



October 24, 2014

Hon. Kathleen H. Burgess  
Secretary to the Commission  
New York State Public Service Commission  
Three Empire State Plaza  
Albany, NY 12223

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

Case 14-M-0094 – Proceeding on Motion of the Commission to Consider a Clean Energy Fund

Hon. Secretary Burgess,

The Northeast Clean Heat and Power Initiative (“NECHPI”) hereby submits for filing the following Reply Comments to Active Party comments filed on September 22, 2014 for the above referenced proceeding.

These comments are primarily authored by Henrietta de Veer, Ph.D., of Adaptive Energy Strategies LLC and Co-Chair of NECHPI’s Policy/Regulatory Committee and incorporate the inputs and review of Ruben Brown, President of The E Cubed Company LLC and Co-Chair of the Policy/Regulatory Committee and the entire Board of Directors representing more than fifteen major companies and organizations in the Combined Heat and Power (“CHP”) industry. Various members of NECHPI, including Ms. De Veer, Ruben Brown, Matt Cinadr (Senior Consultant to E Cubed), and Herbert Dwyer (President, ASI Energy, Inc.) actively participated in many of the committees in Track I of the proceedings and will continue to be directly involved in Track II initiatives and activities.

Respectfully submitted,

\_\_\_\_/s/\_\_\_\_

Timothy Banach, Executive Director  
Northeast Clean Heat and Power Initiative (NECHPI)

cc: Active Parties in Case 14-M-0101  
Administrative Law Judge Eleanor Stein  
Administrative Law Judge Julia Smead Bielawski  
Ruben S. Brown  
Henrietta de Veer  
Matt Cinadr  
Herb Dwyer  
David Ahrens  
David Yanni

**STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION**

---

**Proceeding on Motion of the Commission in Regard  
To Reforming the Energy Vision**

**Case 14-M-0101**

**Proceeding on Motion of the Commission to Consider  
a Clean Energy Fund**

**Case 14-M-0094**

---

**Northeast Clean Heat and Power Initiative**

**Dated: October 24, 2014**

**Table of Contents**

NECHPI KEY OBSERVATIONS ON 9/22/2014 COMMENTS ..... 1

OVERVIEW ..... 2

SUMMARY OF NECHPI APPROACH TO REV PROCEEDINGS ..... 6

    Thermal Energy and CHP, Missing Entirely from the REV Proceedings, Should be Considered Key Distributed Resources Used for Meeting the State’s Energy Efficiency and GHG Emissions-Reduction Goals ..... 6

        CHP Technical Potential in the United States and New York..... 8

        State RPS and EEPS Policies ..... 8

        New York State RPS and EEPS..... 9

        CHP as an Energy Efficiency Technology..... 11

        CHP’s Role in GHG Emissions Reductions ..... 14

A Standardized, Transparent, Technology-Neutral Approach Critical to Success of REV..... 14

New York State’s Need to Update Interconnection and Net Metering Standards..... 16

    Interconnection Standards ..... 16

    Net Metering..... 18

Standby Rates and Demand Charges a Major Impediment to the Growth of CHP ..... 18

The Business Case for Synergies between Natural Gas and Renewable Energy ..... 20

## NECHPI KEY OBSERVATIONS ON 9/22/2014 COMMENTS

- NECHPI reiterates its view that the utility should not be the designated DSP (distribution services provider) and agrees with the many cogent arguments found in various Parties' 9/22/2014 comments against this approach. In fact, the sheer volume in responsibilities shifted to the utilities under the Straw Proposal, when taken together, will increase, rather than decrease, the utilities' monopoly status. While it would appear that it would be less costly and easier to implement over the short term, it will vastly complicate management, cost, conflict-of-interest and many other issues over the longer term and reveal numerous anti-competitive elements not able to be addressed even through the best of intentions by regulators and even the utilities.
- NECHPI supports other Parties' comments that there is no empirical evidence that simply transferring the EEPS and RPS programs to utility control and management will improve the prospects for the State meeting its goals, which are already behind State-mandated targets.
- NECHPI notes that, both in the Straw Proposal as well as in all of the Parties' 9/22/2014 comments, there is an almost-complete lack of discussion on the importance of thermal energy in general and Clean Combined Heat and Power ("CHP") in particular as a critical distributed-energy asset, which is capable of being an important part in helping New York State achieve its energy efficiency, distributed-generation and greenhouse-gas ("GHG") emissions-reduction targets and REV objectives. NECHPI thinks this a mistake which needs to be remedied.
- **There is a clear bias throughout the proceedings in favor of renewables, traditional energy efficiency (excluding CHP) and demand response, with an emphasis on behind-the-meter assets. In addition, the focus appears to be exclusively on the electricity system, with no analysis or discussion of gas-utility networks or steam/thermal networks and their increasing inter-dependencies. Energy comes in many forms, all of which will be important components of New York State's long-term energy mix required to solve emerging grid challenges.**
- In many ways, the REV proposal and filed comments view CHP as an "early 20<sup>th</sup> century technology" whose "time has come and gone." Yet, in NECHPI's view, it is a key transitional energy resource for a healthy, sustainable 21<sup>st</sup> century grid that is being overlooked by the Commission, Staff and NYISO.
- Only a handful of commenters cited the importance of system resilience as a key value contributor to the cost/benefit analysis framework ("BCAF"), which is one of the important performance characteristics of CHP as a local distributed resource. We concur with the National Resources Defense Council when it states that the proposed BCAF would not provide policymakers, regulators and utilities with the correct direction to avoid unintended disincentives or provide the appropriate support of GHG mitigation strategies such as CHP, strategic electrification and fuel switching.
- NECHPI is a firm supporter of technology neutrality, standardization and transparency as key underpinnings to grid transformation, and if truly adopted as core methodologies, they will apply across the board to many of the policies being discussed during REV. This includes the BCAF but many other policies such as interconnection, permitting, net metering, incentive structures and the like. We agree with AES Storage that tariffs, for example, should be designed

to the needs of the system on a technology-neutral basis and then applied to each technology against the identified need.

- Of particular concern is a lack of a detailed State energy plan that provides assumptions for the contribution of each DER to the state's energy mix over the planning periods being discussed and how this mix will provide the means for the State to achieve its energy efficiency, renewable energy and GHG emissions-reduction goals. There is also missing a cost/benefit analysis of the REV itself and the effects of its implementation on ratepayers over the proposed time period. Who pays and who benefits and through what means is still unresolved in the REV proceeding!
- Except for the Supply-Side Renewables Resource discussion, REV's focus seems to be predominantly, if not exclusively, on behind-the-meter resources. We acknowledge that CHP is considered primarily a behind-the-meter resource, but it offers many in-front-of-the-meter benefits as well, as do other DERs. In its emphasis on behind-the-meter, the Proposal seems to ignore the substantial benefits of grid-edge community energy systems where an asset such as CHP is able to provide simultaneously grid services as needed by the utility while supporting behind-the-meter customer requirements. We also note that CHP is a perfect solution for community energy systems, serving mixed and residential neighborhoods/city blocks, multifamily housing units and other aggregations of buildings as well as single buildings of sufficient scale for CHP systems; however, the lack of articulated policy on using CHP for this purpose is noteworthy in its absence.
- In a rapidly evolving market of applications as well as combination rather than just standalone technologies that solve grid and customer issues both behind- and in- front-of the meter, this "siloed" approach is counter to the objectives of REV.
- NECHPI agrees with IREC that interconnection procedures should be as neutral as possible as far as generation technology used. As long as a project can pass technical screens and meet other technical requirements based on transparent and well-understood industry standards, it should be eligible for standardized interconnections, regardless of generation type. Adoption of simplified, expedited, expedited with supplemental review and standard processes for radial, spot and area networks (and, in the case of Con Ed, underground networks), with detailed technical screens used beyond simplified processes tied to generator size "breakpoints" should be an immediate priority.
- CHP has been faced with numerous barriers other distributed resources do not face: lack of access to net metering and wholesale energy markets; exorbitant standby fees and demand charges; a 10% federal ITC versus solar's 30%; difficult, lengthy and expensive interconnection, environmental permitting and siting processes; and many others. All of these contribute to many CHP projects being not economically feasible and therefore, unfinanceable. We are simply seeking a fair, equitable and transparent process and level playing field and would like a rigorous approach made to solving these issues.

