



# **Universal Interoperability for Grid-forming Inverters (UNIFI) Consortium**

## **BYLAWS**

*January 2024*

The Bylaws for the Universal Interoperability for Grid-Forming Inverters (UNIFI) Consortium outlines the purpose, organizational structure, operations, and sets out the rights and responsibilities of Consortium Members.

An unincorporated Association operating  
as a Program of  
the IEEE Industry Standards and Technology Organization (“ISTO”)

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## DEFINITIONS

**Consensus** means the lack of a sustained objection to the issue under consideration.

**DOE** means U.S. Department of Energy.

**DOE Review Board** means a Board comprised of representatives from the U.S. Department of Energy who meet with the Organization leadership on an annual basis to evaluate the progress within research topics and the potential need to redirect efforts.

**External Scientific Advisory Board** means a group of non-member volunteers from industry and academia who conduct regular reviews of progress toward specific Organization goals and give feedback for improvements.

**Federal Work** means work funded by the US Department of Energy (DOE) under Funding Opportunity Announcement (FOA) DE-FOA-0002437 and cost share provided by Members for this FOA.

**IPMP** means Intellectual Property (IP) Management Plan (IPMP), a document that provides an overview of the proposed capabilities for, and collaboration in, open, pre-competitive work among multiple parties in an IP-protected environment.

**Leadership Team** means the governing entity of the Organization.

**Member** means a general reference to all entities who have so qualified for such classifications pursuant to the relevant provisions of these Bylaws and executed a Membership Agreement for the Organization.

**Membership Agreement** means the Organization's Membership Agreement, as in effect and amended from time to time.

**Non-Federal Work** refers to all funding that is not Federal Work. This funding can be from a variety of means including membership dues, contracted services, etc. This funding can be used for activities pertinent to fund administration of the consortium, consortium communications and events, and member-directed research.

**Organization** means Universal Interoperability for Grid-Forming Inverters (UNIFI) Consortium.

**Person** means any individual, corporation, partnership, joint venture, trust, Limited Liability Company, business association, governmental entity or other entity.

**Quorum** means more than fifty percent (50%) of the Members in Good Standing of the applicable group (i.e., the Leadership Team, Working Group, or other group established by the Organization) are present, either in person, by telephone or by such other means as may be prescribed by such group or by these Bylaws.

**Subsidiary or Affiliate** of a Member means a Person: (a) more than fifty percent (50%) of whose (a) outstanding shares or securities (representing the right to vote for the election of directors or other



managing authority) or (b) if the Person does not have outstanding shares or securities, other ownership interest (representing the right to make the decisions for such Person) are, now or thereafter, owns or controls, is owned or controlled, directly or indirectly, by such Member, but such corporation, company or other entity shall be deemed to be a Subsidiary only so long as such percentage of ownership or interest remains more than fifty percent (50%).

**Unanimous** means that the votes or written consents of all members of the relevant body or group are, with not more than one exception, affirmative. Notwithstanding the foregoing, the lower-case use of “unanimous”, when used with the terms “entire” or “all”, shall mean 100% affirmative votes or written consents of the entire relevant body or group.

## Article 1: NAME AND PRINCIPAL OFFICE

The name of the Organization shall be the Universal Interoperability for Grid-Forming Inverters (UNIFI) Consortium. The terms “UNIFI Consortium,” “UNIFI,” “Consortium,” and “Organization” shall be used herein interchangeably.

A principal office of the Organization will be created to perform administrative and operational functions for the Organization. This office will be located at 445 Hoes Lane Piscataway, NJ 08855.

## Article 2: CONSORTIUM MISSION AND VISION

The duration of the Organization shall be perpetual but may be dissolved at any time upon a unanimous vote minus 1 of the Organization Leadership Team.

### Mission

The mission of the UNIFI Consortium is to provide a forum to address fundamental challenges in the seamless integration of grid-forming (GFM) technologies into power systems.

### Vision

The vision of the UNIFI Consortium is enabling power systems to operate with any mix of machines and inverter-based resources (IBRs) at any scale in an affordable, secure, reliable, sustainable, and resilient manner.

### Goal

The goal of the UNIFI Consortium is to conduct research and development, demonstrate concepts at scale, facilitate development of best practices and standards, and train the next-generation workforce in GFM technologies.

### Objectives

The objectives of the UNIFI Consortium are as follows:



- Develop and implement a unified approach for integrating IBRs and synchronous machines in power systems at any scale
- Provide a long-term vision and roadmap for GFM technologies for a rapidly evolving grid
- Develop a sustainable operating model that builds on the initial U.S. Department of Energy (DOE) funding with demonstrated value-add to industry
- Support outreach, education, and collaboration to develop alignment amongst researchers, industry, utilities, and policy makers
- Promote diversity and inclusion in all spheres to create an equitable energy system.

### Article 3: ANTI-TRUST GUIDELINES COMPLIANCE

The Organization is not intended to become involved, and will not become involved, in the competitive business decisions of its member companies, nor will it take any action which would tend to restrain competition among and between such Members in violation of the US antitrust laws.

The Organization unequivocally supports the policy of competition served by the US antitrust laws and intends to comply strictly with such laws. It shall be the responsibility of every Member of the Organization to be guided by this policy of strict compliance with the antitrust laws in all of the Organization's activities. It shall be the special responsibility of the Organization's officers and Leadership Team to ensure that this policy is known and adhered to in the course of activities pursued under their leadership.

Each Member should refrain from any discussion—both at formal gatherings and in informal settings, through email exchanges or on collaboration sites— which may provide the basis for an inference that UNIFI members agreed to take action relating to pricing, allocation of markets, bid coordination or any other matter having a market effect.

