

NEWS & UPDATES

Newsletter for the GRID DATA Repository and BetterGrids Foundation, Inc.



In this Edition	Page(s)
Message from our President: Dr. Ali Vojdani, BetterGrids Foundation	1
Welcome to our Newest Members of the BetterGrids Board of Directors: Bahman Hoveida and Terry Nielsen	2-3
Thank you, Maria Contreras, for your Service and Dedication to BetterGrids!	3
Technical Committee Update	4
A Strong Board, A Strong Future	5
From Data Gaps to Data Confidence: A Candid Look at the Future of Utility Planning	6
Notable New Additions to the BetterGrids Repository	7
BetterGrids Joins EPRI's Open Power AI Consortium	8

Message from our President: Dr. Ali Vojdani, BetterGrids Foundation



As we navigate a rapidly changing energy landscape to support electrification and AI, one thing remains clear: data is the foundation of tomorrow's grid. At BetterGrids, we are committed to ensuring that data is not only available but trustworthy, organized, and accessible to all who need it — from researchers and students to utilities and innovators.

This year, we have made significant strides — including achieving full operational independence of BetterGrids.org, welcoming new board members, and deepening our technical focus through the continued work of our Repository Curator, Webinars, and Technical Committee. Each effort reflects our long-term mission: to build an open platform that enables better grids for all.

Thank you to our board members, volunteers, and donors for helping us move this vision forward. I invite you to stay engaged and help shape what's next.

Dr. Ali Vojdani

Welcome to our Newest Members of the BetterGrids Board of Directors

Strengthening Our Mission Through Visionary Leadership and Philanthropic Commitment

Welcome Bahman Hoveida

The BetterGrids Foundation is proud to welcome Bahman Hoveida to its Board of Directors. A distinguished electrical engineer and entrepreneur, Mr. Hoveida brings a lifetime of experience, technical innovation, and deep philanthropic values that align seamlessly with the Foundation's mission.

Mr. Hoveida earned his Master of Science in Electrical Engineering from the University of Illinois in 1980. Over the following decade, he gained extensive industry experience with respected firms such as Harris-GE, Control Data–Siemens, and KEMA. In 1992, he co-founded Open Systems International, Inc. (OSI) with a bold vision: to develop cutting-edge software solutions for electric utilities. Under his leadership, OSI became a global leader in advanced automation technologies—including SCADA, EMS, and Smart Grid systems—serving customers in more than 35 countries. At the time of its acquisition by Emerson Electric for \$1.6 billion in 2020, OSI had grown to over 1,000 employees across 10 countries, generating nearly \$200 million in annual revenue.

Since retiring from OSI in 2021, Mr. Hoveida has remained an active and influential voice in the energy and engineering sectors. Through the Hoveida Family Foundation (HFF), he has championed causes that promote academic research, scientific innovation, and youth empowerment. His ongoing work includes mentoring early-stage startups, investing in next-generation power and energy technologies, and supporting philanthropic efforts rooted in equity and education. He was elected to the U.S. National Academy of Engineering in 2022 in recognition of his leadership in advancing utility automation technologies.

Mr. Hoveida's addition to the BetterGrids Board marks an exciting chapter for the Foundation. His presence brings not only technical insight and strategic vision, but also a track record of generosity—HFF has long been a philanthropic supporter of the BetterGrids mission. His belief in open access, data-driven research, and collaborative innovation reflects the very values at the heart of the GRID DATA Repository.

We are honored to have Mr. Hoveida join the Board and are excited to build on his legacy of impact and excellence.

Welcome Terry Nielsen

We are thrilled to announce that Terry Nielsen has joined us in another capacity at BetterGrids. While he has been an instrumental part of the development of the BetterGrids Repository since the start of the Foundation, he has accepted a position within the Board of Directors.

Terry has been actively researching the use, management and development of advanced grid models, the impacts of the integration of Distributed Energy Resources (DER) on operations, and secure exchange of grid data use in emergency management. Terry regularly teaches courses in ADMS, OMS, and DER Management Systems (DERMS). Terry was the technical lead on the DOE project that developed the public grid model repository, BetterGrids.org that is used by thousands of grid researchers worldwide. Terry has been the chair of the BetterGrids technical committee providing ongoing support for the BetterGrids Foundation. Terry is the current chair of the IEEE PES, Power Systems Operations, Planning and Economics (PSOPE) Distribution Management Systems (DMS) Working Group and an active member of the IEEE Distribution Reliability Working Group.

