STATE OF NEW YORK

PUBLIC SERVICE COMMISSION

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

DSIP GUIDANCE DOCUMENT COMMENTS

Acadia Center, Association for Energy Affordability, Citizens for Local Power, Clean Coalition, Environmental Advocates of New York, Natural Resources Defense Council, The Nature Conservancy, New York League of Conservation Voters, New York Public Interest Research Group, Pace Energy and Climate Center, and Sierra Club

Dated: December 7, 2015

Acadia Center, Association for Energy Affordability, Citizens for Local Power,

Clean Coalition, Environmental Advocates of New York,

Natural Resources Defense Council, The Nature Conservancy,

New York League of Conservation Voters, New York Public Interest Research Group,

Pace Energy and Climate Center, and Sierra Club

Comments to New York State Department of Public Service

Staff Proposal: Distributed System Implementation Guide

Case 14-M-0101

December 7, 2015

I. INTRODUCTION AND SUMMARY

On October 15, 2015, the New York State Department of Public Services Staff ("Staff") filed a Staff Proposal regarding Distributed System Implementation Plan Guidance ("DSIP Guidance Proposal")[1] in Case 14-M-0101. The Staff invited parties to submit comments on several recommendations pertaining to Track 2 of the Reforming the Energy Vision ("REV") proceeding by December 7, 2015, and reply comments by December 21, 2015.

Acadia Center, Association for Energy Affordability, Citizens for Local Power, Clean Coalition, Environmental Advocates of New York, Natural Resources Defense Council, The Nature Conservancy, New York League of Conservation Voters, New York Public Interest Research Group, Pace Energy and Climate Center, and Sierra Club, filing jointly as the Clean Energy Organizations Collaborative ("CEOC"),[2] appreciate the opportunity to provide these comments on the DSIP Guidance Proposal. This document builds upon many points raised in previous filings from CEOC members,[3] and was prepared with the assistance of Synapse Energy Economics, Inc.

In our comments on Staff's Track 2 White Paper, CEOC described a set of guiding principles that were used to inform those comments.[4] We continue to use these principles to inform our recommendations in these comments on the DSIP Guidance Document. They include the following principles:

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[1] Case 14-M-0101. Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, Developing the REV Market in New York: Staff White Paper on Ratemaking and Utility business Models (July 28, 2015).

[2] The Pace Energy and Climate Center and the Alliance for Clean Energy New York co-convene an independent group called the Clean Energy Organizations Collaborative on REV-related matters. This collaborative is made up of national and state-based environmental organizations, clean energy companies and organizations, renewable energy industry trade associations, consumer groups, energy efficiency providers, and academic centers. CEOC seeks to ensure environmental outcomes that are consistent with New York's overall pollution reduction goals; break down existing barriers to clean energy services; and inform its members on market and rate design issues.

[3] Case 14-M-0101. Core Principles for Reforming the Energy Vision and Creating a Clean Energy Fund from Columbia's Sabin Center for Climate Change Law, Environmental Defense Fund, Natural Resources Defense Council and Pace Energy and Climate Center (May 27, 2014).

[4] CEOC, *Initial Comments*, Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, October 26, 2015, pp. 7-9.

1. Emissions reductions must be central to the Commission's new ratemaking and planning policies.
2. The Commission must strongly support and expand energy efficiency.
3. The Commission must ensure that all customers are allowed to and encouraged to benefit from REV innovations.
4. Distributed Energy Resources ("DER") must be fully valued.
5. Utility financial incentives should be aligned with REV objectives.
6. Market mechanisms must be demonstrated to be effective before they are relied upon.

CEOC supports most of the recommendations provided in the Staff DSIP Guidance Document. However, there are two general concepts regarding the DSIP that we believe require significantly more attention and clarity. First, Staff should provide more guidance on how the utilities should facilitate the role of market participants in developing DER. Second, Staff should provide more guidance on what the utilities should do for those customers, sectors, services, and technologies that market participants are not able or willing to serve.

We provide several recommendations to address and build upon these two important concepts. CEOC recommends that all utility DSIPs (both initial and supplemental) include a section that clearly describes how the DSIPs will contribute to the achievement of the State Energy Plan goals. This discussion is necessary to ensure that important energy goals will be met, and to indicate what actions utilities must undertake to meet them.

We also recommend that Staff require each utility to provide a complete description of the full potential for cost-effective DER, regardless of whether the resource is implemented by the utility or by market participants. This information regarding cost-effective DER potential will be used (a) to help develop a benchmark against which utility solicitations for market-based DER can be evaluated; (b) to indicate the type and quantity of DERs that the utility should implement if the market participants are unable or unwilling to implement them; and, (c) to help set EIM targets.

Specifically, each utility DSIP should include estimates of the potential for all cost-effective energy efficiency resources based upon their "technical" and economic potential,

assuming that the efficiency resources would be implemented by the utility itself. These estimates of efficiency potential should include all of the energy efficiency programs and savings that are currently planned under each utility's ETIP, as well as any additional cost-effective efficiency resources that could be implemented beyond those savings levels. Similar approaches should be used in determining the full potential for demand response, distributed generation, and other types of DERs. Staff should consider whether the New York State Energy Research and Development Authority (NYSERDA) or any other third-party entity should have a formal role in developing or commenting on such estimates of DER potential.

We believe it is critical for the Commission to provide much more concrete guidance regarding the specific actions that the utilities must undertake to support the competitive markets for DER. For many specific types of DER, the utilities will likely need to solicit, evaluate, and select proposals from market participants, and to ultimately procure DERs from market participants on behalf of their customers. In the absence of this type of utility involvement, market participants may not have sufficient certainty, security, or predictability to take the risks necessary to sell DERs competitively. Conversely, customers might be exposed to markets that are not sufficiently competitive or that do not include adequate consumer protections. While utilities should be invited to propose the design of these procurement programs and other market mechanisms, it is important that the Commission critically evaluate these proposals, taking into account the input of other stakeholders and Staff, in addition to the input provided by utilities. Because the Track I Order allows utilities to own DER where market mechanisms are not adequate to incentivize DER, utilities have a built-in counterincentive to establishing effective markets. Staff and the Commission must carefully evaluate these proposals for procurement programs and other market mechanisms, and must develop their own guidance on the structure of these solicitations and other mechanisms for facilitating DER development, with the input of other stakeholders.[5]

[5] At the same time, the Commission should take care not to direct such solicitations in a manner that risks its authority to do so being preempted under the Federal Power Act (FPA) or the Public Utilities Regulatory Policies Act of 1978 (PURPA). As the REV process unfolds, Staff and the Commission should take into account the potential outcomes of *Hughes v. PPL EnergyPlus, LLC*, Case No. 14-614 (concerning state commission actions

At least in the near term, CEOC recommends that the Commission require utilities to use competitive bidding processes with requests for information (RFIs) and requests for proposals (RFPs) to solicit, evaluate, and select market-based DER options for demand response and energy efficiency resources. RFP-based competitive bidding processes can be structured in such a way as to provide the Commission and stakeholders with some degree of oversight regarding the procurement of market-based DERs.

The utility estimates of the cost-effective potential for DERs should be used to help define the terms of the RFPs and inform the creation of other market mechanisms. In particular, the utility estimates of the potential magnitude of DER opportunities should indicate the amount of DERs that the utility could cost-effectively procure. They can also be used to evaluate the effectiveness of using RFPs or other market mechanisms to procure DER rather than relying on utility-owned DER, and inform the Commission regarding the areas where utility provision of DER will be necessary. Ideally, there will be sufficient competition and innovation from market participants to deliver additional DERs, and at lower cost than that offered by the utility. RFP programs and other market mechanisms should be structured in a manner that minimizes any risk that the Commission's authority to implement them could be preempted.

Given the complexities involved in comprehensive distribution system planning, it will be important for each DSIP, especially in the early years, to focus on the top priorities of the Commission, the utilities, and the stakeholders. For this reason, CEOC recommends that the Commission require each utility DSIP to start with a system-wide analysis of DER opportunities, before moving to a circuit-level analysis. By starting with a system-wide analysis, utilities would avoid investing time and resources in analyzing complex circuit-level DER opportunities without the benefit of understanding what DER's system-level benefits could be. The system-wide analysis should utilize system average estimates for the benefits and avoided costs caused by DERs, including, but not limited to, system average avoided energy, capacity, transmission, and

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that may be preempted), and *FERC v. Electric Power Supply Ass'n*, Case No. 14-840 (concerning the scope of FERC's jurisdiction under the FPA), which are both currently pending before the United States Supreme Court. We urge Staff and the Commission to consider the potential interaction between these two cases, as well as any related cases filed in lower courts within the Second Circuit.

distribution costs. Further, a system-wide analysis should be regularly updated to ensure that the most recent data is available.

