

Technical Advisory Council (TAC) Meeting

20 February 2024

OLFENERGY

Meeting information

- Meeting to begin at 5:00 pm Central European Time
- Join the meeting at the link in your calendar in [LFX Individual Dashboard](#)
- 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 <https://wiki.lfenergy.org/display/HOME/Technical+Advisory+Council#TechnicalAdvisoryCouncil-MeetingMinutes>

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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
 - Project Security Focus updates
- 5:20 pm - 5:40 pm - Hyphae Annual Review
- 5:40 pm - 6:00 pm - Power Grid Model Annual Review
- 6:00 pm - 6:20 pm - OpenWallet / VC API presentation
- 6:20 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

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TAC Voting Members

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



Antonello Monti
Chair
Professor
RWTH Aachen
University



Anne Tilloy
Project manager
RTE (Reseau de
Transport
dElectricite)



Art Pope
Member of
Technical Staff at
Google LLC



Avi Allison
Program Manager,
Energy,
Sustainability
Microsoft
Corporation



Boris DOLLEY
Director of
Sustainable IT
Strategy
RTE (Reseau de
Transport
dElectricite)



Bryce Bartmann
Chief Digital
Technology Advisor
Shell International
Petroleum Company



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



Maarten Mulder
PO Field Device
Platforms
Alliander



Travis Sikes
Senior Data
Scientist
Recurse

LF Energy Hosted Project Leads

Project	Project Lead(s)
PowSyBI	Anne Tilloy, RTE
OperatorFabric	Frederic DIDIER, RTE
OpenEEmeter	Travis Sikes, Recurve
GXF	Maarten Mulder, Alliander
SOGNO	Antonello Monti, RWTH Aachen University
CoMPAS	Aliou Diaite, RTE & Sander Jansen, Alliander (TAC Representative)
FledgePOWER	Akli Rahmoun, RTE
Hyphae	Asimena Korompili, RWTH Aachen University
openLEADR	Stan Janssen, OpenADR
SEAPATH	Éloi Bail, Savoir-faire Linux
Grid Capacity Map	Harald Klomp, Vattenfall
Shapeshifter	Robben Riksen, Alliander
OpenSTEF	Frank Kreuwel, Alliander

Project	Project Lead(s)
EVERest	Marco Möller, PIONIX
OpenGEH	Nicolas Bernhardt, Energet
FlexMeasures	Nicolas Höning, Seita Energy Flexibility B.V.
Arras	David Chassin, SLAC
Dynawo	Marco Chiaramello, Benoît Jeanson, RTE
OpenFIDO	David Chassin, SLAC
Power Grid Model	Tony Xiang, Alliander
Real Time Data Ingestion Platform (RTDIP)	Bryce Bartmann, Shell
TROLIE	Christopher Atkins, MISO Energy
Battery Data Alliance	Gabe Hege, AMPLabs
GRIP (Grid Resilience and Intelligence Platform)	Alyona Teybar, MASc

Project & Working Group Leads

Project	Project Lead(s)
Open Sustainable Technology	Tobias Augspurger, Protontypes
CitrineOS	Thana Paris, S44
covXtreme	Sachin Bhakar, Shell
Synthetic Energy Data	Gus Chadney, Centre for Net Zero
OpenSCD	Sander Jansen, Alliander

Working Group	Work Group Lead(s)
AI Working Group	Alexandre Pariost, The Linux Foundation
Archimate Working Group	Jonas van den Bogaard, Alliander

Project Review Cycle

2024 Reviews				
Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
Dynawo	Sandbox	December 6, 2022		January 30, 2024
OpenFIDO	Sandbox	January 17, 2023		January 30, 2024
Hyphae	Incubation	December 8, 2020	February 7, 2023	February 20, 2024
Power Grid Model	Sandbox	February 7, 2023		February 20, 2024
FledgePOWER	Incubation	February 11, 2021	March 21, 2023	March 12, 2024
SOGNO	Early Adoption	October 27, 2020	March 21, 2023	March 12, 2024
Shapeshifter	Incubation	April 6, 2021	April 11, 2023	April 23, 2024
CoMPAS	Incubation	May 5, 2020	July 13, 2022	June 25, 2024
OperatorFabric	Early Adoption	April 30, 2019	July 25, 2023	July 16, 2024
Arras	Sandbox	July 12, 2022	July 25, 2023	July 16, 2024
TROLIE	Incubation	September 5, 2023		September 3, 2024
Battery Data Alliance	Incubation	September 5, 2023		September 3, 2024
GXF	Early Adoption	February 4, 2020	September 26, 2023	September 24, 2024

2024 Reviews				
Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
Open Sustainable Technology	Sandbox	October 17, 2023		October 4, 2024
Grid Capacity Map	Incubation	April 27, 2021	October 17, 2023	October 4, 2024
OpenEMeter	Incubation	June 4, 2019	October 17, 2023	October 4, 2024
OpenSTEF	Incubation	September 21, 2021	October 25, 2022	November 5, 2024
FlexMeasures	Incubation	November 2, 2021	November 28, 2023	November 19, 2024
PowSyBI	Early Adoption	April 30, 2019	November 28, 2023	November 9, 2024
CitrineOS	Sandbox	November 28, 2023		November 19, 2024
SEAPATH	Early Adoption	October 6, 2020	December 19, 2023	December 10, 2024
covXtreme	Sandbox	December 19, 2023		December 10, 2024
OpenLEADR	Incubation	September 15, 2020	December 6, 2022	TBD
OpenGEH	Sandbox	October 12, 2021	October 4, 2022	TBD