## OVERVIEW

The Northeast Clean Heat and Power Initiative ("NECHPI") appreciates the Commission's continuing efforts to engage with the State's stakeholders on the REV (Reforming the Energy Vision) proceedings and giving them multiple opportunities to make comments as the stakeholder process evolves. NECHPI

has been actively involved from the beginning and has submitted comments throughout these proceedings at each point along the process. Members of NECHPI have also been active on various committees and workshops and will continue to be in the future. We have now reviewed all of the Parties' comments submitted as of September 22, 2014 in an effort not only to understand others' views but also to identify points of intersection with our own comments, either negative or positive.

NECHPI reiterates its view that the utility should not be the designated DSP and agrees with the many cogent arguments found in various Parties' 9/22/2014 comments against this approach. While it would appear that it would be less costly and easier to implement over the short term, it will vastly complicate management, cost, conflict-of-interest issues over the longer term and reveal numerous anti-competitive elements not able to be addressed even though the best of intentions by regulators and even the utilities. Cultures change slowly, and given the Joint Utilities' comments, we are not convinced that the utilities will be able to adapt to their new roles while maintaining the old ones in a transparent, open, and competitive manner. In particular, we believe the Joint Utilities' filing exhibits a combination of eagerness to take on these new roles and reluctance to open up the many internal processes and procedures to a required transparency, e.g., in its discussion of interconnection procedures.

As a general statement, **we are as much concerned about items and topics missing in the discussion of various issues than with the articulated differences in approaches to the subject matter.** It is quite clear from a reading of the comments that there are, quite naturally, strong opinions across the range of policies and topics covered in the Staff's Straw Proposal, and various stakeholder processes will have to sort through them to reach balanced, acceptable approaches that can be implemented over the near-, intermediate- and longer-terms.

However, **we note, both in the Straw Proposal as well as in the vast majority of the Parties' 9/22/2014 comments, an almost-complete lack of discussion on the importance of thermal energy in general and Clean Combined Heat and Power ("CHP") in particular as a critical distributed-energy asset, which is capable of being an important part of helping New York State achieve its energy efficiency, distributed-generation and greenhouse-gas ("GHG") emissions-reductions targets. However, in our view, it would appear from the proceedings that CHP is not viewed as a critical asset in helping the State achieve these articulated REV objectives. We think this a mistake which needs to be remedied.**

**Of particular concern is a lack of a New York State detailed energy plan that provides assumptions for the contribution of each DER to the state's energy mix over the planning periods being discussed and how this mix will provide the means for the State to achieve its EEPS, renewable energy and GHG emissions-reduction goals.** There is also missing a cost/benefit analysis of the REV itself and the effects of its implementation on ratepayers over the proposed time period. Finally, except for the Supply-Side Renewables Resource discussion, REV's focus seems to be predominantly, if not exclusively, on behind-the-meter resources. In a rapidly evolving market of applications which oftentimes requires the integration of a combination rather than just standalone technology solutions solving grid and customer issues across both behind- and in-front-of the meter locations, this "siloe" approach runs counter to fulfilling successfully the objectives of REV.

We agree with the observation in the Straw Proposal and in various Active Parties' comments that many behind-the-meter distributed energy resources ("DERs"), including CHP, are able to provide capacity, energy and ancillary services to support various grid requirements. However, **we are concerned, as are others, that jurisdictional issues between Federal Energy Regulatory Commission ("FERC") and the state regulatory authority will impede the ability of behind-the-meter distributed energy resources ("DER") to participate in these markets if the distribution services provider ("DSP") has control over access to wholesale markets**, including aggregation of DER assets. This issue will also crop up for grid-edge solutions if they are controlled by the DSP and are unable to participate directly in wholesale markets. This issue, if not resolved, will have a major impact on the economic viability and, thus, the financeability of many DER projects.

In addition, in its emphasis on behind-the-meter, **the Proposal seems to ignore the substantial benefits of grid-edge community energy systems where an asset such as CHP is able to provide simultaneously grid services as needed by the utility while supporting behind-the-meter customer requirements**. As an example, volt/VAR control, for example, could reside at grid edge and provide voltage support/feedback to the grid while ensuring proper customer voltage. It would also enable flexible load control and inverter control close to loads.

We also observe that one class of the State's energy consumers, referred to as high-usage customers (industrial, commercial and institutional), are deeply dissatisfied with the current energy environment in New York – the highest electricity rates in the nation, a strong view that they contribute extraordinarily high levels of systems-benefit charges in support of the State's renewable portfolio standard ("RPS") and energy efficiency portfolio standard ("EEPS"), and a strong sense of frustration with the REV proceedings. Many of these customers are already users of CHP, or prime candidates for it, but are reluctant to expend additional funds to expand or add new on-site generation resources.

We also note that CHP is a perfect solution for community energy systems, serving mixed and residential neighborhoods/city blocks, multifamily housing units and other aggregations of buildings as well as single buildings of sufficient scale for CHP systems, but the lack of articulated policy on using CHP for this purpose is noteworthy in its absence.

Thus, we are obviously concerned first about two customer classes, namely: 1) high-usage customers, able to implement CHP projects to meet a variety of energy-savings, energy-surety and power-quality requirements but unwilling to move forward based on financial and other policy issues; and 2) residential and mixed-use neighborhoods/city blocks, multifamily housing units as well as commercial buildings of sufficient scale to support CHP systems, with significant implementation barriers and no explicit support of CHP/micro-CHP as a key enabling technology. It is ironic that CHP is one of the few technologies that can support the peak-load requirements outlined in Con Ed's Brownsville RFI, which is predominantly focused on the needs of multifamily housing. Yet the Staff straw proposal does not emphasize this.

**One of NECHPI's biggest concerns is that the proposal's recommendation to move from an SBC (systems benefit charge)- to rate-based support of the RPS and EEPS is that tracking the true costs and**



**benefits of programs will become more difficult, not less, and will exacerbate the already-apparent difficulties various classes of customer have with REV implementation plans.** The SBC, coupled with a volumetric pricing model, has become unfair, most particularly to certain classes or ratepayers. However, ratepayers will still be hit with the bill for the programs through rate-bating, and because rate cases are inherently opaque, complex, and lengthy, most ratepayers will not have the ability to assess the costs and benefits associated with RPS and EEPs programs, particularly if a rigorous cost/benefit analysis framework (“CBAF”) is not used and rates are clearly not broken out into component costs.

