HUDSON RIVER SLOOP CLEARWATER, INC.
Comments on Case 14-M-0101

Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision (REV)

DEVELOPING THE REV MARKET IN NEW YORK: DPS STAFF STRAW PROPOSAL ON TRACK ONE ISSUES

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SECTION I: CONTEXT AND OVERVIEW

Hudson River Sloop Clearwater, Inc. ("Clearwater") commends the New York State Public Service Commission for implementing the Reforming the Energy Vision (REV) proceedings "to transform New York's electric industry, for both regulated and non-regulated participants, with the objective of creating market-based, sustainable products and services that drive an increasingly efficient, clean, reliable, and customer-oriented industry. Under the customer-oriented regulatory reform envisioned here, a wide range of distributed energy resources will be coordinated to manage load, optimize system operations, and enable clean distributed power generation. Markets and tariffs will empower customers to optimize their energy usage and reduce electric bills, while stimulating innovation and new products that will further enhance customer opportunities." [1]

This has been a huge and complex undertaking and the effort of the Judges, Commissioners, Staff and hundreds of participants is greatly appreciated. While the Commission's Straw Proposal has indeed focused on creating a revised ratemaking framework that will improve incentives and remove disincentives to achieving the REV goals and objectives, the Commission continues to avoid imposing active disincentives that would modify actions and policies that do not promote these goals. It seems to rely mostly on carrots, even where sticks are required. If we weren't in the midst of a global climate crisis, this approach might make more sense. As we watch applications for gas and oil pipeline and related infrastructure crisscross NY State and an endless parade of trains, barges and tankers filled with crude oil travel on or alongside the Hudson River, we remain disheartened that this initiative may represent progress, but may prove insufficient to address the immense challenges at hand.

Clearwater also supports the Commission's intention to develop "measures to monetize, in manageable transactions, a variety of system and social values that are currently accounted for separately or not at all," ... "while ensuring reliable service at reasonable rates and maintaining necessary consumer protections." [2]

Clearwater agrees with the Commission's six objectives for the REV initiative, with some reservations:

- Enhanced customer knowledge and tools that will support effective management of their total energy bill;
- Market animation and leverage of ratepayer contributions;
- System wide efficiency;
- Fuel and resource diversity;
- System reliability and resiliency; and
- Reduction of carbon emissions.

Our reservations center on the potential inability of the PSC, the utilities and third party energy and energy efficiency providers to achieve sufficient customer engagement and market animation. With regard to fuel and resource diversity, there has been relatively slow progress in the past, with fossil fuel and nuclear power still dominating the marketplace and utilities and others still heavily invested and investing in this status quo. Fuel diversity can unintentionally be a euphemism for maintaining our dependence on fossil fuel, while allowing and even encouraging more renewable generation and energy efficiency – but it does not imply the aggressive transition that is so urgently needed to ensure the sixth objective, reduction of carbon emissions. Certainly, this transition will need to utilize what is currently in

[1] Case 14-M-0101 – Proceeding on Motion of the Commission in Regard to Reforming the Energy Vision, DPS Straw Proposal on Track One; Aug. 22, 2014; p. 1.
[2] Ibid.

place to ensure reliability, but an active phase out of fossil fuel has not been clearly articulated. Another example is the use of *should* instead of *must* in the last policy recommendation on REV, p. 8:

> As a transition toward market-based approaches to increase levels of efficiency and renewables, utilities *should* integrate energy efficiency into their regular operations and *should* take responsibility for procurement of Main Tier renewables.[3]

The REV needs to spell out exactly how that will occur.

That said, although the REV Straw Proposal does offer much more clarity with regard to near-term measures than the April 24, 2014 REV Report did, Clearwater disagrees with phasing out the System Benefit Charge (SBC) and the rebates for renewables and other transformation programs it supported. While we understand that the SBC is a regressive levy, Clearwater believes that it is needed until the PSC can demonstrate that market incentives are working sufficiently and that consumers seeking rebates to help finance their solar systems are not deterred from doing so.

Lack of an underlying comprehensive Energy Plan that can serve as a roadmap to achieving sustainable energy goals: The main reason for our concern about the term "fuel diversity" is the fact that the NY State Energy Plan sees so-called "natural" gas as a bridge to a greener energy future. New York doesn't have the luxury of utilizing hydrofracked gas and oil as an interim step. This will simply result in an increased carbon footprint, whether they are burned here or abroad, putting our environment at increasing risk and delaying the aggressive steps that need to be taken – and are being taken elsewhere, by courageous leadership in Germany and others. For example, Germany's Renewable Energy Act, originally introduced in 2000, has managed to increase renewables in the country's electricity portfolio from below 7% in 1990 to over 25% in 2014. **Feed-in tariffs**, integral to Germany's renewables energy policy, incentivize long-term investment by smaller investors and have lowered the cost of renewables significantly, especially onshore wind and solar. Germany is not alone. To date, 138 countries have introduced support structures for renewable energy, mainly based on feed-in policies, making renewables by far the fastest-growing electricity generation technology worldwide.[4]

We need that kind of intelligent leadership in the policies of New York State too. The REV should compensate for this deficit – no clear roadmap to define the transition to a green energy economy – by summarizing which specific strategies, technologies and platforms exist to provide Distributed Energy Resources (DER)[5], what is on the horizon, where the gaps are and how they will be filled. For instance, in context of Findings on p.4, it is important to specify what technology is already available to support the Distributed System Platform (DSP) and what technology is achievable through which mechanisms.