Project Review Cycle

Working Groups				
Group	Current Level	Initially Accepted	Last Review Date	Next Review Date
Archimate Working Group	Active	October 4, 2022	November 28, 2023	October 29, 2024
AI Working Group	Working Group	January 25, 2022		TBD

Past Reviews				
Project	Current Level	Initially Accepted	Last Review Date	Next Review Date
EVERest	Early Adoption	October 12, 2021	January 9, 2024	January 7, 2025
Synthetic Energy Data	Sandbox	January 9, 2024		January 7, 2025
RTDIP	Sandbox	October 25, 2022	January 9, 2024	January 28, 2025
OpenSCD	Sandbox	January 25, 2024		January 28, 2025

TAC Sponsors for Projects

Project	Current Level	TAC Sponsor
OpenEEmeter	Incubation	Travis Sikes
OpenFIDO	Sandbox	Avi Allison
OpenGEH	Sandbox	Avi Allison
OpenLEADR	Incubation	Anne Tilloy
OpenSCD	Sandbox	
OpenSTEF	Incubation	Jonas van den Bogaard
Open Sustainable Technology	Sandbox	
OperatorFabric	Early Adoption	Boris Dolley
PowSyBl	Early Adoption	Anne Tilloy
Power Grid Model	Sandbox	Jonas van den Bogaard
Real Time Data Ingestion Platform (RTDIP)	Sandbox	Art Pope
SEAPATH	Early Adoption	Boris Dolley
Shapeshifter	Incubation	Jonas van den Bogaard
SOGNO	Early Adoption	Antonello Monti
Synthetic Energy Data	Sandbox	
TROLIE	Sandbox	Boris Dolley

General Updates

- Yarille will be reaching out to project/working group leads to update slide in HL overview deck. (<https://github.com/lf-energy/tac/issues/91>)
- We'd like to schedule guest speakers/topics that would be of interest to TAC members and TSC leads.
 - **ACTION: Let us know what would be of interest at <https://github.com/lf-energy/tac/issues/31>.**
- Plan to move all projects to using LFX PCC Meeting Management by end of Q1; current status at <https://github.com/lf-energy/tac/issues/39>
 - **ACTION: Projects lead to work with John on transitioning: <https://github.com/lf-energy/tac/issues/110>**
- Future of Slack; Zulip being trialed by EVerest (<https://github.com/lf-energy/tac/issues/48>)

Project Security Focus updates

- Ensure all projects up to date with OpenSSF Best Practices Badge per their maturity level
- Clean up LFX Security to ensure it's accurate
- Review license scans and remedy open issues
- Security Audits for all 'Early Adoption' stage projects
- Security strategy developed by TAC (response standards, CVE response)



openssf best practices silver



openssf best practices silver



openssf best practices passing



openssf best practices silver



openssf best practices silver



openssf best practices in progress 73%



openssf best practices passing



openssf best practices passing



openssf best practices passing



openssf best practices passing



openssf best practices passing



openssf best practices passing



openssf best practices passing



openssf best practices in progress 93%



openssf best practices passing



openssf best practices passing

Current OpenSSF Best Practices Badge status (4 projects out of compliance)

ACTION: Projects in red boxes need review (source

https://tac.lfenergy.org/projects_with_bestpractices)

VULNERABILITIES

13.1K Unique Open Vulnerabilities
4.3K Unique Fixable Vulnerabilities
3.4K Unique Vulnerabilities Fixed

CODE SECRETS

3,810 CODE SECRET ISSUES

3.67% password in url	0.58% secret in xml
0.24% password in url params	0.05% google oauth
4.78% jwt token	5.17% secret assignment
0.03% sqlite database file	74.85% others

UNIQUE NON-INCLUSIVE LANGUAGE WORDS DETECTED

41 Unique Non-Inclusive Language Words Detected

18
Total Projects

2
Projects Successfully Scanned

11
Projects Partially Scanned

4
Projects Unsuccessfully Scanned

44.8K
Upstream Dependencies

94
Types of licenses found

44
Languages

ACTION: John to review and debug issues.