Welcome to our Newest Members of the BetterGrids Board of Directors (continued)

Terry Nielsen possesses in-depth and practical understanding of utility transmission and distribution business processes and operational practices. He is a thought leader in the areas of electrical system modeling and has published papers and made multiple presentations on the issues associated with distributed resource modeling, complex electrical grid models, and the associated analysis and use of these models.

He has assisted several utilities in developing multi-year strategies for deploying and integration of smart grid technology including distribution and substation automation, transmission and distribution operations technology, and distributed resource integration. He has significant experience working with senior-level management at utilities on IT and OT strategy. He has assisted several utilities in the selection and procurement of ADMS, OMS and DMS technologies including the development of functional and non-functional requirements for inclusion in the RFP.

We are excited to have Terry join us in another capacity to bring BetterGrids even further in the future.

Thank you, Maria Contreras!

Recognizing Years of Dedicated Service to the BetterGrids Foundation

At the April 2025 meeting of the BetterGrids Board of Directors, Ms. Maria Contreras stepped down from her role as Corporate Secretary, concluding more than four years of steadfast service to the Foundation's leadership.

Maria has been a consistent and trusted presence within BetterGrids, contributing her deep operational expertise, thoughtful governance support, and unwavering commitment to the Foundation's mission. Her professionalism, follow-through, and collaborative spirit have helped guide the organization through periods of strategic growth and operational change. As Corporate Secretary, she ensured the smooth execution of board processes, maintained transparency and compliance, and served as a valued liaison between internal teams and leadership.

While Maria will no longer serve in this official capacity, we are thrilled that she will continue to be active and involved in the BetterGrids community. Now serving in Corporate Operations at Qualus, Maria continues to bring her decades of nonprofit and for-profit leadership experience to the broader energy ecosystem.

We extend our sincere thanks to Maria for her years of dedicated service—and we look forward to her continued presence and contributions in the chapters ahead.

Technical Committee Update: Elevating the Grid Through Data, Dialogue, and Independence

As utilities, researchers, and policymakers navigate rapid technological shifts, the BetterGrids Technical Committee continues to serve as a vital clearinghouse for ideas, priorities, and collaboration. Meeting regularly throughout the spring and into early summer, the committee's discussions reflect a shared commitment to transforming the repository into a deeper, broader, and more usable public asset — one that supports next-generation grid modeling, planning, and innovation.

While BetterGrids continues to host timely educational webinars, the Technical Committee remains focused on the substance behind the scenes: data gaps, model curation, platform independence, and emerging use cases that demand interdisciplinary attention.

Repository Expansion with Purpose

Under the stewardship of curator Jason Lin, the repository has surpassed 675 public models. But growth isn't the only goal — relevance is. Committee members have emphasized the need to bring in high-resolution, time-domain, and demand-side datasets to meet evolving research needs. This includes everything from second-by-second frequency data in Europe to updated hourly county-level consumption data in the U.S. There is ongoing discussion around how best to guide users in selecting appropriate datasets for their use cases, with potential educational content being scoped to address this gap.

From Dependency to Autonomy

A major milestone this year was BetterGrids' full migration off of GridBright's infrastructure. Now hosted independently on a nonprofit Microsoft 365 account and AWS-based storage, BetterGrids has completed the technical transition to stand-alone status. The Technical Committee advised on this transition with attention to both operational continuity and long-term trust-building with platform users.

AI and Underground Infrastructure

The committee has also been evaluating partnerships and technologies that could intersect with repository goals, including AI applications for underground infrastructure mapping. These technologies may serve as future webinar content and as sources of new datasets, aligning with BetterGrids' commitment to facilitating practical, accessible modeling inputs.

What's Next

- Recent webinars have explored topics such as AI-driven infrastructure data, load forecasting uncertainty, and practical strategies for dataset selection. The committee will continue advising on future educational content to help users bridge technical gaps and apply repository resources more effectively.
- Continued outreach around asset catalogs from national labs
- A strategy to bring in new contributors and diversify repository content

The Technical Committee's work reflects BetterGrids' shift from a passive repository to a dynamic resource. Whether aligning on metadata standards, exploring AI tools, or welcoming new collaborators, the committee's work is helping shape the grid research landscape.