Need for equal access to REV and all PSC proceedings. The REV process is exemplary in its principled openness to participation by community and citizen groups. Clearwater commends the PSC, the utilities, the ESCOs and the many other REV participants for their constructive engagement in these proceedings. However, we want to be clear about the disproportionate influence the utilities and ESCOs have had. **Over the course of the proceeding the Working Groups have been dominated by**

[3] Ibid., p. 8

[4] www.theguardian.com/global-development-professionals-network/wwf-partner-zone/2014/aug/21/energiewende-energy-transition-in-germany?&utm_medium=email&utm_source=nefoundation&utm_content=7+-+Energiewende+energy+transition+in+German&utm_campaign=Energy+Crunch+-+5+September&source=Energy+Crunch+-+5+September

[5] The REV glossary defines Distributed Energy Resources (DER) as Energy Efficiency (EE), Demand Response (DR), and Distributed Generation (DG) – and defines Distributed generation (DG) as any distributed energy resource that generates electricity. Examples include combined heat and power, photovoltaic, and small wind.

those parties whose attorneys and paid staff members are able to attend meetings and webinars during daytime hours. The result is that the dialogue has been heavily weighted toward industry professionals and carried out in a language that is 1) not understandable to the general public, and 2) not well suited to changing the terms of the debate to one focused on the public interest.

Although the REV espouses market animation and customer engagement, these proceedings, and hence their conclusions and recommendations, have been characterized by unequal access due to vastly disproportionate resources that utilities, third-party providers, non-profits and the general public have available to them. Other than PSC oversight, the main entity charged with protecting the public's interest – especially the needs of low income residents – for the entire state is the four-person Utility Intervention Unit (UIU) in the NYS Department of State, with some additional support from the severely underfunded Public Utility Law Project (PULP).

Unfortunately, shortly after taking office, Governor Andrew Cuomo disbanded the New York State Consumer Protection Board (CPB), a former government agency responsible for protecting, educating and representing consumers, which had a staff of 16 – 20, including six attorneys. The three main divisions of the Consumer Protection Board were:

- **Outreach and Program Development Bureau,** which created education programs and brochures for consumers about issues including credit card usage, home improvement, identity theft and Internet safety. The bureau's Consumer Assistance Unit handles over 20,000 complaints a year relating to consumer issues.
- **Counsel, Policy and Research Bureau,** which oversaw the agency's legal functions, including enforcement of the state's Do Not Call law. In 2006, the Board added 1.3 million resident phone numbers to the United States National Do Not Call Registry and reached settlements with 58 telemarketers in response to consumer complaints, collecting over $350,000 in fines.
- **Utility, Telecommunications and New Technologies Bureau,** which represented consumers before the New York State Public Service Commission regarding utility performance and rate issues, and accepted complaints about the Long Island Power Authority.

On March 31, 2011, Part A of Chapter 62 of the Laws of 2011 merged the former New York State Consumer Protection Board into the New York State Department of State, creating a new Division of Consumer Protection, [6] the understaffed Utility Intervention Unit.

Another initiative, which Andrew Cuomo's father, Mario Cuomo, was instrumental in creating at the urging of the New York Public Interest Group (NYPIRG), was the Citizens Utility Board (CUB).[7] Last summer, Governor Andrew Cuomo's Moreland Commission on Utility Storm Preparation and Response recommended the creation (reforming) of a CUB to ensure independent consumer representation before the PSC. The American Association of Retired Persons (AARP) is urging the adoption of the Moreland Commission's recommendation "to give residential taxpayers the meaningful seat at the regulatory table they need" [8] and deserve. Clearwater strongly supports establishing a Citizens Utility Board, or restoring the NYS Consumer Protection Board, or at minimum increasing staff and responsibility for the UIU.

Furthermore, throughout the REV, highly technical language used – in many cases unnecessarily – which creates a significant barrier to participation, when an expanded glossary could have provided significant