A system-wide analysis of DER opportunities is very important for at least two reasons. First, there is already a large potential for cost-effective DERs throughout New York, even without accounting for the specific value of avoided distribution costs at any one circuit. Second, and equally important, a system-wide analysis of DER opportunities is necessary to promote equity across customers. The best way to protect consumers and promote equity is to ensure that as many customers as possible implement DERs in their own homes and businesses. A system-wide analysis will enable the Commission to ensure that DERs are made available, and are eventually adopted, across all customer classes throughout each utility's service territory.

By providing more guidance on how utilities should facilitate the role of market participants in developing DER and the functions that utilities should carry out where market participants are unable or unwilling to provide the necessary investments, the DSIP Guidance will better serve state energy goals and the highest priorities of the Commission and other stakeholders: the implementation of all cost-effective DERs, in order to reduce electricity system costs, provide benefits to as many customers as possible, and reduce carbon emissions.

II. THE ROLE OF DISTRIBUTION SYSTEM IMPLEMENTATION PLANS

A. Introduction

While CEOC supports the majority of the recommendations provided in the Staff DSIP Guidance Document, it should devote significantly more attention to two key issues that require more clarity.

First, Staff should provide more guidance regarding the specific actions that utilities should and must take to facilitate the role of market participants in developing DER. In order to fully enable market participants to identify and develop significant amounts of DER, the utilities

will have to do much more than simply provide the information that allows "third parties to plan for effective market participation."[6]

Second, Staff should provide more guidance on what the utilities will be required to do for those customers, sectors, services, and technologies that market participants are not able or willing to serve, particularly during the transition from today's electricity industry to one that is more reliant upon market participants. There will most likely be many DER opportunities that market participants will not be able to implement in the short- to medium-term. The utilities should have an obligation to implement all cost-effective DER that is not implemented by market participants or customers themselves.

The DSIPs, as well as the Commission's review of the DSIPs, will serve as an important focal point for this critical issue of utility versus market implementation of DERs. Therefore, CEOC recommends that Staff provides much more guidance regarding how the DSIPs will address the role of the utilities and market participants.

B. The DSIP Should Describe How State Energy Goals Will Be Met

Since the very beginning of this docket, the Commission has been clear about the goals that it wishes to achieve through the new REV innovations and practices.[7] The DSIPs provide an opportunity for the Commission and the utilities to (a) set future energy goals in concrete terms, (b) identify the resources and actions necessary to meet those specific goals, and (c) assess progress towards meeting those goals over time.

Therefore, CEOC recommends that Staff require all utility DSIPs (both initial and supplemental) to include a section that clearly describes what the relevant state energy goals are, and how the proposals set forth therein will help achieve those goals. This should begin by explaining the links between the high-level policy goals of the Commission, including: enhanced

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[6] Staff DSIP Guidance Document, page 2.
[7] New York Public Service Commission, *Order Adopting Regulatory Policy Framework and Implementation Plan*, Case 14-M-0101, February 26, 2015, pages 10-13.

customer knowledge and tools; market animation; system-wide efficiency; fuel and resource diversity; system reliability and resiliency; and reduction of carbon emissions.[8]

More importantly, the DSIPs should include a discussion of how they help achieve the goals set forth in the State Energy Plan (SEP). As Governor Cuomo explained in a recent letter to Audrey Zibelman, "the Department, and ultimately the Public Service Commission, is required by section 6-104(5)(b) of the Energy Law to take steps to render decisions and policies that are reasonably consistent with the SEP." The Energy Law provides that the Commission's actions "shall be reasonably consistent with the . . . policies and long-range energy planning objectives and strategies contained in the plan, including its most recent update."[9] The most recent update of the plan, the 2015 SEP, clarifies that the State's goal for 2030 is to provide at least 50% of its electricity from renewable sources, to achieve at least a 600 trillion BTU increase in energy efficiency, and to reduce GHG emissions by at least 40% from 1990 levels.[10]

Each utility's initial DSIP, and the statewide supplemental DSIP, should explicitly identify the DERs that will be used to meet those goals, and explain how the DSIP facilitates their development. The DSIPs should provide details for each type of DER (energy efficiency, demand response, distributed generation, storage, etc.) both in terms of the amount of energy and capacity needs to be served (in MWh and MW, respectively) that will be addressed, as well as in terms of other relevant metrics linked to the State's goals. Each initial DSIP and the supplemental DSIP should also describe in detail those actions that the utility and market participants will undertake to meet those goals. The Supplemental DSIP should provide a comprehensive picture of how state energy policy goals will be met to ensure that no gaps have been left unaddressed.

CEOC expects state energy goals to evolve over time, partly as a result of the new opportunities identified by the REV process, and partly as a result of changing energy and

[8] New York Public Service Commission, *Order Instituting Proceeding*, Case 14-M-0101, April 24, 2014, page 2.
[9] NY Energy Law § 6-104(5)(b).
[10] 2015 New York State Energy Plan, p. 112, *available at* http://energyplan.ny.gov/-/media/nysenergyplan/2015-state-energy-plan.pdf.

environmental requirements. Each DSIP should provide a complete description of how the most recent goals will be achieved, in accordance with section 6-104(5)(b) of the Energy Law.

C. The DSIP Should Clarify the Role of Utilities in Identifying and Facilitating the Development of DER

The Staff DSIP Guidance Document is clear that a full description of available resources should be included in the initial DSIPs, and that this description should include all types of DER as well as traditional delivery infrastructure.[11] However, Staff should provide much more guidance on this critical topic of identifying DER potential, because it will serve as the foundation for much of the rest of the DSIP.

CEOC recommends that Staff require each utility to provide a complete description of the potential for all cost-effective DER, by technology type, and by customer sector where relevant. This information should include the full potential for cost-effective DER, regardless of whether the resource is implemented by the utility or by market participants. This information regarding cost-effective DER potential will serve three important functions in the DSIP. First, it will help to develop a benchmark against which utility solicitations and the performance of other market mechanisms can be evaluated. (This solicitation and benchmarking is discussed in more detail in the following subsection.) Second, it will indicate the type and amount of DERs that the utility should implement if the market participants are unable or unwilling to implement it. Third, potential for all cost-effective DER can be used as a basis for setting EIM targets.

The DSIP estimates of DER potential should begin with a presentation of the full universe of DER opportunities. This is frequently referred to as the "technical potential," which is not limited by economic considerations. Then the DSIP should clearly indicate the full economic value of DERs, in terms of LMP+D, which will be used to indicate the amount of cost-effective DER potential.[12] Figure 1 below provides a schematic illustration of how the technical

[11] Staff DSIP Guidance Document, pages 12-13.

[12] In the event the LMP+D proceeding has not been completed by the deadline to file the DSIP and the Commission prescribes an interim valuation method, that interim method should be used to indicate the value of DERs. This interim method should attempt to approximate the value of LMP+D as closely as is possible given the time constraints. Once the LMP+D proceeding is complete, the DSIP should be updated to include the full value of DERs based on LMP+D.

potential for energy efficiency can be compared with the economic value of energy efficiency to indicate the amount that is cost-effective. It is important that all elements of this analysis (technical potential, economic value, and cost-effective potential) be presented in the DSIP to provide the Commission and other stakeholders with sufficient information to assess the utility's proposal. Staff should consider whether NYSERDA or another third-party entity should have a formal role in developing these estimates. For example, NYSERDA might be called upon to independently develop its own estimates, to work with utilities as they develop their own estimates, and/or to evaluate utility estimates once they are produced. As we explain below, at a minimum, NYSERDA's efficiency targets should inform the Commission's evaluation of utilities' analysis of efficiency potential.

Given the diverse nature of DERs, the many different types of customers who can implement DERs, the many different technologies that can be used as DERs, and the fact that the DER markets are still in formative stages, it is clear that at least in the near term, significant amounts of DER (and in particular energy efficiency and demand response) will not be implemented by market participants alone. If the Commission wishes to achieve the overall REV goals, particularly with regard to promoting energy efficiency and reducing carbon emissions, then, at least in the short term, it will be necessary for the utilities to play a significant, "backstop," role in implementing those DERs that the market does not implement. The role that utilities should play in implementing DERs will depend upon the type of DER.

