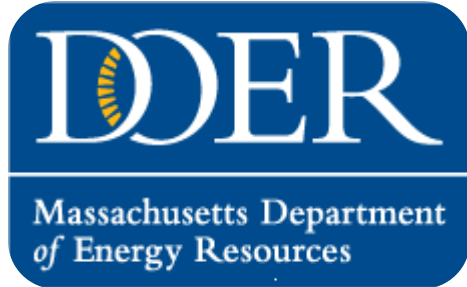


Offshore Wind Independent Transmission

Afternoon Session March 3, 2020

- 1:45pm Introduction and goals of afternoon session –
*Commissioner Patrick Woodcock, Massachusetts
Department of Energy Resources*
- 1:55pm Session format and background on procurements –
*Joanna Troy, Massachusetts Department of Energy
Resources*
- 2:15pm Panel of Solicitation Parties – Question and answer
moderated by DOER
- 3:00pm Break
- 3:15pm Panel of Solicitation Parties – Question and answer
moderated by DOER (*continued*)
- 4:00pm Comments and questions from stakeholders
- 4:30pm Adjourn



Offshore Wind Independent Transmission

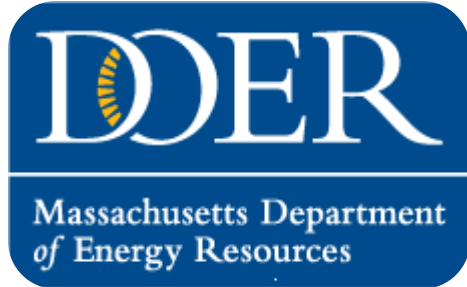
Introductory Remarks

March 3, 2020

Patrick C. Woodcock

Commissioner

Massachusetts Department of Energy Resources



Offshore Wind Independent Transmission

Potential Procurement Technical Session

March 3, 2020

Joanna Troy

Director of Policy & Planning, DOER

Outline

1. Massachusetts Department of Energy Resources
2. Statutory Authority
 - a. *Act to Promote Energy Diversity (2016)*
 - i. 1,600 MW of Offshore Wind
 - b. *Act to Advance Clean Energy (2018)*
 - i. Offshore Wind Study – Additional 1,600 MW of Offshore Wind
 - ii. Authority to direct EDCs to solicit and procure independent offshore wind transmission
3. Background on Completed Offshore Wind Solicitations
4. Goals of the Moderated Panel
5. Possible Structures of a Potential Independent Offshore Wind Transmission Solicitation with Section 83C Offshore Wind Solicitations

Statutory Authority – Energy Diversity Act

In 2016, Massachusetts passed An Act to Promote Energy Diversity requiring the EDCs to solicit and procure 1,600 MW of offshore wind (“Section 83C”)

→ In 2018, the EDCs procured 800MW Vineyard Wind

→ In 2019, the EDCs procured 804MW Mayflower Wind

– The initial 1,600 MW target from Section 83C is now complete

Section 83C:

*(b) The timetable and method for solicitations of long-term contracts shall be proposed jointly by the distribution companies and the department of energy resources using a competitive bidding process, and **shall be subject to review and approval by the department of public utilities.***

*...the department of public utilities shall not approve a long-term contract that results from a subsequent solicitation and procurement period if the levelized price per megawatt hour, plus associated transmission costs, is **greater than or equal to the levelized price per megawatt hour plus transmission costs that resulted from the previous procurement.***

*(e) **A proposed long-term contract shall be subject to the review and approval of the department of public utilities.** ...the department of public utilities shall consider the potential costs and benefits of the proposed long-term contract and shall approve a proposed long-term contract if the department finds that the proposed contract is a **cost-effective mechanism for procuring reliable renewable energy on a long-term basis, taking into account the factors outlined in this section.***

Statutory Authority – Beyond the First 1600 MW

- In 2018, Massachusetts passed *An Act to Advance Clean Energy*. The Act allows DOER to require the EDCs to solicit and procure up to an additional 1,600 MW of offshore wind.
- In the Offshore Wind Study, DOER directed the EDCs to solicit for and procure the additional 1,600MW of offshore wind, if cost effective
 - DOER recommended two 800 MW solicitations in 2022 and 2024
 - Allow for continued price declines and a steady pipeline of solicitations to spur and maintain economic development opportunities

Act to Advance Clean Energy (Chapter 227 of the Acts of 2018):

*SECTION 21. (a)... solicitations and procurements of **up to approximately 1,600 megawatts** of aggregate nameplate capacity ... and may require said additional solicitations and procurements by **December 31, 2035**....*

*(b) ...any additional solicitations conducted pursuant to this section **shall be subject to the required solicitation and procurement process** of said section 83C....*

Statutory Authority - Independent Transmission

- The *Act to Advance Clean Energy* also allows DOER to require the EDCs to solicit and procure proposals for independent offshore wind energy transmission
- In the Offshore Wind Study, DOER recommended holding a technical conference to assess whether and/or how a solicitation for independent transmission proposals should occur and, if necessary, issue a separate contingent solicitation for independent transmission prior to additional offshore wind solicitations.