[6] http://en.wikipedia.org/wiki/New_York_State_Consumer_Protection_Board
[7] Given, Beth; Citizens' Utility Boards: Because Utilities Bear Watching; 1991; p. 8. www.cpil.org/download/CUB_Report.pdf
[8] Kriss, Erik; Why New York Consumers Are Losing the Utility Rate Game; 1/16/14; www.cpil.org/download/CUB_Report.pdf
http://states.aarp.org/aarp-report-why-new-york-consumers-are-losing-the-utility-rate-hike-game/#sthash.NeN8aV3A.dpuf

clarification for the lay reader. It behooves the PSC to prepare a readable, more easily understandable document for public consumption, if it is truly committed to customer engagement. A basic principle of **Environmental Justice** is that all people should have the opportunity to weigh in on decisions about activities that may affect their environment and/or health. Delegates to the First National People of Color Environmental Leadership Summit held on October 24-27, 1991, in Washington DC, drafted and adopted 17 principles of Environmental Justice. Since then, *The Principles* have served as a defining document for the environmental justice movement. One key principle states, "Environmental Justice demands the right to participate as equal partners at every level of decision-making, including needs assessment, planning, implementation, enforcement and evaluation." [9] The stultified and highly technical language in the REV does not welcome customer, consumer, or widespread stakeholder engagement. Rather it discourages grassroots participation, leaving the process to professionals who have a financial stake – often an unlimited profit motive – or are hired to promote a stakeholder's or multiple stakeholders' financial interests. For example the public needs to be able to understand the cost implications of REV efforts, in clear, simplified terminology. Also there seems to be an aversion to talking about specific renewables, including solar, wind, hydroelectric, and storage, which are simply lumped together with energy efficiency, demand response, microgrids and other DER technologies.

In reviewing the REV, Clearwater asked a volunteer, who is an MPA graduate student at Rutgers, to identify examples of technical terms and topics that should have been better explained in the body of the document and/or included in the Glossary to make the REV Straw Proposal more accessible. Simply defining acronyms is not sufficient. Here are her findings:

- Leverage of ratepayer contributions – p. 1
- Define Track One process – p. 2
- Main Tier renewables – p. 5
- Minimal load growth and non hydro generation facilities – p. 7
- FERC Order 745 – p. 8 and p. 63
- Load duration curve; Reduced line losses – p. 9
- System load factor – p. 10
- Base load modification; Peak load modifications – p.15
- Load reduction market – p. 20
- kW load reduction commitment – p. 25
- Consolidated Utility Billing (CUB), EDI, Split-incentives – p. 29
- Brooklyn Queens Demand Management (BQDM) initiative – p. 31
- Uniform business practices (UBP) – p. 33; also called Universal Business Practice in list of acronyms
- Installed Capacity Market (ICAP) – p. 34
- MTTF / MTTR; VAR – p. 38
- Societal Cost Test (SCT), Utility cost test (UCT) and Rate Impact Measure (RIM)– p. 44
- CARIS – p. 48
- Black start capability – p. 60
- 10-minute non-spinning reserve; A-06 Operating Reserve Criteria – p. 62
- Vertical market power – p. 67 (is actually explained pretty well)
- Demand response tariff – p. 80

Unless these shortcomings are openly addressed and corrected, it will be difficult to achieve the REV proceeding's goals of animating markets and engaging ratepayers and communities to play a more active role in transforming the energy system. Because regulated utilities provide an essential public

[9] www.ejnet.org/ej/principles.html

service, public participation is critical to finding the best solution to the fundamental questions posed by the REV process.

Intervenor funding is key to making participation accessible to all. Intervenor funding is the best way to ensure that environmental justice is integrated into the REV proceedings. This would even be true with a strong Citizens Utility Board or Consumer Protection Board, and other governmental support for the public interest, because citizen's groups, especially to grassroots environmental and social justice organizations, often cannot afford to participate without funding. As a result, the voices of many affected people and groups are not heard.

This is one answer to the **Key Question III: Enabling New Roles for Key Participants: What is required to enable key actors to operate effectively in the DSP market?** Clearwater suggests that both intervenor funding for non-profits in future REV-related proceedings and utilizing community-based organizations for education and outreach are key requirements for operating an effective DSP market. As for the second part of this question, **Who should serve as the DSP, how can customers be best empowered, and how should the DSP interact with the wholesale market?** Our answer is that it is critical to include representatives on a Statewide Independent DSP (SIDSP) from grassroots groups who actively represent the public interest (see discussion below on SIDSP).

Moving forward, intervenor funding will be especially important in the stakeholder process that will set up the Cost/Benefit Analysis (CBA) Framework, if it is to be a comprehensive process with balanced views. Communities will need access to funding to hire environmental economists to quantify the costs and benefits that are important to them and that impact their lives. Data cannot remain in the domain of the well-funded industry groups. An effort to reach out to and educate municipal officials, many of whom are profoundly unaware of this process or its impact, would educate decision-makers who need to understand what is being proposed and then urged to help implement the final ruling. The use of social media and decentralized public meetings held in the six utility service areas would also be an important step in the direction of increasing participatory democracy, as has been proposed in the REV.