Energy Efficiency

Energy efficiency is a top priority for CEOC, as well as for the Commission and many other stakeholders in this docket. CEOC, and its member parties, have recommended several times that utility-sponsored, ratepayer-funded energy efficiency programs should continue to be used until more market-based options have been demonstrated to be viable, and that these programs should be expanded from today's levels in order to achieve the state's, and the Commission's, energy efficiency goals.[13]

[13] CEOC, Initial Comments on Track Two, pages 19-21. CEOC, Reply Comments on Track Two, pages 10-11. CEOC, In the Matter of Utility Energy Efficiency Programs Case 15-M-0252, September 28, 2015.

CEOC recommends that Staff require each utility DSIP to include estimates of the potential for all cost-effective energy efficiency resources. As described above, it is important that these estimates include the entire universe of potential efficiency opportunities, based not only on all existing efficiency program delivery and implementation practices, but also on all feasible additional practices that can be implemented by the utilities or market actors. Utilities should attempt to assess the cost-effectiveness of these programs based on the full value of DER. As explained in our reply comments on Staff's white paper on ratemaking and utility business models, the value of DER used for planning purposes should include *all* the benefits of DER, including all benefits that those resources provide to the bulk transmission system.[14] The resulting estimates of cost-effective efficiency potential should include all of the energy efficiency programs and savings that are currently planned for in each utility's ETIP, as well as any additional cost-effective efficiency resources that could be implemented beyond those savings levels by the utility and by market participants. CEOC expects that the total amount of cost-effective efficiency potential identified in the first set of DSIPs would be at least comparable to the amount of savings that peer utilities are achieving in Massachusetts and Rhode Island, which are currently reducing retail electricity sales by roughly 2.5 percent per year. This level of savings is more than double what the utilities are currently planning to implement in their individual ETIPs.[15]

Ideally, some or all of the energy efficiency potential identified in the DSIP (including the portion currently served by existing utility programs) will ultimately be able to be implemented by market participants. Nonetheless, the complete estimates of efficiency potential will be important to ensure that the utility stands ready to implement those efficiency resources that market participants do not carry out, and to help in setting a benchmark for the total amount of efficiency resources that should be delivered. Utilities should also use the DSIPs as a forum for proposing mechanisms beyond those currently being considered that will be effective in procuring or incenting energy efficiency. While new programs that are more experimental in nature should not be implemented at the cost of sacrificing investment in proven programs and

[14] CEOC, Reply Comments on Track Two, page 27.
[15] Savings levels proposed in the ETIPs range from 0.4% to 1.2% in 2018, relative to 2013 distribution sales. (CEOC, In the Matter of Utility Energy Efficiency Programs Case 15-M-0252, September 28, 2015, page 9.)

techniques that are necessary to achieve the State's energy goals, pilot programs should be proposed that can be expanded if they prove to be effective.

The efficiency potential estimate should include best practices for utility energy efficiency program planning to address each market sector (e.g., new construction, retrofit, products and services, upstream buydowns), and to serve every key customer sector (e.g., low-income, residential, multi-family, small commercial and industrial, large commercial and industrial). Section IV provides more detail on how the DSIPs should provide information on energy efficiency potential.

Finally, the utilities' transitional energy efficiency targets and projected future potential must be viewed alongside NYSERDA's Clean Energy Fund ("CEF") efficiency targets. As CEOC described in its ETIP comments, because NYSERDA's existing CEF programs do not include sufficiently detailed budgets and targets, it is impossible to gauge whether the CEF, in combination with utility programs, will allow New York to meet its ambitious energy efficiency goals.[16] Stronger utility targets, a full projection of each utility's efficiency potential, and a more detailed description of NYSERDA's projected efficiency budgets and targets will ensure that New York meets its SEP goals and does not backslide on existing commitments.

Demand Response

The recent Commission docket on dynamic load management (DLM) was an important step forward for the development of demand response resources. CEOC generally supports the Commission's findings and recommendations from that docket, including the conclusions that (a) utilities should immediately begin implementing DLM as a "no regrets" strategy; (b) utilities should be allowed to recover DLM program costs through non-bypassable customer charges; (c) utilities should file annual DLM evaluation reports; (d) the value of DLM should be based on the full range of benefits identified through this REV proceeding; (e) DLM programs should be made broadly available to all customers willing and able to participate; and (f) that DLM programs "will ultimately be integrated into utility system planning."

[16] CEOC, In the Matter of Utility Energy Efficiency Programs Case 15-M-0252, September 28, 2015, p. 5.

There is no question that demand response should play a significant role in the development of the distribution system, and that its role should be clearly articulated in the utility DSIPs. CEOC recommends that Staff require each utility DSIP to include estimates of the potential for all cost-effective demand response resources. As with efficiency resources, it is important that these estimates include the entire universe of potential DR opportunities, based not only on all existing demand response program delivery and implementation practices, but also on all feasible additional practices that can be implemented by the utilities or market actors. Again, while some or all of the demand response potential identified in the DSIPs may ultimately be implemented by market participants, this estimate will help to calculate a benchmark for market solicitations and other market mechanisms, and as an indication of what type and amount of demand response the utility might need to implement to address gaps left by market participants.

The initial DSIPs should include all of the relevant demand response programs from the utilities' most recently approved DLM plans, as well as estimates of the potential for additional demand response programs that would be cost-effective in the context of REV. They should also include additional mechanisms for procuring and/or incenting cost-effective demand response. While new experimental demand response programs should not come at the cost of sacrificing investment in proven programs and techniques that are necessary to achieve the State's energy goals, pilot programs that can be expanded if they prove effective should be proposed.

Distributed Generation

Utilities do not currently provide programs to market and deliver distributed generation resources the way that they do with energy efficiency and demand response. We anticipate that the primary vehicle that the utilities will use to promote distributed generation resources will be through bill crediting mechanisms.[17]

Nonetheless, there may be opportunities for utilities to take additional steps to procure cost-effective distributed generation resources. In its Track One order, the Commission explicitly

[17] See CEOC, Initial Comments on REV Track Two, page 44; CEOC, Reply Comments on REV Track Two, pages 28-30.

identified several conditions under which a utility may own, lease, contract for, or otherwise sponsor distributed generation. In general, the utilities may be allowed to own or otherwise sponsor distributed generation resources when market participants are unable or unwilling to do so, particularly for low- or moderate-income customers.[18] Consequently, it will be important for each utility to include its best estimate of the potential for distributed generation resources in its DSIP. This will provide information that is not only useful for market participants, but also useful regarding actions that the utilities might take to foster or reinforce the market for distributed generation.

CEOC recommends that Staff require each utility DSIP to include estimates of the potential for all cost-effective distributed generation resources, including customer-sited combined heat and power, photovoltaics, wind, and hydro resources. The estimates should separately identify (a) all distributed generation resources that are cost-effective (as measured by the full value of DER, including all benefits that those resources provide to the bulk transmission system); (b) all distributed generation resources that are likely to be adopted by customers through the net energy metering practices; (c) any additional distributed generation resources that might be promoted by market participants; and (d) any additional distributed generation resources that could be implemented by the utility.

Energy Storage Technologies

In the near- to mid-term planning horizon, energy storage technologies could play a highly influential role in the development of DERs and the modernization of the distribution system. First, customer-sited energy storage might be an important complement to other DER options, such as customer-sited photovoltaics and demand response programs. Second, energy storage could be sited on the distribution system, owned and operated by the electric utility, as an alternative, low-cost way of addressing peak distribution and transmission needs.

CEOC recommends that Staff require each utility DSIP to include a detailed forecast of the cost-effective potential for energy storage. This forecast should account for both customer-

[18] New York Public Service Commission, *Order Adopting Regulatory Policy Framework and Implementation Plan*, Case 14-M-0101, February 26, 2015, pages 67-70.

sited and grid-sited storage options. Once more information is available regarding the opportunities and the cost-effectiveness of storage technologies, the Commission will have greater insight into what role the utilities might play in the development of this option, and the market mechanisms that might be used to effectively spur development of storage.

Plug-In Electric Vehicles

In the near- to mid-term planning horizon, plug-in electric vehicles (EVs) could play an important role in the development of the electricity grid. If customers with EVs are provided with proper rate structures that encourage efficient charging (and discharging) practices, EVs could be highly effective resources for mitigating peak demands and the cost of power at peak periods. On the other hand, if efficient rate structures are not implemented, EVs could exacerbate the growth in peak demand, increase the total cost of generating and delivering power, and undermine many of the Commission's goals. Therefore, it is important that the utility DSIPs provide the best information available regarding the likely development of EVs and their expected impact on system electricity demands.

