

WATT and ACP Comments: Grid Resilience Innovation Programs

The Working for Advanced Transmission Technologies Coalition (WATT Coalition) and the American Clean Power Association (ACP)¹ appreciate the opportunity to comment on DOE’s Grid Resilience Innovation Programs (GRIP) Request for Information. The WATT Coalition and ACP support DOE’s proposed approach of coordinating these important grant programs, and urge DOE to ensure that transmission system improvements receive funding, as detailed below.

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[Category 1: DOE’s Proposed Implementation Strategy for GRIP program](#)

1. What actions can DOE take to best achieve the benefits of coordinating applications to all three Grid Resilience and Innovation Partnerships topic areas at the same time?

DOE should acknowledge some projects could achieve the goals of multiple programs. DOE should help applicants choose the right program, and consider the innovation, equity, and climate benefits in resilience-focused projects as well.

DOE should seek to fund a range of projects, and should ensure that both more straightforward, highly beneficial projects - as well as larger-scale projects that may require additional multi-party coordination - can move forward and access the GRIP grant programs. DOE should consider tailoring the application process based upon their complexity; projects that only require two or three partners to meaningfully contribute to the goals of the programs could potentially be deployed quite quickly. For example, if a project would occur only in the footprint of existing transmission infrastructure and requires no siting considerations, there are many fewer entities that should be consulted. We suggest that DOE differentiate expectations for projects dependent on their size or type.

2. How should DOE best assess and prioritize applications that further state objectives developed through the Grid Resilience formula grants under BIL section

¹ The views and opinions expressed in this document do not necessarily reflect the official position of each individual member of ACP.

40101(d), the State Energy Security Plans under BIL section 40108, and activities supported by the State Energy Program under BIL section 40109

No comment.

3. How can funding from the GRIP program best overcome challenges impeding the development of transmission, grid solutions, and interconnecting new generation and storage to improve grid resilience and reliability?

The GRIP program should prioritize projects that deliver the highest MW of new generation per dollar in the shortest amount of time, are aligned with state and regional objectives, and utilize effective public engagement.

Per DOE leadership public statements, the primary focus for these grants is deployment, rather than demonstration. Therefore, these programs are ideal for technologies that have seen successful deployments abroad, for instance, but are facing barriers in the United States. Among other goals, DOE should ensure that GRIP grants help to build market acceptance of commercially available technologies or those with multiple successful deployments, to focus the program on addressing the ‘Valley of Death’ (i.e. final hurdles to widespread adoption).

4. What approaches can be used to both solicit and evaluate proposals for high-value deployment projects with additionality (i.e., where additional funding will overcome existing obstacles that would otherwise result in the project not being built)?

DOE has an opportunity to bridge the last “valley of death” for technologies struggling to commercialize in the US specifically due to regulatory barriers. Applicants should be invited to highlight their pursuit of solutions that are otherwise difficult to implement through traditional grid planning and upgrade processes.

For each transmission owner or transmission provider, the first deployment of a specific Grid Enhancing Technology is by far the costliest in terms of staff training and operational adjustments. GRIP grants will help achieve that first step towards an optimized grid. DOE should consider whether the applicant is making its first fully operationalized deployment of these tools, as these projects will have the greatest additionality by building familiarity and enabling broader use.

5. Any comment on the overall solicitation process, structure, prioritization, requirements, and assessment criteria presented in the draft FOA. The Draft FOA (DE-FOA-0002740) can be found <https://www.fedconnect.net/fedconnect/?doc=DE-FOA-0002740&agency=DOE>.

No comment.

6. Are existing or expected supply chain concerns anticipated to delay or impact development of potential applications or project implementation, if awarded? What

might be some of the potential barriers to timely delivery and how can DOE support the timely delivery of projects?

DOE should support the timely delivery of projects by allowing for domestic content waivers to avoid supply chain bottlenecks where appropriate.

7. DOE proposes to open the first application cycle for the GRIP program in fall 2022 for 45 days for applicants to submit concept papers, that the Department will then down select to recommend submission of full applications in winter 2023, targeting award selections announced in spring 2023.

a. Any comments on this proposed timing?