II. ESTABLISHING REV: DSP MARKET VISION

This section defines the REV DSP market vision – setting the context for the recommendation made in REV Straw Proposal, Section III, which offers this suggested choice for the DSP provider:

> The market operations, grid operations, and system planning functions described above could theoretically be carried out **either by incumbent utilities acting as the DSP, by a newly-created independent DSP based on the NYISO's model of an independent system operator, or by some combination of both.** Under any of these approaches, however, the structure envisioned under REV would not eliminate the need for integrated reliability planning, or the natural monopoly of distribution system operations. [10]
>
> Informed by the extensive input on this issue from parties, Staff reaffirms the recommendation originally set forth in its April 2014 Report and Proposal, and recommends that the incumbent distribution utilities serve as the DSPs. While there are substantial arguments in support of an independent DSP, they are outweighed by the numerous drawbacks of that approach and the practical advantages of the utility approach.[11]

Clearwater strongly disagrees with this recommendation.

[10] Ibid., p.18
[11] Op cit., p. 18-19.

SECTION III: ENABLING NEW ROLES FOR KEY PARTICIPANTS

A. Identity of the DSP Provider

Under the REV, a central question is whether or not utilities should act as the Distributed System Platform provider (DSP). For a variety of reasons, PSC Staff has recommended that the six incumbent distribution utilities become the DSP – despite much comment to the contrary – primarily to avoid redundant costs of setting up an independent DSP. Although there may be some redundancy or overlap between DSP functions and functions the utilities customarily provide, Clearwater agrees with the many comments offered in response to the eight questions on selected policy issues and selected outcomes posed by the PSC regarding REV in July – including by the NYISO, that there should be an independent DSP to work with the utilities to ensure a smooth, effective, equitable and successful transition to the goals relating to achieving a sustainable energy system for New York State.

Clearwater calls for a Statewide Independent Distributed System Platform Provider – NOT the six incumbent distribution utilities recommended in the Straw Proposal. Table 1, p. 20 shows some areas of overlap, but also defines distinct functions that can be clearly separated. A single, independent statewide DSP can promote standardization and prevent market power abuse by closely coordinating with the utilities, whose information will become increasingly transparent, while protecting the interest of consumers and third-party providers and ensuring steady progress to REV, State and Federal goals. The REV market being established by the PSC should not be designed or overseen by industry groups who have a financial stake in the outcome of the market design. Although we agree that utilities and ESCOs should have input, this market transition should be designed and overseen primarily by people who represent the public interest and the policy goals set by the State through a democratic process. NY State Renewable Portfolio Standards (RPS) are 30% renewable energy generation in NY State by 2015; NYS Energy Efficiency Performance Standards (EEPS) goals would reduce NY's energy usage by 15% from forecasted levels by 2015; [12] carbon emission reduction goals are 50% by 2030 and 80% by 2050.

Multi-stakeholder representation on SIDSP: Clearwater envisions a Statewide independent DSP comprised of experienced energy system experts and engineers, but also stakeholders representing third parties (including ESCOs and DER providers) and consumers (especially under-represented low-income consumers and businesses operating on the margins, who are most at risk of unfavorable decisions) and unions, who need to be represented on the DSP because their workers have day-to-day, real-life experience with energy distribution and therefore an important stake in the way the grid and related technologies for generation and efficiency evolve.

- Based on Table 1 in the Straw Proposal, anything where there isn't overlap between the utility and the DSP should be the domain of the SIDSP. Any item where there is overlap, the SIDSP and PSC should have strong oversight and there should be high levels of accountability and transparency, while protecting customer privacy and truly proprietary information.
- The SIDSP should be managed by Board of Directors comprised of representatives of stakeholders, with strong representation from New York's public interest community, but also from business, utility, PSC, NYISO, etc. The SIDSP board should include at least one grassroots environmental/energy group and one environmental justice organization. Day-to-day operations

[12] www3.dps.ny.gov/W/PSCWeb.nsf/All/06F2FEE55575BD8A852576E4006F9AF7?OpenDocument

should be overseen by an Executive Director and highly skilled technical staff who interact with the utilities, the NYISO and other key REV participants, and should report to the SIDSP Board.

Utility Conflict of Interest: We believe that the fact that all utilities in NY are now owned by national or multi-national corporations whose ultimate allegiance is to their shareholders and primary motive is to maximize profit, regardless of societal or environmental impacts, and who may have conflicts of interest with REV, State and Federal energy goals, disqualifies them from serving as the DSP. By way of example, Fortis owns Central Hudson and may have holdings in oil or gas that will benefit from extended reliance on fossil fuel combustion rather than an aggressive transition to renewable energy, energy efficiency and demand response, which, with microgrids and storage, are the key elements of Distributed Energy Resources (DER).

Utility Monopoly and Other Advantages: Since deregulation, utilities are distribution monopolies, who are guaranteed profits, typically in the range of 9 -10% return on investment, which is paid by ratepayers as determined in future rate cases, while third party providers of related products and services are not.

Utility History: NY State Renewable Portfolio Standards (RPS) are 30% by 2015; carbon emission reductions targets are 50% by 2030 and 80% by 2050. Over the past decade, utilities have not contributed significantly to the progress that has been achieved in meeting the RPS, which still fell short of the 2013 limited goal of 25% renewable energy generation in NYS. In fact, utilities have repeatedly fought against raising net-metering caps and have been a consistently restraining force in the success of renewables.