CEOC recommends that Staff require that the utility DSIPs include detailed forecasts of the impact of future EVs on future energy and capacity demands, the expected locations of EV customers and charging stations on the electric grid, and the likely impact that EVs will have on generation, transmission, and distribution needs. These forecasts should be based on the current rate designs for customers who have EVs. These forecasts should also include scenarios with alternative rate designs that could be used to encourage more efficient types of electricity charging (and discharging). These alternative rate designs could then be considered in subsequent rate cases, as a means for utilities to both promote customer adoption of EVs and promote efficient EV charging practices.

The DSIPs should also include plans to help accelerate the deployment of electric vehicles. This should include proposals for market mechanisms to spur investment in plug-in electric vehicle charging infrastructure, and plans for direct utility investment in this infrastructure where market actors are likely unable to make such investments. Utility investment in infrastructure should target areas typically underserved by private, third-party charging service providers, including disadvantaged communities, multifamily buildings, workplaces, and DC

Fast Charging for public access, where needed, to build confidence in the range of pure battery EVs and to ensure broad access to low-cost electric transportation.

The DSIP EV charging infrastructure plans should include a robust load management component to help maximize benefits for the body of utility customers and should ensure that EV drivers who charge in a manner consistent with grid conditions realize fuel cost savings relative to driving on gasoline. CEOC recommends that where market actors are unable to serve electric vehicle infrastructure needs, utilities should be authorized to recover prudently incurred costs and appropriate returns on targeted EV infrastructure that advances the REV objectives of reducing carbon pollution, enhancing system efficiency, resilience and reliability, and improving customer abilities to manage total energy bills.

All Distributed Energy Resources Combined

Finally, the DSIPs should assess various ways that DERs can be combined in the most cost-effective manner. Given the potential multitude of permutations of DER deployments, it will be important for the utility to explore a variety of DER options and scenarios, in a fashion that is as transparent to the Commission and stakeholders as possible. A "black box" modeling approach, with a single proposed DER implementation plan, will not be sufficient for Commission review and approval of utility DSIPs. Additional suggestions for how to evaluate all DERs combined are provided in Section IV.[19]

D. The DSIP Should Clarify the Role of Utilities in Procuring Resources

The DSIP Guidance Document is clear that the DSIPs should be used to provide potential market participants with information needed to identify market opportunities and to plan for how they might participate in the market. However, the Guidance Document provides little direction regarding the role that the utility should play with regard to facilitating market-based DERs, as well as the role that the Commission should play in overseeing the market participants' activities to implement DERs.

[19] See also, Natural Resources Defense Council, *Comments on Staff's Benefit-Cost Analysis White Paper*, August 21, 2015, pages 7-9.

CEOC believes that it is very important for the Commission to provide much more concrete guidance regarding the specific actions that the utilities should undertake to support the competitive markets for DER. In many cases, particularly in the early, transition years, the utilities may need to solicit, evaluate, and select proposals from market participants, and to ultimately procure DERs from market participants on behalf of their customers. Conversely, customers might be exposed to markets that are not sufficiently competitive or that do not include adequate consumer protections.

CEOC recommends that in the near term, the Commission should require utilities to use competitive bidding processes to procure energy efficiency and demand response resources from market participants. The utilities should issue requests for proposals (RFPs) to solicit, evaluate, and select these market-based DER options. An RFP-based approach has been used by electric utilities to procure resources for many years in different circumstances, and provides a structured, transparent process for providing all relevant market participants with fair access to the utility procurement process. RFP-based competitive bidding processes also provide the Commission and stakeholders with some degree of oversight regarding the solicitation, evaluation, selection, and procurement of market-based DERs.

We recommend that the Commission require each DSIP to include a description of how the utility intends to procure DERs using an RFP-based competitive procurement process. The utility estimates of the cost-effective potential for DERs (see above) should be used to set the benchmark for the quantity of DERs the utility is seeking to procure. If the competitive market offers opportunities to reach or exceed these benchmarks with cost-effective DERs, then the utility should procure those resources from the competitive market. Conversely, if there are cost-effective DERs that the competitive market does not bid on, then the utility should implement those resources using its own, ratepayer-funded initiatives.

The amount of cost-effective DER identified in each utility DSIP will inform the Commission regarding the amount of such resources that should be procured from the market, and allow the Commission to evaluate the effectiveness of market mechanisms at procuring DER once those mechanisms are employed. Ideally, there will be sufficient competition and

innovation from market participants to deliver the DERs at a lower cost than that offered by the utility.

We recommend that the utilities be allowed the flexibility to utilize separate bidding processes for separate types of DERs, or a combined bidding process for all types of DERs together. However, the utilities may need to use separate RFPs for separate customer types, to ensure that all customer types are offered DER and that market participants do not over-charge for serving those customers that are the easiest and lowest-cost to serve.

CEOC also recommends that the Initial DSIPs be used to develop the information necessary to prepare DER RFPs, and the Supplemental DSIP be used to actually describe the general process by which the DERs will be procured. The Initial DSIPs will contain each utility's best estimates of the amounts and costs of different types of DERs that should be available in its service territory. The Supplemental DSIP will be used to combine all of that utility-specific DER information, and to develop RFPs and other market mechanisms that are generally consistent on a statewide basis where necessary. For example, with regard to the terms and conditions of the bidding process, the Supplemental DSIP could include the timing of the bids, the information required in the bids, the definitions of what resources qualify for the bids, the criteria used to select winning bids, etc. This approach will provide competitive market participants with a bidding process that is sufficiently detailed at the utility level, but is also generally consistent across utilities.

We also recommend that prior to beginning the competitive bidding process, each utility file with the Commission a "DER Procurement Plan," which would provide the utility's up-to-date best estimate of the amounts and costs of DER available in its service territory as identified in its Initial DSIP, as well as all of the relevant information pertaining to the competitive bidding process, including the proposed solicitations, a description of the evaluation process, and the specific criteria that will be used to select the winning bidders. These DER Procurement Plans will provide significantly greater detail regarding the proposed DER procurements than the Supplemental DSIP.

CEOC recommends that the Commission explicitly identify what role it will play in overseeing the competitive bidding processes and other mechanisms for spurring DER

development, as well as the practices it will use to allow stakeholder input to those processes. In general, the Commission and stakeholders should be engaged in at least two key points in the competitive bidding process: first, in reviewing the utilities' DER Procurement Plans before the competitive bidding process is initiated; and second, in reviewing the results of the RFPs once they have been conducted. As discussed above, depending on the outcome of *Hughes v. PPL EnergyPlus, LLC,* currently pending before the Supreme Court, the Commission must take care not to exercise such a degree of authority over the procurement process so as to risk its authority being preempted. It should be careful not to design or approve any market mechanisms that would put the Commission in the role of approving a wholesale rate as just and reasonable.

Additional detail about how the competitive bidding process should fit within the overall regulatory review process is set forth in Section III.

Finally, CEOC recommends that the DSIPs include proposals for alternative mechanisms to encourage market development of DERs. For energy efficiency and demand response resources, these proposals should be compared to the RFP-based competitive bidding process that we recommend above. Those proposals that can be demonstrated to be more expeditious, more competitive, or otherwise more effective than an RFP-based process should be reviewed and approved by the Commission as part of the Initial DSIP and included in the Supplemental DSIPs for implementation. The Commission should also encourage the utilities to implement pilot programs where the success of a program is less certain but the program offers high potential for spurring development.

E. The DSIP Should Include a System-Wide Analysis to Help Focus on Top Priorities

CEOC agrees with the recommendation in the DSIP Guidance Document that in their initial DSIPs, utilities should focus their analysis on those distribution circuits that are most in need of attention and therefore are likely to offer the greatest opportunity for DERs.[20]

[20] Staff DSIP Guidance Document, pages 14-15.

In addition, we believe that there is another, more important, way for utilities to focus on top priorities and to make the DSIP process more manageable. CEOC recommends that the Commission require each utility to start with a system-wide analysis of DER opportunities within their service territories before moving to a circuit-level analysis. The system-wide analysis should utilize system average estimates for avoided costs, including system average avoided energy, capacity, transmission, and distribution costs. This system-wide analysis will provide a critical foundation for any circuit-level analyses that follow.