We appreciate the proposed approach of concept paper first, then full submissions after a down-selection has occurred. However, DOE should ensure that this process does not disadvantage resource-constrained stakeholders (such as municipal or cooperative utilities) with less proposal development experience. If DOE utilizes this approach, it should conduct robust outreach to state energy offices and public utility commissions as well as other eligible applicants, and ensure that DOE staff can provide technical assistance with applications where needed. We encourage flexibility in the process to support ambitious projects, either by longer timelines, or in allowing concept papers to be proposed by developers while a public coalition is assembled that would support the full application.

b. Are there inter-state inter-regional projects, as described in this RFI, that are sufficiently advanced in development to be ready to apply by this timeline in fall 2022?

Any inter-state, inter-regional transmission project that either 1) has been selected in an applicable regional transmission plan (such as MISO's Long-Range Transmission Plan), or 2) has a valid queue position (or comparable indication of readiness for merchant transmission) should be eligible. This will ensure that credible interregional projects with a range of ownership structures are eligible to apply.

[Category 2: DOE Proposed Implementation for Grid Resilience Grants \(40101\(c\)\)](#)

1. How should DOE define community and assess “greatest community benefit in reducing the likelihood and consequences of disruptive events” for prioritization of applications?

Community should be defined as those people who are impacted by the facilities that could be deployed. That would include both electricity customers across the area affected, and communities subject to wildfires in the case of lines that can be made more resilient to avoid sagging into vegetation to spark wildfires.

A community benefit that should be evaluated is a reduction in outage time (person-minutes) per dollar invested. Reduction in outages and the length of outages supports

disinvested communities where individuals may not have the resources to make individual resilience investments.

2. What other relevant entities should the Secretary consider as eligible entities?

The proposed list seems sufficient.

3. Are there additional burdens or challenges faced by small utilities as defined by the statute that should be taken into consideration for the design of this program?

Small utilities may lack the resources needed to develop proposal and manage large and multifaceted projects. The DOE should provide proposal and/or project management support for small utilities or otherwise ensure that small utilities are able to access funds efficiently.

4. What information could be provided by applicants to ensure proposals are supplemental to existing or already planned hardening efforts?

Applicants should share their latest (and potentially several recent) annual plans and should, within their application, tie their proposal to hardening efforts already referenced in their strategic initiatives.

Applicants should also indicate if their state PUC has taken action to require reporting related to wildfire mitigation efforts and/or implemented mapping of high fire risk zones.

5. What evaluation criteria, and what accompanying evidence, should DOE seek to best achieve the goals of this program as laid out in the FOA?

The evaluation criteria proposed in the RFI are both extensive enough and sufficient to help the DOE achieve their goals.

6. Is the proposed \$100 million Federal funds cap per award appropriate? What actions can DOE take to optimize the overall portfolio supported by 40101(c) through the mobilization of other funds?

The WATT Coalition and ACP support a reasonable cap per award to ensure that multiple projects of various scales are considered and awarded based on their merits.

7. Is the proposed information to be contained in the Report on Resilience Investments appropriate to determine if proposed projects are supplemental to existing efforts? What challenges may be faced in developing the report? What additional DOE guidance would aid in development of the report?

No comment.

8. What data should be required to be tracked by awardees for the duration of the project and/or after project completion to assess "the extent to which the ability of the power grid to withstand disruptive events has increased" and to inform the biennial Report to Congress?

No comment.

a. How long after project completion should data be tracked to fully understand the impacts of project funding beyond the biennial report?

b. What data should be tracked to understand changes in community resilience?

9. Information or analysis that could be submitted to help identify the highest impact projects and proposals that address (1) public benefit (e.g., cost/benefit of the project), (2) additionality (e.g., obstacles that additional funding would allow the project to overcome or would otherwise prevent the project from advancing in the absence of the funding), (3) stakeholder support (e.g., projects where a regional planning process is underway or is taking place), and (4) transformative potential of the project (e.g., the value of the project in catalyzing follow-on replication).

The criteria proposed by the DOE are both sufficient and extensive enough to help the DOE identify the highest impact projects.

10. Any comment on the selection criteria specifics, relative weighting, and capacity for applicants to meet the criteria under this program.

No comment.

