

Coal's Accelerated Burn

A Management Guide to Coal Plant Decommissioning



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More than 25,000 MWs of coal capacity are planned to retire within the next five years in the United States.¹ Generation companies that operate coal-fired power plants must carefully make and execute the decommissioning decision to ensure more than just financial prudence. The human element of retiring an older coal plant requires careful consideration and execution to ensure employees are treated fairly, stakeholder concerns are considered, regulators are provided adequate notice, and the company's public perception is not harmed. In this article, ScottMadden recommends a planning approach to ensure transparency and management control throughout the decommissioning process.

Overview

Executives who are choosing to decommission a coal-fired generation plant have a number of decisions to make—from the desired end state of the plant to the approach and timing of the decommissioning process. Generation companies that have executed this process well in the past utilized a comprehensive planning process that ensured there was a well-thought-out plan in place and that it involved the right people at the right time. Typically, the financial decisions are the easy part. It is the people side of the process that can be trickier and may require a more thoughtful approach to ensure overall success.

This article recommends a three-phased approach to planning a successful coal plant retirement. It is based on ScottMadden's experience helping a variety of generators with their decommissioning efforts. Our experience has shown that a comprehensive and well-thought-out execution plan provides for better human capital, financial, and operational outcomes (for the remainder of the plant's life) for the generation company. The backlash for doing this wrong can be consequential. Generation companies that announce their coal plant retirement without a comprehensive plan risk employee confusion, talent flight of key personnel, souring relationships with collective bargaining, missteps with regulators and other officials, and additional negative consequences that otherwise could have been avoided. Communicating early when facts are known is laudable; communicating an end state with a partially thought-out plan is fraught with risk.

The decommissioning plan should encompass the timespan from prior to the public announcement of the closure through the desired end state of the plant. While the plan should be tailored to the specific needs of the plant and allow for some flexibility, ScottMadden recommends the following three phases: project setup, design and detailed planning, and plan execution.

¹ EIA: Planned U.S. Electric Generating Unit Retirements, https://www.eia.gov/electricity/monthly/epm_table_grapher.php?t=epmt_6_06

Figure 1: Phases of a Successful Plant Closure

	PHASE 1 Project Setup	PHASE 2 Design and Detailed Planning	PHASE 3 Plan Execution
Significant Activities	<ul style="list-style-type: none"> Develop project charter for decommissioning effort Establish desired end state of facility Conduct initial scoping activities Establish small cross-functional teams to: <ul style="list-style-type: none"> Perform stakeholder analysis Draft messaging that considers stakeholder views and concerns Initiate stakeholder engagement planning 	<ul style="list-style-type: none"> Develop detailed execution plans for functional areas Define workstream interdependencies Develop project metrics/success factors Involve additional resources required that were not included in Phase 1 	<ul style="list-style-type: none"> Implement execution plan Monitor metrics/success factors Follow a structured project management process
Key Participants	<ul style="list-style-type: none"> Senior leadership Handful of subject matter experts Communications and/or external relations 	<ul style="list-style-type: none"> PMO Leaders of impacted organizations (e.g., HR, finance, etc.) 	<ul style="list-style-type: none"> Senior leadership PMO Project team Plant management Union leadership
Transition Event	<ul style="list-style-type: none"> Leadership approval of closure* 	<ul style="list-style-type: none"> Board approval* Public announcement of closure 	<ul style="list-style-type: none"> Plant shutdown
Nature of Work	<ul style="list-style-type: none"> Highly confidential 	<ul style="list-style-type: none"> Highly confidential 	<ul style="list-style-type: none"> Public

*Note: Depending on the situation, the timing of leadership and board approval may vary.

Phase 1: Project Setup

When anticipating the closure of a coal-fired power plant, it is vital that management quickly engages in a comprehensive-planning process prior to the public announcement of the closure. The first step is to develop a project charter for the effort that defines the scope, timing, roles/accountabilities, and milestones for the decommissioning project. There are three primary work streams: the human element, the market element, and the operational element.

The human element includes many considerations, such as the views and concerns of the various impacted internal and external stakeholders, workforce strategy through shutdown, Worker Adjustment and Retraining Notification Act (WARN)² notice period and state notifications (if applicable), announcement method(s), message content and timing, and multiple other details.

Importance of the Human Element

ScottMadden’s experience has shown that when generation companies are focused on operations and markets, they are often less prepared when it comes to the human element. However, given the impact the decommissioning process has on the lives of plant personnel and the local community (of which a plant is typically a major employer and driver of significant economic activity), considerable time and effort should be invested in addressing the human element of the closure.

