Assessment of Hybrid Cooling Systems

This is a proposal for the Advanced Cooling Technologies supplemental project. Final project tasks will be selected through prioritization by the project funders.

Issue
Hybrid cooling systems (HCS) provide a compromise between the water conservation aspects of dry cooling (air-cooled condensers) and the efficiency and capacity performance of wet cooling. This technology has had limited application to date, but more projects are committing to the additional capital required to install an HCS.

Description
EPRI will document the current state of the art in design, operation, cost and performance of known and planned hybrid cooling installations. This project will develop the only known independent assessment of the HCS technology.

Value
• Cost and performance analysis of existing and planned HCS installations
• Specification guidance for avoiding known issues with HCS.

Approach
EPRI will gather available information on known and planned HCS installations, using literature searches, owner/operator interviews, data requests, vendor solicitation and site visits as required. Information will be documented in a technical report providing cost, performance, and operational data.

Project Deliverables

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<th>Deliverable Title</th>
<th>Planned Completion Date</th>
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How to Apply the Results
This project will provide information to verify vendor claims and understand the costs and other issues associated with adopting hybrid cooling for new power projects, which reduces the risk of investing in hybrid cooling technology.

Cost Estimate
This project is estimated to require 18 months and $150,000 for completion.

For More Information
For more information, contact the EPRI Customer Assistance Center at 800.313.3774 (askepri@epri.com).