

## *A Forward Clean Energy Market for New England?*



**Timothy J. Brennan**  
**Integrating Markets and Public Policy (IMAPP) Solution Ideas Day**  
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# A Forward Clean Energy Market for New England?

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From “Policies and Markets Problem Statement” of May 17, 2016, available at [http://www.nepool.com/uploads/IMAP\\_20160517\\_Problem\\_Statement.pdf](http://www.nepool.com/uploads/IMAP_20160517_Problem_Statement.pdf):

*“... The challenge is finding a means to execute states’ policy-related requirements at the lowest reasonable cost without unduly diminishing the benefits of competitive organized markets or amplifying the cost to consumers of implementing those state policies in order to maintain markets. In the same way that market mechanisms identify the lowest cost way to satisfy the region’s reliability needs, states seek to determine whether market mechanisms can accommodate public policies without unreasonably increasing the costs to consumers. ...*

*... To be sustainable over time, markets must reasonably accommodate various policy requirements such as, for example, carbon-emissions ...*

*... the states will be pleased to continue working with ISO-NE and NEPOOL to that end. The states are hopeful that New England will succeed in crafting a way forward that enjoys relatively broad support, cognizant of the timing imperatives.”*

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From “Policy and Markets: Goal Posts” of June 2016, available at [http://www.nepool.com/uploads/IMAP\\_20160621\\_Goal\\_Posts\\_States.pdf](http://www.nepool.com/uploads/IMAP_20160621_Goal_Posts_States.pdf):

*“...The high-level market design objective associated with potential competitive markets-based solutions is to (i) ensure a sufficient revenue stream to incent the construction and operation of new resources that are able to satisfy some states’ current and future policy requirements as reflected in state laws, and (ii) provide support if and to the extent needed to existing non-carbon emitting resources to enable their continued viability if one or more states conclude their customers should provide support to such existing resources in furtherance of their state(s)’ policy objectives. ...”*

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- **National Grid is pleased to have this opportunity to participate in this Integrating Markets and Public Policy (IMAPP) Solution Ideas Day and to offer one idea of a potential solution for consideration**
- **This is just one of many ideas National Grid continues to explore and consider as potential solutions for IMAPP issues**
- **As we move forward in this process National Grid welcomes the opportunity to receive feedback (questions, concerns, suggested improvements, etc.) from all stakeholders on this and any other potential solutions it may be able to offer for consideration**
- **National Grid also highly values the opportunity to learn of new ideas from others, as we attempt to find IMAPP solutions least disruptive to the competitive markets while being most cost effective for our customers**

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- National Grid has previously presented (in 2011 or earlier) the idea of a Forward Renewable Capacity Market (“FRCM”) as a potential solution to IMAPP issues
- The Forward Clean Energy Market (“FCleanEM”) idea is, in almost every way, identical the FRCM idea, except that the procured product is “clean” energy rather than capacity
- While the FRCM may still be an idea worthy of further consideration, National Grid chose to present the FCleanEM idea today for the following reasons:
  - Most clean energy/carbon reduction goals are based on clean energy rather than clean capacity goals/measurements
  - The possibility of achieving the most effective results for customers by allowing potential clean energy resources to decide for themselves whether and how they can provide energy and/or capacity given their expected intermittency/capacity factors/performance during scarcity events, and their associated risk tolerance

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- **The Forward Clean Energy Market (“FCleanEM”)**
  - **Like the existing Forward Capacity Market (“FCM”), clean energy commitments could be procured approximately 3.5 years forward through a competitive auction-based central procurement administered by ISO-New England**
    - **Allows new clean resources to compete with existing clean resources**
  - **Like the FCM, payments for cleared/committed clean energy would be provided , and charges from the appropriate load serving entities would be collected, when the clean energy is actually dispatched/delivered in the commitment period**
  - **Like the FCM, payments and charges would be governed and assured under a FERC-approved tariff**

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- The states would be responsible for establishing and agreeing on the FCleanEM auction total requirements and any additional auction clearing constraints (*National Grid recommends avoiding/minimizing the use of additional auction clearing constraints which could limit competition and inhibit procurement of the cheapest clean energy for the region*)
  - Total of X MWh of qualified clean energy to be procured, plus(?), e.g., ...
    - A minimum of X MWh of onshore wind must clear in Northern New England states?
    - A minimum of Y MWh of offshore wind must clear off the coast of Southern New England states?
    - Only clean energy offered below a certain clearing price will be procured?
- Like the FCM, new clean energy clearing the auction could choose to lock in the FCleanEM clearing price for up to seven annual commitment periods

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- **Energy Cleared in an FCleanEM auction would be paid the higher of the FCleanEM auction clearing price and the energy market clearing price at the time the energy is delivered in the applicable commitment period**
  - **Any incremental costs would be allocated through the ISO-NE settlement system to the appropriate wholesale market participant serving the load in the state for which the clean energy was procured in the FCleanEM**
- **An example of remaining questions/details to be considered ...**
  - **Would bidders be expected to assume responsibility for any significant transmission investments required (over an above direct interconnection facilities) for deliverability through existing constraints?**
    - **Answer could significantly affect FCleanEM auction clearing prices**



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- **Resources with clean energy clearing the FCleanEM could, but would not be obligated to, participate in the subsequent FCM auction for the same commitment period**
  - **Any FCleanEM revenues would be considered valid market revenues, not “out-of-market” revenues or subsidies, in the MOPR determination for FCleanEM resources also seeking qualification for participation in the FCM**
  - **ISO-NE would continue to be responsible for the qualification/determination of the ICR/resource adequacy contribution of such resources, regardless of the amount of clean energy cleared by such resources in the FCleanEM auction**

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- **A Forward Clean Energy Market has the potential to achieve the stated “Goal Posts”**
  - *Enable reaction to different market conditions and changing public policy priorities over time (i.e., not assume that the requirements of state laws are static over time)*
  - *Focus on achieving longer-term goals (10-30 years) cost-effectively, with the ability to incorporate needed shorter-term mechanisms to achieve near-term policy requirements.*
  - *At a minimum, enable the achievement of the current RPS requirements of each state.*
  - *In the near-term, consider the need to accomplish current policy objectives under discussion including, for example, up to 2,400 MWs of hydropower and 1,200 MWs of on- or off-shore wind. These numbers are illustrative and could vary according to the outcome of current matters, including but not limited to the three-state Clean Energy RFP.*
  - *E. Consider mechanisms to ensure consumers in any one state do not fund the public policy requirements mandated by another state’s laws*
  - *F. Attempt to minimize short-term financial effects to current existing resources.*

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- **A Forward Clean Energy Market administered by ISO-NE could potentially help New England States achieve their clean energy goals more efficiently, competitively, transparently, and cost-effectively for customers**
- **Questions?**