Other reasons for an independent statewide DSP beyond those listed on p. 19 are scattered throughout the document, and clearly include:

- **Evaluating Response to RFPs to address major system needs** is a function that should be performed by an independent statewide DSP, not by a utility-based DSP (p. 15)
- **Fragmentation of market rules and platform technologies** that will eventually result from six separate utility-based DSPs should be prevented (p. 21).
- **Technology Standardization** should be overseen by a SIDSP (p. 42).
- **Oversight of DSIPs developed by utilities**, including ensuring compliance with each plan, should be provided by a SIDSP.
- **Standardized Interconnection Requirements (SIR):** Approval process should be instituted across all NY State regulated electric distribution utilities and overseen by SIDSP (p. 59).
- **Unregulated utility affiliates:** If an unregulated utility affiliate is permitted to bid into DER procurements, then, to protect the public interest, the SIDSP should oversee the selection of the winning bid – NOT the utility (p. 73).
- **Dispatch**: Asking utilities to ensure fairness is akin to asking the fox to guard the hen house. Preventing anti-completive dispatch and control is surely one of the best reasons to create a statewide independent DSP.

Section IV: GAUGING FEASIBILITY

B. Benefit Cost Analysis (BCA) Framework: It is very forward thinking of PSC Staff to understand the importance of internalizing social and environmental costs into the REV defined BCA. The benefit-cost analysis should incorporate the EPA's 2013 Social Cost of Carbon values. It is critically

important that costs and benefits be internalized from the outset of REV reforms, and the PSC should immediately initiate its proposed stakeholder process, with the goal of adopting a valuation system as soon as possible. Including low-income and social justice advocacy organizations into this process and providing funding for environmental economists and other experts to be available to advise them is critical to ensuring an inclusive discussion with an equitable outcome.

Section V: BUILDING THE DSP MARKET

A. **Clean Energy:** In transitioning to a Green Energy Economy there is a basis tension between the urgent need to ensure renewable energy infrastructure (wind, water, solar) is put into place as quickly as is reasonably possible and the crucial need to protect the public (i.e. electricity consumers or ratepayers) and third party providers of renewable energy generation (and energy efficiency and demand response technologies) from the enormous and potentially distructive advantages utilities have with regard to:

- Monopolistic position in marketplace with regard to distribution
- Access to low cost capital
- Guaranteed rate of return on investment
- Direct and proprietary access to customers in service area via billing system

In this context it is important to incentivize and reinforce the development of renewable sources of energy, while actively discouraging fossil fuel combustion and supporting its phase out. Because renewables are fuel free, once the infrastructure is put into place they will stabilize the market and ensure reliability as well as their predecessors, or better.

Wind, Water and Sunlight (WWS): Recent studies by Mark Z. Jacobson and colleagues at Stanford University have demonstrated that New York can fully meet its power needs by wind, low impact hydroelectric, tidal and wave, and solar.[13] In fact, there's enough offshore wind to power the entire East Coast,[14] and installing large walls of offshore wind turbines can actually tame the force of tropical storms – an added benefit, given the severe weather damage we have experienced in the past few years.[15] To ensure grid reliability, the Jacobson plan outlines several methods to match renewable energy supply with demand and to smooth out the variability of WWS resources. In fact, the New York Power Authority is already looking into opportunities for pump storage, currently in use at the Niagara Falls hydroelectric plant, to balance a renewable portfolio by storing excess power from wind and solar for times these sources are not actively generating electricity.

Renewables are now the fastest growing form of electricity generation, and the greatest job creator in the energy sector.[16] We must not allow the temporarily low price of gas obtained by

[13] Examining the feasibility of converting New York State's all-purpose energy infrastructure to one using wind, water, and sunlight by Mark Z. Jacobson; Robert W. Howarth, et al.; Energy Policy; 2013. www.stanford.edu/group/efmh/jacobson/Articles/I/NewYorkWWSEnPolicy.pdf

[14] US East Coast offshore wind energy resources and their relationship to peak-time electricity demand by Michael J. Dvorak, Bethany A. Corcoran, Mark Z. Jacobson, et al. Wind Energy, Atmosphere/Energy Program, Department of Civil and Environmental Engineering, Stanford University; 2012. www.stanford.edu/group/efmh/jacobson/Articles/I/Offshore/12DvorakEastCoastWindEn.pdf

[15] Taming Hurricanes With Arrays of Offshore Wind Turbines; Mark Z. Jacobson, Cristina Archer, Willet Kempton; Wind Energy Symposium University of Delaware February 27, 2013; www.energy.udel.edu/wind2013/Jacobson_1302UDelHurrTurb.pdf

[16] Sizing the Clean Economy: A National and Regional Green Jobs Assessment by Mark Muro, Jonathan Rothwell and Devashree Saha; Brookings Institute, 2011. www.brookings.edu/~/media/research/files/reports/2011/7/13%20clean%20economy/0713_clean_economy.pdf

hydrofracking to delay our investment in these fuel-free resources. Capturing the vast supplies of ambient energy to generate electricity without burning more fossil fuel or using nuclear fission makes a great deal of sense at this moment in history.