There are two reasons why a system-wide analysis of DER opportunities is so important. First, New York already has a large potential for cost-effective DERs, even without accounting for the specific value of avoided distribution costs at any one circuit. Based on our extensive involvement in the ETIP process and in energy efficiency planning in New York in general, as well as our knowledge of the magnitude of cost-effective energy efficiency resources that have been developed in similar states, there is no question that New York could implement significantly more cost-effective energy efficiency resources than currently proposed – even without considering the value of avoided distribution costs.[21] The same point is true with regard to demand response resources, which have just begun to be investigated and developed in New York. It would not be appropriate for the utilities to use considerable time and resources to investigate complex circuit-specific DER values, impacts, and opportunities, while ignoring the vast opportunity for implementing DERs based upon system-wide impacts and benefits. Such an approach would clearly result in letting "the perfect be the enemy of the good."

Second, and equally important, a system-wide analysis of DER opportunities is necessary to promote equity across customers. The Commission, CEOC, and many other stakeholders have repeatedly highlighted the importance of ensuring that electricity customers, especially but not exclusively low-income customers, are able to experience reduced costs and improved services as a result of REV innovations. The best way to ensure this is for as many customers as possible to implement energy efficiency, demand response, distributed generation, or other forms of

[21]Up to 45% of the forecasted electricity usage in New York could be avoided through cost-effective energy efficiency measures. *See*, Energy Efficiency and Renewable Energy Potential Study of New York State, April 2014, p. 7, *available at* http://www.nyserda.ny.gov/-/media/Files/EDPPP/Energy-Prices/Energy-Statistics/14-19-EE-RE-Potential-Study-Summary.pdf.

DERs in their own homes and businesses. A system-wide analysis will enable the Commission to ensure that DERs are made available, and are eventually adopted, across all customer types throughout each utility's service territory. If utilities conduct detailed circuit-specific DER analyses without conducting a system-wide analysis, then there is a significant risk that some sections of a service territory will receive too much attention and too many DERs, relative to other sections that receive too little attention despite the existence of cost-effective DERs.

In sum, CEOC recommends that the utilities' DSIPs be guided by the highest priorities of the Commission and other stakeholders in the REV process: the immediate implementation of the vast quantity of DERs that are already available to most electricity customers throughout each service territory in order to reduce electricity system costs, provide benefits to as many customers as possible, and to reduce carbon emissions. A system-wide DER analysis will help utilities maintain focus on these key priorities.

III. REGULATORY PROCESS

A. Stakeholder Input

CEOC appreciates Staff's recognition that meaningful stakeholder engagement and input will be critical to the success of the DSIP process.[22] We offer several recommendations at this time to help make stakeholder input both effective and expeditious. Section III.F provides more detail on how the stakeholder input would be incorporated into the DSIP process.

We agree with Staff that technical conferences should be used as a means of exchanging ideas, proposals, and recommendations among utilities, the Commission, and stakeholders. CEOC recommends that the Commission require utilities to host technical conferences at the following times in the DSIP process, at a minimum: (a) during the development of the Initial DSIPs; (b) during the development of the Supplemental DSIP; and (c) during the development of the DER Procurement Plans that include the RFPs and other market mechanisms that will be used to procure resources or otherwise spur investments from market participants. At each of these points in time the utilities should hold a set of conferences, to be able to address some key

[22] Staff DSIP Guidance Document, pages 5-6.

issues in detail. We recommend that the utilities hold a separate, one-day technical conference covering at least the following topics: (i) energy efficiency potential; (ii) demand response potential; (iii) distributed generation potential; (iv) other technology potential (including energy storage and electric vehicles); (v) avoided costs for generation, transmission, and distribution; and (vi) processes and practices for soliciting resources from market participants.

CEOC also recommends that the Commission allow stakeholders the opportunity to file initial and reply comments at key stages in the DSIP process. We recommend that the Commission allow for initial and reply comments at the following stages in the planning process, at a minimum: (a) after the Initial DSIPs are filed with the Commission for review; (b) after the Supplemental DSIP is filed with the Commission for review; and (c) after the utilities file their proposed DER Procurement Plans with the Commission for review.

We also recommend that the Commission identify several priority topic areas on which it is specifically seeking input. For example, with regard to the Initial DSIPs, the Commission could identify the following priority topics: cost and potential of energy efficiency resources; cost and potential of demand response resources; cost and potential of distributed generation resources; estimates of avoided costs; overall results of the system-wide analysis; estimates of circuit-specific DER needs, proposals for specific market mechanisms to spur various forms of DER, proposals to help facilitate the New York Independent System Operator's (NYISO's) ability to account for DER in its own system planning process, and proposals to allow any DER identified in that planning process to be input into the DSIPs in a non-duplicative manner. With regard to the Supplemental DSIP, the Commission could identify the following priority topics: terms and conditions of the market procurement RFPs and other specific market mechanisms; criteria for evaluating DER proposals; market procurement process timelines; consistency of RFPs and other procurement practices across the state; and coordination with NYISO. With regard to the utilities' proposed DER Procurement Plans, the Commission could identify the following priority topic areas: breadth of resources proposed; breadth of competition across market participants; and any other issues pertaining to the reasonableness of the competitive process.

B. Commission Review and Approval

The DSIP Guidance Document states that each utility's Initial DSIP and the joint Supplement DSIP should be filed with the Commission and made publicly available on the Department's website. CEOC recommends that the Commission provide significantly more guidance regarding the role that the Commission should play in reviewing, approving, modifying, and possibly rejecting utility proposals in the DSIP process.

We recommend that the Commission review and make findings on the DSIPs at three key points in the process, at a minimum. First, the Commission should review the Initial DSIPs filed by each utility. The Commission should analyze the Initial DSIPs in light of the initial and reply comments submitted by all stakeholders. The Commission should issue its findings on the Initial DSIPs prior to the date when the utilities file the joint Supplemental DSIP, because the Commission findings are likely to be very influential in shaping the Supplemental DSIP.

Second, the Commission should review the Supplemental DSIP jointly filed by all the utilities. Again, the Commission should analyze the Supplemental DSIP in light of the initial and reply comments submitted by all stakeholders. The Commission should issue its findings on the Supplemental DSIP prior to the date when the utilities file their DER Procurement Plans, because the Commission findings are likely to be very influential in finalizing those plans.

Third, the Commission should review the DER Procurement Plans filed by all the utilities combined prior to awards being granted under the RFPs. Again, the Commission should analyze these plans in light of the initial and reply comments submitted by all stakeholders. The utilities should not execute contracts for DER resources until the Commission has issued its finding regarding the DER Procurement Plans.

C. Evaluation Criteria

CEOC encourages Staff to make clear how the DSIPs should be evaluated. To that end, CEOC sets forth recommendations for a framework, principles, and criteria for considering the merits of the DSIPs. At a minimum, principles should be based on stakeholder engagement, evaluation of resources and resource portfolios, scenario analysis, and development of action

plans. In future planning cycles, the principles should also include follow-through on previous DSIPs.

Compliance with each of these principles would be evaluated based on a number of criteria specific to each principle. Recommended principles and associated criteria are summarized below. Compliance with these DSIP criteria could be used to establish an EIM,[23] which would be assessed by an independent evaluator based on documentation in the draft and final DSIPs.

Stakeholder Engagement: The process should be transparent and allow for meaningful stakeholder involvement throughout the development of the DSIPs. Furthermore, the utility should document stakeholder feedback and incorporate recommendations as appropriate. Criteria should include consideration of stakeholder input when establishing each of the following:

- DER and conventional transmission and distribution options, including market mechanisms to be used to procure and incent development of DER
- Assumptions, risks, and constraints
- Screening of options
- Range of scenarios
- Criteria for ranking of resource plans and the recommendation of a final resource plan

Evaluation of Resources: The DSIP planning process should investigate a wide array of existing and emerging DER options, including energy efficiency, demand response, distributed generation, storage technologies, electric vehicle-related technologies, and customer-facing smart grid options, as well as transmission and distribution opportunities, including utility-side smart grid options. Criteria for evaluation the treatment of these resources in DSIPs should include the following:

[23] Should the Commission choose to implement an EIM for DSIP adequacy, overlap and interaction with other EIMs should be considered.