**In some ways the REV Straw Proposal views CHP as an “old technology” whose “time has come and gone.” Yet, in NECHPI’s view, it is a key transitional resource for a healthy, sustainable 21<sup>st</sup> century grid and also ignores many of the technology innovations which have occurred over the last five to ten years.**

NECHPI has long supported the growth of a technology-agnostic approach to the emergence of a healthy, sustainable 21<sup>st</sup> century grid, believing that no one distributed resource will provide a long-term solution on its own but will require a mix of complementary and mutually-supporting distributed energy resources deployed in the most strategically appropriate locations, coupled with cost-competitive centralized generation and state and regional balancing authorities, to ensure that a new grid model emerges. We believe that the ultimate goal should be a more flexible mix of energy resources that are strategically sited across the grid based on grid requirements, customer requirements, societal goals and the capabilities of a particular resource to address and optimize those multiple needs, either individually or in combination. We have articulated this approach in our many recent filings with both the NY Public Services Commission (“PSC”) and the New York Independent Systems Operator (“NYISO”).

**In NECHPI’s estimation, CHP, with both energy-efficiency and dispatchable distributed-generation characteristics, is, and will continue to be, a key distributed-energy asset able to provide a wide range of capabilities to ensure that the 21<sup>st</sup> century grid is healthy, sustainable, reliable and resilient. In fact, much has been written about CHP’s key attributes in providing a wide range of benefits to the grid’s stability, reliability, resiliency and power quality. CHP as a distributed resource, whether fueled by natural gas and/or renewables, is able to provide significant levels of efficiency to the grid while significantly reducing GHG emissions.** This seems to be consistently overlooked and discounted in an analysis of the needs of New York State to meet its RPS, EEPs and the Environmental Protection Agency (“EPA”) Clean Power Plan 111(D) compliance requirements. We also note that, since Hurricane Sandy, the technical and trade press has produced glowing reports of CHP’s contributions to grid resiliency. It was therefore puzzling to see so little mention of or emphasis on the dramatically increasing needs of the State for energy resiliency and power surety.

**We are therefore concerned that the Staff Straw Proposal is focused on supporting certain DERs (most particularly, energy efficiency, renewables, demand response (“DR”) and energy storage) over others in terms of near-term actions, and has excluded CHP from consideration or has at least minimized its potential contribution, including in terms of its contributions to improved energy efficiency; NECHPI believes that there are a number of near-term initiatives related to CHP which could be implemented**

quickly and cost effectively and which would help the Commission achieve its articulated REV goals more rapidly than it would otherwise.

Finally, this proceeding is supposed to be a forum to discuss transformation changes in the State's energy system and electric grid. However, it appears that certain subjects are off-limits, particularly when it concerns CHP. The subjects include CHP's inclusion as an eligible resource in portfolio standards, its ability to have access to net metering, streamlined and standardized interconnection procedures, various incentives and exemptions for other distributed generation technologies such as solar PV (such as property tax exemptions and exemptions from standby rates and demand charges) not given to CHP, onerous rate structures focused on CHP (and microgrids by extension), and CHP's lack of access to wholesale markets.

If the Commission is truly seeking to level the playing field and allow all distributed energy resources to participate in a fully animated market, each according to its capabilities and based on grid and customer needs, then these and other issues must be dealt with head-on in a transparent and collaborative manner. NECHPI believes that this is the only way to ensure that all REV objectives are met cost-effectively and systematically and are informed by a defensible, internally consistent energy plan based on empirical evidence and rigorously vetted assumptions.

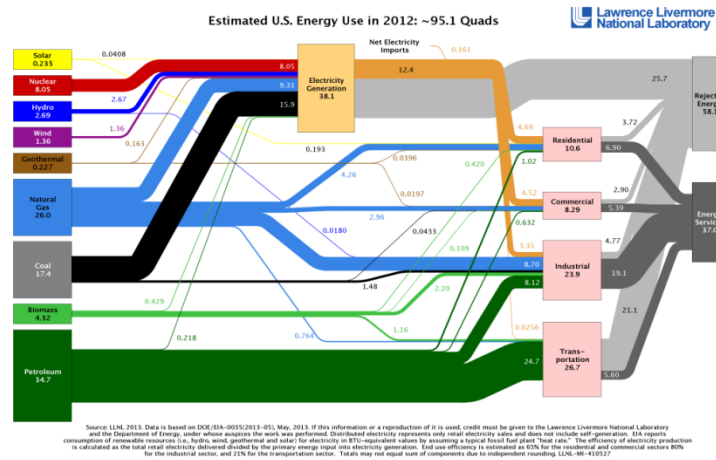
## **SUMMARY OF NECHPI APPROACH TO REV PROCEEDINGS**

NECHPI first would like to reiterate its commitment to technology neutrality and the use of standardized, transparent BCA and related methodologies to establish comparable values for each DER, on a stand-alone basis and/or in combination, to allow for rational, justifiable and consistently applied valuations, with specific technology solutions applied to the identified need of the customer and/or grid. We would like to point out that a lack of standardization based on industry best practices also shows up in areas such as interconnection, permitting and financing. Other non-standard, unevenly applied rules and regulations to various categories of distributed energy assets include financial incentives, net metering, standby rates and demand charges and a host of other potential policies. Again, our view is that, if the appropriate methodologies are developed and uniformly applied, many of these issues would be moderated, if not completely eliminated. Our hope and expectation is that, through these proceedings going forward, these issues will be addressed forthrightly and transparently, with a goal to resolve them for the benefit of all stakeholders in the State of New York.

## **Thermal Energy and CHP, Missing Entirely from the REV Proceedings, Should be Considered Key Distributed Resources Used for Meeting the State's Energy Efficiency and GHG Emissions-Reduction Goals**

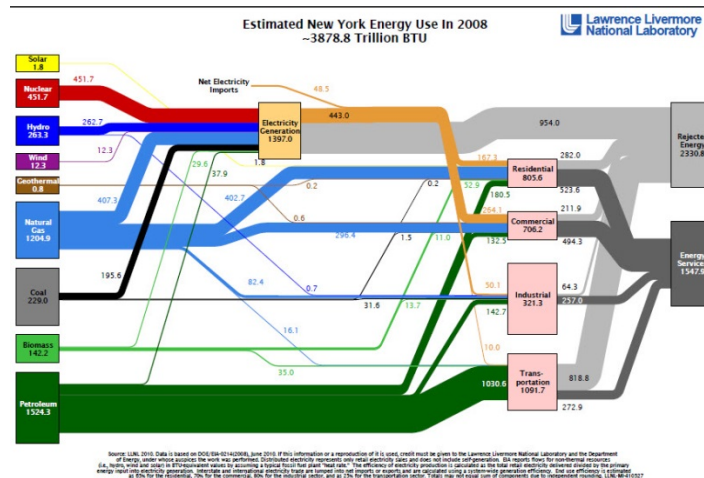
There is a clear bias throughout the proceedings in favor of renewables, traditional energy efficiency (excluding CHP) and demand response, with an emphasis on behind-the-meter assets. In addition, the focus appears to be exclusively on the electricity system, with no analysis or discussion of gas-utility networks or steam/thermal networks and their increasing inter-dependencies. Energy comes in many forms, all of which will be important components of New York State's long-term energy mix required to solve emerging grid challenges.

