

OPEN POWER AI CONSORTIUM

Member Benefits and Expectations

MISSION STATEMENT

The Open Power AI Consortium aims to evolve the electric sector by leveraging advanced AI technologies to innovate the way electricity is made, moved, and used by customers. By fostering collaboration among industry leaders, researchers, and technology providers, the consortium will drive the development and deployment of cutting-edge AI solutions tailored to enhance operational efficiencies, increase energy resilience and reliability, embrace emerging and sustainable technologies, and reduce costs while improving the customer experience.

POWER

BENEFITS OF COLLABORATION

This document identifies benefits that the Open Power AI Consortium could provide for various types of organizations along with the value they would receive from joining the consortium:

INDUSTRY	BENEFITS
Utilities	 Enhanced Operational Efficiency, Resiliency, and Reliability: Access to advanced AI models tailored for the electric sector to optimize power plant and power grid operations, reduce downtime, improve resource management, reduce O&M costs, inform decisions, operationalize data, and improve customer experience. Faster Time to Deployment: Utilizing a collaborative network, utilities can work together to develop and deploy use cases that can scale across utilities, speeding broader deployment. De-risking AI: Leveraging collaboration, utilities can de-risk deployment by focusing on executing one or two use cases while their utility peers focus on others, reducing risk across utilities. Collaboration and Knowledge Sharing: Engage with industry peers and technology experts to share best practices and innovative solutions. Access to Talent: Engage with universities and other organizations with AI and energy talent to create a pipeline of new talent to fill open vacancies in utility organizations.
Big Tech	 Market Opportunities: Opportunity to deploy and scale AI technologies in the electric sector, opening new business avenues via additional compute and hosting needs. Collaborative Innovation: Partner with utilities and other stakeholders to co-develop cutting-edge AI solutions that are made once and used many times, reducing investment costs. Early Access: Early access to developed models for early-stage testing, development, and deployment. Data Access: Access to open-source industry-specific datasets that are developed for training and refining AI models. Brand Leadership: Position as a leader in AI innovation within the energy sector. Access to Talent: Expand engagement with universities and other organizations with AI and energy expertise to more seamlessly identify and recruit top talent.

INDUSTRY	BENEFITS
Universities	 Research Opportunities: Access to data and industry challenges for academic research and development. Funding and Grants: Potential for funding and grants either through the consortium or with government agencies to support AI research projects. Industry Collaboration: Collaborate with industry leaders and technology providers to bridge the gap between academia and practical applications. Student Engagement: Provide students with exposure to cutting-edge AI technologies and networking opportunities, creating a pipeline of students with relevant energy industry experience. Brand Recognition: Engage with industry leaders to further enhance the reputation and brand of the university.
National Labs	 Collaboration with Industry: Opportunities to partner with utilities, tech companies, and universities to drive innovation and technology transfer. Access to Data: Access to open-source industry-specific datasets that are developed for training and refining AI models. Advanced Research: Opportunities to engage consortium partners and resources (network, data, etc.) to conduct advanced research in AI and energy technologies. Impactful Solutions: Contribute to the development of impactful AI solutions that address national energy challenges.
Government Organizations	 Public-Private Partnerships: Foster public-private partnerships to drive innovation and economic growth in the energy sector. Regulatory Insights: Gain experience with and deeper understanding of emerging AI technologies and deployment insights to support regulatory interactions with industry on the implications of AI technologies in the energy sector. Policy Development: Inform policy decisions with insights from AI-driven research and industry collaboration.
Other Industry Organizations (i.e., ASME, IEEE, CIGRE, etc.)	 Expanded Utilization: Connect available standards and energy data with AI models and users, providing member organizations with additional insights and value. Increased Membership: Reference behind-the-paywall information, encouraging organizations to purchase reports or subscribe to services for greater value from AI tools. Industry Influence: Play a key role in shaping the future of AI in the energy sector. Collaborative Projects: Engage in collaborative projects that drive innovation and technological advancements. Knowledge Sharing: Share expertise and insights with consortium members to advance the field.
Startups	 Networking Opportunities: Connect with industry leaders, investors, and potential users and partners. Early Access: early access to developed models, data, and industry expertise for early-stage testing, development, and deployment. Market Entry: Accelerate market entry by collaborating with established players in the energy sector. Innovation Platform: Utilize the consortium as a platform to showcase innovative solutions and gain visibility. Brand Visibility: Engage with industry leaders to further enhance the reputation and brand of the company.

ENGAGEMENT EXPECTATIONS

By joining the Open Power Al Consortium, organizations can leverage an ecosystem of partners with expertise, resources, and data to drive innovation, achieve their goals, and contribute to the transformation of the electric sector. Consortium members are expected to contribute their time, resources, and expertise to support the goals of the consortium.

Engagement is flexible, allowing participants to scale their level of engagement—from light-touch participation in webcasts, to mid-level engagement in the consortium through data sharing and use case working groups, to deeply involved via model and tool development.

To support resource planning, the engagement opportunities and estimated time commitment for various activities is outlined below.

- Webcast Participation: Webcasts provide updates and opportunities for feedback on technical scope and progress. Use case working groups will host four to six webcasts per year, with an estimated commitment of approximately five hours per year.
- Use Case Working Groups and Workshop Engagement: In-person workshops facilitate collaboration on technical advancements, knowledge sharing, and engagement with power companies and industry stakeholders. The Open Power Al Consortium team plans to host one to two workshops per year, requiring an estimated 24 hours per year. Participants are responsible for their own travel expenses.
- Data Sharing: a key need for developing useful AI tools is clean, robust data sets. Consortium members will be advocates for data sharing through appropriate methods including simple data sharing for non-sensitive data, data anonymization, synthetic data generation, etc. to help provide access to robust data sets for model training.
- Use Cases: Members are encouraged to share ideas for use cases and application. By sharing their ideas, members can help shape the future of AI and energy-sector solutions, driving innovation and addressing real-world challenges.
- **Compute Resources**: Training AI models, especially LLMs and other large-scale AI models require significant compute resources. Organizations with significant available compute resources, such as technology companies and national labs will be asked to supply compute needs for training AI models.

CONTACT INFORMATION

For more information or to express your interest in joining the Open Power AI Consortium, please email <u>OpenPowerAI@</u> <u>epri.com</u> or visit <u>https://msites.epri.com/opai/</u>

For more information, contact:

EPRI Customer Assistance Center 800.313.3774 • <u>askepri@epri.com</u>



March 2025

EPRI

3420 Hillview Avenue, Palo Alto, California 94304-1338 USA • 650.855.2121 • www.epri.com

© 2025 Electric Power Research Institute (EPRI), Inc. All rights reserved. Electric Power Research Institute, EPRI, and TOGETHER...SHAPING THE FUTURE OF ENERGY are registered marks of the Electric Power Research Institute, Inc. in the U.S. and worldwide.