- Were appropriate modeling tools used?
- Were existing systems and conditions adequately characterized?
- Was an adequate range of new resources considered?
- Were new resource options analyzed on a consistent and comparable basis, using reasonable estimates of the benefits and costs? Were at least all cost-effective resources identified and quantified, consistent with the BCA framework? Were a full array of means of procuring resources analyzed, taking into account all feasible utility programs and all additional feasible potential DER from market actors?
- Was adequate analysis performed to determine the risks and constraints of new resources?
- Did the analysis produce credible and reasonable results?

Scenario Analysis and Resource Portfolios: The planning process should include a transparent approach to identifying a reasonable set of scenarios and resource portfolios to analyze. From this set, the resource portfolios should be transparently prioritized or ranked based on previously identified key criteria consistent with state energy goals.

- Was there evaluation of an appropriate number of resource portfolios to ensure results of the process are meaningful?
- Was an appropriate range of scenarios examined (e.g., appropriate incorporation of various uncertainties; were scenarios extremes, or did they resemble what might actually occur)?
- Were the criteria for determining the best resource portfolio clearly articulated at the outset?
- Was the weighting and ranking to determine the best resource portfolios transparent and did it incorporate the principles and objectives previously identified?

- Was sufficient consideration given to whether or not resource portfolios are able to meet state energy policy goals?
- Were measures and strategies identified to address limitations and constraints that may impact the utility's ability to achieve the state energy policy goals?

Action Plan: The planning process should include an action plan that enables the utility to translate the results of its analyses into the development of actual resources.

- Does the Action Plan articulate next steps and a timeline for stimulating development of resources?
- Does the Action Plan identify and address barriers to developing the identified resources?

D. Initial DSIPs, the Supplemental DSIP, and DER Procurement Plans

Staff's DSIP Guidance Proposal suggests that there be two parts to the first round of DSIPs: utility-specific DSIPs (Initial DSIPs), and a DSIP that would be jointly prepared and filed by the utilities (Supplemental DSIP).[24] The Initial DSIPs would address each utility's system and denote changes that can support REV policies in the short term. The Supplemental DSIP would support retail markets that coordinate significant DER investment. Also, the Supplemental DSIP would specify the tools, processes, and protocols that are best developed jointly or using common standards, to support the development of a grid that can dynamically manage distribution resources.[25] Although the development of the Supplemental and Initial DSIPs would occur simultaneously, [26] the Supplemental DSIP would be filed September 1, 2016, two months after the Initial DSIPs are due on June 30, 2016.[27] Finally, CEOC recommends that prior to initiating the competitive bidding process, each utility should file with the Commission a DER Procurement Plan that would include the estimated DER opportunities within each utility's service territory, as identified in the Initial DSIP, as well as all of the information relevant to the

[24] DSIP Guidance, page 4.
[25] DSIP Guidance, page 4-5.
[26] DSIP Guidance, page 28.
[27] DSIP Guidance, page 4-5.

bidding process, including the proposed solicitations and a description of the evaluation and selection criteria.

The Initial DSIPs should provide assumptions, description, and analysis of detailed utility-specific information and resource potential. This includes all of the information that Staff recommended for inclusion in the Initial DSIPs, but also includes the results of full assessments of DER potential. For energy efficiency, this would incorporate the results of the potential studies recommended by CEOC in its comments on the ETIPs,[28] and focus on the increment of cost-effective potential that is not captured in the utilities' current plans. Likewise, the Initial DSIPs should include an analysis of demand response potential and plans for targeting the demand response that is not projected to be captured through existing and currently planned utility programs. For distributed generation, each utility should include its best estimate of the potential for distributed generation resources in its Initial DSIP, according to the categories identified in Section II C, as useful information for market participants but also as useful information regarding actions that the utilities might take to foster or reinforce the market for distributed generation—particularly with respect to difficult to reach customers, market segments, services, and technologies. The Initial DSIPs should also provide cost and energy forecasts and plans for energy storage and electric vehicles. Further, the Initial DSIPs should include proposals for additional mechanisms beyond those baseline mechanisms laid out by Staff in its final guidance document (such as RFPs), that can be used to procure or otherwise incent each of these types of DER. Throughout the stakeholder process (including at the technical conferences and through comments once the Initial DSIPs are filed) other stakeholders and Staff should provide additional input regarding what mechanisms should be used to procure or otherwise incent or implement DERs. Staff should consider whether NYSERDA or another third-party entity should have a formal role in this process.

The Supplemental DSIP should be used for statewide market support and coordination, as envisioned by Staff. Also, the Supplemental DSIP should be used to combine each utility's best estimates of the amounts and costs of different types of DERs that should be available in its service territory. The Supplemental DSIP should set forth a means of coordinating procurement

[28] In the Matter of Utility Energy Efficiency Programs Case 15-M-0252, September 28, 2015, at 12.

or other incentive mechanisms between utilities for those DERs that are most efficiently procured jointly. This coordinated procurement will allow for the development of RFPs and other mechanisms that are generally consistent on a statewide basis. For RFPs, such consistency should be coordinated with regard to the terms and conditions of the bidding process (e.g., the timing of the bids, the information required in the bids, the definitions of what resources qualify for the bids, the criteria used to select winning bids, etc.). This approach will facilitate participation by competitive market participants by reducing the administrative burden associated with RFPs that vary widely across utilities. Procurements would need to be coordinated with NYSERDA, particularly for emerging distributed generation technologies.

The DSIP Guidance indicates a number of areas that should be covered by the Supplemental DSIP, including the stakeholder process, distribution system planning, distribution grid operations, pricing, interaction and roles of DSPs vis a vis NYISO, data access, market participant rules, settlement procedures, procurement approaches, and joint-system planning and operations progress. CEOC agrees with Staff's suggestions, but maintains that more description should be provided at least with respect to settlement procedures. In addition, CEOC recommends that the Supplemental DSIP include plans for joint procurement of resources. This information should include not only the type of procurement planned, but also the proposed terms and conditions, including:

- A coordinated procurement timeline, as described above;
- Monitoring;
- Bidder qualifications;
- Information required in the bids;
- Definitions of resources that qualify; and
- Criteria and associated weights used to select winning bids.

E. Earning Impact Mechanisms

The DSIP Guidance is not clear about how or when Earning Impact Mechanisms ("EIMs") would be developed in relation to the DSIP process. The only mention of EIMs in the

DSIP Guidance is that "a utility's DSIP should align with the eventual Earning Impact Mechanisms and their metrics."[29] CEOC believes that more details should be provided about these processes and how they interact, as both the EIMs and the DSIPs will serve critical functions in moving the state toward achieving the goals of the REV process.

CEOC's comments in the Track Two proceeding recommended a set of EIMs, many of which are best determined with an eye toward achieving cost effective resource potential: e.g., energy efficiency demand and energy savings by program, demand response demand savings by program, distributed generation by resource type.[30] Because DSIPs should include consideration of all cost-effective resource potential (as discussed herein), they provide the best forum for developing EIM targets.