<p>SOGNO SOGNO</p> <p>opentf best practices passing 50%</p> <p>TOTAL VULNERABILITIES 3.5K FOUND, 543 FIXABLE, 848 FIXED</p> <p>305 CODE SECRETS, 295 NON-INCLUSIVE LANGUAGE WORDS</p> <p>35 TOTAL REFS, 25 SCANNED REFS, 1 DISABLED REFS</p> <p>View Dashboard</p>	<p>GXF Grid Exchange Fabric (GXF)</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 3.2K FOUND, 1.2K FIXABLE, 0 FIXED</p> <p>16 CODE SECRETS, 1 NON-INCLUSIVE LANGUAGE WORDS</p> <p>12 TOTAL REFS, 4 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>OpenEMeter</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 2.7K FOUND, 1.4K FIXABLE, 1.2K FIXED</p> <p>6 CODE SECRETS, 0 NON-INCLUSIVE LANGUAGE WORDS</p> <p>3 TOTAL REFS, 3 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>POW5YBL Pow5yBl</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 2.3K FOUND, 1.6K FIXABLE, 665 FIXED</p> <p>47 CODE SECRETS, 1.2K NON-INCLUSIVE LANGUAGE WORDS</p> <p>47 TOTAL REFS, 41 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>
<p>FledgePower</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 561 FOUND, 4 FIXABLE, 116 FIXED</p> <p>15 CODE SECRETS, 73 NON-INCLUSIVE LANGUAGE WORDS</p> <p>23 TOTAL REFS, 2 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>OperatorFabric</p> <p>opentf best practices in progress 64%</p> <p>TOTAL VULNERABILITIES 378 FOUND, 173 FIXABLE, 29 FIXED</p> <p>1.2K CODE SECRETS, 242 NON-INCLUSIVE LANGUAGE WORDS</p> <p>9 TOTAL REFS, 4 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>CoMPAS</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 279 FOUND, 137 FIXABLE, 478 FIXED</p> <p>56 CODE SECRETS, 154 NON-INCLUSIVE LANGUAGE WORDS</p> <p>20 TOTAL REFS, 11 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>OpenSTEF</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 97 FOUND, 3 FIXABLE, 12 FIXED</p> <p>400 CODE SECRETS, 9 NON-INCLUSIVE LANGUAGE WORDS</p> <p>5 TOTAL REFS, 4 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>
<p>SEAPATH</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 46 FOUND, 1 FIXABLE, 17 FIXED</p> <p>40 CODE SECRETS, 140 NON-INCLUSIVE LANGUAGE WORDS</p> <p>18 TOTAL REFS, 4 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>Hyphae</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 40 FOUND, 40 FIXABLE, 5 FIXED</p> <p>162 CODE SECRETS, 1 NON-INCLUSIVE LANGUAGE WORDS</p> <p>14 TOTAL REFS, 12 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>Everest</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 39 FOUND, 11 FIXABLE, 0 FIXED</p> <p>28 CODE SECRETS, 2 NON-INCLUSIVE LANGUAGE WORDS</p> <p>34 TOTAL REFS, 1 SCANNED REFS, 16 DISABLED REFS</p> <p>View Dashboard</p>	<p>SHAPESHIFTER Shapeshifter</p> <p>opentf best practices in progress 57%</p> <p>TOTAL VULNERABILITIES 1 FOUND, 1 FIXABLE, 1 FIXED</p> <p>14 CODE SECRETS, 1 NON-INCLUSIVE LANGUAGE WORDS</p> <p>5 TOTAL REFS, 1 SCANNED REFS, 2 DISABLED REFS</p> <p>View Dashboard</p>
<p>ARRAS</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 0 FOUND, 0 FIXABLE, 0 FIXED</p> <p>119 CODE SECRETS, 1 NON-INCLUSIVE LANGUAGE WORDS</p> <p>12 TOTAL REFS, 0 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>FlexMeasures</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 0 FOUND, 0 FIXABLE, 0 FIXED</p> <p>203 CODE SECRETS, 1 NON-INCLUSIVE LANGUAGE WORDS</p> <p>5 TOTAL REFS, 0 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>Grid Capacity Map</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 0 FOUND, 0 FIXABLE, 0 FIXED</p> <p>3 CODE SECRETS, 336 NON-INCLUSIVE LANGUAGE WORDS</p> <p>3 TOTAL REFS, 0 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>	<p>OpenLEADR</p> <p>opentf best practices passing</p> <p>TOTAL VULNERABILITIES 0 FOUND, 0 FIXABLE, 0 FIXED</p> <p>35 CODE SECRETS, 1 NON-INCLUSIVE LANGUAGE WORDS</p> <p>5 TOTAL REFS, 0 SCANNED REFS, 0 DISABLED REFS</p> <p>View Dashboard</p>

All current projects accepted before 12/1 had license scans done at the end of December

ACTION: Review latest license scans sent from Jeff Shapiro and address open issues

JS

Jeff Shapiro <jshapiro@linuxfoundation.org>

December 29, 2023, 10:19 PM

LF Energy - SEAPATH License Scan and Findings - Dec 2023

[Details](#)

To: SEAPATH-TSC <SEAPATH-TSC@lists.lfenergy.org> Cc: & 1 more

Hi Team,

Here are the results from the December 2023 license scan of the SEAPATH project. The scan was performed using the Linux Foundation Fossology server. Licenses and copyrights were examined.

The key findings (if any) and license summary can be found in the HTML report, the list of files in the spreadsheet, and also find the SPDX file listed below:

NOTE: I recommend that SPDX license identifiers be added to ALL source file headers. [see <https://spdx.dev/learn/handling-license-info> for examples]

NOTE: There are high priority key findings, please address these as soon as possible:

Finding #1

Priority: High

These files have an Apache-2.0 notice, but they also contain a comment indicating that they contain code from a third-party GPL v2 project.

The GPL v2 license is generally understood as prohibiting GPL v2 code from being incorporated into another work under a different license. The GPL v2 code from the upstream project should likely be removed and rewritten without using that project's code.

4 files

Finding #2

Priority: High

These files indicate that they contain content (or refer to a 3rd party dependency) under a version of the LGPL, typically seen as a weak copyleft license. Although LGPL content can be used in compatible ways with Apache-2.0 projects, its code should not be intermingled with code that needs to remain Apache-2.0, and it imposes some requirements that users of an Apache-2.0 project may not expect. The project may want to remove these files and replace them with permissively-licensed alternatives if that is feasible.