Any violation of the General Rules of Antitrust Compliance or of this Article shall make the violator subject to immediate suspension from membership in the Organization and immediate removal from any office held by an official representative violating such rules or this Article.

### Article 4: AUTHORITY

The UNIFI Consortium was established under Funding Opportunity Announcement (FOA) DE-FOA-0002437 originally released on December 16, 2020, by the DOE Office of Energy Efficiency and Renewable Energy (EERE) Solar Energy Technologies Office (SETO). For work conducted under the FOA, a single organization will act as the lead (the "Prime"). The Prime will be responsible for conducting the agreed upon work, administering subcontracted work, and managing work and monitor performance per the objects stated in the Technical Work Plan (TWP) Statement of Project Objectives document (SOPO). For 2022-2027, the Alliance for Sustainable Energy, LLC ("Alliance") will serve as the Prime.

These Bylaws may be ratified, amended, or temporarily suspended by two thirds vote present at a UNIFI Consortium leadership meeting where a quorum of the Leadership Team is present.



The UNIFI Consortium shall also undertake additional purposes and activities which may be undertaken by an organization described in Section 501(c)(6) of the Internal Revenue Code of 1986, as the same may be amended or modified or replaced by any future United States internal revenue law (the “Code”).

Subject to the provisions of these Bylaws, the activities and affairs of this Organization shall be conducted and all powers shall be exercised under the direction of the Leadership Team.

## Article 5: MEMBERSHIP

### **Determination, Rights and Obligations of Members**

Membership in the UNIFI Consortium shall be open to any for-profit or non-profit entity in support of the UNIFI mission. As used herein, “ Member,” “Consortium Member,” “UNIFI Member,” and “UNIFI Consortium Member” may be used interchangeably.

A Member and any of its Subsidiaries shall be deemed one (1) Member. Any entity owning 51% of its own stock is deemed an individual Member.

Member entities may have multiple individuals participating in the UNIFI Consortium. Each Member shall appoint a designated contact to serve as the primary Member representative in UNIFI Consortium matters. The Member may change such designated representative from time to time upon written notice to the UNIFI Organizational Director.

All participation in the UNIFI Consortium by Members shall be in accordance with applicable UNIFI Consortium policies. Member acknowledges and agrees that the rights and privileges of Member participation in the UNIFI Consortium may be changed from time to time by action of the Leadership Team (Described in Article 6) and that any such amendment shall be binding upon Member on a prospective basis following notice to the Member.

### **Membership Eligibility**

Eligibility for membership or appointed or elected officer positions may not be limited on the basis of race, religious beliefs, national origin, ethnicity, color, age, gender, gender identity, marital status, medical status, sexual orientation, or disability. The Organization shall have no rules or policies that discriminate on the basis of race, religious beliefs, national origin, ethnicity, color, age, gender, gender identity, marital status, medical status, sexual orientation, or disability.

### **Membership Classifications**

“Full Member” is defined as a Member that receives the member benefits listed in Table 1 and contributes the Membership Dues, for the Full Member tier to the Consortium per year, provided that such Member is only a Full Member for the duration of such year(s).



“Full Member via EPRI” is defined as a Full Member whose dues are paid to the UNIFI Consortium through EPRI.

“Associate Member” is defined as a Member that receives the member benefits listed in Table 1 and contributes the Membership Dues, for the Associate tier Member to the Consortium per year, provided that such Member is only an Associate Member for the duration of such year(s).

“Start-up Member” is defined as a Member that receives the member benefits listed in Table 1 and: (i) has fewer than 50 employees; (ii) started its operations within the last 5 years; and (iii) contributes the Membership Dues, for the Start-up tier Member to the Consortium per year, provided that such Member is only a Start-up Member for so long as these conditions continue to be met.

“Non-Profit Member” is defined as a Member that receives the member benefits listed in Table 1 and is a University, National Laboratory, or organization that has received non-profit status from the Internal Revenue Service (IRS) under code 501(c) or 170(c)1. Non-Profit Members contribute the Membership Dues, to the Consortium per year, provided that such Member is only a Non-Profit Member for the duration of such year(s). Whether a Member is or continues to be not-for-profit shall be determined at the sole discretion of the UNIFI Leadership Team.

“Foundational Member” is defined as any organization that was part of the original DOE UNIFI Consortium Project team established in January 2022 (Year 1). The designation of Foundational Member shall be extended to the Subsidiaries and Affiliates of the Foundational Member. The Foundational Member receives the member benefits of a Full Member. This designation lasts from January 1, 2022 to December 31, 2026. After this time, the Foundational Member must switch to another membership category. If a Foundational Member receives DOE funding related to the Consortium, they must remain a Member of the Consortium and provide their agreed upon cost-share for the agreed upon time period. If a Foundational Member does not provide their annual cost share amounts, their membership will be terminated unless it has been preapproved by the UNIFI Organizational Director to make up their costs share the subsequent year. A Foundational Member may terminate their membership with written notice to the UNIFI Organizational Director.



