Technical Advisory Council (TAC) Meeting

11 February 2025



Meeting information

- → Meeting to begin at 5:00 pm Central European Time
- → Join the meeting at the link in your calendar in <u>LFX Individual Dashboard</u>
- → Any problems with connectivity, you can contact John Mertic from the Linux Foundation at +1 234-738-4571
- → Previous TAC Meeting notes, deck, and recording, at <u>https://wiki.lfenergy.org/display/HOME/Technical+Advisory+Council#Te</u> <u>chnicalAdvisoryCouncil-MeetingMinutes</u>



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Examples of types of actions that are prohibited at Linux Foundation meetings and in connection with Linux Foundation activities are described in the Linux Foundation Antitrust Policy available at <u>linuxfoundation.org/antitrust-policy</u>. If you have questions about these matters, please contact your company counsel, or if you are a member of the Linux Foundation, feel free to contact Andrew Updegrove of the firm of Gesmer Updegrove LLP, which provides legal counsel to the Linux Foundation.

Agenda

All Times in Central European Time Zone

- 5:00 pm 5:20 pm Opening and General Updates
 - TAC member updates and project review date reminders
 - General updates
 - Follow up TAC Leadership
- 5:20 pm 5:40 pm Grid2Op Project Presentation
- 5:40 pm 6:00 pm Hyphae Annual Review
- 6:00 pm 6:25 pm Marketing/PR/Events updates
- 6:25 pm 6:30 pm Closing and Next Meeting

Opening and General Updates

5:00 pm - 5:20 pm



TAC Voting

Members

You can update your headshot/title at openprofile.dev.

Antonello Monti Chair Professor **RWTH** Aachen University

Art Pope Member of **Technical Staff** Google LLC





Chief Digital Technology Advisor Shell International **Exploration &**

Software engineer RTE (Reseau de Transport dElectricite)

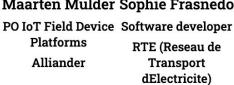




Jonas van den Bogaard **Open Source Office** Lead Alliander



Maarten Mulder Sophie Frasnedo Platforms Alliander



Production, Inc.



Travis Sikes Data Science Manager Recurve

Bryce Bartmann Clément Bouvier



LF Energy Projects

SIG - Digital Substations (3)





SIG - EV Charging (2)



SIG - Grid Operations (8)



FlexMeasures



SIG - Grid Simulation and Modeling (8)



CovXtreme





SIG - Data Standards and Tooling (6)









TAC Resources

- TAC Website <u>https://tac.lfenergy.org</u>
 - Contains all the TAC policies and meeting materials, as well as guides to using the various LF Energy tools
- TAC Overview -<u>https://github.com/lf-energy/fou</u> <u>ndation/blob/main/overview_de</u> <u>ck/LF%20Energy%20TAC%20Ove</u> <u>rview.pdf</u>
 - Guide for TAC members on their role and how to navigate LF Energy

Questions/feedback - let us know!

O Search LF Energy Foundation TAC Need help or have a question? Contact us her Home LF Energy Foundation TAC Getting Involved Per the Directed Fund Charter, the role of the Technical Advisory Committee (TAC) is to facilitate Processes communication and collaboration among the Technical Projects. The TAC will be responsible for: Meetings Coordinating collaboration among Technical Projects, including development of an overall Programs technical vision for the community Tools Making recommendations to the Budget Committee of resource priorities for Technical Projects; Resources Electing annually a chairperson to preside over meetings, set the agenda for meetings, ensure Code of Conduct meeting minutes are taken and who will also serve on the Governing Board as the TAC's representative (the "TAC Representative"); Creating, maintaining and amending project lifecycle procedures and processes, subject to the ommunicated to the TAC **Technical Advisory** participate in TAC s project inclusion or Council (TAC) Overview echnical steering December 2024 **TLFENERGY**