4 files

Finding #3

Priority: High

These recipes appear to contain some patches and code files that are under GPL-2.0, a strong copyleft license which is typically seen as incompatible with Apache-2.0 in many instances.

This may be okay, to the extent that the recipe is patching a GPL-2.0 project. However, for the patches / files that are GPL-2.0, will these be interacting with the project's Apache-2.0 code?

14 files

Finding #4

Priority: High

These files are under a GPL license which may conflict with your project license, especially if they are source code that is integrated with other code. Unless they are 100% separate and stand-alone, they need to be removed from your repo.

12 files

REPORTS:

lfenergy/seapath, code pulled 2023-12-23

- report: <https://liscanning.org/reports/lfenergy/seapath-2023-12-23-1eed5565-a64d-4d91-a21f-645536f1a512.html>

- xlsx: <https://liscanning.org/reports/lfenergy/seapath-2023-12-23-1eed5565-a64d-4d91-a21f-645536f1a512.xlsx>

- spdx: <https://github.com/liscanning/spdx-lfenergy/tree/master/seapath/2023-12/seapath-2023-12-23.spdx>

Please feel free to contact me with any questions about the scan results. Be sure to reply to me directly as I may not get an email sent directly to the distribution list.

Thanks, Jeff

Security Audits through Open Source
Technology Improvement Fund.

Priority Focus for 'Early Adoption' projects

In progress:

- SEAPATH - in progress
- EVerest - planned kickoff in Q1 2024
- PowSyBL - planned kickoff late Feb 2024

TODO:

- GXF
- OperatorFabric
- SOGNO

Next focus is on Incubation projects.

ACTION: Remaining 'Early Adoption' projects get lined up for scans; identify any 'Incubation' projects next.

OSTIF.org



The Open Source Technology Improvement Fund is a corporate non-profit dedicated to **securing open source apps** that we all depend on. Securing software isn't easy, and we know what it takes to succeed. By facilitating security audits and reviews, OSTIF makes it easy for projects to significantly improve security.

Security Strategy

TAC take the lead on developing a common set of security expectations and infrastructure for all hosted projects.

Besides the aforementioned topics, the TAC should provide guidance on:

- Base security policy for projects
- Standards for security response and responsible disclosure (CVE)
- Anything else industry specific to consider

ACTION: TAC to discuss forming a group to focus on building out security strategy

Hyphae Annual Review

5:20 pm - 5:40 pm

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Hyphae

Brief Description:

Hyphae aims at building open-source control for AC/DC microgrids, which is modular and scalable, allowing the plug-and-play capability of power electronics-interfaced distributed energy resources, as well as the flexible expansion and resilience of microgrids.

TSC Chairperson:

Antonello Monti (amonti@eonerc.rwth-aachen.de)

TSC Members and Affiliations:

Asimena Korompili (ACS, RWTH-Aachen University)

Contributed by:

ACS, RWTH Aachen University

Key Links:

Github: <https://github.com/hyphae>

Website:

<https://www.lfenergy.org/projects/hyphae/>

Artwork: *N/A*

Mailing lists:

- <https://lists.lfenergy.org/g/hyphae-general>

OpenSSF Best Practice Badge URL: *N/A*

Organizations contributing and/or using in production



Key Achievements in the past year (1/2)

- Controller for converters in hybrid AC/DC microgrid
 - Plug-and-play capability
- Systematic design process of converter controller
 - Achieve opposing design requirements in frequency and time domains
 - Consideration of non-linearities, discretisation, hardware implementation
 - Applicable to various controllers and converter types
- Hardware set-up for DC microgrid control
 - Use for testing of control in real control device
 - Various converter controllers in various converter types are validated

Key Achievements in the past year (2/2)

- Integration of distributed OPF algorithm in automation platform of PlatOne EU project
 - Application in use-cases of real demo AC grids
- Improvements of distributed OPF algorithm for AC systems
 - Faster convergence for faster control actions in power electronics-based grids
 - Integration to LFE SOGNO platform
- Integration of open-source control solution into FEN 3.0 proposal
 - Key role of open-source converter control for interoperability
 - Research topic together with converter manufacturers

Growth Plan

- Open-source code for system control in AC/DC microgrids
- Validation of control of AC/DC microgrids with real power devices
- Connection with other projects on AC/DC distribution grids
 - Hyperride EU project: Application of distributed OPF algorithm in real demo AC/DC grid
- Promotion of Hyphae project in topics of FEN 3.0 project proposal

Areas the project could use help on

- Integration of OPF tool as microservice in LFE SOGNO platform

- System models, data formats



- Application of OPF tool in TSO/DSO platforms

- Use-cases and business models of system operation



- Open-source control solutions in converter-based power systems

- Topic of interoperability in projects about HVDC transmission grids



Feedback on working with LF Energy

- Motivation to include open-source control solutions in research projects
- Relation with other LFE projects

TAC Open Discussion

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Power Grid Model Annual Review

5:40 pm - 6:00 pm

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Brief Description:

Power Grid Model is a high-performance distribution grid calculation library. It provides various algorithms to perform power flow, state estimation and short circuit calculations. Power Grid Model achieves a high performance due to the implementation in C++, but can easily be used, cross platform (Linux, Windows, Mac), through the Python API or C API.

