Creating A Clean, Affordable, and Resilient Energy Future For the



Massachusetts Department of Energy Resources

COMMONWEALTH OF MASSACHUSETTS

Charles D. Baker, Governor Karyn E. Polito, Lt. Governor Matthew A. Beaton, Secretary Judith Judson, Commissioner

Next Generation Solar Incentive Stakeholder Meeting #6

December 1, 2016

Process and Schedule

- Stakeholder meetings are coming to a close
- Discussions have been productive and resolved many issues
- Several key issues remain:
 - >On-bill crediting for QFs
 - Land use & siting criteria
 - Competitive procurement vs. DBI for large projects
 - Timing of new program relative to end of SREC II
- DOER planning to issue revised proposal this month



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On-Bill Crediting Mechanism

- Is this feasible from a billing perspective?
 - How can the third-party administrator address utility concerns?
- What should the applicable rate be?
 - > QF rate?
 - > Basic service?
 - Other?
- Should there be a limit on the number of credits that can be allocated?
 - Percentage of bill?
 - Limited to kWh consumption?



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Land Use & Siting Criteria

- Discussions still ongoing, but reconsidering some of the restrictions that were originally proposed
- Priority Habitat
 - After NHESP review, if a take of a habitat is found, the project will be ineligible for the tariff
- Ch 61A and APR land
 - Projects approved under current restrictions for renewable energy installations on those parcels
- Article 97 land permanently protected open space
 - Exceptions allowed for canopies on parking lots and rooftop installations
 - > Existing process for agricultural land
- Prime Agricultural Land (non-61A or APR) and Prime Forest
 - > Possibility for some subcategories to be restricted from qualifying
 - > Others would be approved using performance standards
- Possibility for exemptions if projects meet certain milestones
- Possibility of additional exceptions upon petition



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Competitive Procurement

- Distribution companies, AIM, AGO, and NCLC have argued for some form of competition to be used in setting tariff rates as a means to achieve the lowest costs possible
- Opposition to procurement from the solar industry, citing the following:
 - > Race to the bottom
 - > High attrition rates
 - > Administrative complexity
 - Efficacy of procurements vs. administratively set prices
 - Constraints on market growth if controlled by scheduled procurements



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Solar + Storage Adder

- After reviewing Public Comments and Storage Stakeholder Discussions, DOER has created a proposed formula for a Storage Adder
- Adder is determined based on ratio of Power (kW) and energy (kWh, duration)
- Incentive levels were derived from State of Charge report data and represent values that address the revenue gap for storage projects, but deliver storage at a net benefit to ratepayer

| | Storage Hours @ Rated Capacity | | | | | | | | |
|--------------------|--------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| | Minimum Maximu | | | | | | | | |
| Storage kW as % of | 2 | 2.5 | 3 | 3.5 | 4 | 4.5 | 5 | 5.5 | 6 |
| 25% | 0.0275 | 0.0287 | 0.0298 | 0.0307 | 0.0316 | 0.0323 | 0.0330 | 0.0336 | 0.0342 |
| 30% | 0.0357 | 0.0373 | 0.0387 | 0.0399 | 0.0410 | 0.0420 | 0.0429 | 0.0437 | 0.0445 |
| 35% | 0.0425 | 0.0445 | 0.0461 | 0.0476 | 0.0489 | 0.0500 | 0.0511 | 0.0521 | 0.0530 |
| 40% | 0.0477 | 0.0498 | 0.0517 | 0.0533 | 0.0547 | 0.0560 | 0.0572 | 0.0583 | 0.0594 |
| 45% | 0.0512 | 0.0535 | 0.0555 | 0.0572 | 0.0588 | 0.0602 | 0.0615 | 0.0627 | 0.0638 |
| 50% | 0.0535 | 0.0559 | 0.0580 | 0.0598 | 0.0614 | 0.0629 | 0.0642 | 0.0655 | 0.0666 |
| 55% | 0.0550 | 0.0575 | 0.0596 | 0.0615 | 0.0631 | 0.0646 | 0.0660 | 0.0673 | 0.0685 |
| 60% | 0.0559 | 0.0584 | 0.0606 | 0.0625 | 0.0642 | 0.0657 | 0.0671 | 0.0684 | 0.0696 |
| 65% | 0.0565 | 0.0590 | 0.0612 | 0.0632 | 0.0649 | 0.0664 | 0.0678 | 0.0691 | 0.0703 |
| 70% | 0.0568 | 0.0594 | 0.0616 | 0.0636 | 0.0653 | 0.0668 | 0.0683 | 0.0696 | 0.0708 |
| 75% | 0.0571 | 0.0597 | 0.0619 | 0.0638 | 0.0655 | 0.0671 | 0.0685 | 0.0698 | 0.0711 |
| 80% | 0.0572 | 0.0598 | 0.0620 | 0.0640 | 0.0657 | 0.0673 | 0.0687 | 0.0700 | 0.0713 |
| 85% | 0.0573 | 0.0599 | 0.0621 | 0.0641 | 0.0658 | 0.0674 | 0.0688 | 0.0701 | 0.0714 |
| 90% | 0.0573 | 0.0600 | 0.0622 | 0.0641 | 0.0659 | 0.0674 | 0.0689 | 0.0702 | 0.0714 |
| 95% | 0.0574 | 0.0600 | 0.0622 | 0.0642 | 0.0659 | 0.0675 | 0.0689 | 0.0702 | 0.0715 |
| 100% | 0.0574 | 0.0600 | 0.0622 | 0.0642 | 0.0659 | 0.0675 | 0.0689 | 0.0703 | 0.0715 |



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Storage + PV



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Other Topics

- Differentiating standalone vs. sized to load
 - Should there be a distinction?
 - How should sized to load determination be made? Percentage of historical consumption?
- Length of tariff
 - Should tariff terms be increased or decreased for certain projects?
- Adders
 - Should non-net metering adder be



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