LF Energy Hosted Project Leads

Project	Project Lead(s)		
Arras	David Chassin		
Battery Data Alliance	Gabe Hege, AMPLabs		
CitrineOS	Thana Paris, S44		
CoMPAS	Pascal Wilbrink Alliander & Sander Jansen, Alliander (TAC Representative)		
covXtreme	Sachin Bhakar, Shell		
Dynawo	Marco Chiaramello, Benoît Jeanson, RTE		
EVerest	Marco Möller, PIONIX		
FledgePOWER	Romain Lebrun-Thauront, RTE		
FlexMeasures	Nicolas Höning, Seita Energy Flexibility B.V.		
GEISA	Richard Lam, Michael Stauber, SCE		
Grid Capacity Map	Harald Klomp, Vattenfall		
GridFM	François Miralles		

Project	Project Lead(s)		
GRIP	Alyona Teybar, MASc		
GXF	Maarten Mulder, Alliander		
Hyphae	Arila Barnes		
InterConnect SIF	Milenko Tosic, VizLore Labs		
NODE Collective	DeAndrea Salvador		
OneNet Framework	Vassilis Sakas		
OpenDSM	Travis Sikes, Recurve		
OpenFIDO	David Chassin, SLAC		
OpenGEH	Nicolas Bernhardi, Energet		
OpenLEADR	Hugo van de Pol, Arila Barnes		
OpenSTEF	Frank Kreuwel, Alliander		
OpenSynth	Gus Chadney, Centre for Net Zero		

Project Leads

Project	Project Lead(s)		
OperatorFabric	Frederic DIDIER, RTE		
Power Grid Model	Peter Salemink, Alliander		
PowSyBI	Sophie Frasnedo, RTE		
Python Emission Localisation and Quantification (pyELQ)	Bas van de Kerkhof, Shell		
Real Time Data Ingestion Platform (RTDIP)	Bryce Bartmann, Shell		
SC Decarbonisation Hub	Sachin Bhakar, Pedram Muurlink		
SEAPATH	Éloi Bail, Savoir-faire Linux		
Shapeshifter	Robben Riksen, Alliander		
SOGNO	Antonello Monti, RWTH Aachen University (TAC Representative) & Fito Galeano, RWTH Aachen University		

Project & Working Group Leads

SIG / Working Group	Work Group Lead(s)	
AI SIG	Alexandre Pariost, The Linux Foundation	
Archimate SIG	Jonas van den Bogaard, Alliander	
Digital Substations	SIG Chair - Jos Zenner, Vice Chair - Maxime Pelletier	
EV Charging	SIG Chair - Robert de Leeuw, Vice Chair - Thana Paris	
Grid Simulation and Modeling	SIG Chair - Thomas van Dijk, Vice Chair - Josh Main	
ORES (Open Renewable Energy Systems)	Chris Xie, Futurewei	



Project Review Cycle - TAC

TAC Level Reviews				
Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
RTDIP	Sandbox	2024-06-04	2024-01-30	2025-02-11
Hyphae	Incubation		2024-02-20	2025-02-11
OpenSynth	Sandbox	2024-01-09		2025-03-11
OperatorFabric	Early Adoption	2019-04-30	2024-07-16	2025-04-08
Shapeshifter	Incubation	2021-10-04	2024-05-14	2025-04-08
Battery Data Alliance	Incubation	2023-09-05	2024-08-27	2025-05-13
SOGNO	Early Adoption	2021-03-11	2024-04-23	2025-05-13
GXF	Early Adoption	2020-02-04	2024-09-18	2025-06-10
SC Decarbonisation Hub	Sandbox	2024-08-27		2025-06-10
CDSC	Working Group			2025-07-08
NODE Collective	Sandbox		2024-04-02	2025-07-08
OpenDSM	Incubation	2019-06-04	2024-09-17	2025-09-09
OpenLEADR	Incubation	2021-08-03	2021-11-23	2025-09-09
Archimate	Working Group			2025-10-14
GEISA	Sandbox			2025-10-14
FlexMeasures	Incubation	2022-01-05	2024-11-20	2025-11-11
AI	Working Group			2025-11-11
TROLIE	Working Group			2025-12-09

Project Review Cycle - SIGS

Grid Simulation and Modeling - Mtgs every other month, 1st Wednesday				
Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
PowSyBl	Early Adoption	2019-04-30	2024-12-04	2025-12-03
OpenSTEF	Incubation	2021-09-21	2023-11-07	2025-02-05
Power Grid Model	Sandbox	2023-02-07	2024-02-20	2025-02-05
covXtreme	Sandbox	2023-12-19		2025-04-02
Dynawo	Sandbox	2022-12-06	2024-01-30	2025-06-04
Arras	Sandbox	2022-07-12	2024-07-16	2025-09-03
Grid Capacity Map	Incubation	2021-04-27	2023-10-17	TBD
GRIP	Sandbox	2023-09-26		TBD