Reliability: Generating electricity utilizing a balanced portfolio of fuel-free renewables: wind, water (hydroelectric) and solar, with storage provides a high degree of reliability – and tidal is scrupulously reliable. Renewables with storage promotes resilience to severe weather events and should be routinely installed in all emergency and first responder facilities, as diesel generators are phased out and replaced by solar with battery backup.

Renewable Portfolio Standards (RPS): New York and the Federal Government both have laudable, achievable goals. "New York State, through regulations adopted by the Public Service Commission (Commission), first enacted its RPS in 2004 with the goal of increasing the amount of renewable electricity used by consumers to 25% by 2013. In an Order issued in January 2010, following a comprehensive mid-course review, the Commission expanded the RPS target from 25% to 30% and extended the terminal year of the program from 2013 to 2015. In an April 2, 2010 Order the Commission established static NYSERDA Main Tier and Customer-Sited Tier program targets for supporting the production of approximately 10.4 million megawatt-hours (MWh) of renewable energy annually by 2015.[17]

The final REV should require utilities and ESCOs to meet RPS procurement goals – possibly also by generation, but that is far more debatable (see below).

Carbon Emission Reduction: "Cleaner Environment: Working through innovative public-private partnerships, investments in clean energy strategies will help New York to reduce the intensity of its carbon emissions from the energy sector by 50 percent by 2030 (measured in CO_2 emissions per Gross State Product from 2010 baseline), putting New York on a pathway to achieve an 80 percent reduction in total emissions by 2050."[18]

Mid–Hudson Regional Sustainability Plan (MHRSP) Energy Efficiency and Renewable Energy Goals: In 2012 NYSERDA invested over $10 million in the ten NY State Economic Development Regions to develop Sustainability Plans, which are now being incentivized with implementation funding. The Mid-Hudson Region Sustainability Plan includes the following objectives for Chapter 5: Energy: [19]

- EN1 - Become radically less energy intensive while maintaining a strong regional economy
- EN2 - Expand renewable generation as an energy source across the Region
- EN3 - Improve the continuity of the energy delivery system throughout the Region

The specific achievable metrics that were arrived at by a very intense collaboration among some of this region's most knowledgeable energy experts are as follows.

EN 1: Reduce energy intensity. The current regional energy consumption is 157.2 MMBtu per capita. The MHRSP goal is to reduce this by 15% to 133.6 MMBtu by 2020; by 30% to 110.1 MMBtu

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17 "New York State Renewable Portfolio Standard." *nyserda.ny.gov.* New York State Energy Research and Development Authority. Web. March 2014. www.nyserda.ny.gov/Publications/Program-Planning-Status-and-Evaluation-Reports/Renewable-Portfolio-Standard-Reports.aspx

18 "2014 Draft New York State Energy Plan." *New York State Energy Plan*. n.p. Web. 2014. http://energyplan.ny.gov/Plans/2014.aspx

19 www.orangecountygov.com/filestorage/124/1362/MHRSP_Book_opt.pdf

by 2035, and by 50% or 78.6 MMBtu by 2050. There were similar reductions proposed for stationary fossil fuel consumption and Greenhouse Gas (GHG) emissions.

EN 2: Increase installed renewable energy capacity from current 0.382 MMBtu per capita by 200% to 1.15 MMBtu by 2020; by 2,000% to 8.02 MMBtu per capital by 2035, and by 20,000% to 76.70 MMBtu per capita by 2050 (see Attachment 1).

Clean Power Plan: Nuclear power should be excised from the Federal Clean Power Plan – nuclear, with its planned and unplanned releases of radioactive isotopes, is NOT clean power. Fortunately New York State does not include nuclear power in its Renewable Portfolio Standards or its Energy Efficiency Portfolio Standards.

Supply Side Renewable Resources: Although there has been steady progress in implementing solar, wind and other renewables, New York failed to reach the 2013 25% RPS target and is not yet on a trajectory to accomplish 30% renewable generation by 2015, despite a variety of incentives to do so. Linking the rate of return on investment to utilities' procurement of renewables will ensure they do their share to attain or exceed RPS goals; penalties for failure to do so will further motivate appropriate action.

Interconnection Procedures: Interconnection costs are one of the greatest obstacles for municipalities, who have landfills, brownfields and other appropriate open space for large solar installation, to overcome. To promote the implementation of large renewable energy infrastructure projects, interconnections costs on property in reasonable distance to power lines capable of handling this large influx of power should be waived for municipalities, or funded through NYPA or other reserve funds (REV, p.74). The severe delays in processing applications that have occurred in many utility service areas should be monitored and prevented.

Microgrids: Perhaps the single most important obstacle to the success of microgrids are standby tariffs. Restricting or **eliminating Standby Tariffs** is essential for the REV to be successful in supporting distributed generation (REV, p.61).