*SECTION 21. (a)...the department of energy resources may also require distribution companies to jointly and competitively solicit and procure proposals for offshore wind energy transmission **sufficient to deliver energy generation procured pursuant to this section** from designated wind energy areas for which a federal lease was issued on or after January 1, 2012 that may be developed independent of such offshore wind energy generation; provided further, that such transmission service **shall be made available for use by more than 1 wind energy generation project and shall not exceed the generation capacity authorized by this section**; provided further, that any selection of offshore wind energy transmission **shall be the most cost-effective mechanism** for procuring reliable, low-cost offshore wind energy transmission service for ratepayers in the commonwealth.*

Statutory Authority – Summary

An Act to Promote Energy Diversity (2016)

→ Directed EDCs to procure 1,600 MW of offshore wind, resulting in Vineyard Wind & Mayflower Wind procurements

Act to Advance Clean Energy (2018)

→ Gave DOER authority to direct EDCs to:

- Solicit and procure an additional 1,600 MW of Offshore Wind → This was authorized following Offshore Wind Study
- Solicit and procure proposals for independent offshore wind transmission → *DOER is hosting this technical conference to investigate*

Background - Procurement Process

- **RFP Drafting** - Joint filing by EDCs and DOER
 - Attorney General consults on choice of solicitation methods
 - Independent Evaluator monitors and reports on solicitation process
- **RFP Review** – DPU reviews & approves timetable and method of solicitation in the RFP
- **Bid Evaluation Team** – EDC's and DOER
 - Evaluation Team Consultant
 - Independent Evaluator (IE)
- **Selection** - EDC's select winning bidder, with DOER serving an advisory role
- **Contract Negotiation and Execution** – EDCs with DOER monitoring negotiations
- **Contract Approval** - DPU

Background on Completed Offshore Wind Procurements

- 83C Round 1 solicitation:
 - Two required bids: Generator Lead Line (GLL) bid and an Expandable Transmission Network (ETN) bid.
 - ETNs were intended to create an open-access offshore transmission network to which multiple offshore wind developers would be able to interconnect.
 - Evaluation Team developed a methodology that assigned costs and benefits to the ETN proposals, including stranded cost risks
 - Selected Vineyard Wind project included GLL transmission only

Background on Completed Offshore Wind Procurements, cont'd

- 83C Round 2 solicitation:
 - No ETN Requirement
 - Two required bids: GLL bid and a GLL bid with a Commitment Agreement.
 - The Commitment Agreement is a commitment by the bidder that, if a future third-party offshore wind developer requests interconnection with or expansion of the bidder's interconnection facilities, the bidder will negotiate in good faith and use commercially reasonable best efforts to enter into a voluntary agreement with the third-party developer.
 - The selected Mayflower Wind project in 83C Round 2 includes a Commitment Agreement.

Questions?

Next Steps

- Stakeholder Comment
 - DOER requested Stakeholder Comment on a number of questions and received 26 comments from academia, EDCs, transmission and generation developers, and other industry partners
 - Technical Panel discussion today will build on the responses from those comments
 - DOER will open a second round of stakeholder comment period to capture thoughts and impressions from the first round of stakeholder comment and from this technical session

Moderated Panel

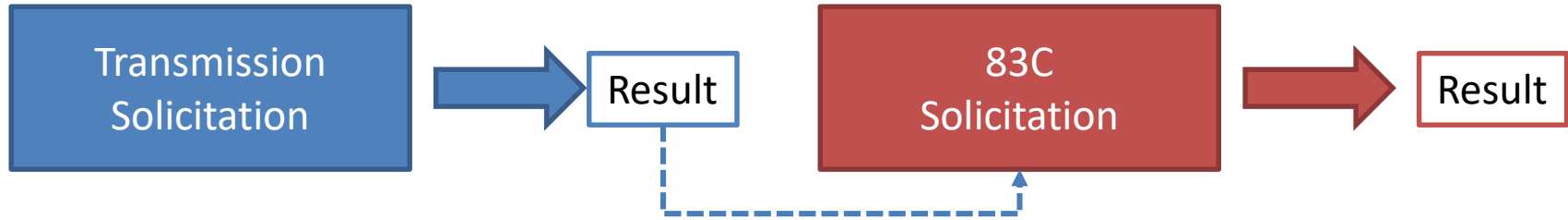
- **Introductions**
- This afternoon session will be used to discuss the possible structures of the paired solicitations:
 - (1) Independent Offshore Wind Transmission, followed by
 - (2) Offshore Wind Generation under Section 83C
- DOER has not made a decision on whether to authorize a separate independent offshore wind transmission solicitation.
- DOER is interested in investigating the possible structures of these two paired solicitations to better understand
 - Is there a structure or structures that would allow for a competitive and successful independent offshore wind transmission solicitation?
 - Can the benefits of independent transmission be captured through a solicitation following the authority provided by the *Act to Advance Clean Energy*?
 - Can these benefits be evaluated and included in a total cost and benefits analysis?

Discussion

- This is an open discussion on high-level solicitation structures
- The discussion should focus on the solicitation structure and not any particular project, whether transmission or generation.
- Although the discussion will include statutory authority, please avoid directing questions on or providing any legal interpretations
- We have a limited number of microphones today. Please indicate if you would like a microphone during the discussion.

Thank you.

Solicitation Structures



Example A	Solicitation for 1600 MW Projects Bid includes Known Location For Interconnection	One Project Selected	Two Required Bids: Bid to Known Interconnection Bid GLL	One Project with Bundled Generation & Transmission
Example B	Solicitation for 1600 MW Projects Bid includes Open/Unknown Location for Interconnection	One Project Selected	Two Required Bids: Bid with ITO* Bid with GLL	One Project with Bundled Generation & Transmission
Example C	Solicitation for 1600 MW Projects Bid includes Open/Unknown Location for Interconnection	Multiple Projects Selected	Two Required Bids: Bid with one of ITOs Bid with GLL	One Project with Bundled Generation & Transmission

*ITO = Independent Transmission Operator