# NEW YORK'S VALUE OF DISTRIBUTED ENERGY RESOURCES ORDER

*MILES FARMER*

# Eligibility

Phase I Net metering → Value of DER

Net metering → Phase I net metering (20-year term) (may opt into Value of DER)

Value of DER (community and C&I projects)

Net metering or Phase I net metering, as applicable (residential and small commercial)

Stand-alone storage systems are not eligible for the initial Value of DER tariff

Photo credits: National Renewable Energy Laboratory

# Value of DER rules

- Individual participants in community projects do not see this value stack
- Customers can carry over excess credits indefinitely, but must forfeit them at the end of the 25-year period; CDG sponsors must use credits for a given year within a 3-year period (carryover within the annual period plus a 2-year grace period)
- Value of DER applies for 25 years from in-service date (different from Phase I NEM, which applies for 20-years from in-service date)
- For customers with on-site large generation, Value of DER applies only to injections, not generation consumed on site, unless customers elect to separately meter

Energy (day-ahead, hourly zonal LBMP)

Capacity (various alternatives)

Environmental benefits (higher of Tier 1 REC and SCC)

Distribution value (includes 'demand reduction' and 'locational system relief')

Market transition credit (tranche-based; calculated based on portion of eligible customers served)

Notes:

- Environmental benefits credited only for net injections
- DRV and LSRV to be based on forthcoming "deaveraging" from utilities
- C&I projects are not eligible for MTC
- MTCs based on difference between value stack estimate and retail rate in each service territory

# Capacity value

- Alternative 1: capacity portion of the supply charge for the service class with the load profile most similar to a solar generation profile (used for each kWh of generation all year)
- Alternative 2: take total capacity charge for service class 1 customers, and allocate it on a per kWh basis to only the 460 peak summer hours. (Essentially taking a similar total value, and allocating it to potential peak hours to incent better performance in those particular hours.)
- Alternative 3: NYISO capacity tag approach. (Compensation determined entirely by performance during the single peak hour of the prior year.)

# Distribution value

- Demand Reduction Value (DRV) applies across the service territory, whereas Locational System Relief Value (LSRV) only applies to constrained areas
- Both to be based upon “deaveraged” Marginal Cost of Service studies developed by utilities (which were submitted for comment on May 1);
- Similar to NY’s Dynamic Load Management programs, except that this value is paid based on performance measured over 10 peak hours, rather than in response to dispatch calls from the utility (10 hours based on local peak for LSRV)
- DRV and LSRV will be recalculated every 3 years, but a resource receiving LSRV compensation gets that value for a 10-year period. DRVs change as updated by the utility on a 3-year basis
- Projects are not eligible for DRV to the extent that they receive MTC (e.g. a project with 90% non-C&I customers gets only 10% DRV), but they *are* eligible for LSRV

# Market transition credit calculation

**APPENDIX A. ESTIMATED MTCS**

| (to be replaced by utility compliance calculations) | | All Averages are PV Load Weighted Averages | | | | |
|---|---|---|---|---|---|---|
| | CHGE | O&R | NGRID | NYSEG | Con Ed | RG&E |
| **Estimated "Base Retail Rate"** | | | | | | |
| MFC | $0.0042 | $0.0072 | $0.0021 | $0.0042 | $0.0051 | $0.0064 |
| SBC | $0.0081 | $0.0045 | $0.0053 | $0.0061 | $0.0045 | $0.0068 |
| Deliv | $0.0607 | $0.0785 | $0.0476 | $0.0368 | $0.1016 | $0.0379 |
| ICAP | $0.0184 | $0.0288 | $0.0125 | $0.0114 | $0.0408 | $0.0121 |
| Energy+ | $0.0559 | $0.0608 | $0.0392 | $0.0488 | $0.0638 | $0.0447 |
| subtotal 1 | $0.1473 | $0.1798 | $0.1067 | $0.1073 | $0.2158 | $0.1079 |
| | | | | | | |
| **"Estimated Value Stack"** | | | | | | |
| E | $0.0242 | $0.0242 | $0.0242 | $0.0242 | $0.0242 | $0.0242 |
| ICAP | $0.0184 | $0.0288 | $0.0125 | $0.0114 | $0.0408 | $0.0121 |
| DA LBMP | $0.0490 | $0.0489 | $0.0400 | $0.0400 | $0.0515 | $0.0365 |
| subtotal 2 | $0.0916 | $0.1020 | $0.0768 | $0.0757 | $0.1166 | $0.0728 |
| | | | | | | |
| Estimated MTC (subtotal 1 - subtotal 2) | $0.0558 | $0.0778 | $0.0299 | $0.0317 | $0.0993 | $0.0350 |
| | | | | | | |
| **VoD (estimated)** | $0.0063 | $0.0078 | $0.0084 | $0.0089 | $0.0316 | $0.0106 |
| | | | | | | |
| **Net Revenue Onsite Mass Market Impact** | $0.0737 | $0.0942 | $0.0457 | $0.0470 | $0.0919 | $0.0487 |
| **Net Revenue CDG Impact*** | $0.0494 | $0.0700 | $0.0215 | $0.0228 | $0.0677 | $0.0244 |
| | | | | | | |
| | * CDG impact < Onsite Mass Market impact due to E credit | | | | | |

# Next steps – Phase I

Final implementation order to be issued “Summer 2017”

May 1 implementation plans from utilities include:

- Distribution value plans
- Capacity values and calculation methods for options 1 and 2
- MTC calculations
- Cost allocation proposals
- Reporting procedures to track progress

Staff to work with stakeholders to develop a plan to promote soft cost reduction proposals for CDG market, for example:

- New York Green Bank financing to voluntarily opt into higher tranches
- Consolidated billing

# Next steps – Phase II

Some aspects may be implemented prior to a second iteration of the Value of DER rate, which is to be developed by the end of 2018. Procedural conference in May 2017

- Inclusion of stand-alone storage and other non-NEM DER (on a "technology-neutral basis")
- "Development of methods to provide equal compensation to reduced consumption as to injected generation"
- Transition mass market projects to VDER
- A framework to develop grid access charges, non-bypassable fees, or other methods to mitigate costs to non-participants
- Changes to default rate design and development of optional rates for VDER participants
- Value stack "improvements"
- Low income (Staff report to be filed by Sept. 1, 2017):
  - Consideration of "tailored approaches" for CDG projects serving majority low-income
  - NYSERDA to reassess allocation of Clean Energy Funds to low-income CDG
  - Staff to work with NYSERDA on Green Bank credit support for CDG projects serving low-income customers
  - Staff to develop report on the feasibility of an inter-zonal CDG credit program for low-income customers
- Soft cost proposals (including, explicitly, increase of 2 MW limit)

# Questions

**MILES FARMER**

*Clean Energy Attorney*

212.727.4634

mfarmer@nrdc.org

**NATURAL RESOURCES DEFENSE COUNCIL**

NRDC.ORG