TSC Chairperson:

Tony Xiang – tony.xiang@alliander.com

TSC Members and Affiliations:

Tony Xiang – Alliander

Jonas van den Bogaard – Alliander

Werner van Westering – Alliander

Peter Salemink – Alliander

Contributed by:

Alliander N.V.

TU Delft

TU Eindhoven

Key Links:

Github: <https://github.com/PowerGridModel>

Website:

<https://lfenergy.org/projects/power-grid-model/>

Artwork:

<https://github.com/PowerGridModel/.github/tree/main/artwork>

Mailing lists:

<https://lists.lfenergy.org/g/powergridmodel>

OpenSSF Badge URL:

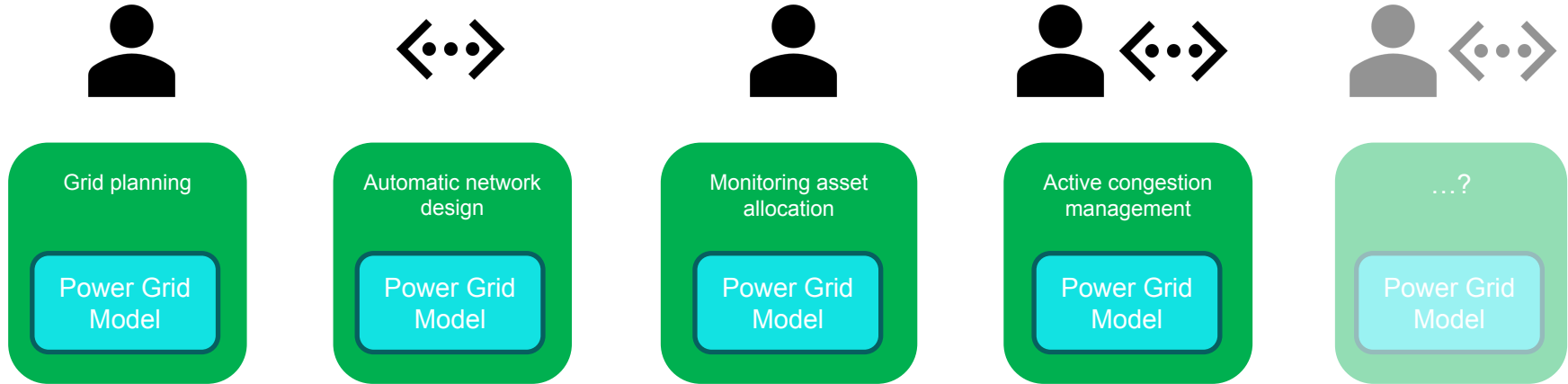
<https://www.bestpractices.dev/en/projects/7298>

Organizations contributing and/or using in production



Power Grid Model

- A fundamental building block to modernize power system analysis for distribution grids
- Support for Power flow, State estimation & Short circuit calculations



Code and non-code Contributions

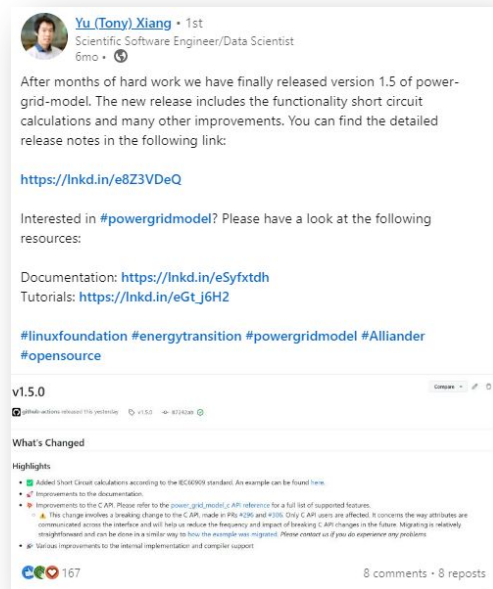
- Validation test cases from diverse users
- Algorithms for flexibility estimation (OPF)
- Proposals for serialization

Contributions to main, excluding merge commits



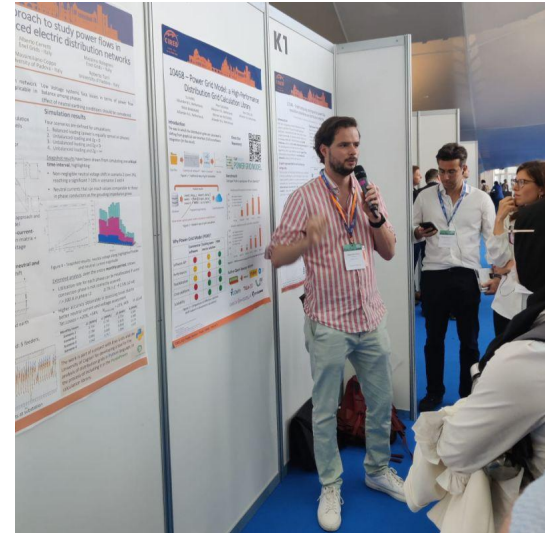
Key Achievements in the past year

- Features:
 - Musllinux support
 - Improved documentation
 - Release in conda-forge
 - C-API
 - Pandapower conversion + integration
 - Short circuit calculations 1.5.x
 - Serialization 1.6.x
 - Disable sensors in state estimation
 - C++20