EV Charging SIG - Monthly, 4th Wednesday				
Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
CitrineOS	Sandbox	2023-11-28	2024-11-27	2025-11-26
EVerest	Early Adoption	2021-10-12	2024-01-09	2025-01-22

Digital Substations - Monthly, 2nd Tuesday				
Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
Seapath	Early Adoption	2020-10-06	2023-12-19	2025-01-14
FledgePOWER	Incubation	2021-02-11	2024-06-04	2025-05-13
CoMPAS	Incubation	2020-05-05	2024-06-25	2025-06-10

Project Pipeline

- <u>Grid2Op</u> is an open-source project that provides a highly customizable framework for simulating and optimizing real-time power grid operations. Contributed by RTE. The project is on schedule to be presented to the TAC on February 11th.
- <u>RTC-Tools</u> is a mature, leading open-source solution for the operational optimization of water and energy systems. Contributed by Deltares and Shell. Working through licensing issues, and aim to have TAC review in 1H.
- <u>CUPID (Controllable Unit Protocol Interface for DER)</u> aims to maximize the communication capabilities of Distributed Energy Resources (DER) and Energy Management Systems (EMS) by supporting diverse and scalable use cases to drive innovation and efficiency in the energy sector by increasing adoption of the standard. This project is in the early stages of onboarding.

Governing Board CONFIDENTIAL

Approve TAC Chair/Vice Chair roles

- 1) Create a new role of TAC Vice Chair, which will:
 - Support the TAC Chair
 - Serve as the TAC Chair when the TAC Chair is not present.
- 2) Change term length for TAC Chair/Vice Chair to one-year, Jan 1 - Dec 31
 - Vice Chair would be promoted to Chair at end of their term
 - TAC elects new Vice Chair annually.

Specific policy defined at <u>https://github.com/lf-energy/tac/pull/381</u>

Vice Chair Election plan (aligns with election policy at <u>https://github.com/lf-energy/foundation/blob</u> /main/elections.md)

- Open for nominations TODAY through 2/18 11:59 pm US Pacific Time.
- Election held via LFX Voting starting 2/20.

RESOLVED: That the TAC Roles policy discussed in this meeting is hereby approved.

Security Audit Follow Up

LF Energy Governing Board has approved additional budget to cover two Security Audits in 2025.

DISCUSSION:

- 1) TAC approve moving forward with security audits for both PowSyBl and EVerest.
- 2) Establish prioritization for remaining projects.



Projects stalled in post TAC onboarding

Two projects that were approved by the TAC before the change in the onboarding process are currently stalled.

- Interconnect SIP
 - Approved by TAC on April 23, 2024
 - Stalled in LF Onboarding, been slow getting legal questions answered
- OneNet Framework
 - Approved by TAC on May 14, 2024
 - Stalled in LF Onboarding, they have struggled getting their legal engaged to review.

DISCUSSION: Recommend to projects to stop onboarding, have them re-apply when they are ready to move forward.

Grid2Op Project Proposal

5:20 pm - 5:40 pm



Hyphae Annual Review

5:40 pm - 6:00 pm



Marketing/PR/Events Updates

6:00 pm - 6:25 pm



Marketing and PR Updates

- Webinars
 - <u>Power Grid Model webinar</u> took place yesterday
 - <u>Arras/GridChat webinar</u> to take place Jan 30
- New Project Launches
 - NODE Collective logo awaiting approval from project maintainers, then website will be launched
- Case Studies
 - New EVerest case study with Park&Charge in the Netherlands published today
- Website
 - Currently working on a restructuring and content update to the website (not a full redesign), to be completed ~February 7
 - SIGs will be getting dedicated webpages, starting with Digital Substations
- <u>Event tracker</u> please review and add any additional opportunities
- Use this <u>form</u> to submit any comms/marketing support requests
- See <u>media coverage spreadsheet</u> or <u>website</u> for recent articles

