Clean Coalition
Making Clean Local Energy Accessible Now

July 18, 2014

Hon. Kathleen H. Burgess
Secretary to the Commission
NYS Public Service Commission
Empire State Plaza, Agency Building 3
Albany, New York 12223
Secretary@dps.ny.gov

Re: Case 14-M-0101 – Track 2 Comments of the Clean Coalition on the Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision

Dear Secretary Burgess:

The Clean Coalition applauds the Public Service Commission for laying out a visionary proposal for transforming the relationships between customers, utilities and system operators to guide New York State towards a clean energy future. Please find attached the Clean Coalition's recommendations for implementing the Reforming the Energy Vision Staff Report's proposals to increase reliance on distributed energy resources.

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement, interconnection, and realizing the full potential of integrated distributed energy resources, such as distributed generation, advanced inverters, demand response, and energy storage. The Clean Coalition also works with utilities to develop community microgrid projects that demonstrate that local renewables can provide at least 25% of the total electric energy consumed within the distribution grid, while improving grid reliability.

Sincerely,

Stephanie Wang
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BEFORE THE NEW YORK STATE PUBLIC SERVICE COMMMISSION

Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision	Matter 14-00581 Case 14-M-0101

COMMENTS OF THE CLEAN COALITION
ON REFORMING THE ENERGY VISION TRACK 2

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July 18, 2014

COMMENTS OF THE CLEAN COALITION ON REFORMING THE ENERGY VISION TRACK 2

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I. Introduction

The Clean Coalition applauds the Public Service Commission for laying out a visionary proposal for transforming the relationships between customers, utilities and system operators to guide New York State towards a clean energy future. The Clean Coalition offers the following recommendations for implementing the Reforming the Energy Vision (REV) Staff Report's proposals to increase reliance on distributed energy resources (DERs). These comments are submitted in accordance with Administrative Law Judge Eleanor Stein's Ruling Issuing Track 2 Questions and Establishing a Response Schedule, issued on May 1, 2014, in response to the questions regarding Outcomes-Based Ratemaking. Specifically, these comments address questions 2 (new outcomes/metrics) and 8 (removing bias toward increasing capital expenditures).

The Clean Coalition is a nonprofit organization whose mission is to accelerate the transition to renewable energy and a modern grid through technical, policy, and project development expertise. The Clean Coalition drives policy innovation to remove barriers to procurement, interconnection, and realizing the full potential of integrated distributed energy resources, such as distributed generation, advanced inverters, demand response, and energy storage. The Clean Coalition also works with utilities to develop community microgrid projects that demonstrate that local renewables can provide at least 25% of the total electric energy consumed within the distribution grid, while improving grid reliability. The Clean Coalition participates in numerous proceedings before state and Federal agencies throughout the United States.

Reforming the Energy Vision is a unique opportunity to support New York's clean energy, resilience, and economic goals by addressing structural biases against Distributed Energy Resources (DERs). Increasing reliance on and deployment of clean DERs, including local generation, storage and demand response, will require fundamental shifts in the roles and responsibilities of Distributed System Platform Providers (DSPPs) and the New York Independent System Operator (NYISO). The PSC should allocate to DSPPs responsibilities for planning DER solutions to meet clean energy goals and address both bulk system and local area needs, and managing DERs to meet local reliability targets and reduce reliance on the transmission system. Clarifying the responsibilities of the DSPPs will make it possible to realize the full value of DERs and reduce the operational complexity of managing DERs to meet local and bulk system needs.

First, the Clean Coalition recommends reforming transmission planning so that DERs are treated as primary tools for meeting reliability needs, rather than "alternatives" to transmission and central generation investments. We support the Staff Report's proposal that DSPPs have responsibility for planning for DERs at the distribution grid level, and further recommend that DSPPs be assigned responsibility for proposing integrated DER solutions for meeting transmission system needs as well. Reforming the Energy Vision Staff Report also calls into question "the assumption that the centralized generation and bulk transmission model is invariably cost effective, due to economies of scale" and proposes that DERs should be used, "not as a last resort but rather as a cost effective, primary tool to manage distribution system flows, shape system load, and enable customers to choose cleaner, more resilient power options."[1] Accordingly, we recommend neutralizing the bias toward capital expenditures by conditioning the rate-basing of investments in transmission and central generation on a finding by the PSC that such investments will be more cost-effective for ratepayers than investments in clean DERs that could meet the same needs.