Key Achievements in the past year

- Promotion & Community events:
 - PGM paper published in CIRED conference
 - Presentation at CIRED conference
 - Presentation at LF Energy Summit
 - Presentation at Open Source Summit Europe
 - Video interview with Swapnil
 - Hackathon with SOGNO
 - Two Power Grid Model meet-ups
 - New Case study: <https://lfenergy.org/power-grid-model-delvi/>
 - Blogs:
 - <https://lfenergy.org/recap-of-the-4th-power-grid-model-meet-up/>
 - <https://lfenergy.org/join-the-free-power-grid-model-workshop-online-18-january-2024/>
 - <https://lfenergy.org/power-grid-model-v1-6-now-available/>
 - And more
- Other
 - Joining LF Energy
 - OpenSSF badge on passing level
 - Power Grid Model architecture view in LF Energy Architecture model

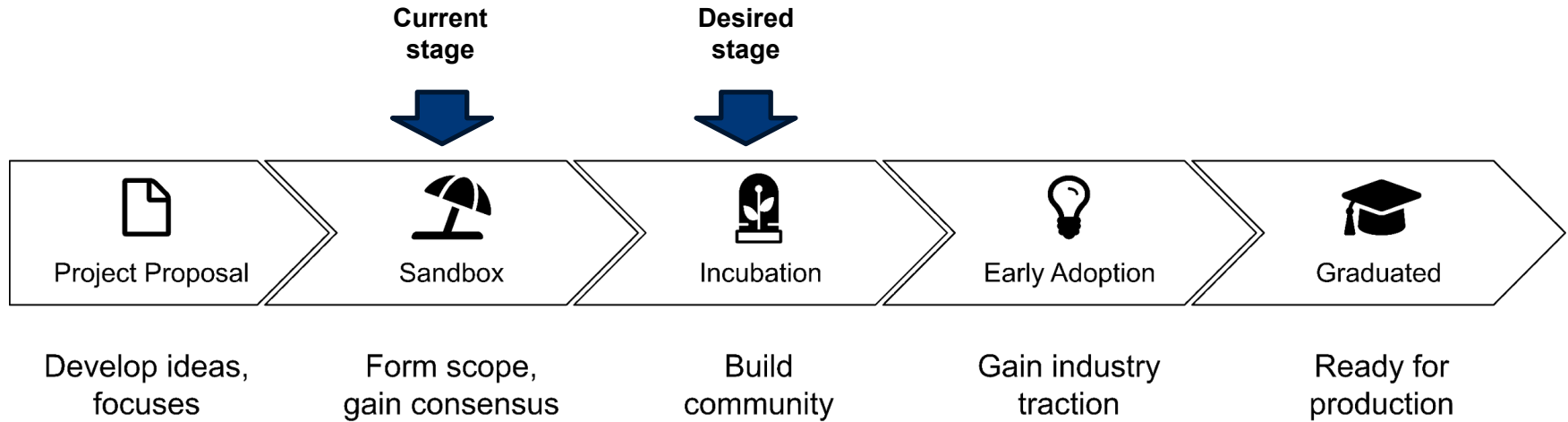


Presentation at CIRED conference

Key goals for coming year

- Features:
 - Newton Raphson state estimation
 - Automatic tap changer
 - Added to LFX
 - Move to Incubation
- Promotion & community events:
 - Power Grid Model Workshop
 - Presentation at FOSDEM '24 conference
 - Presentation at SG Tech '24 conference
 - Presentation at LF Energy Summit '24
 - Two Power Grid Model meet-ups
- Other:
 - Add Power Grid Model to LFX
 - Move to Incubation from Sandbox

Power Grid Model is ready for Incubation



Incubation Project review criteria

To be considered for the Incubation Stage, the project must meet the following requirements:

- Have an open and documented technical governance, including:
 - A LICENSE file in every code repository, with the license chosen an [OSI-approved license](#). ✓
 - A README file welcoming new community members to the project and explaining why the project is useful and how to get started. ✓
 - A CONTRIBUTING file explaining to other developers and your community of users how to contribute to the project. The file should explain what types of contributions are needed and how the process works. ✓
 - A CODEOWNERS or COMMITTERS file to define individuals or teams that are responsible for code in a repository; document current project owners and current and emeritus committers. ✓
 - A CODE_OF_CONDUCT file that sets the ground rules for participants' behavior associated and helps to facilitate a friendly, welcoming environment. By default projects should leverage the [Linux Foundation Code of Conduct](#) unless an alternate Code of Conduct is approved prior. ✓
 - A RELEASE file that provides documentation on the release methodology, cadence, criteria, etc. ✓
 - A GOVERNANCE file that documents the project's technical governance. ✓
 - A SUPPORT file to let users and developers know about ways to get help with your project. ✓
- Complete and approve the Technical Charter and agree to transfer any relevant trademarks to The Linux Foundation or its affiliate, LF Projects, LLC, and to assist in filing for any relevant unregistered ones. ✓

Growth Plan to Scale the Community

We have the following ambitions:

- Increase contributions by motivating recurring contributions from organizations that use or extend Power Grid Model
 - Contributor recognition
- Attract new contributors
 - Increase contribution backlog exposure
 - Improve documentation by making contribution guides easy to navigate.
- Expand Outreach
 - Social media presence (e.g LinkedIn)
 - Event presence (e.g. FOSDEM, LF Energy Summit, etc.)