A Stronger Board, a Stronger Future: BetterGrids Welcomes New Leaders and Sets the Course Ahead

This spring marked an exciting milestone in BetterGrids' evolution as we gathered for our 2025 Board of Directors meeting—our first since completing a full separation from GridBright infrastructure and operations. The meeting, held in April, celebrated a year of transformation, sustainable growth, and forward momentum.

Led by Board President Dr. Ali Vojdani, the session highlighted BetterGrids' continued mission to provide open access to high-quality grid data for researchers and educators around the globe. With more than 675 models now in the repository, over 1,200 registered users, and thousands of anonymous downloads last year alone, the Foundation's impact continues to expand.

But the highlight of this year's meeting was leadership renewal. We're proud to announce the election of two esteemed new board members: **Bahman Hoveida**, a respected entrepreneur with a history of visionary leadership in the energy sector, and **Terry Nielsen**, whose deep experience in grid technology and strategy brings added strength to our evolving mission.

Both join a board whose terms were renewed for another three years, including **Dr. Ali Vojdani**, **Chad McArthur**, **Don McDonnell**, **Professor Sascha von Meier**, and **Professor Mohammad Shahidepour**. This continuity, paired with the fresh perspective of Bahman and Terry, sets the stage for bold thinking and expanded reach.

Other changes included the appointment of **John Thompson** as Board Secretary, succeeding Maria Contreras, whose contributions we gratefully acknowledge.

Looking ahead, the board approved a focused strategy for 2025: operating within budget, expanding the model repository, hosting more AI-focused webinars, strengthening collaborations, and exploring new value-added services to fund our mission sustainably.

We're grateful to the entire board, our community of volunteers, and our generous supporters for making this next chapter possible. As we look toward the future—through the lens of innovation, resilience, and open collaboration—BetterGrids remains committed to being a trusted home for the data that drives the grid forward.

Stay tuned for exciting developments in the months ahead—and be sure to visit [BetterGrids.org](https://www.bettergrids.org) to view our updated leadership team and upcoming events.

From Data Gaps to Data Confidence: A Candid Look at the Future of Utility Planning

On June 25, over 1,000 individuals across the energy and infrastructure sectors received invitations to join a live BetterGrids webinar, “From Data Gaps to Data Confidence: Transforming Utility Planning with AI and Experience.” Of the more than 300 who viewed the announcement, over a third registered, and more than half of those attended the session live — a strong turnout for an increasingly complex topic.

Hosted by Zac Canders of DataCapable, the conversation brought together utility veterans and technical pioneers including Kevin Hotchkiss of Qualus, GIS thought leader Pat Hohl of Esri, and AI-driven utility mapping innovator Paul Olenik of 4M. Together, they unpacked the practical intersection of infrastructure modernization, spatial intelligence, and machine learning — with a clear throughline: we’re entering a new era where better data isn’t a luxury. It’s essential.

Kevin Hotchkiss shared real-world lessons from converting hundreds of miles of overhead lines to underground infrastructure — noting that resilience planning isn’t one-size-fits-all. “You’ve got to align your roadmap to your region,” he said. “Whether it’s hurricanes or fire mitigation, environmental realities drive the investment strategy.” Kevin emphasized that there is still a lot of work to be done around modeling technology and deployment, especially around distributed resources. “We need more flexible, scalable models that can be used across utilities, and a better understanding of how the underlying data gets updated.”

Esri’s Pat Hohl offered a forward-looking view of GIS’s evolving role. “We’re moving from ‘where is it’ to ‘what does it mean and what do we do next,’” he explained. GIS is no longer just the mapping department — it’s becoming a real-time system of engagement across planning, operations, and even customer communication. With increased weather volatility and community scrutiny, Hohl believes granular data — and the ability to share it transparently — is no longer optional.

Paul Olenik, representing 4M Analytic’s AI-driven utility mapping platform, showed how emerging AI tech is closing the information gap in the earliest stages of infrastructure projects. “Every orange line we map represents a real pain point someone’s encountered before — a delay, a change order, a lost day in the field,” Paul noted. By proactively mapping underground utilities in 14 states (and counting), 4M is aiming to take guesswork off the table before engineering teams ever break ground.