**Table 1 – UNIFI Consortium Membership Level and Benefits**

<b>BENEFITS</b>	<b>Full Member (including Foundational and Full via EPRI)</b>	<b>Associate Member</b>	<b>Startup<sup>[a]</sup> and Non-Profit Member</b>
Voting member	✓		
Early access to UNIFI Specifications	✓	✓	✓
Access to UNIFI core-stack IP (note: access may not be free)	✓	✓	✓
Participation in UNIFI events (workshops, trainings, job fairs, etc.)	✓	<i>2 Events per year</i>	✓
Development of UNIFI Specifications (based on votes)	✓	✓	✓
Participation in UNIFI working groups	✓	<i>2 Working Groups</i>	✓
Access to education and workforce-development material	✓	<i>2 items</i>	✓
Access to demonstrations	✓		✓
Access to member-provided or other new funding	✓		✓
Decide on member-funded projects (based on votes)	✓		

- Structure in place for Years 1-5 of Consortium; subject to adjustment per bylaws
- [a] Startup members must have less than 50 employees and be less than 5 years old
- Foundational Members are Full members for Years 1-5

## **Upgrades and Downgrades**

In the event that Member decides to transfer from one class of membership in the UNIFI Consortium to another and complies with the admission criteria for the new class of membership, the Member's first membership will be deemed terminated and a new membership will be deemed to be created in the new class of membership, upon written notice filed with the Organizational Director and satisfaction of any other requirements.

## **Member Expenses**

Each Member shall bear its own costs and expenses for its participation in the UNIFI Consortium, including without limitation compensation of its employees, and all travel and expenses associated with Member's participation in the UNIFI Consortium meetings and conferences, and Member understands that it has no right of reimbursement from the UNIFI Consortium for such expenses.

## **Member Dues**

In support of the UNIFI Consortium, Members agree to pay the non-refundable annual membership dues described in the Membership Agreement. Beginning in 2027, the Foundational membership class will dissolve, and existing Foundational members will be able to select a new membership class for their continued engagement and pay the corresponding membership dues for that class.

The amount required for annual dues shall be as stated on the Organization website, unless changed by a majority vote of the Leadership Team at an annual meeting. Continued membership is contingent upon being up-to-date on membership dues. Initial dues shall be due and payable upon the Member's execution of the Membership Agreement and approval by the Leadership Team. Thereafter, annual dues shall be due and payable as specified in the Schedule of Fees and Dues. Invoices will be sent to members on an annual basis.

## **Member Voting**

Full Members and Foundational Members are able to vote when a decision among members is needed at the work group level and at the Leadership Team level. See Table 1. There is one vote per one member entity.

## **Members in Good Standing**

Membership in the UNIFI Consortium is contingent upon payment of the annual membership dues. Foundational Members also need to provide substantiation of cost share to the Prime. Membership in the UNIFI Consortium is further conditioned upon the acceptance by the Member of the obligations and rights set forth in this document.

## **Member Resignations**

A Member may resign from the UNIFI Consortium by giving written notice to the Organizational Director, in which case withdrawal and termination of participation shall be effective as of the date of notification. Participation of Member in the UNIFI Consortium may also be terminated by the UNIFI Consortium under the conditions set forth in the Expulsion or Suspension Section of this Article. Members shall have no right to a refund of any dues, fees or assessments paid prior to the termination of its participation in the UNIFI Consortium, including but not limited to withdrawal by Member for any reason. Moreover, Members shall remain fully liable for any dues, fees or assessments then due and owing to the UNIFI Consortium.

### **Member Expulsion or Suspension**

(a) Grounds. The Leadership Team may, upon the affirmative vote of two-thirds of Members of the Leadership Team, expel or suspend a Member who, in the determination of the Leadership Team, has engaged in conduct that is not in the best interest of the UNIFI Consortium, including but not limited to: (i) failing to conform with the provisions of these Bylaws or other rules and policies of the UNIFI Consortium, including Antitrust Guidelines, or (ii) failing to comply with the rules and regulations for the UNIFI Consortium provided, however, that the Leadership Team (i) shall deliver to such Member written notice by certified mail, return receipt requested of such proposed expulsion or suspension not less than thirty (30) days prior to the effective date of such proposed expulsion or suspension, which notice shall set forth the reasons for such expulsion or suspension and (ii) shall provide an opportunity for such Member to be heard, orally or in writing, not less than ten (10) days before the effective date of such expulsion or suspension by the Leadership Team or a committee of the Leadership Team that is authorized to decide that such proposed expulsion or suspension not take place. The decision of the Leadership Team or the authorized committee of the Leadership Team shall be final.

(b) Suspension for Failure to Pay Dues. In addition to the reasons specified above, the Organizational Director, in his or her discretion, may suspend the right of any Member to participate in activities of the Corporation for failure to pay the general membership fee, any dues, assessments or other amounts the within ninety (90) days after the payment thereof shall be due and if, after written notice, the Member fails to make payment within ten (10) business days. The Organizational Director shall notify Member of the proposed suspension by certified mail, return receipt requested and the effective date of such expulsion shall be two (2) weeks after Member has received such notice. Upon payment of all amounts that are due and payable to the UNIFI Consortium, such Member may be reinstated as a Member upon approval of the Leadership Team.

(c) Effect of expulsion or Suspension. The expulsion or suspension of a Member shall not relieve the Member from obligations the Member may have to the UNIFI Consortium for dues, assessments, fees, charges for goods or services, arising out of an indemnification obligation or otherwise.



## Article 6: ORGANIZATION LEADERSHIP

### Organizational Structure

The organizational structure of the UNIFI Consortium is shown in Figure 1. The Consortium consists of a leadership team and three “Thrusts”: Research and Development, Commercialization and Demonstration, and Outreach and Training. Under each Thrust are “Areas” where the bulk of the work is being conducted. Each Area will have at least one Working Group that Full, Start-up, and Non-profit Members can join.

