lbs				
Thermocouple and Instrument	Linear Feet	557,000		102	lb/1000 ft				56814	lbs				
Communication	Linear Feet	40,000		102	lb/1000 ft				4080	lbs				
Cable Totals									**363270**	**lbs**	**@**	**1.65**	**$/lb**	**$599,395**
				Total Opinion of Scrap Value for Iatan 1 and Iatan 1 Common*										$11,502,620
				* Common at the time that Iatan Unit 1 was built.										
Assume that 25% of the quantities above are "common facilities"; therefore, the scrap value of Iatan Unit 1 is:					**$8,500,000**									

APPENDIX C

REFERENCES

REFERENCE DOCUMENTS

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

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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.