Second, the Clean Coalition recommends that the DSPPs be required to submit Distribution Resources Plans for approval by the Public Services Commission. These Plans would detail the DSPP's proposed optimal portfolio of DERs to cost-effectively meet state and local goals, such as targeted levels of reliability and demand side management at the substation level, and meet customer desires and needs.

Third, the Clean Coalition recommends that the PSC clarify the role of the DSPP as the Distribution System Operator, allocating responsibility to the DSPP for operation of the distribution networks to meet targeted levels of local reliability and resilience. This will enable the implementation of the Staff Report's vision that "the utility as Distributed System Platform Provider (DSPP) will actively coordinate customer activities so that the utility's service area as a whole places more efficient demands on the bulk system, while reducing the need for expensive investments in the distribution system as well."[2] Clarifying the division of responsibilities for maintaining reliability between the distribution operator and the transmission operator will facilitate grid planning for DERs to be a primary means of meeting system needs, reduce the operational complexity of relying on DERs, and unlock opportunities to realize the value of DERs for meeting local needs.

[1] Reforming the Energy Vision (REV) Staff Report at 8
[2] REV Staff Report at 9

II. Transmission Grid Planning

Transmission planners across the country view distributed energy resources (DER) as "alternatives" to transmission and central generation, and rarely proactively propose integrated DER solutions to meet needs. Distribution planners, on the other hand, generally fail to account for the value of DER for avoiding investments in transmission and central generation. The Reforming the Energy Vision Staff Report proposes that DERs should be used "not as a last resort but rather as a cost effective, primary tool to manage distribution system flows, shape system load, and enable customers to choose cleaner, more resilient power options."[3]

An integrated approach to transmission and distribution planning is necessary for moving beyond the current NTA approach towards using DER as a primary means of addressing bulk system operational needs. We support the Staff Report's proposal that DSPPs have responsibility for planning for DERs at the distribution grid level, and further recommend that DSPPs be assigned responsibility for proposing integrated DER solutions for meeting transmission system needs as well. The New York Independent System Operator would retain responsibility for timely identifying projected bulk system operational needs and working with the DSPPs to model how proposed DER portfolios could meet such needs. However, the DSPPs would have the primary responsibility for developing technically feasible and cost-effective portfolios of integrated DER solutions to meet transmission system level needs. The DSPPs would also have responsibility for ensuring that the approved DER portfolio is acquired and online in time to meet needs.

Further, we recommend neutralizing the bias toward capital expenditures by conditioning the rate-basing of investments in transmission and central generation on a finding by the PSC that such investments will be more cost-effective for ratepayers than investments in clean DERs that could meet the same needs. As an example of this approach taking shape in another jurisdiction, California's AB 327 takes a major step in this direction by requiring utilities to develop Distribution Resources Plans by July 2015 to guide DERs to optimal locations on the distribution grid, and allowing utilities to rate-base only distribution grid investments that yield net benefits for ratepayers.[4] Since the Reforming the Energy Vision Staff Report explicitly calls into question "the assumption that the centralized generation and bulk transmission model is invariably cost effective, due to economies of scale," we recommend that New York apply this approach to fairly compare transmission and central generation investments with clean DER investments.

In order for to compete with transmission and central generation investments on a level playing field, and in order to fully comply with state and federal clean energy goals, all values of DERs should be accounted for in cost-effectiveness calculations. DERs provide a number of significant and quantifiable benefits to ratepayers. These benefits include significant locational benefits, including reduction in transmission line losses and opportunities to avoid or defer

[3] REV Staff Report at 8

[4] California Public Utilities Code, Section 769, added by California Assembly Bill 327 (2013)

investments in transmission and central generation.[5] As the Clean Coalition has testified before the California Public Utilities Commission, such locational value especially applies to any portion of the generation that is deemed "deliverable," and does not exceed 100% of the coincident load at the substation, as all such generation avoids use of transmission system.[6] In addition, compliance with New York's existing greenhouse gas, renewable energy, energy efficiency and other clean energy goals should be considered quantifiable ratepayer benefits of clean DERs.