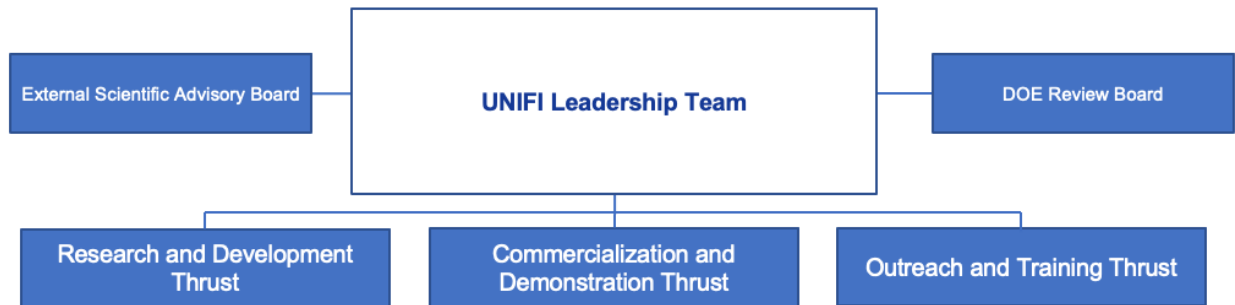


Figure 1– UNIFI Consortium Organizational Structure

### Leadership Team

The Leadership Team serves as the governing body of the Organization and is empowered to guide the future direction of the Organization, ratify its work products, approve new work initiatives, manage its operations, and interface with the US DOE. The Leadership Team consists of the following non-compensated positions:

- **Organizational Director** – Responsible for the day-to-day management of the Consortium, organizing advisory and review Boards, reporting to DOE. This position is the chair of the Leadership Team. The Organizational Director is also responsible for, ensuring efficient operation of the UNIFI Consortium, and creating and maintaining a collaborative infrastructure. The Organizational Director is responsible for coordinating the assessment of the Consortium’s quality through feedback from the External Scientific Advisory Board and DOE Review Board. This position is also responsible for financial and program management of the Consortium and the final allocation of and Consortium funds.
- **Sustainability Officer** – Responsible for networking with industry and recruiting Members. Focused on growth of the Consortium with the task to become financially sustainable (i.e., able to function without DOE funding after 5 years).
- **Industry Liaison Officers**– Represent Industry on the Leadership Team. There will be four Industry Liaison Officers representing four major industrial categories: Large original equipment manufacturers (OEM), Small OEM, Utility, and independent system operators (ISO)/regional transmission operators (RTO).

- **Diversity, Equity, and Inclusion (DEI) Officer** – Responsible for developing principles and evaluating opportunities to increase DEI in the Consortium and described in a DEI Plan.
- **Intellectual Property (IP) Officer** – Responsible for leading the IP Management Areas and coordination of core IP that ensures interoperability as described in Article 11 – IP Management.
- **Area Leads** – The Area Leads are responsible for overall coordination and tracking progress of work in the twelve Areas under each Thrust as shown in Figure 1. At least one person is assigned for each area. There can be co-Area Leads assigned to each area. A single person can be the lead for one or more Areas. The Areas are listed below.
  - Modeling and Simulation Area
  - Controls Area
  - Implementation and Validation Area
  - Field Demonstration Area
  - IP Management Area
  - Standards Area
  - Education and Workforce Development Area
  - Communications and Events Area

### Leadership Team Qualifications, Term of Office, Appointment and Vacancies

Leadership Team members shall be employees of a Member entity. They may hold more than one position within the Consortium. All Leadership Team members serve for a term of five (5) years, or until their successors shall be duly elected.

Leadership Team members may resign at any time upon written notice to the Organizational Director. The resignation of a Leadership Team member is effective without acceptance when the notice is given to the Organizational Director, unless a later effective time is specified in the notice. Any Leadership Team member may be removed, with cause, by the affirmative vote of a majority of the Leadership Team Members and the approval of the Organizational Director.

Leadership Team vacancies shall be filled without undue delay by an election of a two thirds vote of the remaining members of the Leadership Team at a regular meeting where quorum is achieved. Area leads are afforded 1 vote per Area. In Areas with co-leads, then the Area must come to consensus on their vote. To fill vacancies, the Organizational Director will ask for nominations. Vacancies may be created and filled according to specific methods approved by the Leadership Team.

All issues are resolved by consensus whenever possible or by a two thirds vote of those Leadership Team members attending a Leadership Team meeting when quorum is achieved.

The Leadership Team shall not discuss or disclose information about the Consortium or its activities to any person or entity unless such information is already a matter of public knowledge, such person or entity has a need to know, or the disclosure of such information is in furtherance of the Consortium's purposes or can reasonably be expected to benefit the Consortium. Leadership Team members shall use discretion and good business judgment in discussing the affairs of the Consortium with third parties.

Duties of the Leadership Team shall include but not be limited to:

- a) Performing any and all duties imposed on them collectively or individually by law, or by these Bylaws;
- b) Meet at such times and places as required by these Bylaws;
- c) Elect organization members to fill Leadership Team vacant seats, as required;
- d) Approve Working Group applications for Technical Work Area projects that support the work and purpose of the Organization;
- e) Resolve issues that are brought forward to the Leadership Team by its members;
- f) Consider for approval or rejection any public statement, press release or similar public materials concerning the business and technical activities of the Organization prior to making such materials public;
- g) Consider for approval or rejection the Organization's annual budget as submitted annually. If the annual budget is not approved at the start of each calendar year, the Organization shall operate based on the prior yearly budget, to the extent practical, until an annual budget is approved;
- h) Establish or revise membership classes and the rights and privileges of the various classes of Members;
- i) Establish annual dues for the various classes of Members and determine the rights, privileges and obligations for each class of Member not otherwise stated in these Bylaws;
- j) Make ongoing evaluations of the Organization's fulfillment of its purpose and the need to continue the existence of the Organization going forward;
- k) Adopt and modify the Bylaws;
- l) Adopt procedures to govern operations of Working Groups and approve Charters for same;
- m) Adopt and modify the Organization's Membership Agreement;
- n) Ensure secretariat functions are sufficiently staffed, supported and performed; and
- o) Other responsibilities as specified and approved by the Leadership Team.