² U.S. Department of Labor: WARN Act Compliance Assistance, <https://www.dol.gov/agencies/eta/layoffs/warn>

A plant closure will have wide-ranging impacts on both individuals and the community. As part of the initial human element planning activities, the team should identify all stakeholders, both internal and external, and their primary concerns. This will help to anticipate questions and concerns likely to be raised across a variety of impacted stakeholder groups following a retirement announcement. Each impact should be identified and assessed prior to publicly announcing the closure, as each will need to be messaged appropriately. For example, ScottMadden has worked with multiple owners to plan the closure of plants that were among the largest employers in their communities. In those cases, management made the decision to work proactively with local political leadership of the impacted areas to address specific concerns, such as jobs and tax impacts to state and local communities.

Figure 2: Example Stakeholder List and Concerns

Stakeholder Group	Primary Concerns	Stakeholder Group	Primary Concerns
 Employees	Jobs and asset diversity	 Interest Groups and Associations	Carbon impact of capacity replacement and pace of decarbonization
 Board	Financial and political impacts	 Retail Ratepayers	Rates and reliability
 State and Local Government Officials	Jobs, tax revenue, and local economy	 Independent System Operators	Reliability, asset diversity, ramping ability, and disaster recovery capabilities
 Federal Government Officials	Climate and jobs	 Community Groups	Jobs and local economy
 Regulators	Rates, reliability, and process	 Potential Industrial Customers	Rates, reliability, climate, and asset diversity
 Bargaining Units	Jobs	 Business Partners	Supply chain impacts (upstream and downstream)
 Media	Climate, jobs, and local economy	 Investor Community	Asset diversity and impacts of carbon regulation

The market element includes economic decisions and alternatives for the final state of the unit (e.g., mothballing the asset, decommissioning, returning the site to brown/greenfield for future development, etc.), proper accounting, market/regional transmission organization (RTO) notification, salvage opportunities, environmental requirements, etc. Effective generation owners employ a project management approach to research, evaluate, and make decisions based on the company’s unique situation.

The operational element includes strategic decisions on the continued operations and maintenance of the site until closure, adhering to all environmental guidelines, and preparing the site for closure. It also includes considering changes to normal and customary operations and maintenance practices, including outage planning, preventive maintenance, changes to the supply chain process (e.g., amount of inventory on hand and redeployment of fuel, parts, and spares to other sites within the fleet), and even shift schedules.

Small cross-functional teams plan the details for the closure across all three primary workstreams. These teams should include individuals with expertise from areas across the enterprise, including HR, plant operations/maintenance, finance, accounting, legal, regulatory, corporate affairs, communications, etc.

When establishing these teams, it is vital that senior leadership communicates the importance and confidentiality of the plant closing and that the team does not share any information until instructed to do so by the executive sponsor.

The teams should engage in initial-scoping activities, which include identifying major issues relating to the closure and developing functional work plans to address these issues. The work of the teams spans a broad spectrum and includes developing materials that communicate the closure of the plant; anticipating the concerns of internal and external stakeholders and providing adequate information and resources to address those concerns; establishing strategies to ensure the operational continuity for the remainder of the plant's operating life; developing processes for engaging in reduction of force activities; and identifying/engaging third-party contractors to assist in the demolition/deconstruction of the facility (if the decision is to demolish the site). ScottMadden strongly recommends the initial-scoping process take place prior to the closure announcement.

While engaging in Phase 1 activities will not eliminate all potential problems, having cross-functional teams from across the enterprise, who are thinking through these impacts and actively engaging in the planning process prior to the announcement, will ultimately result in a smoother plant closure.

Phase 2: Design and Detailed Planning

While Phase 1 focuses on the big picture, stakeholder identification, and issue identification, Phase 2 focuses on designing and developing detailed execution plans for key functional areas (e.g., communications, HR, finance, and regulatory) and significant stakeholder groups (e.g., state commissions, RTOs, political leaders, community groups, etc.). As part of the process, it is imperative to identify and plan for interdependencies. As a result of the expanded work associated with Design and Detailed Planning (Phase 2) and Plan Execution (Phase 3), we recommend additional resources be added to the small Phase 1 project teams. To highlight activities during this stage, figure 3 is an example of the key elements associated with the communications function.

Figure 3 - Consider This: Communications

A comprehensive communications strategy is vital to a successful decommissioning plan. Generation companies need to be cognizant of how a plant closure will impact various stakeholder groups, both internal and external, and the importance of maintaining an ongoing dialogue with each group.

Current employees are the most immediately impacted group and, consequently, will want to know the plant closure strategy, timeline, and what is going to happen to their jobs. There are significant downsides to poorly managed communications with employees—vague, incomplete communication drives rumors and lowers morale. Also, disengaged and disenfranchised employees are more likely to have work accidents. Moreover, employment uncertainty may encourage workers to seek employment elsewhere, risking the loss of essential skills to the utility. Direct management engagement with employees is important to convey the appropriate level of respect and care when announcing plant closures and explaining the subsequent activities. The closure announcement should come from management in a face-to-face setting at each facility (multiple sites simultaneously, if applicable).