Clean DERs have many other benefits that should be accounted for in cost-benefit analyses, including hedge value against rising fuel costs and local economic benefits. For more information, see the Clean Coalition's Energy, Economic and Environmental Benefits Analysis performed for the Hunters Point Community Microgrid Project in San Francisco.[7]

III. Distribution Resources Plans

The Clean Coalition recommends that the DSPPs be required to regularly submit Distribution Resources Plans for approval by the Public Services Commission. Each DSPP would propose the optimal portfolio of DERs to cost-effectively meet state and local goals, including clean energy goals and targeted levels of reliability at the substation level, and meet customer desires and needs. These Plans would facilitate comparisons of the costs of transmission and central generation investments with DER solutions that would defer or avoid such investments, as required above.

System-wide DER optimization includes optimizing a DER portfolio across a collection of substations in a distribution utility's service territory. This will involve identifying which substations would benefit most from high levels DERs based on system needs and local goals, such as local clean energy targets or resilience priorities. For example, any distribution grid routinely experiencing or forecast to experience local capacity shortages may be a good candidate for high levels of DERs. Substations with local capacity needs resulting from transmission constraints or congestion will benefit from DERs that can avoid or defer the need for developing costly transmission upgrades. In another example, substations that contain critical infrastructure may be good candidates for islanding campuses within a substation to maintain reliable electrical service to emergency services such as hospitals. However, such

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[5] See the Clean Coalition's Locational Benefits brief, available at http://www.clean-coalition.org/site/wp-content/uploads/2013/11/Locational-Benefits-Brief-08_tk-6-Nov-2013.pdf

[6] Opening Brief of the Clean Coalition Regarding Southern California Edison's Application to Establish Green Rate and Community Renewables Programs before the California Public Utilities Commission (May 2014), available at http://www.clean-coalition.org/regulatory-filings/cpuc-opening-brief-on-green-tariff-applications-sb-43/

[7] The Clean Coalition, The Hunters Point Project: A Model for Clean Local Energy, An Energy, Economic and Environmental Benefits Analysis for High Penetrations of Renewable Energy in San Francisco's Bayview Hunters Point Area, available at http://www.clean-coalition.org/site/wp-content/uploads/2012/10/HPP-Benefits-Analysis-Summary-21_gt-26-Mar-2014.pdf

islanding capabilities come at far greater costs, which must be weighed against the societal benefit of the resulting increased resilience.

Optimizing a portfolio of DERs within a single substation requires starting from a detailed map of the existing distribution grid, including feeder line topology and transmission capabilities, transformer and switch locations and capacities, and location and time profiles of all existing load and generation assets within the distribution grid. The optimal locations for a portfolio of DERs can be determined from this map.