4th Power Grid Model Meet-up

Incubation Project review criteria (continued)

- Have achieved and maintained an [OpenSSF Best Practices Badge](#) at the ['Passing' level](#). ✓



power-grid-model

[Expand panels](#) [Show all details](#) [Hide met & N/A](#)

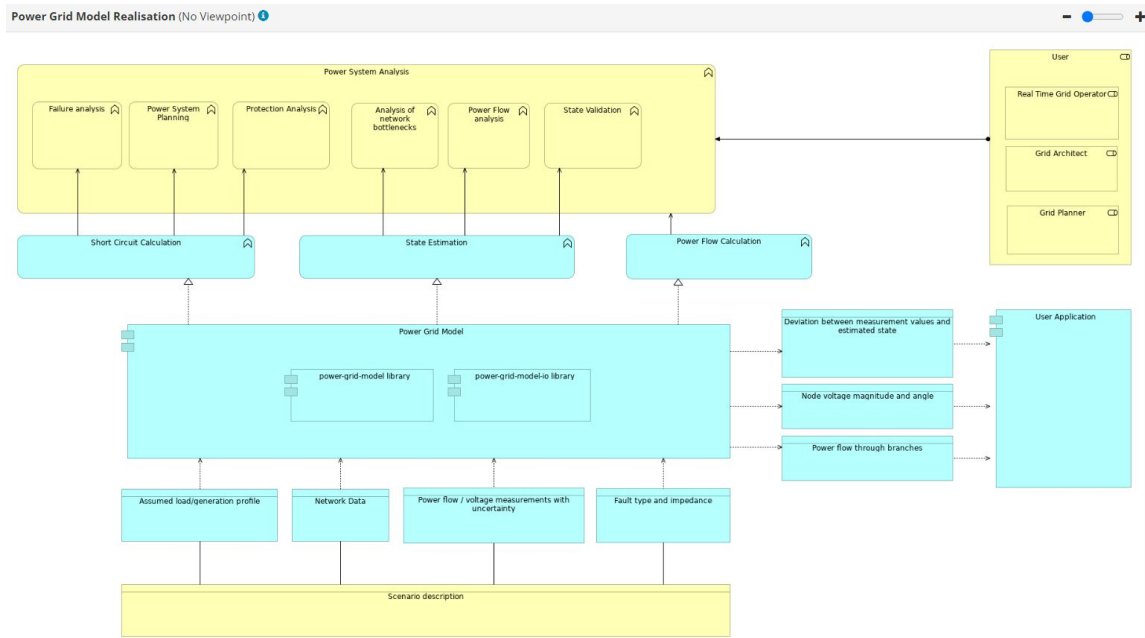
Projects that follow the best practices below can voluntarily self-certify and show that they've achieved an Open Source Security Foundation (OpenSSF) best practices badge. [Show details](#)

If this is your project, please show your badge status on your project page! The badge status looks like this: `openssf best practices passing` Here is how to embed it: [Show details](#)

- Have had a successful license scan with any critical issues remedied. ✓
- Have a defined project mission and scope ✓

Incubation Project review criteria (continued)

- The project's functional architecture is built out in the [LF Energy ArchiMate tool](#). ✓



Incubation Project review criteria (continued)

- An overview of the project's architecture and features defined. ✓
- The project roadmap defined, which should address the following questions.
 - What use cases are possible now? ✓
 - What does the next year look like in terms of additional features and use cases covered? ✓
- Community and contributor growth assessment (**see previous slides**)
 - The current number of contributors and committers, and the number of different organizations contributing to the project. ✓
 - Demonstrate a sustained flow of commits / merged contributions ✓
 - A credible plan for developing a thriving user community, in particular expanding the number of committers and contributors? ✓
 - An outline of the plan for the project to complete the requirements for the Early Adoption stage ✓
- Receive the affirmative majority vote of the TAC. ?



Does the TAC agree that the
Power Grid Model is ready for
Incubation?

Areas the project could use help on

Feedback on working with LF Energy

OpenWallet / VC API presentation

6:00 pm - 6:20 pm

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Marketing/PR/Events Updates

6:20 pm - 6:25 pm

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Marketing and PR Updates

dbrown@linuxfoundation.org
+1 415-420-7880

- Developing Seed ReCharger case study and webinar with EVerest project (jointly with LF Zephyr project which is also used in the product) - awaiting approval from Seed
- Also working with RTE and FledgePower on a case study - release date TBD
- Drafted blog post about SAM use cases - will publish tomorrow
 - Planning a webinar around the project in the coming months
- [TROLIE webinar](#) scheduled for Feb 21
- [OpenSTEF webinar](#) scheduled for 1 March
- [OpenEEMeter webinar](#) scheduled for 12 March
 - Announcement of OpenEEMeter 4.0 issued today
- New content in development:
 - 2023 LF Energy Annual Report
 - Open Source Impact on Vertical Industries White Paper
 - Interoperability Research Report with Natural Resources Canada & LF Research
- Use this [form](#) to submit any comms/marketing support requests