ScottMadden recommends establishing a communications infrastructure that includes an employee hotline, website, and social media presence for employees to submit questions or concerns, as well as obtain updated information from the company after the initial announcement. The hotline and

social media presence should be monitored by HR with quick response times (less than 60 minutes) during the first month following the announcement and then regularly until all the units are retired. Additionally, a “resource center” managed by HR and supplemented with career counselors should be established to assist employees with questions, pursuit of job opportunities, and general communications in a friendly face-to-face environment.

Many coal plants being considered for closure have been in operation for decades and often represent a legacy of employment to a local community. It is not uncommon for a local economy to be centered on a single plant. In such situations, plant closures can have major socioeconomic impacts. It is likely that the plant shutdown will be felt not just by current plant employees and their families but also throughout the entire community. Due to the impact of the shutdown, it is essential that the communications plan address issues that will inevitably be raised by local units of government, local businesses, and individual community members.

Once communications have been made to internal stakeholders, follow-on announcements should be made to external stakeholder groups, including trade partners (e.g., suppliers, financial institutions, industry publications, etc.), regulatory bodies, and political offices at the community, state, regional, and federal levels, etc. It is critical that a complete set of pre-announcement documents are developed well in advance of the initial closure announcement. Following the physical and digital release of the announcement, representatives should be available to address questions from any external stakeholders, relying on predetermined and focused messaging. A structured process and timeline helps to ensure consistent messaging with an emphasis on milestone achievement.

Once detailed plans have been developed by the team and vetted by senior leadership, a recommendation is made to the board. Phase 2 concludes with board approval and a public announcement of the closure of the site. The team then shifts to Phase 3: Plan Execution.

Phase 3: Plan Execution

The Plan Execution phase initiates the transition from the initial closure announcement to a structured project management process. This provides the necessary approach to fulfill the defined project scope and timing objectives while not compromising ongoing generation activities (assuming the plant will remain in operation for some period of time post-closure announcement). Safe and efficient operations are still the top priority at generating stations during the decommissioning process. Major milestones should be tracked and reported to key stakeholders to ensure progress is in line with expectations.

Decommissioning a generating asset is expensive and can become untenable if planning is poor and lacks executional rigor. The key to managing costs is to strategically control the decommissioning process. The plan developed in Phase 2 involves a thorough evaluation of all options and scenarios and includes success metrics and milestones. In Phase 3, the team pivots into execution mode and manages progress against the plan, metrics, and milestones. Even with the approved plan, the team should remain flexible to allow for reassessment of options in case of significant changes in legislation, the operating environment (demand), and/or operating costs. The execution phase is a careful balance of unit operations and maintenance, stakeholder management, and risks and conditions assessment. Perfect foresight is impossible, as issues will emerge that are outside the plan; carefully managing the plan and making decisions is critical during Phase 3.

Once the unit has been decommissioned, Phase 3 ends. That said, additional work is required in many areas, including demolition, environmental remediation, sale of assets, and the potential transfer of property to a third party. Again, it is essential that management fully plan post-operation activities to ensure success.

How ScottMadden Can Help

ScottMadden has assisted multiple generation companies to effectively analyze, plan, and execute plant decommissioning projects. We approach decommissioning work with a deep respect for the stakeholders and leverage professional and specific experience to support your initiatives. Our experience includes:

- Decommissioning analysis and strategy
- Decommissioning planning
- Stakeholder communications and employee notifications
- Project management
- Organizational redesign
- Reduction in force analysis and implementation
- Vendor selection for demolition/deconstruction
- Development of coal ash disposal strategy
- Decommissioned plant strategic-repurposing analysis

For more information on how ScottMadden can assist you with plant decommissioning and other fossil generation initiatives, please [contact us](#).

Related Articles

This article is part of the series, Coal's Accelerated Burn, which focuses on coal unit closures:

1. Drivers for Coal Unit Closures
2. Management Guide to Coal Unit Closures
3. Stakeholder Analysis: A Case Study
4. After the Closure: What's Next for a Decommissioned Coal Plant?

Additionally, we suggest the following article on page 23, written by Dorsey & Whitney's Development and Infrastructure Industry Group:

5. [Power Plants Retired as "Uneconomic" May Still Hold Significant Value](#)

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ScottMadden is the management consulting firm that does what it takes to get it done right. We consult in two main areas—Energy and Corporate & Shared Services. We deliver a broad array of consulting services ranging from strategic planning through implementation across many industries, business units, and functions. To learn more, visit www.scottmadden.com | [Twitter](#) | [Facebook](#) | [LinkedIn](#).

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We know energy from the ground up. Since 1983, we have served as energy consultants for hundreds of utilities, large and small, including all of the top 20. We focus on Transmission & Distribution, the Grid Edge, Generation, Energy Markets, Rates & Regulation, Enterprise Sustainability, and Corporate Services. Our broad, deep utility expertise is not theoretical—it is experience-based. We have helped our clients develop and implement strategies, improve critical operations, reorganize departments and entire companies, and implement myriad initiatives.

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