Lawrence Livermore National Laboratory (“LLNL”) updated its annual U.S. energy flows in 2013, which clearly shows massive inefficiency in the U.S. energy system.



Of the 95.1 quadrillion British Thermal Units (known as “quads”) of raw energy inputs that flowed into the U.S. economy in 2012, only 37.0 quads were constructively used at the end of the day as “energy services.” The other 58.1 quads were, in essence, wasted. (euphemistically classified as “rejected energy” at the top right of the above diagram.) Facilities accounted for almost 20% of rejected energy. LLNL further observes that its findings suggest that 2012 was the most energy-wasteful year in more than a decade. By LLNL’s historical calculations, the amount of energy wasted annually has hovered between 50 – 58% for the last ten years, but in 2012, shot up to 61%.

Without providing a detailed analysis of New York’s energy flows, the following LLNL diagram shows that, of the 3878.8 trillion quads of energy inputs, about 2,330.8 quads, or 60.1% of the total, were wasted. Obviously, there is a great deal of wasted energy which could be put to good use in the State.



CHP represents a group of technologies which address the issue of “wasted” energy. Clean CHP systems generate both electricity and thermal energy in a single integrated system. CHP is more energy-efficient than producing electricity and thermal energy separately because heat that is normally wasted in

conventional generation is recovered as useful energy. In general, the recovered heat from a CHP system is used to satisfy an existing thermal demand, such as the heating and cooling of a building, process or water supply. CHP systems are generally powered by natural gas, but many are fueled by biomass, biogas, or other bio-/synfuels.

Almost 80% of thermal demand is used to provide heat below 150° C, which falls within the range of temperatures produced by thermal technologies such as CHP, waste heat recovery, and district energy systems. By directly utilizing heat, thermal energy technologies lower the demand for primary fuel sources by recycling waste heat or displacing the need for electricity or fossil fuels to generate heat. Direct thermal use also lowers the grid demand for electricity to produce heat and therefore, reduces losses along transmission lines. Thermal energy systems can operate independently from the grid, and are more resistant to extreme weather that can produce power outages.

There has been much written about the benefits of CHP, reviewed, in part, in our 9/22/2014 comments. However, we would like to add some specific information that we hope will add to the understanding by the Commission as well as other Commenting Parties of CHP's important role in improving system efficiency, providing high levels of resiliency and reducing GHG emissions, both CO<sub>2</sub> as well as air criteria pollutants. Financial, technical, policy and regulatory factors all have an impact on the extent to which CHP is deployed, and we would like to point out some of those factors missing in the Straw Proposal and the ensuing Active Party comments.

#### **CHP Technical Potential in the United States and New York**

In a recent report entitled *the Opportunity for CHP in the United States (May 2013)*, ICF International provides a significant amount of state-by-state information on CHP's technical potential and on state policies that can encourage or deter its development. **New York, of all of the states in the U.S., is considered to have the largest amount of technical potential of all states at 9,360 MWs, with 5,864 MWs of that in the strong potential category (with under five years of payback).**

#### **State RPS and EEPS Policies**

The ICF report also discusses in detail how state policies have a significant impact on the success (or lack thereof) of CHP deployment. As the design features of both renewable portfolio standards ("RPS") and energy efficiency portfolio standards ("EEPS") clearly demonstrate in the following paragraphs, state policymakers can promote, or discourage, CHP in their portfolio standards through several different approaches, based on both the energy savings and/or environmental benefits that CHP can provide in producing electricity and thermal energy.

These policies, however, vary significantly in their structure, administration, size and eligible applications as well as the types of eligible energy sources. **In fact, one might observe that this substantial level of variety reflects the complexity of identifying thermal and CHP values as key distributed assets in the emerging 21<sup>st</sup> century energy grid and of integrated the distributed asset into a state policy and regulatory framework.** However, what is clear is that the approaches used in states to incorporate CHP into portfolio standards and energy efficiency resource standards can have a significant impact on its successful integration (or lack thereof) into the distributed-energy-resource mix.

States have varying definitions concerning CHP eligibility. In some states, all CHP types using a variety of fuels, not just renewables, qualify as an eligible technology in portfolio standards while in other states only waste heat-to-power qualifies. Some states have minimum or maximum system size limits under their portfolio standard programs. Some states have incorporated various CHP efficiency metrics into their standards. A handful of states have minimum CHP operating efficiency requirements, such as 50% in Connecticut. In certain states, more efficient systems earn more credit per unit of output. For example, Massachusetts provides credit for CHP based on the efficiency of the system compared to that of grid-supplied electricity and on-site boilers producing the same electric and thermal output as the CHP system. Finally, in a number of states, CHP qualifies under a renewable portfolio standard irrespective of the fuel type used. Others, however, such as Arizona, only recognizes renewables-fueled CHP systems.

In addition, accounting for CHP's benefits also varies widely, and can be based on its energy output, energy capacity and/or energy savings. Some portfolio standards encourage eligible resources such as CHP by issuing tradable credits for the energy generated where credits can be sold at market prices to utilities or other entities to demonstrate compliance with portfolio targets. Some states such as New Hampshire have taken it a step further and developed thermal renewable energy credits in order to value thermal output. Other portfolio standards, generally seen in energy efficiency resource standards, provide financial incentives based on system performance or energy savings.

Further, some states account for only the electrical output of CHP systems in determining credit for portfolio standards while others account for both the electrical and thermal output. CHP can receive full credit on par with other resources (e.g., Michigan and Pennsylvania) or partial credit (Massachusetts). States that want to provide a significant incentive for CHP have applied a credit multiplier for each MWh of eligible CHP generation. If the State's objective is to encourage GHG emission reductions, then the State may credit the CHP system based on a measure that reflects actual reductions.

A CHP system's efficiency can also play a significant role in portfolio standards. Various efficiency metrics already exist for a CHP system that pertain to electricity generation and heat production (the electrical and thermal output) or an overall operating or system efficiency. The type of efficiency metric used will depend on the type of portfolio standard.

### **New York State RPS and EEPS**

**New York State has both a renewable portfolio standard and an energy efficiency portfolio standard. However, for various historical reasons, including lack of receptiveness by electric distribution utilities, CHP has had a limited role for helping the state meet either of these standards, particularly given the magnitude of CHP's technical potential in the State. NECHPI is very concerned that CHP's role will be diminished further by the lack of clarity on how existing programs will be handled and if they will be transitioned over to utility or third-party control or not, as recommended for both the energy-efficiency and renewables programs.**

Under current law, only digester-fired and biomass-fired CHP and fuel cells using renewable fuels and greater than 50 kW are eligible under the Customer-Sited Tier of the Renewable Portfolio Standard. The

RPS target standard is 30% of state electricity consumption by 2015. Of this 30%, approximately 20.7% of the target will be derived from existing renewable-energy facilities and 1% is expected to be met through voluntary green power sales in 2015. NYSERDA manages the RPS fund financed through a surcharge on each kilowatt-hour sold by the state's six investor-owned utilities. The RPS surcharge is separate from and in addition to the State's system benefits charge. Customers exempted from contributing to the SBC (including NYPA and LIPA) are also exempt from the RPS charge.