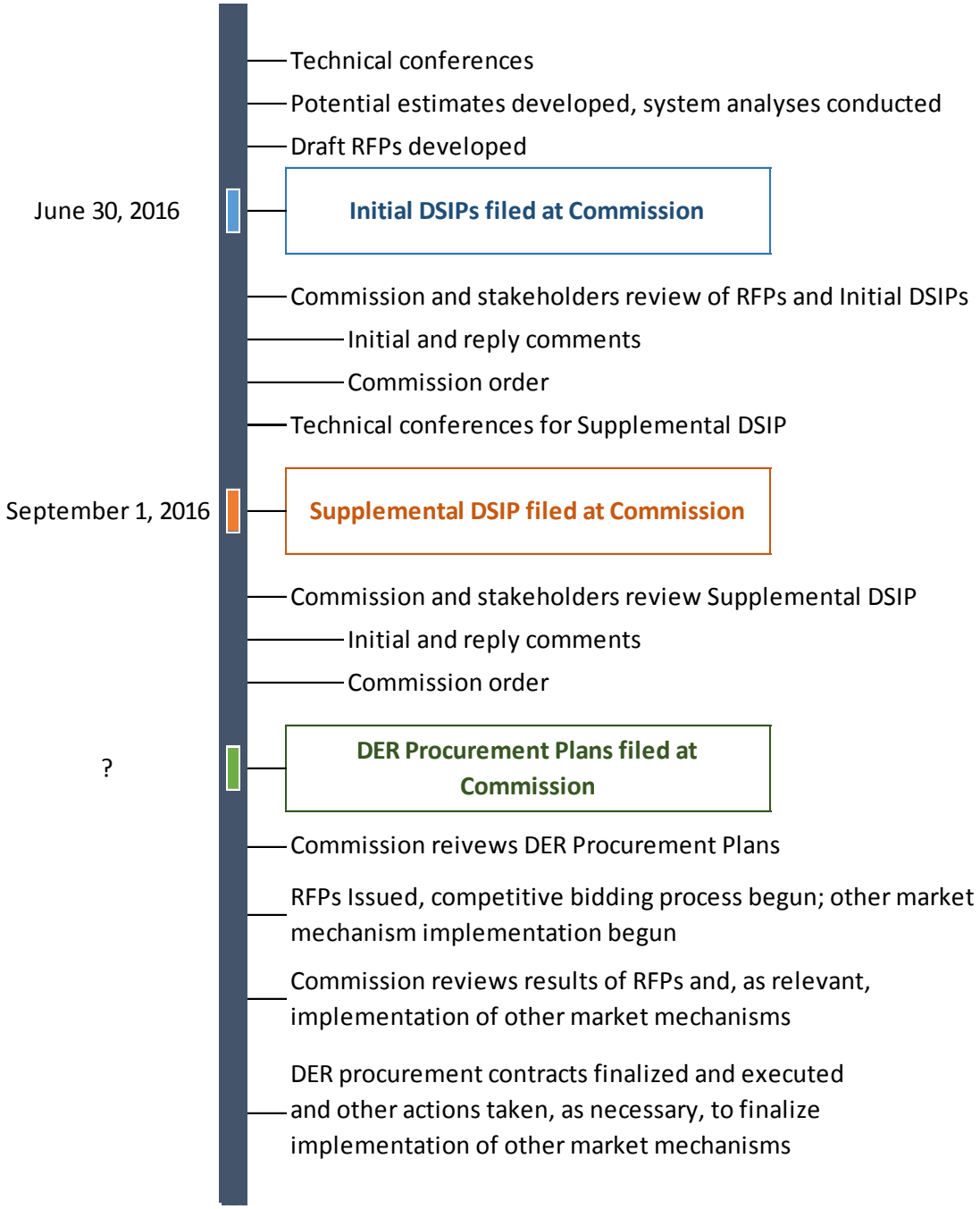
CEOC recommends that the EIMs cover all cost-effective energy efficiency, demand response, distributed generation, energy storage, electric vehicle technology and other DER separately from each other, regardless of whether these resources are to be captured by utility-based programs or by the market. Setting EIMs in this way would require consideration of all resource potential, including potential associated with those customers and sectors that are difficult to serve and with those services and technologies that are difficult to implement. Furthermore, CEOC believes that there will be many DER opportunities that market participants are not likely to implement in the short- to medium-term. Utilities should have an obligation to implement all cost-effective DER that is not implemented by market participants or customers themselves.

Utilities should propose EIM targets in the Initial DSIPs. Final EIM targets could be set in the Supplemental DSIP or, alternately, in final versions of the Initial DSIPs. Financial incentives associated with these EIMs could be set in rate cases, outside of the DSIP process. Developing EIM incentives in the context of rate cases will allow consideration of all utility revenue streams simultaneously and a holistic view of bill impacts.

[29] DSIP Guidance, p. 2.
[30] CEOC Track Two White Paper Comments, p. 28-29.

F. Timeline

Below we summarize our proposed timeline.



IV. DISTRIBUTION SYSTEM PLANNING

It is widely recognized that the value of DER to the distribution grid is particularly great when DER can help to avoid investments in traditional distribution infrastructure, as exemplified by the Brooklyn-Queens Demand Management (BQDM) effort. However, DER can also be cost-effective even where a distribution system investment is not imminent. A key role of the DSIPs should be to convey this "everyday" value of DER to the markets in order to stimulate such investments. Further, DER should be implemented wherever it is cost-effective, regardless of whether it is supplied by the utility or the market. For this reason, the DSIPs should identify a plan for utility implementation of cost-effective DERs where markets fail to do so. They should also describe measures (including the development of procurement programs and market mechanisms) that can be taken to ensure that all cost-effective DER are procured.

A. System-Wide Cost-Effectiveness Assessments

To identify DER investments that may be generally cost-effective, we recommend that the utilities' DSIPs provide system-wide, high-level resource supply curves and avoided cost forecasts, as discussed below. Subsequently, utilities should undertake a more detailed analysis on priority areas of the distribution system.

Resource Supply Curves

First, in order for the utilities to effectively operate as backstops to the market, a transparent, high-level assessment must first be made of the overall potential quantity and cost of each type of DER available. As discussed above, information regarding DER potential will serve two purposes: it will serve to help the Commission determine a benchmark against which bids from the market can be evaluated,[31] and it will help identify opportunities for the utility to provide cost-effective DER where the market does not.

We recommend that each utility provide a high-level assessment of DER potential and costs, by technology type, and by customer sector where relevant. This information should then

[31] Note that in developing a benchmark, the Commission should also look to input from Staff and other stakeholders on the utilities' assessments of DER potential.

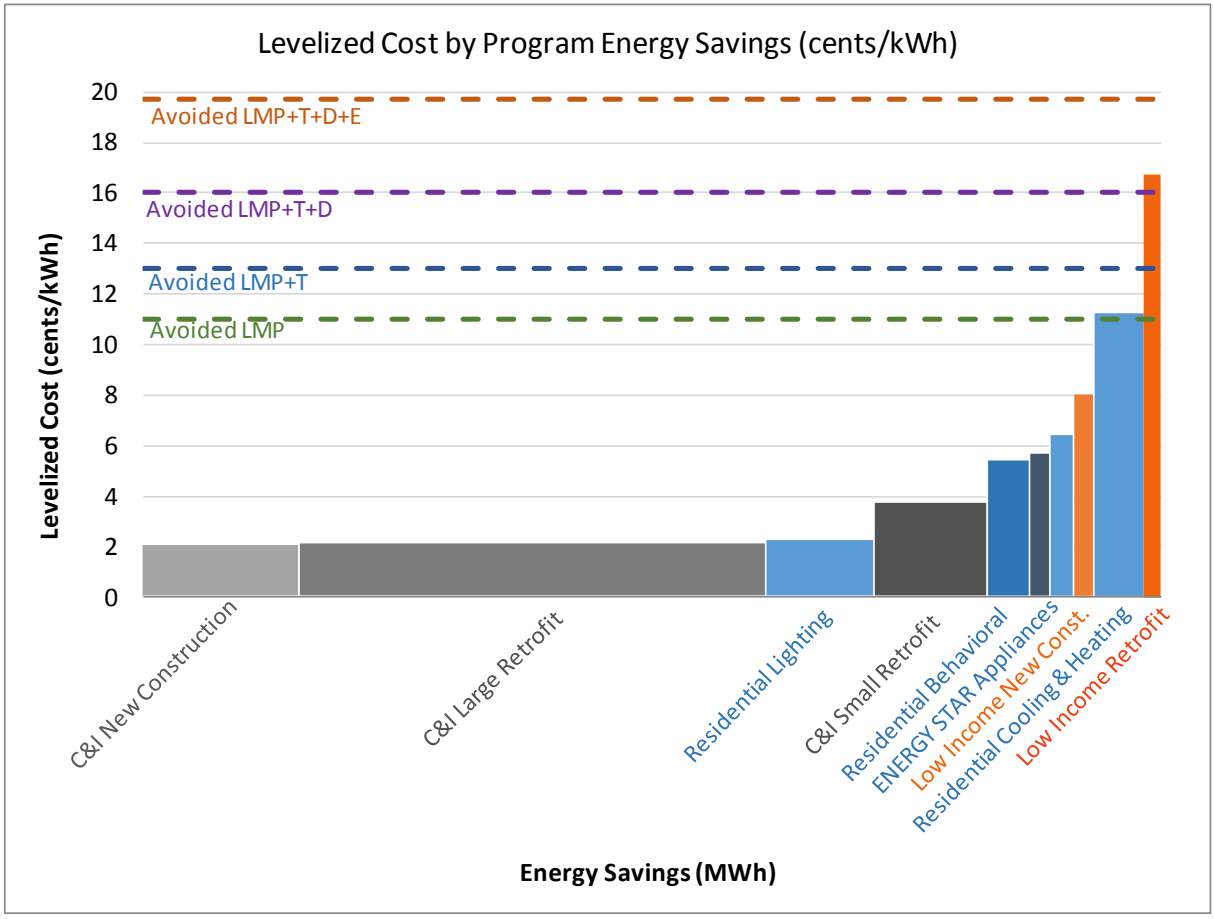
be presented as a "supply curve" for each type of DER, indicating (a) the levelized costs of different types of each resource (in $/MW and $/MWh), and (b) an estimate of the quantity available in the utility's service territory (in MW and MWh). Once supply curves are developed for each resource type, they should be aggregated, where possible, to form a combined supply curve that also accounts for the interaction effects among certain resources. These supply curves should be combined with estimates of the value of DER (LMP+D), and assess how this value may decline as DER penetration increases.