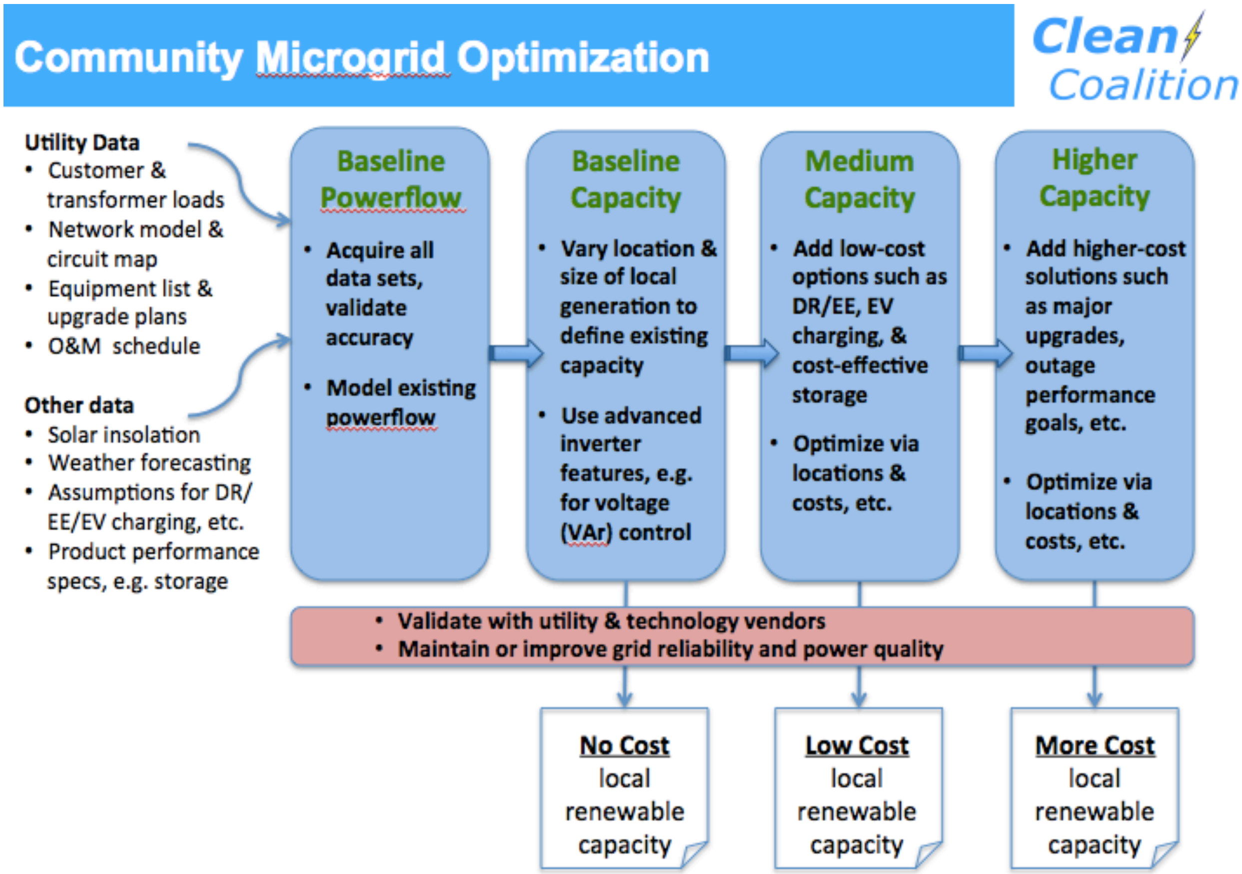
Utilities often utilize several different software packages to help with the management of the dynamic and static characteristics of their distribution grid operations. However, these products have historically been designed for the analysis of one-way power flow, and typically lack functionality for modeling advanced DER capabilities including, for example, advanced inverter functionality or energy storage operation. Realistically and efficiently creating an optimized DER portfolio requires working with software modeling tools providers to increase visibility of the distribution grid.

The Clean Coalition is currently working on the Hunters Point Project, a Community Microgrid Initiative project in collaboration with Pacific Gas & Electric.[8] This project will serve 25% of total energy consumed at the Hunters Point substation in San Francisco with local renewables, balanced with intelligent grid solutions like advanced inverters, demand response, and energy storage. The Clean Coalition uses sophisticated powerflow modeling and cost-benefit analysis tools to reveal how – and precisely where – DERs can best meet system needs. The Clean Coalition team works with utilities and powerflow and cost optimization modeling tools providers to use existing tools for seeing, and planning enhancements for, the distribution grid. For the Hunters Point project, the Clean Coalition is working with PG&E's powerflow modeling tool provider CYME and its cost analytics tool provider Integral Analytics to show that utilities' favored tools can meet these new challenges once they have the right specifications to move forward. The Clean Coalition is also developing standard specifications for modeling tools providers, so that our lessons learned from this experience can be applied to any other modeling tool.

Existing modeling tools can be used by system planners to locate where a given DER can be located within the distribution grid without requiring costly system upgrades. For example, in areas where the existing distribution feeder lines are robust enough to support incremental power flow without needing network upgrades, additional DG resources may be reliably added to the d-grid at least cost. The modeling tools can also enable the system planner to examine the operational characteristics of the DER resources that lead to reliable performance. For example, advanced inverter functionality can be used to inject reactive power into the grid during times of high PV generation and low load in order to mitigate power flow and voltage stability issues.

Once least-cost, highest value locations for DERs have been determined, the benefits of additional DERs placed on the system must be balanced against their costs.

[8] For more information, see http://www.clean-coalition.org/our-work/community-microgrids/



The benefits of higher levels of DER include:

- Deferred or avoided transmission and distribution investments
- Reduced usage and congestion of the transmission system
- Increased system efficiency, including reduced transmission and distribution line losses and conservation voltage reduction
- Meeting clean energy goals, such as emissions reductions, and associated regulatory compliance value
- Increased local reliability – lower frequency and duration of outages
- Local resilience, including the possibility of islanding a substation or campus
- Reducing reliance on a few large generators will reduce needs for contingency reserves
- Increasing independence from the transmission system for energy and energy services
- Improved power quality
- Hedging against fossil fuel price volatility