Throughout the discussion, one theme was clear: whether you’re talking predictive maintenance, microgrid design, or automated restoration, confidence in planning starts with better, more accessible data. And while AI and automation are part of the solution, so is the hard-earned experience of professionals who know what success — and failure — looks like on the ground.

For those unable to attend the webinar live, the full recording is available at [BetterGrids.org](https://www.bettergrids.org). The insights shared are timely, actionable, and well worth the watch — especially for utilities and partners working to modernize with clarity, not just buzzwords.

Notable New Additions to the BetterGrids Repository	Source
<p>WRDB: Wind Resource Database</p> <p><i>WRDB is a collection of modeled wind resource estimates for the United States and various countries around the globe of various lengths up to over 20 years. Most of the data are available in 5-minute (min.) intervals at 2-kilometer (km) spatial resolution. For the United States, uncertainty estimates are also provided.</i></p>	<p>NREL</p>
<p>LA100: The Los Angeles 100% Renewable Energy Study and Equity Strategies</p> <p><i>To combat climate change while capturing health and economic benefits, the City of Los Angeles has set ambitious goals to transform its electricity supply, aiming for a 100% renewable energy power system by 2045, along with a push to electrify the buildings and transportation sectors.</i></p> <p><i>The LA100 study aims to inform the city, LADWP, and other stakeholders of possible pathways to 100% renewable energy, and the implications of these pathways for the people who live and work in LA.</i></p> <p><i>NREL modeled and analyzed different projections for LADWP’s customer electricity demand, local solar adoption, power system generation, and transmission and distribution networks, and worked with local LA institutions to examine changes to air quality and the potential for jobs and economic development. The groundbreaking Los Angeles 100% Renewable Energy Study (LA100) found that LA can achieve reliable, 100% renewable power as early as 2035.</i></p>	<p>NREL</p>
<p>Ausgrid Distribution zone substation data</p> <p><i>Ausgrid operates a network with over 180 zone substations. These substations form the boundary between the sub-transmission network and the distribution (11kV) network. In accordance with the National Electricity Rules Chapter 5 (Rule 5.13A), Ausgrid is making available historical interval demand data (in Megawatts) for all zone substations not subject to third party privacy concerns. Please refer to the Australian Energy Market Commission for further information on this rule.</i></p> <p><i>Each year, within 30 business days of the publication of our Distribution and Transmission Annual Planning Report, Ausgrid will provide 12 months worth of interval data in .csv format. The Reporting Year (as defined in Rule 5.13A) will be from May to May (i.e the 2015/16 data will cover the period May 2015 to April 2016).</i></p>	<p>Ausgrid</p>

BetterGrids Joins EPRI's Open Power AI Consortium

BetterGrids is proud to announce its participation in the EPRI Open Power AI Consortium, a cross-sector initiative focused on responsibly advancing artificial intelligence across the electric power industry.

As part of this effort, BetterGrids has assigned volunteers to actively contribute to three key working groups:

- Data Curation & Benchmarking – supporting reproducibility and transparent metadata standards
- AI Use Case Evaluation – contributing open-source models, documentation, and public-good expertise
- Collaborative Sandbox Design – helping shape testable, trusted AI deployment scenarios

These roles directly align with BetterGrids' mission of providing curated, open-access grid data for researchers, students, and utilities. By participating in the Consortium, BetterGrids brings a unique voice — one grounded in transparency, reproducibility, and nonprofit neutrality.

“We're excited to represent the public-good perspective within this influential forum,” said Dr. Ali Vojdani, BetterGrids President. “With the Consortium's collective strength — and BetterGrids' unique neutrality and metadata expertise — we believe we can help shape how AI is evaluated, trained, and trusted in the power sector.”

To learn more about the EPRI Consortium, visit <https://opai.epri.com> or <https://www.bettergrids.org>.

Thank you to all of you!

We appreciate your continued support and connection with the BetterGrids Foundation. If you'd like to provide a charitable donation to the BetterGrids Foundation, please contact us at Ali.Vojdani@BetterGrids.org. If you have any ideas for Webinars, Forums or continued engagement, please reach out to us at Terry.Nielsen@BetterGrids.org

Stay Current

Stay up to date on the Repository progress and BetterGrids by following us at LinkedIn or at our website www.BetterGrids.org

