



Assessment of Indirect Dry 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

Indirect dry cooling (IDC) may be the most cost-effective means of using dry cooling in nuclear units. This technology has had limited application to date, and the majority of the installations are in Europe, with no operating experience in the United States.

Description

EPR I will document the current state of the art in design, operation, cost and performance of known and planned indirect dry cooling installations. This project will develop the only known independent assessment of the IDC technology.

Value

- Cost and performance analysis of existing IDC installations
- Specification guidance for avoiding known issues with IDC

Approach

EPR I will gather available information on known IDC 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

Deliverable Title	Planned Completion Date	Deliverable Type
Assessment of Indirect Dry Cooling Systems	6/30/2010	Technical Report

How to Apply the Results

This project will provide information to verify vendor claims and understand the costs and other issues associated with adopting IDC for new power projects, which reduces the risk of investing in IDC technology.

Cost Estimate

This project is estimated to require 18 months and \$130,000 for completion.

For More Information

For more information, contact the EPR I Customer Assistance Center at 800.313.3774 (askepri@epri.com).

The Electric Power Research Institute, Inc. (EPRI, www.epri.com) conducts research and development for the global electricity sector. An independent, nonprofit organization, EPRI brings together experts from academia and industry as well as its own scientists and engineers to help address challenges in electricity generation, delivery and use, including health, safety and the environment. EPRI's members represent more than 90 percent of the electricity generated and delivered in the United States, and international participation extends to 40 countries. EPRI's principal offices and laboratories are located in Palo Alto, Calif.; Charlotte, N.C.; Knoxville, Tenn.; and Lenox, Mass.


Together . . . Shaping the Future of Electricity

July 2008

Electric Power Research Institute

3420 Hillview Avenue, Palo Alto, California 94304-1338 • PO Box 10412, Palo Alto, California 94303-0813 USA
800.313.3774 • 650.855.2121 • askepri@epri.com • www.epri.com

© 2008 Electric Power Research Institute (EPRI), Inc. All rights reserved. Electric Power Research Institute, EPRI, and TOGETHER . . . SHAPING THE FUTURE OF ELECTRICITY are registered service marks of the Electric Power Research Institute, Inc.

 Printed on recycled paper in the United States of America