The benefits of integrated DER solutions are much greater than the sum of the benefits of each individual component. For example, peak PV generation impacts on net load profiles can be mitigated with demand response and daytime electric vehicle charging.[9] Similarly, the value of

[9] See the Clean Coalition's presentation to the California Energy Commission, Flattening the Duck (February 2014), available at http://www.clean-coalition.org/resources/february-2014-cec-presentation-flattening-the-duck/

distributed solar and storage are enhanced by turning on advanced capabilities of the inverters, which can prevent over-voltage due to high levels of distributed solar, prevent blackouts by providing reactive power close to loads, and enable conservation voltage efficiencies.[10]

Long-term optimization of DERs requires long-term load forecasting in order to understand future system needs. Long-term forecasting can best be performed by stochastic simulation that determines design parameters based on a system reliability metric such as a 1 event in 10-year outage rate. This approach requires forecasting likely values for input parameters and imposing correlations between them that reflect physically appropriate behavior. For example, high temperatures are correlated with increased solar insolation and increased PV generation, along with potentially higher loads from air conditioning units. Therefore, high PV generation may be highly correlated with high load in the summer. All such physically justifiable correlations must be quantitatively accounted for in the stochastic modeling process in order to achieve meaningful results.

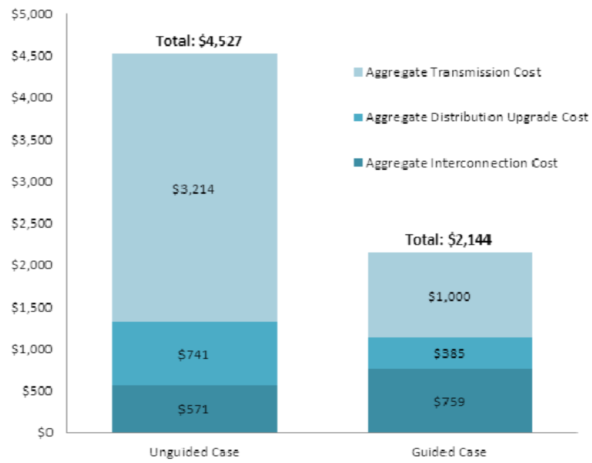
California is about to embark on the implementation of the AB 327 requirement that each investor owned utility must submit a Distribution Resources Plan by July 2015. The California statute provides that each Distribution Resources Plan must identify "optimal locations" for the deployment of distributed resources, propose or identify mechanisms for the deployment of cost-effective DERs, identify barriers to the deployment of DERs, and propose cost-effective methods to maximize "locational benefits" and minimize incremental costs of DERs.[11]

The importance of identifying optimal locations, maximizing locational benefits, and minimizing incremental costs of DERs is supported by a May 2012 study by Southern California Edison, which found that transmission upgrade costs for their share of the California Governor's goal of 12,000 MW of distributed generation could be reduced by over $2 billion from the trajectory scenario. The lower costs were associated with the "guided case" where 70 percent of projects would be located in urban areas, and the higher costs were associated with the "unguided case" where 70 percent of projects would be located in rural areas.[12]

[10] Craig Lewis, Advanced Inverters – Recovering Costs and Compensating Benefits (October 2013), available at http://www.clean-coalition.org/site/wp-content/uploads/2013/10/October2013_SolarServer.pdf

[11] California Public Utilities Code, Section 769, added by California Assembly Bill 327 (2013)

[12] Southern California Edison, The Impact of Localized Energy Resources on Southern California Edison's Transmission and Distribution System (May 2012), validated by Navigant Consulting, Distributed Generation Integration Cost Study Analytical Framework prepared for the California Energy Commission (November 2013)



Source: Southern California Edison[13]

AB 327 also provides that each investor owned utility will propose any spending necessary to accomplish the Distribution Resources Plan as part of the next general rate case, and such spending will be approved if ratepayers would realize net benefits and the associated costs are reasonable. This provision contemplates a major shift from the status quo reactive approach to conducting interconnection studies and requiring DER developers to pay for distribution grid upgrades on a case-by-case basis, to a proactive effort by utilities to identify and rate-base the most cost-effective distribution grid upgrades, and then guide DER development to optimal locations on the grid. This approach can remove the uncertainty around interconnection costs and greatly reduce the time required for interconnection studies for DER projects.