11. Any comment on the proposed staging and timing of the application, evaluation, and award process (including both Concept Paper and Full Application Stages), and on the requested performance period.

No comment.

12. Any comment on the specific proposed application and information submission requirements.

No comment.

[Category 3: DOE Proposed Implementation for Smart Grid Grants \(40107\)](#)

1. Appropriateness of highlighted grid flexibility functions and technologies of interest identified by DOE above. Are there additional smart grid functionalities or technologies that would support grid reliability and resilience that should be considered?

The DOE's current list is both comprehensive and sufficient. We do not recommend broadening the list any further.

The WATT Coalition and ACP appreciate DOE's "interest in applications that deploy GETs to modernize the grid and unlock significant public benefit, and therefore demonstrate the suggested benefit shown by various studies" on pages 20-21 of the draft FOA. GETs are well-proven, but have not been deployed broadly in the United States; additionally, each deployment is relatively low-cost when compared to most other grid

expenditures, and can unlock both resilience benefits and substantial capacity increases on existing transmission in many circumstances.

2. Information or analysis that could be submitted to help identify the highest impact solutions and proposals that address (1) greatest public benefit (e.g., cost/benefit of the project), (2) additionality (e.g., obstacles that the Federal funding would allow the project to overcome that would otherwise prevent the project from advancing in the absence of the Federal funding), and (3) transformative potential of the project, (e.g., the value of the project in catalyzing follow-on replication).

A strong metric of impact could be the highest amount of lower-cost, clean generation enabled in the shortest amount of time. This represents environmental, health and economic value to ratepayers and the public. It also addresses a missing incentive for transmission owners, which are not rewarded for efficiency under typical return-on-equity rate design. By supporting initial deployments of technologies that transmission owners and providers might not otherwise learn to use, the federal funds would support additionality and a culture shift in utility operations.

3. In the collective portfolio of awarded projects, any suggestions regarding project types that have special strategic importance?

Transmission grid flexibility and optimization have great strategic importance to the United States. The DOE should strive to have a diverse portfolio of projects and ensure that a substantial amount of grant funding is directed at transmission grid modernization. In the previous iteration of the Smart Grid Investment Grant program, [only 6% of funding went to transmission-level upgrades](#). This time, the DOE can fund projects that reduce grid congestion, saving customers a portion of the over [\\$6 billion in yearly congestion costs](#) and accelerating clean energy integration. Leveraging these funds to ensure experience is gained with all Grid Enhancing Technologies should be a focus for the DOE.

4. Appropriateness of the requirement for a cybersecurity plan for this provision, and the required contents of such a cybersecurity plan.

No comment.

5. Any comment on the selection criteria specifics, relative weighting, and capacity for applicants to meet the criteria under this program.

In the Impact, Transformation and Technical Merit category, a key evaluation criterion capturing economic and ratepayer benefits is the highest amount of low-cost, clean generation delivered in the shortest amount of time. WATT would support strong weighting of this metric.

Otherwise, the DOE's current selection criteria are both comprehensive and sufficient. We do not recommend changing these any further.

6. Any comment on the proposed staging and timing of the application, evaluation, and award process (including both Concept Paper and Full Application Stages), and on the requested performance period.

No comment.

7. Any comment on the specific proposed application and information submission requirements.

No comment.

[Category 4: DOE Proposed Implementation for Grid Innovation Program\(40103\(b\)\)](#)

1. How should DOE define and evaluate a full range of “innovative approaches” to transmission and distribution projects that deploy large-scale, high-value projects that are innovative in scope; scale; stakeholder engagement; technology; partnership or business model; financial arrangement; use of innovative planning, modeling, or cost allocation approaches; environmental siting or permitting strategies; or in overcoming other existing barriers to project development and deployment in ways that enhance reliability and resilience and unlock new renewable generation?

The WATT Coalition and ACP believe that many large-scale projects can use Grid Enhancing Technologies to maximize their impact by resolving downstream congestion coming from changes to grid topology. We strongly encourage DOE to highlight the value of including dynamic line ratings, advanced power flow control and topology optimization alongside other innovative approaches to increase project efficacy.

2. What technical review criteria, and what accompanying evidence, should DOE seek to best achieve the goals of this program as laid out in the FOA?