Eligible, new renewable resources have been categorized into two tiers: a Main Tier, which includes roughly 91.56% of incremental renewable generation, and a Customer-Sited Tier. The technology minimum for customer-sited projects has a target of 8.44% of the annual incremental requirement or 0.5764% of State electricity sales in 2015. It should be noted that the State is substantially behind meeting its 2015 RPS targets at this point in time. NYSERDA can procure Main Tier resources through auctions, requests for proposals and/or standard-offer contracts. The resources eligible for the Customer-sited Tier include fuel cells, solar hot water, wind turbines and methane digesters. CST systems are generally limited to the size of the load at the customer site. **The State's ambitious RPS has so far failed to produce results as targeted. As reported in NYSERDA RPS Performance Report as of 12/31/2013, progress in achieving the Main Tier and Customer-sited Tier 2015 targets is only 48% and 57%, respectively, of the target 30% goal.**

The PSC has filed to create a new Clean Energy Fund to replace the State's RPS, designed to help the State meet its goals. When the RPS expires on December 31, 2015, the Clean Energy Fund is expected to bridge the RPS and the NYS Green Bank, the latter of which is projected to fund \$1 billion of investments in clean energy and energy projects in the State. NYSERDA has already reallocated \$165.6 million in uncommitted NYSERDA EEPS I and System Benefits Charge (SBC) III funds, uncommitted utility EEPS funds and \$50 million in NYSERDA Main Tier RPS funds to support the transition and the establishment of the Green Bank.

The EEPS is complicated, and has gone through a number of changes over the last decade. In December 2012, the PSC issued an order transferring roughly \$86.7 million in EEPS funding to support CHP and workforce development initiatives within NYSERDA's Technology and Market Development Program portfolio. The EEPS standard for 2015 is a 15% electric-energy sales reduction relative to projected electricity use in 2015 and approximately 14.7% of projected gas use in 2020. The programs are funded through surcharges on retail sales of electricity and natural gas.

In December 2012, the PSC issued an order transferring roughly \$86.7 million in EEPS funding (consisting of uncommitted funding and budget reductions in two other programs) to support CHP and workforce development initiatives within NYSERDA's Technology and Market Development program portfolio. An October 2011 PSC order lists an overall projected total of \$449 million in gas contributions (combined SBC and EEPS) for 2012 – 2015. As with the electric portion of the target, programs consist of a combination of utility-administered and NYSERDA-administered programs.

The State EEPS targets were developed with recognition that some of the factors affecting electricity and gas consumption are beyond the jurisdiction and control of the PSC. Thus, the PSC accounted for



this by calculating what is referred to as “jurisdictional gap” targets for electricity savings by providers not under the PSC’s jurisdiction (e.g., NYPA and LIPA) as well as electricity savings contributions from other sources (building codes and standards, state agency mandates, etc.) Thus, while total electricity sales reductions under the 15% EEPS standard would require savings of roughly 29.4 million MWh annually in 2015, the EEPS jurisdictional program target is roughly 7.7 million MWh annually in 2015. When combined with the incorporation of SBC III programs into the EEPS, the total electric jurisdictional gap is 11.2 million MWh annually in 2015. While achieving the EEPS 15% target is expected to be more doable than meeting the RPS target, several Parties commented on New York (at 0.94% annually) being well below annual savings’ levels found in neighboring states, almost half of what MA (1.8%), RI (1.55%) and VT (2.14%) have already achieved. According to the ACEEE 2014 State Scorecard, MA spends on energy efficiency programs \$75.86 per capita, RI \$73,70, and VT \$68.30 to NY’s \$30.22.

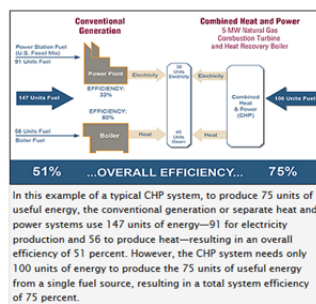
In May 2014 the PSC started a proceeding to consider the development of a Clean Energy Fund, aligning with other recent developments such as the Green Bank, NY-SUN and REV. NYSERDA released a CEF proposal on September 23, 2014, and we have reviewed it and will comment in detail on the proposal in coming filings. **We will only say in the context of these comments that we are concerned about the lack of specific analysis of current programs and how they are mapped onto the new structure of utility energy-efficiency, demand-response and renewable-energy responsibilities. It is unclear to NECHPI where, for example, the current CHP programs will end up and whether there will be any additional support offered as part of the new REV approach.**

NECHPI believes that CHP could play a significant role in aiding the State in achieving its energy-efficiency and GHG emissions-reduction goals. There is as yet no empirical evidence that simply transferring EEPS and RPS programs from NYSERDA to the utilities’ control will improve the prospects for the State meeting its goals.

### CHP as an Energy Efficiency Technology

In terms of meeting efficiency targets, CHP systems, by using waste heat recovery technology to capture a significant portion of wasted heat discussed above, typically achieve total system efficiencies of 75% for producing both electricity and thermal energy. Because CHP is more efficient, less fuel is required to produce a given energy output. Higher efficiency translates into lower operating costs, reduced emissions of all pollutants, increased reliability and power quality and reduced grid congestion and avoided distribution losses.

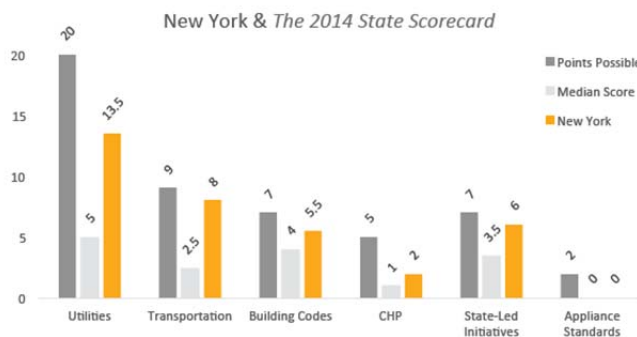
Conventional Generation vs. CHP: Overall Efficiency



The American Council for Energy Efficient Economy (“ACEEE”) has long considered CHP as an energy-efficiency technology in many of its analyses and white papers. In April 2014, ACEEE published a whitepaper titled *Change is in the Air: How States Can Harness Energy Efficiency to Strengthen the Economy and Reduce Pollution*. In it, the study evaluates four of the most common and effective energy efficiency policy options available to reduce pollution. The four policy options are: (1) implementation of an energy efficiency savings targets; 2) enactment of a national model building code; 3) construction of combined heat and power systems; and 4) adoption of energy efficiency standards for products and equipment. Even under very conservative assumptions, CHP provides significant GHG emissions reductions.

