HYDROPOWER AND SOUTH CAROLINA'S WATER RESOURCES

As South Carolina emerged from the most recent multi-year drought ending in 2002, it became clear that the sustainability of the state's water resources could no longer be taken for granted. The drought brought about a change in the state's water resources management, reinforcing the need for improved coordination and planning within and between levels of government and water users. Beyond South Carolina's push for improved drought planning are examples of this trend at the federal and national level. Many of the hydropower dams are up for relicensing and in order to meet the Federal Energy Regulatory (FERC) requirements the hydropower companies are developing Low Inflow Protocols (LIP) as a part of their new license. Many of the current licenses have been in place since the 1950s and the inclusion of drought indicators and low inflow protocols can be a major milestone for future drought mitigation given the 30- to 50-year duration of each license. The LIP provides procedures for how the hydro-projects will be operated by the licensee and how other water users should respond during periods when there is not enough water flowing into the project reservoirs to meet the normal needs.

The Federal Power Act gives FERC the exclusive authority to issue licenses to construct, operate, and maintain certain non-Federal hydropower projects. FERC regulates hydroelectric power projects under other statutes including the Public Utility Regulatory Policies Act, Electric Consumers Protection Act of 1986, and the Energy Policy Act of 1992. FERC licenses more than 1,000 private and non-federal public dams used for hydroelectric power generation with dams located in 44 states and in Puerto Rico.

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The license process has changed over the past 50 years, with emphasis shifting away from a license focused solely on generating electricity from hydropower, to a balance between producing electricity and its impact on the environment. The relicensing process addresses not only the generation of electricity but also the natural resources that may be affected by a project's operation. With 200 licenses up for renewal over the next 15 years, and four impacting South Carolina water resources (Catawba Wateree, Yadkin Pee Dee, Saluda and Santee Cooper), resource agencies and conservation groups have a once-in-a-lifetime shot at working with hydropower operators to slow shoreline development, improve fish habitat, enhance river recreation, and enhance management plans that will shape the affected rivers for the next 30 to 50 years.

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