

WIND INNOVATORS NETWORK

The Electric Power Research Institute (EPRI) is offering a new technical user group for owners and operators of wind power plants.

The group, called the Wind Innovators Network (WIN), will provide a collaborative forum to share lessons learned and best practices for improving wind turbine reliability, performance, and operations and maintenance (O&M).

VALUE

Joining WIN can provide many benefits. The chief value will be the opportunity to share lessons learned with a continually expanding network of industry peers and experts. This opportunity means that wind power companies will have access to objective, expert, and peer insights on how to reduce lifetime costs while improving energy production, affordability, reliability, and operational capabilities.

Benchmarking wind turbine reliability will aid decisions involving existing and future plants. Wind turbine reliability analysis also has the potential to lead to projections for each specific fleet, including correlations between manufacturers, site conditions, and/or O&M activities.

Exchanging lessons learned and networking with other users will provide near-term value, while informing the wind industry of strategic research needs should improve the future of wind energy costs, reliability, and capability. With **75%** of wind power capacity less than **10 years** old, collaborative R&D and technical knowledge sharing is critical to support reliable, cost-effective, and longterm O&M.

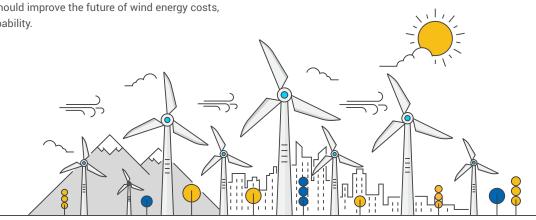
NEED FOR INFORMATION SHARING

Global wind power generation capacity will reach 1 terawatt before 2025. This growth has been so rapid that about 75% of current plants have only been operational for 10 or fewer years. As a result, a knowledge gap is opening between actual performance and expectations for reliability and 0&M over the 25+ years of turbine operational life.

Furthermore, wind turbine technology is rapidly evolving, producing innovations with the potential to change operations and the metrics of performance. Many lessons learned from the design, construction, and 0&M of existing plants could benefit the community of owners and operators.

While useful information is accumulating, many wind power organizations don't have the internal resources or sufficient data to benchmark operational performance, predict component health and reliability, and use that information to adjust maintenance strategies and budgets.

More widely, across the power sector, user groups have long provided an important function in facilitating information sharing and collaboration among organizations. However, until now, limited venues have been available for technical and R&D-level knowledge sharing among wind farm owners and operators.



COLLABORATIVE TECHNICAL FORUM

EPRI's WIN provides a technical forum that offers timely, actionable, and objective information to its members and the public about large-scale wind generation facilities.

The group is open to owners and operators of existing plants and organizations considering new wind generation. Companies actively engaged in procuring, financing, or insuring wind electricity from such facilities may also find the forum valuable.

Key offerings include:



WORKSHOP

An annual workshop provides a multi-day meeting with roundtable presentations and discussions, and in-person exchanges with industry experts. The focus is on O&M topics, resulting in a report summarizing findings.



RELIABILITY DATABASE

Component reliability benchmarking and future reliability projections across industry.

- Inform supplier selection decisions
- Budgeting on year to year basis
- Projecting O&M costs for life of assets
- Guide research and solutions where we find reliability shortfalls



WEBSITE

A website provides access to workshop proceedings and reports as well as a data portal for benchmarking.



WEBCASTS

Periodic webcasts will be conducted for all WIN members on selected topics and additional meetings at industry events.



PUBLISHED MATERIALS

Conference proceedings and slide decks are available from annual workshops and webcasts for all WIN members.

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