If every state adopted the four policies in ACEEE’s scenario, GHG emissions from the power sector would be reduced in 2030 by 26% relative to 2012 emissions’ levels. Simply by implementing these four policies on a conservative basis, **ACEEE estimates that the State of New York could reduce in 2030 its electric consumption by 37% relative to 2012, the second highest projected reduction after Arizona. The use of CHP figures importantly in these projected reductions.**

ACEEE just released its annual state energy efficiency scorecard, *The State Energy Efficiency Scorecard* (October 2014). The scorecard is a comprehensive state-by-state analysis of energy-efficiency policies, rules, regulations and programs and provides an annual benchmark of progress, rating each state across six categories based on industry best practices. New York State ranks 7<sup>th</sup> in the nation, with a score of 35 points out of a possible 50, three spots below the 3<sup>rd</sup> place ranking it held in 2012 and 2013. The following is a snapshot of New York’s scores in each of the six scoring categories: utilities, transportation, building energy codes, combined heat and power, state government-led initiatives, and appliance standards.



All of the six categories are important measures of a state’s success in achieving energy-efficiency improvements. For the purpose of these remarks, we will focus on New York’s score in the CHP category, which totaled 2 out of possible 5.

The eight factors considered when scoring CHP were: 1) standard interconnection rules; 2) inclusion of CHP in a state EEPS; 3) inclusion of CHP/waste-heat recovery in a state RPS or other standard; 4) favorable revenue streams, including wholesale net metering, feed-in tariffs, or standard-offer programs; 5) applicable financial incentives; 6) loan and loan-guarantee programs; 7) output-based air emissions regulations; and 8) any additional supportive policies.



In terms of interconnection standards, a state could receive up to 1 point for having an interconnection standard that explicitly established parameters and procedures for the interconnection of CHP systems. To receive a top score, a state's interconnection standards needed to: be adopted by all major utilities; cover all forms of CHP, regardless of fuel; have multiple tiers of interconnection or some kind of fast track for smaller systems; and apply to systems over 10 MW. New York was awarded 0 points out of a possible 1.

ACEEE awarded 1 point for CHP's eligibility in an EEPS. To receive full credit, state EEPSs must explicitly apply to CHP powered by natural gas; treat CHP as a resource in the top tier or category; establish specific CHP targets; and be binding, including penalties for utilities that do not meet goals. New York received 0 points out of a possible 1.

ACEEE awarded 0.5 points for CHP's eligibility in an RPS. To receive full credit, state RPSs must explicitly define waste heat-, biomass-, or biogas-powered CHP as an eligible resource; and be binding, and include penalties for utilities that do not meet goals. New York received 0.5 points out of a possible 0.5 because of the inclusion of biogas-powered CHP/aerobic digesters and fuel cells using renewable fuels.

ACEEE awarded up to 0.5 points for the presence of favorable revenue streams that apply to CHP. A state must have at least one of the following policies: a statewide wholesale net metering policy that can be used by all customer classes and applies to CHP system powered by natural gas; a statewide feed-in tariff policy that applies to CHP powered by natural gas; and any other state program that offers wholesale prices for natural gas-powered CHP, such as a standard offer program. New York State received 0.5 points out of a possible 0.5 because it allows micro-CHP under 20 kW to participate in net-metering programs. (NECHPI observes that this has proved to be a marginal incentive for the industry since there are few other support mechanisms in place to support micro-CHP much less the wide range of sizes, capacities and value-creation capabilities of CHP.)

ACEEE awarded up to 0.5 points for incentives for CHP. To be eligible, at least one available incentive must apply to all CHP, regardless of fuel; be a production credit, an investment credit, a credit for installed capacity, or a grant; and apply to both the commercial and industrial sectors. New York received the full 0.5 points out of 0.5. because of NYSEDA's two financial-incentive CHP programs: 1) the CHP Acceleration Program for the installation of pre-qualified, pre-engineered CHP systems by approved CHP system vendors, with systems between 0.05 MW and 1.3 MW in size eligible for the program; and 2) the CHP Performance Program, a performance-based incentive for CHP systems with a nameplate greater than 1.3 MW that provide summer on-peak demand reduction.

States could receive up to 0.5 points for the level of financing assistance available for CHP systems. Financing strategies include low-interest loan programs, loan guarantees and bonding authorities. To receive a top score, key programs must be available to all forms of CHP and be substantial enough that they can truly be used by a CHP project. Additionally, CHP has to be clearly identified as an eligible target project type. New York received 0 out of a possible 0.5 points.

ACEEE also awarded 0.5 points for the presence of output-based emissions regulations. To receive full credit, states must have a fast-track permitting process in place for sulfur oxides and/or nitrogen oxides;

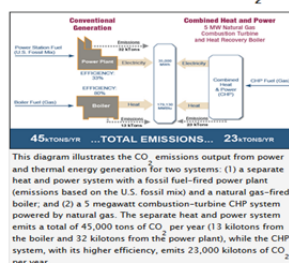
and have output-based parameters for all major applicable air permits. New York received 0 out of a possible 0.5 points. While the State has output-based regulations, it does not have fast-track permitting processes.

ACEEE also awarded 0.5 points for other policies supportive to CHP such as targeted technical assistance programs, education campaigns or other unique policies or incentives that support CHP. New York received a score of 0.5 out of a possible 0.5 points because of its innovative technical assistance and educational programs through NYSERDA.

### CHP's Role in GHG Emissions Reductions

In terms of CO<sub>2</sub> emissions reductions, CHP systems offer considerable environmental benefits when compared with separately purchased electricity and onsite-generated heat as well as when compared to natural gas- and other fossil fuel-fired central-generation plants. Because less fuel is combusted, GHG emissions, such as carbon dioxide as well as criteria air pollutants like nitrogen oxides and sulfur dioxides, are reduced. The following diagram shows the magnitude of reduced carbon emissions from using CHP.

Conventional Generation vs. CHP: CO<sub>2</sub> Emissions



**NECHPI would like to point out that New York is also well-situated to take advantage of CHP to meet EPA’s 111(d) compliance requirements.** New York is relatively high in the ranking for EPA-mandated GHG emissions reductions and might require approximately a 53% reduction in emissions by 2030, necessitating a variety of policy decisions relating to how it will achieve those reductions. Secondly, and on a positive note, the State already uses output-based emissions standards (“OBES”) to measure efficiency improvements. (In contrast to commonly-used input-based emissions standards, OBES relates emissions to the productive output of a given process, which includes electrical, thermal and mechanical energy in the case of CHP.) From a policy perspective, research has found that OBES is more cost-effective and results in more total carbon abatement than other U.S. industry programs, including energy efficiency portfolio standards. **NECHPI believes, therefore, that CHP is a fundamental and critical asset to help New York achieve its GHG emissions reductions targets.**

### A Standardized, Transparent, Technology-Neutral Approach Critical to Success of REV

A technology-agnostic approach to REV objectives is based on the premise that standardized, fair, transparent, replicable and scalable methodologies, procedures, processes and associated documentation are utilized in order to level the playing level and ensure that the right technology, or combination of technologies, are selected and appropriately compensated for meeting certain grid

and/or customer requirements. It is one of the reasons NECHPI has been excited about these proceedings, in the hope that the layers of rules and regulations currently in place in New York State for CHP, most of which have created substantial barriers to entry for the industry, would be removed and replaced with a rational, consistently-applied approach yielding significant benefits for all distributed energy resources, including CHP. **However, we have been disappointed by the lack of serious discussion on an energy policy incorporating all resources in a balanced, thoughtful manner. To date, CHP does not appear to be at the table among the State's Policymakers as an equal participant.**

We continue to believe that standardization and transparency are key underpinnings to grid transformation, and if truly adopted as core methodologies, they will apply to many of the policies being discussed during the proceeding. It is not just about developing and implementing a benefits/costs analysis framework ("BCAF"), which will allow for technology comparisons and valuations to be made on an apples-to-apples basis. It is also about the development of mechanisms that will be used to compensate resources for their contributions based on their specific characteristics as well as locational and temporal grid conditions both behind-the-meter or grid-tied. A BCAF should also be able to provide the means to set the stage for new ratemaking methodologies as we move to Track II of these proceedings.

