



# NYISO DER Roadmap Presentation

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# About EnerNOC



## Proven Customer Track Record

- 1,100+ software subscription customers
- US \$1 billion+ in customer payments/savings to date
- Market leader in demand response

## Full Value and Technology Offering

- Energy intelligence platform and applications
- Combines technology, professional services, and market access
- More than US \$200 million invested to date in technology
- 24x7x365 Network Operations Center & customer support

## World Class Team and Resources

- US \$400M revenue in 2015
- US \$104M cash and cash equivalents on balance sheet
- Present in 100+ countries
- Offices in 12 countries
- More than 1,000 employees
- Publicly traded on the US NASDAQ (ENOC) exchange

# Feedback on DER Roadmap

- Aggregations
- Dual Enrollment
- Performance Obligations
- Reference Prices

# Aggregations

- We recognize that dispatches of an aggregated portfolio should not exacerbate transmission constraints
- As NYISO has acknowledged, aggregations have been largely successful in the SCR program. Aggregation enables stronger, firmer performance from a larger volume of customers. Future programs should not unnecessarily restrict ability to aggregate
- In ISO-NE, where DR with a capacity obligation will be fully integrated in energy & ancillary markets, DR resources are aggregated at the load zone level
- **Recommendation:** Allow aggregation at as broad a level as possible (i.e. zonal), while ensuring that dispatches do not exacerbate constraints. For instance, in cases where there are real constraints, allow for partial, more granular dispatch of an aggregated resource. More data needed on constraints

# Dual Participation

- We support the position taken by the Joint Utilities that dual participation should be allowed by individual customers. The Con Edison and NYISO programs have co-existed well for several years
- It is critical to remember that the aggregated resource has the performance obligation to the utility and the NYISO, not an individual customer. Each aggregated resource could have the same customer, but overall be comprised of two fairly distinct customer bases, especially in Zone J
- Therefore, even if one customer might not be able to do back to back dispatches in the same day, a properly constructed aggregated resource can meet its performance obligation
- To ensure the resource performs, penalize the resource for non-performance, not the customer

# Performance Obligations

- We do not see the need to have different categories of capacity products (peak period, daytime, full time), and capacity payments should be uniform across various resource types (generation, DER, etc)
- Once again, the performance obligation should be on the aggregated resource, not individual customers. If a customer has a two hour battery, then they can be part of an aggregated resource
- If a capacity resource comprised of DERs does not deliver expected performance during scarcity events, then it should be penalized as any other capacity resource for non-performance
- Reducing the capacity payment to DER resources will severely restrict their growth. Price signals and penalties drive portfolio growth and design, and capacity payments are foundational

# Reference Prices

- Reference prices should not apply to DER. Reference prices are primarily needed when there are threats of market power and there is incentive to withhold
- DER has neither the incentive to “withhold”, since customers pay for energy they are consuming, nor the market power to influence prices given the size and distributed nature of the resource
- It would also significantly complicate DER participation for customers, aggregators and the NYISO. Other ISOs have considered this for DR and adamantly decided against it

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