The Leadership Team shall not be personally liable for the debts, liabilities, or other obligations of the Organization.

Each Leadership Team member shall have one (1) vote on each matter submitted to a vote by the Leadership Team. Voting at meetings shall be by a show of hands if held in person, or by voice ballot if

held by audio, videoconferencing or teleconferencing, or by electronic ballot if held by electronic means, unless otherwise required.

For general actions not described in (a) or (b) below, such action must be approved by a two thirds vote of the Leadership Team members at which a Quorum is present.

- a) The following actions must be approved by two-thirds (2/3) of the Leadership Team members:
  - i. Removing a Leadership Team member for cause
  - ii. Chartering or amending the charter of any Working Group, establishing rules of operation, or terminating Working Groups
  - iii. Requiring the expenditure in excess of USD \$50,000
  - iv. Approving annual dues and budget
  - v. Terminating a Member's Membership Agreement in accordance with its terms
  - vi. Approving the filling of vacant seats on the Leadership Team
  - vii. Approving any press release, public announcement or other public communication (e.g., white papers, guidelines)
  - viii. Granting to a Non-Member access to, or the receipt of copies of, Organization-created material, unless said material was developed for public access
  - ix. Any other action not described in section (b) below that two or more Members reasonably believe is outside of the Scope of the Organization (upon request, the members will disclose the reasons for their belief)
  - x. Adopting Organization material and/or ratifying final Organization work product
  - xi. Approving or modifying the Membership Agreement and any other documents among the Organization and its Members, or
  - xii. Amending these Bylaws, the Intellectual Property Management Plan, or the Non-Disclosure Agreement.
  
- b) The following actions must be approved by a unanimous minus one vote of the Leadership Team:
  - i. Adopting or amending antitrust guidelines, except where counsel has advised that an amendment to the guidelines is required, in which case such amendment is approved
  - ii. Enforcing a copyright owned by the Organization



- iii. Changing the name of the Organization
- iv. Approving a new name or logo adopted by the Organization for use by its Members in identifying the Organization's certified products
- v. Causing a substantial change in the Scope of the Organization
- vi. Entering into a sale of assets of the Organization outside of the ordinary course of business, or
- vii. Dissolving the Organization.

### External Scientific Advisory Board

A dedicated External Scientific Advisory Board comprised of relevant stakeholders from private industry and academia shall be maintained. This External Scientific Advisory Board is a voluntary, non-compensated role. The purpose of this External Scientific Advisory Board is to conduct regular reviews of the progress toward specific Organizational goals and give feedback for improvements. Board Members shall have no duties, voting privileges, nor obligations for attendance at regular meetings of the External Scientific Advisory Board. Members of the External Scientific Advisory Board shall possess the desire to serve the community and support the work of the Consortium by providing expertise and professional knowledge. External Scientific Advisory Board members shall not be employees of Members in the UNIFI Consortium. External Scientific Advisory Board selection, participation, and replacement is at the discretion of the Organizational Director.

### DOE Review Board

A dedicated DOE Review Board shall be maintained as long as DOE Funding is associated with the operations of the UNIFI Consortium that contains representatives from the U.S. Department of Energy (DOE). The DOE Review Board membership will be selected by the DOE Award Technology Manager and could include representatives from the DOE Solar Energy Technology Office, Wind Energy Technology Office, Office of Electricity, and others as deemed relevant. The DOE Review Board will meet on an annual basis to evaluate, with the Consortium's leadership, the performance within the research topics for progress and the potential need to redirect federally funded efforts.

### Article 7: WORKING GROUPS

The UNIFI Consortium encourages the formation of Working Groups that have identifiable goals that promote the purposes and programs set forth in Article 2. Working Groups shall have only such rights as are expressly set forth in these Bylaws, in a resolution of the Leadership Team or in an agreement approved by the Leadership Team between this UNIFI Consortium and a Working Group.

### **Working Group Members**

Each Working Group shall consist of at least two Members who (i) are interested in conducting work in the UNIFI Areas and who (ii) meet such other membership criteria adopted by the Working Group, subject to the UNIFI Consortium's approval (each person in the Working Group shall be referred to herein as a "Working Group Member").

Each Working Group shall identify one individual who shall exercise the power of the Working Group and that name shall be provided to the Organization Director, together with the name of the alternate to serve as the representative of the Working Group (the "Working Group Representative") in all matters of the UNIFI Consortium in which the Working Group is authorized by these Bylaws to participate. More than one person from a single Member is allowed to participate in the Working Groups, but the Member has only one vote (per the voting structure in Article 5) when making decisions. Working Group membership may be restricted based on the Membership types discussed in Article 5.

### **Application**

Member(s) interested in forming a Working Group shall submit an application in the form prescribed by the Leadership Team to the Organizational Director. The Leadership Team shall approve or disapprove such application, in its sole discretion, and shall notify the applicant(s) of its decision.