**In the case of CHP, we have been puzzled about the lack of seeming interest in or discussion of system resiliency, a key value contribution of CHP. In fact, we found almost no references, or just fleeting references, to it in the Straw Proposal or in the Parties' 9/22/2014 comments.** Not that long ago, Hurricane Sandy's impacts inspired Governor Andrew Cuomo to create the NYS2100 Commission "in response to the recent, unprecedented, and severe weather events experienced by New York State and the surrounding region." The executive summary of its draft report invokes "resilience" 36 times and demanded that New York "rebuild smart." CHP is a critical component of that resilience capability, which was clearly demonstrated during Hurricane Sandy when the only buildings supplying energy were powered by CHP.

**One commenter in particular, National Resources Defense Council, was clearly supportive of high-efficiency DG (including CHP) and emphasized the importance of resilience as a value in the CBAF. It also noted that it was not clear that the proposed BCAF would provide policymakers, regulators and utilities with the correct direction to avoid unintended disincentives and to provide appropriate support of GHG mitigation strategies such as strategic electrification, fuel switching and CHP. It also noted that without the necessary Department of Environmental Conservation ("DEC") distributed generation ("DG") regulation on the books to ensure that stringent emissions performance standards are in place, behind-the-meter generation could potentially include dirty diesel engines that have no place in a market-based, clean-energy market. We concur with these observations, and wish that there were more supportive comments like these from other Active Parties to these proceedings.**

Numerous studies have also shown that another key challenge for distributed energy resources is the lack of standardization across-the-board, which increases "soft" costs fairly dramatically as a percent of total project costs. Of particular concern are those related to interconnection procedures, local permitting, customer acquisition and financing.

**We stated in our 9/22/14 comments that cost-benefit and valuation methodologies should also aim to be accepted as industry best practices by the financial industry.** “It would be quite a breakthrough if some standardized and transparent financial/risk reduction/valuation methodologies accepted by the financial industry were actually integrated into utility resource planning and REV goals and proposed near-term actions.” Associated documentation based on industry best practices will also go a long way to creating a framework that will help accelerate the adoption of DER, with support of the financial industry. Increasing private-sector involvement is another key objective which will only be reached through the adoption of standardized and transparent methodologies, procedures, processes and associated documentation.

In addition, **we support the approach of AES Storage in its 9/22/14 comments (age 5): “While we agree that new tariffs need to be designed within the DSP market, we are concerned that it is already taken as a given that tariffs will be designed for each technology and not created on a technology-agnostic basis.”** The comments continue to emphasize that tariffs should focus on the customer’s need and the needs of the DSP, with each technology providing value in terms of peak capacity, off-peak capacity, flexibility, hourly energy, ancillary services, etc. according to their capabilities. **We agree that tariffs should be designed to the needs of the system on a technology-neutral basis and then applied to each technology against the need.**

## **New York State’s Need to Update Interconnection and Net Metering Standards**

### **Interconnection Standards**

In general, the interconnection procedures in New York for CHP are cumbersome, in some cases arbitrary and in many ways, based on the discretion of a utility, and expensive. All of these factors combined can make an otherwise viable project financially unfeasible. Numerous CHP developers have specifically cited Con Ed’s interconnection-application and engineering review processes as counter-intuitive, lengthy and increasingly unmanageable. **Streamlining these processes would be immensely beneficial for future projects since it would significantly reduce the amount of consultants’ time and associated professional fees. We believe that updating to industry best practices the State’s interconnection (“IC”) processes is a critical, immediate issue for not only CHP but for distributed energy resources in general.**

In our 9/22/2014 comments, we urged the Commission to establish a working group as an immediate action to update and streamline current interconnections processes and procedures. There has been significant work undertaken over the last three years in establishing industry best practices, and states such as Massachusetts and California interconnection standards and FERC’s Small Generator Interconnection Procedures (“SGIP”) provide excellent roadmaps for adopting state-of-the-industry procedures.

**We support IREC’s recommendations in its 9/22/2014 comments, including those focused on streamlining the CHP interconnection process.** NECHPI sat on the Massachusetts Distributed Generation Interconnection Working Group, along with IREC and many others, and agrees that interconnection problems will only become more pressing as the quantity, pace and technological

complexity of IC applications increase, and on-going innovations lead to new types of DER technologies and services (e.g., solar storage, CHP/storage, solar cogeneration, etc.). By the time the MA working group was established, the processing of interconnection applications had come to a grinding halt resulting from the explosion in DG projects entering the interconnection queue across all utilities. The utilities were simply unprepared for processing the sheer volume and type of applications.

**We also agree with IREC that interconnection procedures should be as neutral as possible as far as generation technology used. As long as a project can pass technical screens and meet other technical requirements based on transparent and well-understood industry standards, it should be eligible for standardized interconnections, regardless of generation type.** NECHPI acknowledges, as does IREC, that CHP facilities, as well as other resources such as energy storage, may present certain technical issues that warrant particular consideration, but it is our experience that the use of well-constructed technical screens based on well-defined criteria will alleviate many unnecessary issues related to interconnection.

Some of the key provisions needing to be adopted by New York include the following:

- Standards applicable to all utilities, not just investor-owned
- Greatly increased data access for project developers to reduce costs, improve siting, and maximize use of DERs across the grid.
- A pre-application report mandate with detailed information provided by utilities on potential points of interconnection (based on MA best practices).
- The public disclosure of network and distribution upgrade costs by equipment type and other associated costs as well as for projects in a timely, specified manner.
- Mapping of grid down to feeder/circuit level to identify optimum locations for points of interconnection, alleviating many inefficiencies for both utilities and developers/investors.
- **Adoption of simplified, expedited, expedited with supplemental review and standard processes for radial, spot and area networks, with detailed technical screens used beyond simplified processes tied to generator size “breakpoints” (e.g., 25 kW, 2 MW, 10 MW on non-exporting systems, and a track for complex systems and for systems 20 MW and larger.**
- Detailed interconnection queue information, with specific data for all process steps, identified timelines, compliance reporting provided by utilities on a monthly basis, and penalties assessed on a yearly basis for failing to meet specified requirements
- Group interconnection studies allowed on circuits with high penetration of DG in order to spread the costs of potential large upgrades across a group of potential interconnection customers

**As a final note, we were not encouraged by the Joint Utilities’ comments on interconnection, which were vague and non-committal.** National Grid proved to be a leader of the effort in Massachusetts, and given its technical interconnection group is located in upstate New York, with a number of key members

on the MA working group, we would urge the Commission to recruit National Grid to help spearhead a working-group effort in New York. The MA collaborative effort amongst utilities and various stakeholder groups was a long, involved process which took from May 2011 to the filing of an updated tariff in September 2014 (from the initial filing in the spring of 2013) to complete the process. It is why we believe that the **Commission needs to institute the process immediately to ensure that the utilities are not overwhelmed with the expected dramatic increases in DER interconnection applications.**

### **Net Metering**

**We will bring this topic up briefly because several commenters raised the issue, including the Joint Utilities. We have expressed our opinion in other places that, as long as net metering is in place, CHP should have access to its benefits as do other distributed-generation resources.** We realize that the net-metering approach is under study in New York and that it will likely be discussed in Track II; however, we think it important enough to warrant a few observations given that the Joint Utilities unequivocally state in their comments that “....the Joint Utilities do not support the inclusion of CHP as an eligible net metering technology.”

