

# Technology Transfer Support for Nuclear Power Plants



## Background

Nuclear power plants gain access to a wide array of research results as part of their participation in EPRI programs. These research results can help support the safe, reliable, and cost-effective operation and maintenance of commercial nuclear power facilities.

In some instances, participants need additional assistance in effectively deploying EPRI technology and research results at their plants. A U.S. non-fleet nuclear plant operator, for example, may not have sufficient personnel or resources to successfully implement EPRI technology at their site. An international nuclear plant owner may need tailored support to assess how EPRI technology and guidance would be deployed in their regulatory environment. A plant owner confronting workforce challenges may benefit from ready access to a customized array of EPRI training solutions.

A simple, convenient method for enabling technology transfer promotes greater use of EPRI research and can support a wide range of activities related to nuclear plant operation, maintenance, aging management, personnel training, etc.

## Solution

The EPRI Nuclear Sector has developed a mechanism through which participants can access industry-recognized expertise to address emerging issues, deploy resources more strategically, and more efficiently apply EPRI research results. Through this supplemental project, participants will be able to allocate a pre-defined dollar amount that can be used throughout the year for technology transfer support activities.

To support the technology transfer of EPRI research results, expertise, and training to its members, EPRI has developed a simplified funding and contracting mechanism. Through this supplemental, participants will be able to commit funds that can be used throughout the year for activities such as custom training, on-site support, expert assistance, and technology implementation support.

Additional funds can be added to the supplemental project if necessary. Example applications include:

- **Training:** A member may identify several customized in-person or distance learning training needs. These courses could be coordinated and paid for through this supplemental.
- **Assessments:** A single-unit member considering how best to modernize its plant to reduce costs and gain efficiencies could use this mechanism to request EPRI support in conducting a detailed, plant-specific assessment based on EPRI guidance, analytical tools, and subject matter expertise.
- **Guideline Deployment:** An international member interested in adapting EPRI technical guidelines to its particular operating regime and regulatory environment could access EPRI expertise through this supplemental.
- **Software Application:** A nuclear plant operator evaluating a significant asset management issue, such as replacement timing for station transformers, could enlist support in applying EPRI's Integrated Life-Cycle Management software tool.

Note that while a broad range of technology transfer activities are envisioned through this supplemental funding mechanism, it is possible that EPRI's operational parameters will preclude certain items. EPRI will engage participants upfront to determine the eligibility of specific items prior to beginning work. Moreover, while most technology transfer activities will be specific to a single funder, funds could also be used for multi-funder projects. For example, if two or three

members were interested in funding a technology demonstration unique to their nuclear plant design, that would be permitted, and the results would be shared only with the two or three funding members unless otherwise agreed.

For each technology transfer activity, a brief statement of work and cost estimate will be developed and shared with the funding member. Approvals to proceed will be provided by a designated point of contact at the member company (e.g., the Nuclear Manager of EPRI Technology Transfer, or NMETT).

When the activity is completed, funds will be applied from the member's Technology Transfer Supplemental Project. If sufficient funds are not available based on the cost estimate, work will not commence until additional funds are provided.

### Benefits

EPRI's unique combination of capabilities—industry subject matter expertise, global collaboration, and an expansive array of technical guidance and research results—puts it in a unique position to provide targeted technology transfer to its members. Participants will be able to take advantage of collaborative technology transfer opportunities outside of their EPRI membership. Benefits include:

- Opportunities to develop custom technology transfer solutions that meet critical asset performance needs
- Streamlined access to technical expertise
- A convenient engagement mechanism to accelerate support and minimize contractual delays
- Ability to add funding at any time should technology transfer needs change
- Ability to fund for multiple years in advance
- Other technology transfer solutions depending on need

Overall, participation in this supplemental will support member efforts to maximize the value of their EPRI membership.

### Deliverables

- Results from technology transfer projects tailored to specific user needs. The form of these results will depend on the particular technology transfer project, but may include training materials, letter reports, assessment summaries, etc.
- Annual summary of activities conducted through the technology transfer vehicle.

Where possible, the non-proprietary results of this work will be incorporated into EPRI's R&D programs and made available to the public for purchase or otherwise.

### Price of Project

This project is available at various price levels to support the varying technology transfer needs of EPRI members. The minimum price is \$25,000, with multiple intermediate higher levels up to \$1,000,000. Additional funds can be added throughout the year. It is EPRI's expectation that all funds will be used in the calendar year for which they are committed. If activities cannot be identified within the respective funding year, the respective portion of unused funds can be carried forward and used for activities in the following year, provided the participant remains an EPRI member in that year.

### Project Status and Schedule

This project will start in 2021, and can be renewed on an annual basis. Members will be able to allocate funds to this project as part of the annual supplemental selection process or at any time during the year.

### Who Should Join

This project is currently limited to full members of EPRI's Nuclear Sector.

### Contact Information

For more information, contact the EPRI Customer Assistance Center at 800.313.3774 ([askepri@epri.com](mailto:askepri@epri.com)).

### Technical Contact

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