Recent Media Coverage

- [EnergyCentral - Alliander's Delvi Project Leverages LF Energy Power Grid Model to Direct Overhaul of Low Voltage Grid](#)
- [EnergyCentral - Sustaining Progress - January 2024 Digest for the Energy & Sustainability Network](#)
- [TFIR - LF Energy, U.S. Joint Office of Energy and Transportation Join Hands To Improve Interoperability Of EV Charging](#)
- [ARC Advisory Group - U.S. Joint Office of Energy and Transportation Partners with Linux Foundation Energy to Improve EV Charging Nationally](#)
- [Engineering.com - Linux Foundation tapped to develop open source EV charging tech](#)
- [AutoBlog - U.S. Joint Office of Energy and Transportation Partners With Linux Foundation Energy to Improve Reliability and Interoperability of EV Charging Nationally](#)
- [Electronics Specifier - US gov't adopts open source EV charging framework](#)
- [Auto Connected Car News - Free Webinar 1/29 from LF Energy & Dept. Energy & Transportation for Open Sourcing EV Charging Structure](#)
- [IT Brief UK - US Office adopts LF Energy EVerest for nationwide EV charging](#)
- [TFIR - More Standardization Is Needed To Tackle Energy Sector Challenges | Maarten Mulder – Alliander](#)
- [Power Systems Design - US Gov Office Adopts Open Source EV Charging Framework from Linux Foundation Energy](#)
- [Digital Journal - EV decarbonization partnership launches in US](#)
- [EV World - U.S. Joint Office of Energy and Transportation Partners With Linux Foundation Energy to Improve Reliability and Interoperability of EV Charging Nationally](#)
- [EV Charging & Infrastructure - US government partners with Linux Foundation Energy on EV charging](#)
- [The Buildout - Biden Administration Partners With Open Source Community on EV Charging Standards](#)
- [SD Times - SD Times Open-Source Project of the Week: ClimateTriage](#)
- [Slashdot - Linux Foundation Energy' Partners With US Government on Interoperability of America's EV Charging](#)
- [gtucker.io \(blog\) - FOSDEM Energy 2024](#)
- [TFIR - EnAccess works to democratize energy access with open source solutions | Vivien Barnier](#)

Events

- FOSDEM 2024 - 3-4 Feb, Brussels
 - [Videos](#) available of all talks
 - Energy Devroom was filled to or past capacity the entire day - thank you to the Devroom organizers!
- [Open Sustainability Policy Summit](#) - 2-3 May, Washington, DC
 - This event will be hosted by Johns Hopkins University at their DC facility
 - LF Energy will be responsible for curating the content
 - Public CFP has closed, but if you have a speaking topic in mind, reach out to Dan
- Open EV Charging Summit (TBA)
 - Texas Instruments Campus, Dallas, TX
 - May 15-16, 2024
- LF Energy Summit 2024 (pending contracts with venue)
 - Marriott Grand Place Brussels
 - September 5-6, 2024
 - [Preliminary sponsorship prospectus](#) - will be updated once all contracts are signed
 - CFP to open in early March
- DISTRIBUTECH - 26-29 Feb, Orlando
 - 6 LF Energy members will be exhibiting
 - James Sullivan from our member solutions team will be onsite for discussions with potential new members
- [Event tracker](#) - please review and add any additional opportunities

Upcoming Event CFPs

- [MOVE London - June 19-20, 2024 - Rolling submission deadline](#) (for this one, we should email cormac.martin@terrapinn.com with speaking proposals)
- [Experience POWER - October 9-11, 2024, Orlando, FL - Submissions due Feb 28](#)
- [Open Source Summit Europe \(including SustainabilityCon\) - September 16-18, 2024, Vienna - Submissions due April 30](#)
- [National Clean Energy Week - September 23-27, 2024, Washington, DC - Rolling submission deadline](#)
- [Enlit Europe - October 22-24, 2024, Milan - Rolling submission deadline](#)
- [Climate Tech Show - November 27-28, 2024, London - Rolling submission deadline](#)

Ambassador Program

- Looking at standing up an Ambassador Program for 2024. Examples from other LF projects can be seen at:
 - <https://www.cncf.io/people/ambassadors/>
 - <https://openmainframeproject.org/about/ambassadors/>
- [6 Applications](#) were received and shared with the TAC
 - Assuming there are no objections today, we will consider these approved and get them officially announced
- Requirements
 - Be active in at least one LF Energy project
 - Conduct at least one activity per quarter to remain an active ambassador
 - Speaking engagements, webinars, videos, blogs, etc.
- We would like to line up a few more, so applications remain open at <https://lfenergy.org/ambassador-program/>

Closing and Next Meeting

6:25 pm - 6:30 pm

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Next TAC Meeting

The next meeting of the LF Energy TAC is scheduled for 12 March 2024 at 8:00 am US Pacific Time/11:00 am US Eastern Time/5:00 pm Central European Time. Agenda will include:

- New Working Group/Special Interest Group Proposal - Digital Substation Automation Systems (DSAS)
- New Working Group/Special Interest Group Proposal - Open Renewable Energy System (ORES) Working Group
- TAC Evolution Plan
- General Updates
- Marketing/PR/Events update

To add agenda items, go to <https://github.com/lf-energy/tac/issues/new/choose>.

You can review the TAC Agenda at <https://github.com/orgs/lf-energy/projects/2/views/1>



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