Right now, in California, a developer first identifies a potential site for local renewables, and then checks a grid map to see if the site may be eligible fast track interconnection, which is an expedited grid access procedure for the best locations on the grid, and which is much less time consuming and expensive than the standard interconnection process. Then the developer orders a pre-application report, which shows any known interconnection constraints. Then the developer must secure site control, and then apply for an interconnection study. The developer may then find out that the site wasn't eligible for Fast Track interconnection after all, and will have to decide whether to go forward with a significantly more expensive project.

The Clean Coalition is currently advising the California policymakers on how to leverage advanced grid modeling tools to help utilities develop interactive Distribution Resources Plans that guide distributed energy resources to the best locations on the grid and reduce the timeframes and uncertainty involved in grid interconnection. The Distribution Resource Plans should guide developers to optimal locations, instead of forcing them to look through the haystack for these locations, and provide up-to-date information on required grid upgrades and associated costs. This would remove the uncertainty about timelines and costs for developers, greatly reducing their project development costs, translating to lower costs for ratepayers.

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[13] Southern California Edison, The Impact of Localized Energy Resources on Southern California Edison's Transmission and Distribution System (May 2012)

IV. Distribution System Operator

The Clean Coalition recommends that the PSC clarify the role of the DSPPs as Distribution System Operators (DSOs), allocating responsibility to the DSPPs for operation of the distribution networks to meet targeted levels of local reliability and resilience. In addition to the grid planning role described above, the DSPPs should be responsible for managing the operation of DERs to meet local reliability targets and reduce reliance on the transmission grid, resulting in greater value to customers and lower costs. This will enable the implementation of the Staff Report's vision that "the utility as Distributed System Platform Provider (DSPP) will actively coordinate customer activities so that the utility's service area as a whole places more efficient demands on the bulk system, while reducing the need for expensive investments in the distribution system as well."[14] Clarifying the division of responsibilities for maintaining reliability between the DSO and the transmission system operator will reduce the operational complexity of relying on DERs, facilitate grid planning for DERs to be a primary means of meeting system needs, and unlock opportunities to realize the value of DERs for meeting local needs.

The PSC should consider how distribution and transmission operators should interact. Lorenzo Kristov, a director of the California Independent System Operator, asserts that there are two bookend approaches for how the electric grid can reliably evolve.[15] The first approach is a continuation of the top down, command-and-control structure of the existing grid architecture. Under this approach, the bulk system operator, which currently manages operation of all central station generation and reliability of the flow of bulk power at the transmission system, will take on the added responsibility of managing all DERs placed on the distribution grid. Even with third party aggregation of DERs, this approach represents a massive shift in the complexity and sheer number of resources that the transmission grid operator will be forced to manage. As DER penetration continues to accelerate, the operational complexity of metering, modeling and managing real-time operation of DERs will continue to increase. Furthermore, inconsistent objectives between local distribution grid management and transmission grid stability criteria may lead to systemic reliability issues.[16] For example, end use service reliability may not always be consistent with stability at the transmission level, which tends to optimize system level stability over distribution level stability.

The second approach represents a more fundamental change to grid design that would redefine responsibilities between the transmission and distribution system operators and would support prioritization of DER by utilities. Under this new approach, the transmission grid operator continues to manage the electric grid down to the transmission-distribution (T-D) interface, and the utility as DSO would now manage all DER resources below the T-D interface. The DSO will

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[14] REV Staff Report at 9

[15] Lorenzo Kristov, California Independent System Operator, Paul De Martini, Caltech Resnick Institute, 21st Century Electric Distribution System Operations (May 2014)

[16] CISCO, Paul De Martini, Newport Consulting Group, Ultra Large-Scale Power System Control Architecture: A Strategic Framework for Integrating Advanced Grid Functionality (October 2012)

manage visibility of DERs and control over their associated reliability services in a manner that will enable it to maintain a more stable and predictable interchange with the TSO at the T-D interface. This will result in less reliance on the TSO to provide energy balancing and other real time services, and more reliability and resilience at the distribution level. The DSO will also be able to aggregate and provide the capabilities of single types of DER and combinations of DER with appropriate performance characteristics to the TSO. In addition, under conditions where sufficiently robust and self-sufficient microgrids have been established – enabled by local generation, energy storage, demand response, and advanced monitoring, communications and control technologies – elements of the distribution grid may be able to adopt islanding capabilities. The DSO will then have the responsibility and accountability for the reliable real-time operation and balancing of the respective islanded microgrid, along with integration and coordination with other parts of the electric system. The DSO would optimize real time performance of each distribution network under its control in a similar manner, with each distribution network represented as a single T-D interface to the system operator. The TSO would still be responsible for system level reliability.