### **Rules of Operation**

Each Working Group, in conjunction with the Organizational Director, shall establish rules of operation, including criteria for membership, the internal governance of the Working Group, and obligations of members, all of which shall be consistent with the rules established by the UNIFI Consortium. Such rules shall be effective upon approval of the Working Group, subject to the review of the Leadership Team. Each Working Group Member shall be obligated to affirm its or his or her understanding of, and agreement to, the rules and policies of the Working Group.

The Leadership Team shall have the right to have a representative involved as a liaison or observer during document development and to review issues arising with a Working Group.

### **Article 8: MEMBER MEETINGS**

Regular meetings of the members shall be held at a time and place designated by the Organizational Director. The following schedule is set forth:

**Leadership Team Meetings** – Normally held on a bi-weekly basis, the Leadership Team meets regularly to discuss UNIFI Consortium business and operations. This meeting is typically a virtual meeting. A majority of the total number of Leadership Team members shall constitute a quorum for the transaction of business. The vote of two thirds of the Leadership Team present at a meeting at which a quorum is present shall be the act of the Leadership Team. In the absence of a quorum, a majority of the Leadership Team members present may adjourn a meeting to another time or place. Notice of any adjourned meeting need not be given, other than by announcement at the meeting at which adjournment is taken.

**Annual Organization Meetings** – UNIFI shall hold two (2) annual meetings per year for Members. Held approximately every six months, one meeting will try to align with the IEEE’s Power and Energy Society General Meeting usually held in the summer. The other annual meeting will be approximately 6 months after. Review meetings of the External Scientific Advisory Board will be part of these meetings. These meetings will have a portion open to Members only and may include parts that are open to the general public.

**Quarterly DOE Review Meetings** – For the first 5 years of the Consortium, quarterly review meetings will be held between the Leadership Team and the DOE to evaluate progress towards the technical work plan.

**Annual DOE Review Board Meeting** – For the first 5 years of the Consortium, an annual meeting will be held to present information and progress on the Consortium to the DOE Review Board.

## Article 9: FINANCES

The Consortium has multiple funding mechanisms including federal and non-federal funding. The Consortium is expected to be financially and operationally self-sufficient after five years (i.e., five years from January 2022) through income-generating activities, which may include (but are not limited to) member dues, intellectual property licenses, contract research, certification activities or other fee-for-service activities.

Federal Work is described in the Consortium’s Technical Work Plan (TWP) and Statement of Project Objectives (SOPO). These documents are available through a request to the UNIFI Organizational Director. The TWP outlines the Federal Work being conducted in thirteen areas and provides a list of deliverables necessary to achieve success. DOE funding is passed to members either directly in the case of national Laboratory members or through subcontracts with the Prime. Spending of DOE funds is tracked quarterly. Cost share is tracked by the Prime via quarterly reporting from Member inputs. The costs share is an agreed upon amount provided by Members that can be provided as cash, labor, travel, equipment, and other relevant expenses.

A mechanism has been set up through an EPRI Project that mirrors the UNIFI Federal project. This mechanism provides a way for organizations to join as Members by providing membership dues as cash cost share to the project and provides a pathway for new Members to join the project through paying membership dues. A set amount of EPRI Project funds has been dedicated for the Cost-share match of the federal funds. Any additional funds that come to EPRI for the UNIFI project beyond the agreed upon cost share amount is considered non-federal funding for Non-Federal Work.

The Leadership Team shall develop an annual budget for the next year at or before the annual meeting. The Leadership Team shall determine, from time to time as needed, the Membership dues and the costs of services to be provided to Members. Member funding can be used for activities pertinent to fund administration of the consortium, consortium communications and events, and member-directed research.

### Allocation of Member Funding

Once the annual budget for Consortium operations has been determined and provided for, the remainder of the member funding will be used to fund activities in line with the Consortium Areas. The following process will be used to determine the funded projects:

- The Leadership Team will develop a list of Areas for proposals, a process to review proposals and a process to determine allocation of funding to selected proposals.
- Proposals will be requested from Members. Members will be given 60 days to submit proposals.
- An evaluation process will take place. Members will vote on proposals during a 1-month period.
- The Organizational Director will evaluate the member voting results.
- Funding will go to selected project(s) for a period of not more than 24 months.

### Article 10: INDEMNIFICATION

The UNIFI Consortium shall, to the fullest extent now or hereafter permitted by law, indemnify any person made, or threatened to be made, a party to any action or proceeding by reason of the fact that such person, or his or her testator or intestate, is or was a director, officer, employee or agent of the UNIFI Consortium against judgments, fines, amounts paid in settlement and reasonable expenses, including attorneys' fees.

### Article 11: INTELLECTUAL PROPERTY (IP) MANAGEMENT

Results, data, information and work product from the UNIFI Consortium is meant to be shared with UNIFI Consortium Members to the broadest extent possible. Some data and information may be proprietary in nature and the use and dissemination of this data is covered in Articles 12-13. In addition, an Intellectual Property (IP) Management Plan (IPMP) that provides an overview of the proposed capabilities for, and collaboration in, open, pre-competitive work among multiple parties in an IP-protected environment has been developed as a separate document. The Consortium is organized to foster an open exchange of pre-competitive best practices and know-how—including design and control methods—while protecting proprietary IP.