We reiterate our support of a criterion for all GRIP programs evaluating how proposals enable clean, low-cost generation in short timeframes. Otherwise, the DOE’s current selection criteria are both comprehensive enough and sufficient. We do not recommend changing these further.

3. Information or analysis that could be submitted to help identify the highest impact projects and proposals that address (1) greatest public benefit (e.g., cost/benefit of the project), (2) additionality (e.g., obstacles that the Federal funding would allow the project to overcome that would otherwise prevent the project from advancing in the absence of the Federal funding), (3) stakeholder support (e.g., projects where a regional planning process is underway or is taking place), and (4) transformative potential of the project (e.g., the value of the project unlocking resilience and reliability benefits from investments elsewhere on the grid).

See our response above on question 4.2

4. What are best practices and processes for states, public utility commissions, Tribes, and other eligible entities to obtain input and engage in coordination with

regional planning organizations, electricity utilities, and other stakeholders in developing and submitting proposals?

No comment.

5. This draft FOA will make up to \$2 billion available for this first award cycle under BIL section 40103(b). Any comment on whether any specific projects or types of large transformative projects might not be viable within the current FOA total of \$2 billion but could be viable if additional funding were made available and/or if the maximum award size were increased (see question #6 below on maximum award size).

No comment.

6. Appropriateness of the proposed range of \$50 million to \$250 million for Federal investment; as well as the provision allowing an increased maximum award of up to \$1 billion for an application submitted by a coalition of multiple states for interregional transmission projects.

The proposed range is appropriate for state entities to establish meaningful innovation programs with sufficient resourcing and impactful project funding opportunities. DOE should make clear that applicants seeking near-maximum (\$1B) grants should anticipate commensurate evaluation steps; as noted above, it may be appropriate to adopt separate timetables for smaller-scale projects with fewer affected stakeholders, and larger projects dependent upon many actors.

a. What actions can DOE take to optimize the overall portfolio supported by 40103(b) through the mobilization of other funds? Does such a scale of investment support the right scale of project to achieve transformative impact?

No comment.

b. Are there any impactful projects that may not be sufficiently supported with these minimum and maximum award sizes but that would provide significant public benefits, consistent with the statute, by cost-effectively 1) increasing transfer capacity between regions, 2) addressing the most consequential system needs and challenges related to interconnection queue times, and 3) increasing access to geographically and technologically diverse energy resources to enhance energy affordability, resource adequacy, and resilience? What are examples of these projects that would not be viable, and what maximum / minimum award size would accommodate these projects?

No comment.

7. In the collective portfolio of awarded projects, any suggestions regarding project types that have special strategic importance? Should the program prioritize inter-

regional multi-state or other types of projects that may be more transformative and provide multiple benefits on a large scale?

No comment.

8. Appropriateness of the requirement for a cybersecurity plan for this provision, and the required contents of such a cybersecurity plan.

No comment.

9. Any comments on the selection criteria specifics, relative weighting, and capacity for applicants to meet the criteria under this program.

The GRIP program should prioritize projects that deliver the highest MW of new generation per dollar in the shortest amount of time, are aligned with state and regional objectives, and utilize effective public engagement. This should not preclude larger-scale, longer-term projects where they would enable substantial resilience enhancements and additional clean energy deployment.

Otherwise, the DOE's current selection criteria are both comprehensive and sufficient. We do not recommend changing these any further, except in the case of very large proposals – these should require significantly more review and evaluation.

10. Any comments on the proposing staging and timing of the application, evaluation, and award process (including both Concept Paper and Full Application Stages) to accommodate the most impactful types of deployment projects at various stages of development.

For large projects spanning multiple states and beneficiaries, additional time or well-defined steps might be necessary. We support flexibility for projects seeking to bring multiple states together to support advancing an interregional project by either 1) Giving additional time for those projects to develop or 2) Allowing concept papers to be submitted by private entities, even if they later require state entities to submit the full application.

11. Any comments on the requested performance period, considering that potential projects will be different stages of development and readiness

No comment.

12. Any comments on the specific proposed application and information submission requirements

No comment.

13. Appropriateness of the use of a minimum 50% non-Federal cost share for the proposed project. Should DOE establish a different minimum non-Federal cost share? Should DOE express a preference for projects with a higher non-Federal cost share than the statutory minimum?