An illustrative example of a supply curve for a typical set of ratepayer-funded energy efficiency programs is presented in Figure 1.[32] The figure also includes illustrative examples of the levelized benefits (avoided costs) of energy efficiency programs. This type of information can be extremely useful for utilities, the Commission, stakeholders, and market participants to understand the likely costs and the potential for different types of DERs. For example:

- Utilities may want to issue RFPs for energy efficiency resources for separate customer classes, because it may not be appropriate for low-income program bids to compete directly with commercial and industrial program bids.
- There is likely to be a large amount of cost-effective energy efficiency available in New York, even without including the avoided distribution costs or the avoided environmental externality costs. As described in Section II.E, this is an important point that can help inform the priorities of the DSIP. There is no need to wait for a full finalized assessment of the value of LMP+D to understand that energy efficiency programs should be significantly expanded using proven market mechanisms.

[32] Chart based on recent energy efficiency data for an electric utility in New England.

Figure 1. Illustrative Supply Curve of Typical Energy Efficiency Programs



CEOC understands that the initial supply curves may require some approximations, particularly for new and emerging DER technologies, but we expect that these estimates will be refined over time as prices are revealed in the market and greater experience develops.

DER Value Forecasts

Second, we recommend that the utilities facilitate the dispersion of information regarding the future value of DER through the provision of value forecasts. The value of DER will change over time according to many factors, including the avoided wholesale electricity costs (largely based on natural gas prices) and the value of environmental benefits provided by DER (including, e.g., the value of avoided CO_2 emissions, which should be expected to fluctuate). Developing forecasts of how the value of such benefits may change over time will help communicate price signals to the market and facilitate efficient long-term investments in DER.

While such forecasts will by no means provide a guarantee of a resource's value, they will reduce information asymmetry and risk for market actors, thereby supporting the DER markets. To ensure the quality of the information provided, methods for developing these forecasts should be vetted beforehand through an open process.

B. Resource Planning for Priority Areas

According to Staff's proposal, each DSIP would identify specific areas where DER could potentially help to alleviate a foreseeable infrastructure upgrade need. Each utility would be required to list specific infrastructure projects where "DER solutions should be compared as potential alternatives to traditional grid infrastructure under varying scenarios of DER integration," and to identify the resource requirements needed to avoid the infrastructure project.[33]

CEOC fully supports identification of opportunities for DER to avoid distribution infrastructure upgrades, as described above. This identification of the potential for DER to alleviate infrastructure needs should include areas where DER could defer or reduce the amount of infrastructure needed, in addition to those areas where DER could fully replace the infrastructure. In addition, it should not be limited to distribution infrastructure; each DSIP should also identify areas where transmission-level infrastructure could be deferred or supplemented. For all of these priority areas, the utility's analysis should extend beyond identifying the need. As the backstop DER providers, the utilities should also analyze whether DER options would likely be cost-effective and identify a straw proposal for DER procurement to cost-effectively meet the identified need. This straw proposal would then be used by the Commission, in conjunction with input provided by Staff and other stakeholders, in assessing a benchmark against which procurements from the market would be measured, and the proposal could be implemented in whole or in part where the market does not provide cost-effective DERs.

[33] Staff Proposal, page 15.

In order to develop an optimal DER investment straw proposal, the utilities should conduct a resource analysis that considers multiple DER resource portfolios. These resource portfolios should be evaluated under a range of plausible future scenarios and sensitivities in order to ensure robust results.

C. Coordination with NYISO

Staff's proposed DSIP Guidance emphasizes that the DSIPs should coordinate with NYISO so as to ensure that distribution-level and transmission-level planning processes are compatible with one another. In finalizing its Guidance, Staff should build on these principles and do more to explain specific ways in which the DSIP process will be structured and implemented so as to facilitate coordination.

Staff should work with NYISO to ensure that the data submitted by utilities through the DSIP process is presented in a manner that is also usable in all phases of NYISO's planning process, including the Local Transmission Planning Process (LTPP), the Reliability Needs Assessment (RNA), Comprehensive Reliability Plan (CRP), Congestion Assessment and Resource Integration Study (CARIS) and the Public Policy Transmission Planning Process (PPTPP). The DSIP process should be structured so as to make it as easy as possible for NYISO to reflect the amount of existing DER and amounts projected to be developed in its load forecasts and reliability assessments.

Unfortunately, it appears that next year's DSIPs may be developed along a timeline that will make it difficult for the information to be used in a timely manner in the NYISO planning process. The Supplemental DSIP is not scheduled to be submitted until September 2016. If NYISO releases its RNA on a similar schedule to that it has used in past years, then the RNA will also be released in September 2016, meaning that the Supplemental DSIP (and stakeholders' subsequent comments on the DSIP and the Commission's evaluation of it) will likely not be available for use as a direct input into the 2016 RNA. While it may not be feasible to require earlier submission of the DSIPs given the current status of development of the DSIP process, Staff should at minimum explore ways of structuring the process for this planning cycle such that utilities are required to develop some initial data and information regarding DER in a timely enough manner for use by NYISO for purposes of the 2016 RNA. In the future, the Commission

should initiate a technical conference to investigate scheduling coordination between the NYISO planning process and the DSIP process, and should consider altering the DSIP schedule such that the data and other information developed through the DSIPs and the programs proposed therein can be seamlessly taken into account in the NYISO process.

Each Initial DSIP and the Supplemental DSIP should also be required to explain how coordination with NYISO will be facilitated. The DSIPs should be required to set forth a process by which any DERs that are proposed and implemented pursuant to NYISO-level planning processes will be incorporated into distribution-level planning. In addition, DSIPs should explain how programs will be planned and operated to avoid double counting resources in retail and wholesale markets, while at the same time taking into account all of the benefits of DER. Where DER may offer both distribution-level and transmission-level services (e.g. DERs might participate in NYISO's wholesale ancillary services markets), DSIPs should set forth a process that will operationally enable participation in both markets.

V. DISTRIBUTION GRID OPERATIONS

The DSIP Guidance recommends that information on system operations, volt/VAR optimization, and the interconnection process should be provided in the Initial DSIP. CEOC concurs with Staff's recommendations.

VI. DISTRIBUTION SYSTEM ADMINISTRATION

Data Access

CEOC concurs that "data collection and sharing is imperative to achieve the objectives of REV,"[34] and supports the general recommendations of Staff regarding the information to be provided in utilities' initial and supplemental DSIPs. CEOC offers the following suggestions regarding the provision of data sharing information:

- When describing the process for making system data available to stakeholders, the utilities should identify:

[34] Staff proposal, page 17

    - How frequently such data can be made available;
    - The time required between gathering raw data and making it available to stakeholders (i.e., how up-to-date the data provided will be);
- When addressing how vendors can obtain customer data, the utilities should identify:
    - What specific actions are required by customers to provide authorization to share data, and whether such a process can be streamlined or otherwise improved to make authorization as effortless as possible;
    - How frequently customer data can be made available;
    - The time required between gathering raw data and making it available to vendors (i.e., how up-to-date the data provided will be);

Further, CEOC recommends that the utilities work collaboratively with third-party vendors to determine the data and data formats that would be most useful, and to reduce any inefficiencies in data access. Stakeholders should also have an opportunity to formally comment on the utilities' draft data sharing proposals to ensure that vendors' have adequate opportunity to offer recommendations.

Advanced Metering Functionality and Communication Infrastructure

CEOC acknowledges that advanced metering infrastructure (AMI) will help to achieve REV goals through enabling more sophisticated rate designs, facilitating third-party vendor service provision, and providing customers with greater control over their energy usage. At the same time, the benefits of AMI must be weighed against affordability. For this reason, utility proposals for AMI deployment should be supported by a thorough benefit-cost analysis that demonstrates the cost-effectiveness of the project.

Thank you.

[Signatures to follow.]

Respectfully submitted,

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