All UNIFI Work performed by a laboratory under the DOE Laboratory System, including but not limited to DOE Office of Science (SC) Laboratories, DOE National Nuclear Security Administration (NNSA) Laboratories, and other DOE Laboratories, will be performed either under the laboratory contract (if funded directly by the UNIFI Consortium sponsor) and will be subject to terms of that contract, or under a separate Cooperative Research and Development Agreement (CRADA) which contains the entire agreement between the Parties with respect to the work performed by the DOE Laboratory. In order to fulfill the Fairness of Opportunity requirement, DOE Labs must provide widespread notice of availability in all lab generated IP before licensing to parties other than a CRADA participant. Nothing in this Agreement shall affect work performed by a DOE Laboratory, including rights in IP generated in the work performed by the DOE Laboratory.



## Article 12: CONFIDENTIALITY

Treatment of confidential/proprietary information is governed by the UNIFI Nondisclosure Agreement.

## ARTICLE 13: DATA MANAGEMENT

This Article covers the generation, storage, and use of data from the UNIFI Consortium under Federal work and acts as the Data Management Plan (DMP). The UNIFI Consortium Data Management Plan is consistent with the intent of the DOE Public Access Plan for research performed with federal government/tax-payer funds.

Data generated under the UNIFI Consortium Federal work including processed data, reports, and presentations will be maintained in a secure repository with appropriate access controls. Data provided to the Consortium (for example, a proprietary model from a manufacturer or utility) can be used by the Consortium Members under the UNIFI non-disclosure agreement (NDA) for the purposes of conducting UNIFI activities.

The UNIFI Consortium will not generate or use Classified Information. If used, Controlled Unclassified Information including Proprietary Business Information will be protected in accordance with all laws and U.S. Government regulations, orders, and policies. Access to digital data, protected, confidential, and proprietary information will be limited by internal access controls and information security. Data shared by participants under confidentiality requirements will be treated in accordance with those confidentiality requirements.

Personally Identifiable Information (PII) collected from Organization members will be used for membership purposes only and will be maintained in a secure repository and not shared with any third parties.

### **Shared and Preserved Data Generated by the Project**

Sharing and preserving data are central to protecting the integrity of science by facilitating validation of results and to advancing science by broadening the value of research data to disciplines other than the originating one and to society at large. In this context, the Consortium will make digital research data from the Federal work available to, and useful for, the scientific community, industry, and the public to the greatest extent and with the fewest constraints possible, and consistent with the requirements and other principles. Project data and information from Federal work provided by Consortium Members, project partners or external entities will be stored in a secure data repository and will be archived for a minimum of three years after the award has ended. The Consortium is committed to proper data management, and as such will work with the DOE to meet their specific requirements.

The project will plan to use GitHub as a platform for sharing code and managing version control. This will enable collaboration and discussion among all team members contributing to software development. For software planned for open-source release, relevant GitHub repositories will be made publicly accessible at an appropriate stage in the software development process. The public will be made aware of any publicly available open-source software through the UNIFI Consortium website.

### **Plan to Publish the Data**

Analyzed and processed data products, produced for publication, will be made available upon request to the Member. Data that has been contextualized and found useful to validate and reproduce any experimental results, including methods and software used, will also be made available, subject to applicable information protection requirements. Data released pursuant to such requests will be in an easily readable format (e.g., comma-delimited).

Validated data made available to the public may be disseminated through peer-reviewed scientific journals and non-proprietary published technical reports. Such validated data may also be distributed in the form of progress and final reports, conference presentations, patents, or other publications. This will, in turn, allow interested parties to validate the scientific findings of this research.

Any Controlled Unclassified Information will be protected in accordance with all laws and DOE regulations, orders, and policies.

#### Article 14: OPEN-SOURCE SOFTWARE DISTRIBUTION

This Open Source Software Distribution Plan only applies to software that is designated for open-source release. However, some software created under the Consortium, including simulation and control code from software and hardware vendors and/or work activities that will result in proprietary code, may not be suitable for open-source release, and instead may be protected under copyright or patent and made available to industry participants or other entities through a licensing agreement. The project team will consult with the technology transfer and commercialization teams at their respective institutions and companies to create an appropriate deployment strategy for such software.

The Consortium will strive to make information and products as widely accessible as possible. It is anticipated that some software (including models and control code) produced or modified by the Consortium will be made available as Open Source. However, not all software developed under this Consortium will be designated as Open Source.

It is not possible to include a list of existing models and software that will be modified or incorporated into software products produced under this FOA at the beginning of the Consortium. This will instead be done on a continuous basis during the lifetime of the Consortium. There are a wide range of modeling and simulation platforms that are needed to evaluate the integration of GFM inverter technologies into power systems. During the lifetime of the Consortium, several will be evaluated to see if any updates are necessary.

Software developed under this project and designated for open-source release will be licensed under the permissive Berkeley Software Distribution 3-Clause license ([3-Clause BSD license](#)). The BSD 3-Clause license permits redistribution, modification and preparation of derivative works; is compatible with distribution of both source code and executable code. The BSD 3-Clause license enables broad usage; it does not restrict use in specific fields of endeavor, nor does it limit usage to specific technologies. Finally, the BSD 3-Clause license does not place restrictions on other software distributed with the software in question. Using this license allows broad opportunities for access and adoption of the software by industry or academic entities.

To the extent possible, the project will use GitHub as a platform for sharing code and managing version control. This will enable collaboration and discussion among all team members contributing to software development. For software planned for open-source release, the relevant GitHub repositories will be made publicly accessible at an appropriate stage in the software development process. The public will be made aware of any publicly available open-source software through the UNIFI Consortium website.

## ARTICLE 15: USE OF NAME

### **Name**

Universal Interoperability for Grid-Forming Inverters (UNIFI) Consortium is the selected Name of this Organization. The Leadership Team may select a new Name in accordance with their voting rights in these Bylaws.