A 50% cost-share for projects across-the-board is appropriate. This will ensure that the applicant has “skin in the game,” but also means that DOE’s contribution will meaningfully move forward projects that might otherwise not advance.

a. To what degree should DOE include in the Technical Review Criteria and Policy Program Factors an assessment of applicant’s ability to provide sufficient information to show that minimal federal cost-share is being requested, so that GRIP program dollars are 1) only providing the amount of additional capital needed to advance project development and 2) unlocking the greatest possible public benefits relative to the amount of federal investment. What types of application information should be requested to indicate that minimal federal cost-share is being requested?

No comment.

14. DOE is interested in supporting highly impactful projects that can deliver significant public benefit and acknowledges that some of these projects may be earlier in the planning or development stages. DOE is considering an option to offer grants of up to \$20 million for planning and development activities for concept papers submitted by a coalition of multiple states for projects that are interregional (i.e., cross multiple ISOs, grid operators, or other balancing authorities) and/or a product of an interregional planning process – assuming the concept paper shows promise in the ability to deliver significant public benefit, but has a project that is not sufficiently mature enough to submit a Full Application. Please provide comment on this approach, the maximum planning and development grant size, what factors to consider in offering these types of grants, and any other additional considerations

We believe allocating grants for planning and development activities for concept papers is prudent, especially given the time constraints and resources required to coordinate a \$250M - \$1B project proposal.

Category 5: Community Benefits, Justice40, Quality Jobs, and Performance Metrics

1. How can applicants ensure community-based stakeholders/organizations are engaged and included in the planning, decision-making, and implementation processes (e.g., including community-based organizations that are advisory to the decision or directly benefit) for the GRIP program?

DOE should set aside some funds for every supported project to pay community-based stakeholders for their engagement in the planning, decision-making and implementation of the projects.

2. How can DOE best support the creation and retention of high-quality jobs, and the clear workforce training pathways into those jobs, through the GRIP program?

The GRIP programs are designed to deploy grid technologies and other tools to support resilience and modernization. Increasing domestic demand for these tools will increase

jobs in these high-tech industries. In addition, the renewable energy development enabled by a modernized grid will create a vast number of temporary construction jobs and long-term operations and management jobs.

Prevailing wage requirements are a good option to protect workers and support local economies, provided that these requirements are clearly communicated to applicants.

3. DOE identified eight policy priorities to guide DOE’s implementation of Justice40 in DACs: (1) decrease energy burden; (2) decrease environmental exposure and burdens; (3) increase access to low-cost capital; (4) increase the clean energy job pipeline and job training for individuals; (5) increase clean energy enterprise creation (e.g., minority-owned or disadvantaged business enterprises); (6) increase energy democracy, including community ownership and other economic benefits associated with the energy transition; (7) increase parity in clean energy technology access and adoption; and (8) increase energy resilience.

a. Of the eight Justice40 benefits, any comments on tracking these across the GRIP program?

The impacts of GRIP projects in increasing clean and low-cost generation support goals 1 and 2. If a project can show that it would reduce generation from polluting resources near residential areas, that would be an especially strong option.

4. What are the most appropriate performance and other metrics to track community benefits?

No comment.

Category 6: Build America, Buy America requirements

If funded, DOE will consider applicability of the Build America, Buy America Act. All projects subject to the corresponding FOA for GRIP are considered “infrastructure.” The Buy America requirements of the BIL do not apply to DOE projects in which the prime recipient is a for-profit entity; the requirements only apply to projects whose prime recipient is a “non-Federal entity,” e.g., a State, local government, Indian tribe, Institution of Higher Education, or nonprofit organization.

1. Identify any iron, steel, manufactured goods/products or construction materials which may be crucial to this work, and whether those items would normally be procured domestically or from a foreign source.

No comment.

2. For any item that would normally be procured from a foreign source, please specify to the best of your ability what actions would be required to comply with this requirement should it be deemed to apply, such as the expected added cost of sourcing the requisite materials from domestic sources, seeking a waiver from Build

America, Buy America, etc.; the impact on your project, and whether these items would be unable to be procured domestically due to lack of availability or cost.

No comment.