

March 25, 2014

**MEMORANDUM TO THE TRUSTEES**

**FROM THE PRESIDENT and CHIEF EXECUTIVE OFFICER**

**SUBJECT: Membership in Electric Power Research Institute – Renewal**

**SUMMARY**

The Trustees are requested to authorize the renewal of the Authority's membership in the Electric Power Research Institute ("EPRI") effective January 1, 2015 for a five-year term. While the current membership term does not expire until December 31, 2014, authorization for renewal is being sought at this time to enable the Authority to participate in certain multi-year supplemental EPRI projects commencing during calendar year 2014. The total membership dues for this five-year renewal are \$13.43 million and are payable in annual installments.

**BACKGROUND**

EPRI is a non-profit corporation organized to promote, conduct and sponsor scientific research, development and demonstration ("RD&D") relating to the generation, delivery and use of electricity for the benefit of the public. It is considered the premier electric utility research organization, bringing together scientists and engineers as well as experts from academia and the industry to help address challenges in electricity.

EPRI's current worldwide membership base in excess of 1,000 organizations consists of electric utilities, government agencies, corporations and other energy enterprise organizations that are engaged in some aspect of the generation, delivery or use of electricity. EPRI's large membership enables its members to collaboratively support and leverage a broad array of large-scale research and demonstration projects of mutual interest, some of which could not be funded by an individual entity.

The EPRI organization is aligned with various segments of the electric market in developing technologies, information and methods related to generation, delivery and use of electricity, with special attention to cost reduction, cost-effectiveness, environmental concerns and customer retention. Its programs are planned, developed and implemented by market segments guided by an Industry Committee Structure, consisting of member representatives selected for expertise in their particular fields.

**DISCUSSION**

Section 2879 of the Public Authorities Law and the Authority's Guidelines for Procurement Contracts require the Trustees' approval for financial obligations in excess of \$3,000,000 that occur over a period in excess of one year.

The Authority has been a member of EPRI since July 1, 1987. The Authority's Chief Executive Officer currently serves on the EPRI board and the Authority is represented at all levels of the EPRI advisory structure -- the Research Advisory Council, and the Generation, Power Delivery and Environmental Councils, including their associated work groups.

EPRI members realize the value of their membership through successful applications of the more than 1,200 research products annually that range from white papers, project updates and newsletters, to comprehensive reports, field guides and software that inform its members and the public on their efforts to help shape the future of electricity. EPRI's portfolio of research programs is defined and guided by advisors from both industry and public stakeholders.

The Authority derives benefit from using EPRI's products and services by participation in a research program that affords the Authority a degree of control over the nature and scope of a particular research project within the program; through participation in supplemental projects; and from an EPRI platform that allows direct access to member utilities facing similar technology challenges. Financial benefit is derived from a co-funding program where a group of interested utilities fund a program or project allowing the contributing members access to the results generated for a fraction of the cost had the program or project been funded independently.

Over the last few years, the Authority has been effective in obtaining several million dollars of EPRI co-funding for projects of interest to the Authority and has worked closely with EPRI to develop and implement technologies at the Authority's facilities. Examples include developing the plan for a state-of-the-art Advanced Grid Innovation Lab ("AGILE"), a robotic concrete inspection crawler that can scale vertical walls such as those at our large hydro facilities, online infrared inspection monitoring techniques, a transmission line right-of-way stewardship accreditation program, personal EMF monitors for Authority workers working under high voltage transmission lines, and an ultra-high tech nano-technology process of coating equipment with a hydrophobic polymer to prevent icing.

Membership dues are collected by EPRI based on a formula that takes into account generation assets and transmission system peak capacity in megawatts ("MW"). Membership dues are pooled by EPRI to fund RD&D programs. Members may access programs in the annual research portfolio and/or select specific EPRI programs or projects for participation. A portion of membership dues is allocated to focus on longer-term research opportunities, and to look for breakthrough technologies and innovations that can be applied in the electricity industry.

EPRI allows its members to set aside 25 percent of their membership dues for participation in supplemental research projects with other member utilities. These "Tailored Collaboration" ("TC") funds enable the Authority to design or join projects that address specific research priorities. Such projects are approved by the Trustees as part of the Authority's annual budget process. In the past, the Authority has participated in numerous EPRI collaborative projects through the use of its TC funds. Since the existing five-year membership contract with EPRI will expire on December 31, 2014, and new supplemental projects need to be initiated that will carry past this date, early approval of a new five-year membership contract is being

requested. This will ensure that a contract is in place for the entire length of these projects. Examples of projects of interest that will be initiated under the current EPRI contract that will carry into the new EPRI contract are the Physical Security – Transmission project and continuing work with AGILE. Under the current EPRI membership contract, expiring on December 31, 2014, the Authority would be unable to enter into a contract for these projects because they extend past the current contract expiration date.

On an annual basis, the Authority’s Research and Development Department works closely with other departments to target EPRI programs from which the Authority and its customers would derive benefits from EPRI products and services. For 2014, staff selected approximately 32 programs and 8 sub-programs in the areas of power generation, transmission, environment, distributed resources, power quality and end-use customer energy efficiency.

### FISCAL INFORMATION

Funds required for the Authority’s 2015 EPRI membership will be included in the 2015 O&M Budget Plan. Dues associated with future years will be included in the budget submittals for those years. Payments will be made from the Operating Fund.

### RECOMMENDATION

The Senior Vice President – Strategic Planning, the Director – Clean Energy Technology, and the Manager – Research and Development recommend that the Trustees authorize the President and Chief Executive Officer to enter into a five-year extension of the Authority’s existing membership in the Electric Power Research Institute effective January 1, 2015 for an estimated total increase of \$13.43 million.

For the reasons stated, I recommend the approval of the above-requested action by adoption of the resolution below.

Gil C. Quiniones  
President and Chief Executive Officer

**RESOLUTION**

RESOLVED, That the Trustees authorize the President and Chief Executive Officer, or such officer designated by the President and Chief Executive Officer, to execute a five-year extension of the Authority’s existing membership agreement in the Electric Power Research Institute (“EPRI”) effective January 1, 2015, in the amounts and for the purpose listed below:

<u>Operating Fund</u>	<u>Expenditure Approval</u>
Electric Power Research Institute	\$2.63 million – 2015 \$2.67 million – 2016 \$2.69 million – 2017 \$2.71 million – 2018 <u>\$2.73 million – 2019</u>
TOTAL	<u>\$13.43 million</u>

AND BE IT FURTHER RESOLVED, That the Chairman, the Vice Chair, the President and Chief Executive Officer, the Chief Operating Officer and all other officers of the Authority are, and each of them hereby is, authorized on behalf of the Authority to do any and all things and take any and all actions and execute and deliver any and all agreements, certificates and other documents to effectuate the foregoing resolution, subject to the approval of the form thereof by the Executive Vice President and General Counsel.