

**UNITED STATES OF AMERICA  
BEFORE THE  
FEDERAL ENERGY REGULATORY COMMISSION**

<b>Building for the Future Through</b>	)	<b>RM21-17-000</b>
<b>Electric Regional Transmission</b>	)	
<b>Planning and Cost Allocation and</b>	)	
<b>Generator Interconnection</b>	)	

**WATT COALITION COMMENTS  
March 28, 2022**

The WATT Coalition (“WATT”) appreciates the opportunity to provide perspectives on the Federal Energy Regulatory Commission’s (“the Commission”) July 15, 2021 Advanced Notice of Proposed Rule Making (ANOPR) in the above-captioned proceeding. In this response, WATT details our support of requirements to increase the use of Grid Enhancing Technologies (GETs) in addition to or in conjunction with the use of a shared savings incentive (for example the Shared Savings proposal first raised with FERC in 2019).

While requirements could be a regulatory tool to increase the use of GETs in the U.S., they will have to be designed carefully. Order 1000 is a prime example of a well-intentioned requirement for action in the consumer interest that has failed to create the desired outcomes. WATT continues to strongly endorse and recommend incentives which we believe will be more effective in promoting widespread adoption of GETs, because incentives are the best way to make utilities *want* to do something. WATT believes that any push (requirements) will be more effective combined with the pull (incentives) to drive the outcome FERC is aiming for. Requirements for evaluation alone will be insufficient to achieve the pace or scale of change necessary to quickly drive down costs for consumers and ensure the most cost-effective generation resources can quickly connect to the grid.

To be effective, requirements for GETs must ensure that compliance will include meaningful evaluation of GETs *and* required implementation where GETs are expected to solve operational constraints or reliability challenges, achieve public policy goals, and/or save consumers money. Several consumer interests responded to the WATT Coalition/Advanced Energy Economy shared savings incentive proposal with interest in requirements. And while it is prudent for the commission to consider these interests, the following should inform that evaluation:

- 1. Strategies for successfully and efficiently mandating Grid-Enhancing Technologies**
  - a. RTOs and TOs should be required to do their own studies on the value of GETs, and be required to implement them when they show greater benefits than costs over a reasonable assumption for their time in operation.
    - i. GETs evaluation criteria could be similar to what the Texas Legislature designed in [Section 2.d of S.B. 1281](#) for evaluating transmission projects.
  - b. In all cases, third parties beyond Regional Transmission Organizations (RTOs), Independent System Operators (ISOs) and Transmission Owners (TOs) should be able to propose GETs projects to alleviate constraints that they either experience or anticipate. These third parties should justify the potential for GETs to resolve the constraint in a timely and cost-effective manner. Given a proposal demonstrating the value of GETs,

RTOs and TOs should be required to confirm or refute the evaluation with transparent modeling data and rationale to a stakeholder forum (ex. all interested parties with appropriate CEII clearance can participate in the review). If the third party believes a refutation is based on erroneous modeling, they should have recourse to appeal to the Federal Energy Regulatory Commission (FERC) or Independent Market Monitor.

- i. Ideally, this will ensure that TOs and RTOs fully evaluate and implement GETs, rather than having to respond to many third-party proposals.
- c. The value of GETs should be calculated in both baseline conditions and in outage conditions, or under other unusual but predictable scenarios.

## **2. In Operations Timeframe:**

- a. Topology optimization is the only GET that can feasibly be implemented in the operational timeframe. Market participants should be able to request a reconfiguration with a one-week turnaround for evaluations, in line with the timing of outage requests from TOs. If the requested reconfiguration is feasible and shows better market efficiency results than the alternative used by the RTO, it must be implemented to deliver savings to transmission users.

## **3. In Operations Planning:**

- a. GETs should be evaluated, and third-party proposals should be considered, for applications where GETs would solve a frequently observed constraint or a constraint that is likely to emerge. RTOs and TOs should be required to evaluate GETs and other low-cost and rapid turnaround solutions (e.g., terminal equipment upgrade) for at least their top 5 or 10 most costly constraints on a quarterly basis, as well as to mitigate congestion impacts for all planned outages that are anticipated to have significant congestion impacts. Longer term, RTOs and TOs should be required to work on a roadmap over a particular timeframe (e.g., 5 years) for full deployment of GETs across all interconnection, operations, and planning processes. RTOs and TOs should also consider prioritizing GETs for facilities that could provide reliability or resiliency benefits during stress scenarios for the grid (e.g., extreme weather events).
- b. To ensure that GETs are considered in operations planning, TOs should be required to respond to a proposal for GETs from a market participant within a defined period of time.
- c. In addition, cost allocation questions need to be settled such that both the lowest-reasonable cost solution is chosen and that the beneficiary pays for the upgrade. However, most GETs installations will create operational cost savings well in excess of their cost, so they could reasonably be rate-based given that the savings accrue to the consumers.
- d. Other grid upgrades may be necessary for GETs to be used to their full potential. Upgrades for terminal equipment and other grid hardware and software should be considered in this timeframe as well.

## **4. In Interconnection:**

- a. Interconnection customers should be able to propose GETs to resolve transmission constraints. If the interconnection customer is able to demonstrate that GETs are likely to facilitate interconnection, the TO should be required to do its own study and offer it as a solution if the results are verified with transparent modeling data and rationale.
  - i. Interconnection customers must have recourse to FERC if they believe the TO refused the use of GETs on false premises or has not identified the least-cost GETs solution.

- ii. Standards for models must ensure that all GETs are accurately incorporated. Line ratings must be modeled stochastically, like load, due to their seasonal and weather dependence.
- b. Cost allocation rules should be included in a requirement. Considerations listed in 3.c apply here.

**5. In Long-Term Planning**

- a. GETs should be used to mitigate the impacts of growing constraints in addition to other long-term solutions. They should also be used to alleviate known constraints even if there is another solution being developed. The identification of these solutions could be done by the RTO, TOs and/or market participants. GET projects for these temporary needs that pass a benefit/cost ratio of 1 must be deployed.
- b. Across all processes, RTOs and TOs to identify additional benefits that could be measured to justify GETs deployment – e.g., consumer savings – beyond the typical production cost savings. These benefits should include public policy, reliability, resilience, and reduced congestion costs to consumers.

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Signed,

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