Section VI: MITIGATING MARKET POWER

A. **Utility Engagement in Distributed Energy Resources and Vertical Market Power Concerns:** In the context of whether or not utilities should be allowed to own renewable generation capacity, the Staff REV Straw Proposal is currently recommending that utilities be allowed to generate renewable energy on land they own (which could also include lands they purchase for this purpose) or be detailed in a Distributed System Implementation Plan (DSIP), based on need and with other conditions described on p. 73. It is important to note that in 1998 the PSC adopted its Vertical Market Power Policy (VMP) preventing the utility or its affiliate from ownership of generation. Unless we go back to a framework which strongly regulates vertically-integrated utilities, the utilities should be limited to providing the service they currently offer – delivering electricity purchased in bulk markets to their customers (one-way distribution) – plus increasingly receiving and redistributing energy from bidirectional distributed sources (renewable generation, combined heat and power and other microgrids) to their customers. The main reason to prohibit utility-owned generation of renewables is that utilities have unfair advantages, including direct customer communication, easy access to investment capital, etc. – and there is no real firewall between a utility and its affiliate. Also, they may be motivated to keep progress slowed, at least in the short and mid-term, while they still exploit fossil-fuel infrastructures. Utility ownership of renewable

generation may also compete with and hamper the development and implementation of Community Choice Aggregation (CCA) and true community solar. While there is no clear consensus on the question ownership of renewable energy generation by utilities, there is strong support for high renewable procurement requirements by utilities and ESCOs.

Direct Ownership of DER by Utilities: There is a paradoxical tension between urgency to maximize the implementation of renewable energy infrastructure and energy efficiency/demand response practices versus the need for market equity and consumer protection (REV, p.70).

The same advantages observed with regard to Utilities as DSP, apply to utility ownership of DER, with an additional concern related property ownership:

- Monopolistic position in marketplace with regard to distribution
- Access to low cost capital
- Guaranteed rate of return on investment
- Direct and proprietary access to customers in service area via billing system
- Property ownership for potentially siting renewable energy generation facilities

Tim Judson of Nuclear Information & Resource Service (NIRS), has summarized this quandary well:

> "Allowing DSPP ownership over distributed energy resources could impinge on energy democracy and affordability goals by usurping distributed ownership opportunities and presumably allowing utilities to include distributed generation the utility owns in the rate base, and pass on increased costs to ratepayers unjustifiably. Limits and protections against such outcomes must be a priority. Two possible mechanisms would be either to require that DSPPs be independent from the utility, or that utilities' involvement in distributed generation be curtailed to (a) providing low/no-interest financing and/or (b) serving as an "owner of last resort." Utilities might be permitted, for instance, to establish a revolving loan fund with their own capital for the express and sole purpose of providing no-interest financing to ratepayers, and the revolving fund would be treated as the regulatory asset in the rate base. Through such a mechanism, billions of dollars of distributed generation could be financed, for instance, but through a regulatory asset worth only a few hundred million."

Clearwater has already strongly recommended a Statewide Independent DSP and agrees to a trial of limited ownership of renewable energy generation by utilities on the narrow scale proposed in the REV, with a re-evaluation in a few years to assess the effectiveness of this policy and the impact on other renewable energy providers. Of greater concern is the ongoing reduction and phasing out of once generous rebates offered by NYSERDA to customers who want to install solar or other renewable generation. The impending reduction from $1.00/watt to $0.90/watt represents a loss of $500 for a 5-kilowatt photovoltaic (PV) system. Over time this will force more residents and business to opt for solar lease arrangements, such as those provided by Solar City, who has unfairly competed with other companies that install customer-owned systems to capture NY SUN funds. While all solar infrastructure is a step in the right direction, this represents a very unfortunate trend – one that does not promote the energy customers' best interest, but rather the interest of corporations such as Solar City.

Deregulation: The purpose of deregulation was to promote competition in the hopes that ratepayers would benefit, but its value to energy customers is highly questionable. Vertically integrated utilities, with stringent and clearly protective regulatory oversight, might have actually been more beneficial for ratepayers. Limiting utility's return on investment to 6-7% instead of guaranteeing 9-10% would have as well. Essentially the main value of deregulation has been to create a cadre of ESCOs, who

have not served the public well, often charging more than the utility for the same amount of energy (REV, p.69).

> "Despite the promise of lowering prices through increased competition, evidence suggests that the deregulated energy market has not been working for many consumers and small businesses. For example, data obtained by the Public Utility Law Project from Niagara Mohawk showed that, between August 2010 and July 2012, 84% of the electric bills and 92% of the gas bills of those who switched to Energy Service Companies (ESCOs) were higher than the bills of those who decided to keep receiving their supply from the utility." [20]

Storage: Storage is critical to balancing a renewable energy portfolio. The wind blows when and where it will; the sun shines for half the day. Hydropower is more reliable and tidal is extremely reliable except at high and low tides when flow pauses. Hydropower can also serve as storage as it does at Niagara Falls. As noted in the REV Straw Proposal, other states, including California, provide major incentives for investing in storage capacity. Solar + storage provides excellent reliability and increased resilience in case of severe weather or other disasters (REV, p. 71).

