Business & Technology Advisory 🗾

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New Decommissioning Library Offers Co-ops a Wealth of Practical Information

Key Highlights

- Economic, social, and environmental pressures are spurring the retirement of coal-fired power plants, including those operated by cooperatives.
- Co-ops that have retired, or plan to retire, their coal-fired plants are considering the option of decommissioning those plants.
- To provide information on how to proceed with decommissioning and the options available to co-ops, NRECA has created a library with a wide range of documents on what is involved in decommissioning and how to proceed. To facilitate its use, the library is searchable.
- The new library is available at: <u>https://community.cooperative.com/communities/allcommunities</u>

What has changed in the industry?

A growing number of coal-fired power plants across the United States are being retired. Among the drivers of retirement are economic, social, and environmental considerations.

Economic factors include increased operating and maintenance costs, relatively flat electricity demand growth, sustained lower prices in wholesale power markets, and competition from natural gas-fired power plants. Environmental factors include a number of the Environmental Protection Agency's regulations, including the 2015 Coal Combustion Residuals (CCR) rule, 2015 and 2020 Steam-Electric Effluent Limitation Guidelines (ELGs), greenhouse gas emissions from power plants under the Clean Air Act and, if implemented, EPA's Affordable Clean Energy Act. Another factor is the need to move toward a low-carbon future.

What is the impact on electric cooperatives?

Several cooperatives have retired — or are contemplating retiring — their coal-fired power plants for economic and/or environmental reasons. Once a coal-fired plant is shuttered, a co-op must weigh its options for next steps. One such option is to decommission the retired plant.

What do cooperatives need to know or do about it?

NRECA has created a decommissioning library that provides information and co-op experience on decommissioning. The library may be accessed by NRECA cooperative members within the professional communities section of our website, cooperative.com:

https://community.cooperative.com/communities/allcommunities

The library provides information on five general phases: pre-decommissioning, decommissioning, demolition, of decommissioning, repurposing the plant site, and restoration.

Co-ops that want to explore decommissioning should begin by addressing four issues, said John Weeda, Consultant to NRECA's Generation, Environment and Carbon work group. The issues are:

- *Can the site be repurposed?* There are a number of articles on ways to devote the site, and in some cases, alternative uses for equipment, said Weeda.
- *Can the facility be decommissioned without demolition?* Some sites lend themselves to retirement without demolition, he noted.
- *Decommissioning and demolition*. A majority of the library content deals with how to go through the decommissioning and demolition phases safely and efficiently.
- *Post-demolition use of the site*. Much of the library material addresses environmental considerations in returning the site to a brownfield, greenfield, or other use, said Weeda.

A decommissioned coal-fired plant may be repurposed for another generation technology or some other commercial, industrial, or municipal application. Coal-fired power plants typically occupy land near towns or along rivers, and they usually have access to railroads, roadways, water, sewers and other infrastructure, notes the Energy Information Administration (EIA).

A decommissioned coal-fired plant also can be repowered with natural gas, such as a combined cycle gas turbine plant. A CCGT plant would require significantly less space. Such repowering is a viable option for power providers, because much of the critical infrastructure is already in place, including transmission lines, substations and water, according to EIA.

Repowering with newer natural gas assets can also result in a higher capacity, more efficient plants, which can boost power generation.

The library includes a range of plant-specific and general plant information in various formats: documents, articles, workshops, guidebooks, case studies and papers. Users can search by topic, e.g., environmental, plant name and organization, e.g., EPRI, as well as the type of document, e.g., workshop. The library also includes a communications management plan. For a list of issues to be considered in the various phases of decommissioning, search for *Welcome to the Community*.

The library will be a living resource and updated over time. We welcome users to email documents and resources that they suggest be added to the library to the contacts at the end of this advisory.



Two important areas to study, said Weeda, are environmental and safety. "Co-ops need to make sure to conduct a survey of PCBs. This is the first issue to deal with." Asbestos can also be an issue, especially in older plants, he said. "This needs to be dealt with before demolition." The plant needs to be made as clean as possible, so that fugitive dust is not an issue. For details, users can search for *PCBs* and *Asbestos*.

A thorough review of what the plant permits require is also necessary, said Weeda.

One aspect of safety is electrical safety. When a plant is shut down, electricity is still needed for a period of time, said Weeda. "Early in the process, co-ops need to plan where power is needed, and how to shut it off." There is also the matter of legacy ash ponds and landfills.

If part of the plant is being demolished, safety also is paramount. It is crucially important to ensure that workers are not injured.

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