Over the last five years, models based on best practices have been developed that demonstrate that efficient, flexible systems for net metering, which are technology-agnostic and cover a range of types and sizes of distributed-generation technologies, have spurred growth in various state markets. Seventeen states currently allow some form of net metering for CHP, in general allowing much larger systems, including natural gas-fired CHP, to participate.

We acknowledge that there is a great deal of discussion going on nationally about the net-metering model and whether it should be replaced with other compensation mechanisms. We have assumed up until this point that, given a reference in the original April 2014 REV proposal, the model would evolve and be replaced with another policy. **However, in the meantime, we are concerned that the replacement of the current net-metering policy with another compensation mechanism will not happen, at least in a timely fashion, and that CHP will again be in a weak position to garner the benefits of either the existing net metering mechanism or new incentive structures and compensation mechanisms that may replace it.**

**We are simply looking to be treated fairly, equitably and transparently and in a manner so that the industry can grow at a rate reflective of the large technical potential available to it in New York, which is in fact the largest in the nation.**

### **Standby Rates and Demand Charges a Major Impediment to the Growth of CHP**

**We have discussed this elsewhere, but it is worth repeating. No other technology faces what CHP does on an on-going basis in terms of onerous utility standby rates and charges.**

Standby rates in particular can pose a substantial barrier to adoption of CHP systems when they are not designed to closely preserve the nexus between charges and cost of service. Standby service is generally defined as a set of electric utility products for customers with on-site, non-emergency generation, providing a utility electricity back-stop for these facilities. It is considered an important factor in determining the economics of CHP applications relative to utility full-requirements service or purchasing

power from a competitive supplier. A typical (and complex) standby rate structure includes a capacity reservation charge, as-used capacity and energy charges, a maintenance capacity charge, and facility charges.

The Regulatory Assistance Project (“RAP”) lists the following as standby-rate best practices:

- Allocation of and better matching to utility costs
  - Generation, transmission and distribution charges should be unbundled
  - Generation reservation demand charges should be based on the utility’s cost and the forced outage rate of customers’ generators on the utility’s system
  - Higher-voltage delivery charges should recognize load diversity
- Appropriate and improved incentives and the application of clearer price signals
  - Pro-rated daily demand charges
  - Daily maintenance demand charges – discounted
- Customer options to enhance flexibility
  - Interruptible standby service option
  - Customers should be able to procure standby service from the open market

Recent meeting between representatives of Consolidated Edison and some of the major users of CHP was convened to discuss standby rates and potential changes to the tariff as a part of the REV proceedings. It is estimated that there are 50 large (over 1 MW) CHP systems on the existing Con Ed standby rate. Most of the users at the meeting, including some of the largest, were not supportive of the existing tariff and suggested that it be eliminated entirely. Several noted that only a few CHP users could take advantage of the new campus tariff since it was punitive to those where each building’s peak sets the contract demand, even though the buildings do not peak at the same time. Several others observed that they were paying more in utility costs now with cogeneration than they would be if they did not have cogeneration.

We also note that many high-usage customers are distressed with utility rates in general, most particularly these “specialized” rates which have created substantial barriers to the implementation of on-site generation. As one example among many, this summer, Durst Organization went public with its experience at One Bryant Park in New York where it installed a \$29 million cogeneration plant, an on-site natural gas-powered system that recycles heat and steam to power chillers, heaters and electricity. That and other implemented efficiency measures made it the first building of its height to earn a LEED Platinum rating for the U.S. Green Building Council.

However, the bottom line has been disappointing, and company officials blame the \$2.7 million a year it pays in standby charges, \$1.5 million in standby fees for electricity and \$1.2 million for steam, whether they need it or not. While the company acknowledges that they have needed it primarily for two weeks every year when the plant is shut for planned maintenance, Durst officials say there has yet to be a peak emergency, which is calculated in standby fees based on a worst-case scenario. Company officers have in fact stated that they are not sure they would make the same investment again under the current fee structure. In his 2013 State of the State Address briefing book, Governor Cuomo stated that “modifying



standby charges to encourage energy storage and distributed generation” would be a key part of reshaping New York’s aging grid. We hope this will be addressed in the REV proceedings so that CHP is able to participate economically in solving grid and customer issues.

We finally note that we believe that CHP offers the best solution to solve Con Ed’s major grid-overload issue as expressed in its recent RFI to address the Brownsville network issues. However, NECHPI has been told that Con Ed approached all of the private hospitals on the Brownsville network for CHP siting, and all expressed that they were unwilling to take on what they perceived to be high risks related to CHP and high costs, particularly standby rates and demand charges, for taking those risks. The issues surrounding risk/reward for CHP need to be addressed directly, so that CHP can provide the very grid support services that Con Ed is actively pursuing.

This is a perverse and untenable situation, one that is antithetical to the stated goals of New York State’s Energy Plan and the REV proceedings. **While the BCA framework and valuation methodologies, when implemented, are supposed to help eliminate most of these onerous utility rate structures, we are concerned that, until the framework is in place and these rate issues are resolved, the CHP industry will stall in the meantime.**

### **The Business Case for Synergies between Natural Gas and Renewable Energy**

While CHP power plants are able to use multiple different fuel types (natural gas, renewables, synfuels, biofuels and so on), the majority of plants are fueled by natural gas. This has caused more issues than warranted – from a desire by many clean-energy advocates to have a 100% renewables future, unrealistic at best for the foreseeable future, and thus, ignoring the role CHP might play in the stable, reliable and resilient evolution/transition of the grid through the integration of CHP as a distributed resource; to a lack of understanding that CHP in fact reduces GHG emissions since it replaces high carbon-emissions central power plants as well as for other reasons, and the list goes on. In fact, these views are reflected in many of the 9/22/2014 comments of Active Parties. CHP has an important place in the emerging mix of flexible distributed resources, and to support that place, **NECHPI recommends that the Commission address issues surrounding the increasing interdependence of the gas and electric utility industries.**

**We would also like to mention that there is a strong business case for the synergies between natural gas and renewable energy. In spite of the fact that natural gas and renewables are often considered competitors in markets, in actuality, natural gas and renewable energy each contribute to economic growth, energy independence, and carbon mitigation, sometimes independently and sometimes collectively.** A recent paper commissioned by the Joint Institute for Strategic Energy Analysis and written by the National Renewable Energy Laboratory (“NREL”), entitled *Exploring the Potential Business Case for Synergies between Natural Gas and Renewable Energy* (February 2014), focuses on how can compelling business models be created where these two domestic forms of energy work in greater concert in bulk energy and four distribution-edge subsectors: industrial, residential, commercial and transportation end uses.