2025 LFE-hosted Events

- Open Data Access event at SF Climate Week
 - Apr 23, 2025 San Francisco, USA
 - Goal: convene participants across government, industry and utilities to highlight how open data and software can make progress on hitting decarbonization goals and delivering on the promise of VPPs. Success is measured by obtaining buy-in on the CDSC from stakeholders of influence from government and utilities. A side benefit is greater awareness of LF Energy within the Bay Area and Climate Tech community.
 - Invitation-only. Initial invitations have been sent.
- Open EV Charging Workshop at CharIN testival
 - May 15, 2025 Detroit, USA
 - Goal: leverage existing industry event to increase awareness in LF Energy EV charging projects, attracting new adopters and contributors
 - Finalizing agenda with CharIN; website to launch soon
- LF Energy Summit Europe
 - Sep 10-11, 2025 Aachen, Germany
 - Goal: the main event to share and collaborate for the LF Energy community, strengthening existing relationships and bringing new collaborators into the community
 - Website to launch this week
- LF Energy Summit North America
 - Oct 3, 2025 Montréal, Québec
 - Goal: at the end of CIGRE, provide a forum for North American LFE community members to convene in person. Also, attract new collaborators to the community.
 - \circ Website to launch this week

Upcoming Event CFPs

North America

- Energy Thought Summit May 19-22, 2025 San Antonio, TX Rolling submission deadline
- <u>Open Source Summit North America June 23-25, 2025 Denver Submission deadline February 17</u>
- <u>CEATI's Strategy and Innovation Conference Sept 16-17, 2025 Ft. Lauderdale, FL Submission deadline</u> Feb 7
- National Clean Energy Week Sept 15-19, 2025 Washington, DC Rolling submission deadline
- <u>T&D World Live September 23-25, 2025 Phoenix, AZ Submission deadline Feb 17</u>

Europe

- The EV:ent May 21-22, 2025 Heidelberg, Germany Submission deadline February 14
- MOVE June 18-19, 2025 London Rolling submission deadline
- OpenSouthCode June 20-21, 2025 Malaga, Spain Submission deadline March 31
- <u>Climate Tech Show October 1-2, 2025 London Rolling submission deadline</u>
- Enlit Europe November 18-21, 2025 Bilbao, Spain Rolling submission deadline

Closing and Next Meeting

6:25 pm - 6:30 pm



Next TAC Meeting

The next meeting of the LF Energy TAC is scheduled for 11 March 2025 at 8:00 am US Pacific Time/11:00 am US Eastern Time/5:00 pm Central European Time. Agenda will include:

- General Updates
- OpenSynth Annual Review
- Marketing/PR/Events update

To add agenda items, go to <u>https://github.com/lf-energy/tac/issues/new/choose</u>. You can review the TAC Agenda at <u>https://github.com/orgs/lf-energy/projects/2/views/1</u>



APPENDIX

Marketing and PR Updates

Recent Media Coverage

- <u>TFIR Hydro-Québec joins LF Energy</u>
- TFIR Code quality and security are crucial for open source projects | Nico Rikken, Alliander
- <u>TFIR Open source foundations to accelerate the energy transition | Alex Thornton LF Energy</u>
- TFIR LF Energy's SEAPATH project aims to drive the next generation of energy management
- TFIR What are the unique challenges in the energy sector?
- <u>EnergyCentral How French Transmission System Operator, RTE, Leverages Open Source to Build Next-Gen</u> <u>Substation Monitoring and Controls</u>
- TFIR LF Energy's role to accelerate decarbonization in the energy sector
- <u>EC&M Open-Source Platform EVerest to Advance Electric Vehicle Charging Interoperability</u>
- <u>Electronic Design This Week in PowerBites: Open-Source EV Charging, Solid-State Circuit Protection</u>
- TFIR Open source drives technical transformation of vertical industries: Linux Foundation Report
- Solar Builder Solving public EV charging issues with open-source software
- <u>TFIR LF Energy's role in global decarbonization and grid standardization</u>
- <u>Electronic Design Open-Source EV Charging: Linux-Based Platform Simplifies Interoperability</u>
- TFIR United States is ready to tackle Climate Crisis with the help of Open Source | Boris Dolley

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