Under high DER penetration, the traditional definition of the T-D interface would become obsolete, and would be replaced with a regulatory framework under which the roles and responsibilities of grid operator and DSPP would be developed to reflect the new operational responsibilities. Under the new approach, the distribution network would be operated by the DSPP as a mini ISO below the T-D interface, with appropriate incentives to cost-effectively provide reliable end use service.

The Clean Coalition recommends that the PSC clarify that DSPPs will be responsible for the operation of the distribution networks below the T-D interface to meet targeted levels of local reliability and resilience. This is necessary for implementing the staff vision that "DSPP will serve as the local balancing authority, forecasting load and dispatching resources in real time to meet customer needs and balance supply with load in real time to maintain reliability."[17] There are several reasons why the DSPPs are the appropriate parties to take responsibility for operation of DERs to meet local reliability and resilience targets. First, the DSPPs should have the most knowledge of their own distribution grids, customer loads, and how to operate DERs within these constraints. Second, the NYISO would not be able to rely heavily on DERs unless it gained much greater visibility into the distribution grids and full control of DER resources. However, NYISO control of DERs is not ideal since NYISO is not primarily interested in operating DERs in a manner that encourages continued participation in DER programs or providing high levels of end-use customer reliability.

Formalizing the role of DSPPs as DSOs can provide DSPPs with sufficient financial motivation to plan for, procure and operate integrated DER solutions to meet both local and transmission level operational needs. The DSO would act as the distribution grid Responsible Interface Party in transactions with the grid operator at the wholesale level. The DSO would be responsible for generating daily load forecasts of the distribution grid downstream of the T-D interface, which would be provided to the NYISO operator for least cost unit commitment purposes. Because the

[17] REV Staff Report at 22

DSO would interface with the wholesale markets at a single T-D interface for each substation under its control, the energy and energy services costs being incurred by each substation will be transparent. Transparent energy and energy service costs for each substation will facilitate development of optimal DER resource placement and management, and will provide a strong foundation upon which to develop best practices.

A key benefit of having a transparent T-D interface is that it would enable the DSO to realize the value of DERs that are not bid into ISO markets. Although some DERs are bid into TSO markets, requiring all DERs to bid into TSO markets to realize value for contributing to system needs would result in undervaluing DERs since TSO markets are designed to meet bulk system needs, rather than to meet local needs. Further, it would greatly reduce the amount of DERs that are deployed since TSO markets may be overly restrictive about DER performance requirements and have high costs of participation.[18] A DSO can greatly reduce its costs of settlement with the TSO for bulk system services at the T-D interface by relying more on DERs and less on the bulk system for energy and grid services. For example, a DSO could smooth the net load profile and reduce the energy imports of a substation with a combination of distributed solar, storage, demand response, electric vehicle charging, and conservation voltage reductions facilitated with advanced inverters.

DSO operational control of DERs could also reduce the operational complexity of relying on DERs. Rather than giving control of DERs to the NYISO or arranging for the NYISO and the utilities to "share the button" for DERs, the DSOs could control operation of DERs to meet both local and bulk system needs. For example, the DSO could commit to the TSO that it will trigger certain demand response portfolios in specified circumstances, or prove to the TSO that a demand response portfolio will behave in a statistically reliable manner.

The DSO approach would facilitate the transformation of the relationship between transmission and distribution system. The TSO would still be responsible for maintaining bulk system reliability, but the DSOs would be responsible for local reliability and motivated to minimize reliance on TSO energy and grid services.

V. Conclusion

Reforming the Energy Vision is a unique opportunity to support New York's clean energy, resilience, and economic goals by addressing structural biases against DERs. To accomplish fundamental and lasting change, the PSC should realign the roles, responsibilities, and optimization processes for transmission and distribution grid planning to meet state and local goals. The PSC should also clarify the roles of the distribution operators and the transmission operator to make it possible to realize the full value of DERs and reduce the operational complexity of managing DERs for meeting local and bulk system needs.

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[18] Olivine Inc., Distributed Energy Resources Integration report to the California Independent System Operator (January 2014), available at http://www.caiso.com/Documents/OlivineReport_DistributedEnergyResourceChallenges_Barriers.pdf

Respectfully submitted,

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July 18, 2014