### **Prohibition on Registration of the Name**

No Member shall register or attempt to register the Name or any name, trademark, or service mark confusingly similar to the Name, or register any second level domain name that uses the Name in a way likely to create confusion regarding the ownership of the second level domain name, anywhere in the world. Any Member that holds a second level domain name that uses the Name as described above will (1) redirect it to the official Organization website and (2) assign it to the Organization upon request of the Board.

### **Required Use of the Name**

The Members agree that when they refer to any Organization Material or Services, they will use the Name or use some other means to accurately describe the Organization as the origin. Except as provided in the previous sentence, no Member shall be obligated to use the Name on any product, advertising, or other materials in any manner. Each Member uses the Name at its own risk.

### **Limitations on the Use of the Name**

The Members agree that they will use the Name only for the limited purpose of promoting the Organization and for labeling, promoting, and marketing Compliant Portions. No Member shall use the Name or any name, trademark, or service mark confusingly similar to the Name to promote, or refer to, other initiatives or technologies.

The Consortium will not do any of the following, without, in each case, Member's prior written consent: (i) use any names, service marks, trademarks, trade names, logos, or other identifying names, domain names, or identifying marks, including online, advertising, or promotional purposes; (ii) issue a press release or public statement regarding this Agreement, except for documents used for internal consumption by Consortium; or (iii) represent or imply any Member's endorsement or support of any product or service in any public or private communication. Any permitted use of Member's Marks must comply with Member's requirements, including using the ® indication of any registered mark(s).

## Article 16: EXECUTION OF INSTRUMENTS, DEPOSITS AND FUNDS

### EXECUTION OF INSTRUMENTS

The Leadership Team, except as otherwise provided in these Bylaws, may by resolution authorize the ISTO as agent of the Organization to enter into or sign any contract, bill, note, receipt, acceptance, endorsement, check, release, document, or to execute and deliver any instrument in the name of and on behalf of the Organization, and such authority may be general or confined to specific instances. Unless so authorized, no officer, agent, or employee shall have any power or authority to bind the Organization by any contract or engagement or to pledge its credit or to render it liable monetarily for any purpose or in any amount.

### CHECKS AND NOTES

Except as otherwise specifically determined by resolution of the Board, or as otherwise required by law, checks, drafts, promissory notes, orders for the payment of money, and other evidence of indebtedness of the Organization with a value of less than Fifty Thousand Dollars (USD \$50,000) cumulative in any quarterly period may be signed by the ISTO upon written request from the Chairman, Treasurer or Executive Director. Checks, drafts, promissory notes, orders for the payment of money, and other evidence of indebtedness in excess of Fifty Thousand Dollars (USD \$50,000) shall require a special resolution of the Board.

### DEPOSITS

All funds of the Organization shall be deposited from time to time to the credit of the Organization in such banks, trust companies, or other depositories as the Board may select.

## Article 17: MAINTENANCE OF RECORDS

The Organization shall keep at its principal office:

- a) Minutes of all meetings of the Leadership Team, the DOE Review Board and the External Scientific Advisory Board, recording therein the time and place of holding such meetings, whether regular or special, the names of those present or represented at the meeting, and the proceedings thereof, including voting and decisions made;



- b) Adequate and correct books and records of account, including accounts of its properties and business transactions and accounts of its assets, liabilities, receipts, disbursements, gains and losses;
- c) A roster of its Members, indicating their names and addresses and, if applicable, the class of membership held by each Member and the effective date and termination date, if applicable, of any membership;
- d) A copy of the Organization's Bylaws and Membership Agreement as amended to date;

The foregoing records shall be open to inspection by the Members of the Organization at all reasonable times during office hours.

#### Article 18: MISCELLANEOUS

**Binding Nature of Bylaws.** These Bylaws shall be binding on the Organization members executing Organization Membership Agreements and their successors and assignees, thereby attesting to adherence of these Bylaws. Members may not assign or otherwise transfer their rights or obligations hereunder except as approved by the UNIFI Consortium, except that a national laboratory contractor may assign its Membership to the DOE, or a successor contractor designated by the DOE, upon termination of that contractor's contract to operate the national laboratory. Any assignment or transfer or attempted assignment or transfer by Member in violation of the terms of this Article shall be null and void.

**No Implied Joint Venture.** These Bylaws do not create a joint venture, partnership, or other form of business association between the members nor an obligation to develop, make available, use, license, buy, sell or provide any information, product, services or technology.

**Notice.** Any written notice required or permitted to be delivered pursuant to this Agreement shall be in writing and shall be deemed delivered: (a) upon delivery if delivered in person or (b) one (1) business day after deposit with a national overnight courier, provided that such overnight delivery is received by the sender, in each case addressed to the address of each Party set forth on the signature page to this Agreement or to such other individual or address as may be specified by a Party hereto upon notice given to the other.

#### Article 19: BYLAW AMENDMENTS

These Bylaws may be amended, altered or repealed only by the affirmative vote of two thirds of the Leadership Team, subject to the approval of the Organizational Director. Any changes will be sent to Organization Members with at least 30 days' notice. If a Member does not wish to continue to abide by the revised Bylaws, Member may, at its option, terminate its organization membership. No such withdrawal will entitle Member to any refund of any fees due and owing.

#### Article 20: SEVERABILITY

In case any provision in these Bylaws shall be invalid, illegal, or unenforceable, the validity, legality and enforceability of the remaining provisions shall not in any way be affected or impaired thereby.



<b><u>BYLAWS VERSION</u></b>	<b><u>DATE</u></b>
Version 1.0	November 1, 2023
Version 2.0	January 18, 2024