VII. IMPLEMENTING REV: Findings and Recommendations

Summary: Clearwater offers the following observations, conclusions and recommendations:

What NY State needs to achieve regional, state and federal energy goals to increase renewable energy generation, energy efficiency and demand response is an **energy roadmap** that is based on an understanding of what currently exists, where the gaps and challenges are, a specific timeline with specific metrics to be achieved as milestones toward successful implementation, and financing strategies to ensure that investment is made primarily into renewables and other DER infrastructure – not into fossil fuel or nuclear power. The roadmap must result from balanced input in which all stakeholders have a real and effective opportunity to participate. A REV based on such a guidance document would be better able to achieve the goals set forward in the PSC Report and Straw Proposal. In the absence of such a document, the PSC should create one to base its findings upon.

Clearwater strongly supports the creation of a Statewide Independent entity to serve as a unified DSP that includes a Board of Directors comprised of experienced energy system experts and engineers, but also stakeholders representing third parties (including ESCOs and DER providers) and consumers (especially under-represented low-income consumers and businesses operating on the margins, who are most at risk of unfavorable decisions) and unions. Independent oversight will be especially important for renewable energy interconnection applications and the interface of microgrid with utility distribution systems. Clearwater urges **independent monitoring** of commitments and requirements to achieve specified levels of renewable energy procurement by utilities and ESCOs, linked to an expanded RPS, with specific deterring penalties for failing to do so.

Clearwater believes that it is premature to phase out renewable energy rebates to residential and commercial customers – that doing so will deter participation and/or force customers that could become renewable energy generators to lease rather than own this critical infrastructure.

[20] NYC Dept. of Consumer Affairs, June 14, 2014, citing 1 Testimony of William D. Yates, C.P.A., on behalf of the Public Utility Law Project of New York, Inc., before the New York Public Service Commission, Proceeding for Niagara Mohawk Power Co. for natural gas and electric rates, Cases 12-G-0202/12-E-0201 (August 31, 2012), at 6.

Clearwater observes a tension with regard to utility ownership of renewable energy generation between the urgent need to put renewable energy infrastructure (wind, hydroelectric, tidal, solar, and storage) in place and the monopolistic and other fiscal advantages utilities have. For now, Clearwater supports the REV recommendation for limited ownership of renewable energy generation by utilities, including wind, solar PV, hydroelectric and storage, with strict oversight to minimize unfair advantages.

The Lower Hudson Valley New Capacity Zone (NCZ) is an example of a poorly designed, counterproductive tariff: The recently implemented Lower Hudson Capacity Zone did exactly the opposite of incentivizing renewables and energy efficiency. In fact, it has motivated Danskammer to come back on line and is paying Entergy and other area power producers extra for capacity they were already providing at Indian Point Nuclear Facility and the other fossil fuel-based power plants, as well as hastening the implementation of Cricket Valley, which will provide 1,000 megawatts of power from hydrofracked, and therefore unnatural, gas. This is an example of a failed regulatory decision that directly contradicts clearly articulated energy goals that have been widely adopted. As a guardian of the Hudson River, Clearwater has direct stake in this matter, as power plants are one of the most damaging industrial facilities to the ecology of this world-renowned river. As stewards and as a customer, we greatly appreciate the Public Service Commission and Central Hudson/Fortis for the legal challenge and appeal they have undertaken to oppose the faulty decision by Federal Energy Regulatory Commission (FERC) and the New York Independent Systems Operator (NYISO) in implementing this poorly conceived tariff. The best way to deal with the capacity issue in and through the Lower Hudson Valley is to expedite the Governor's Energy Highway RFP to relieve transmission bottlenecks and to incentive renewable generation and energy efficiency here in this region.

Wasted Energy: The REV focused specifically on reforming New York's electricity system. It is important to also address building heating and cooling and transportation, which represent the other two-thirds of energy consumption. In fact, the best way to address personal transportation and an array of fleets at this time is to transition to hybrid electric vehicles. As this becomes more commonplace and charging stations are more available, electricity consumption and battery storage capacity will increase. The REV needs to plan for this by ensuring additional demand is met by renewable – not by fossil fuel or nuclear power – and that the storage capacity hybrid EVs will provide is accounted for in the DSP.

Public engagement is a very laudable goal, but widespread public education is needed to engender informed participants. The REV needs to articulate how residents and businesses will benefit from the plan's implementation. **Low-income and environmental justice communities:** There have been no concrete suggestions offered as to how implementation plans will "encourage participation of low and moderate-income customers" (REV, p.77). Clearwater urges the Commission to consider utilizing community-based organizations to do this outreach to help to democratize these proceedings and their implementation. This was done very effectively in NYSERDA's Green Jobs/Green New York program, and can be helpful here.

Role of renewables as economic drivers: One aspect of the market transformation that has not been addressed in the REV is the need to prepare utility workers and people seeking employment in the field of renewable energy, energy efficiency and other DER resources for the employment opportunities that the transition to a Green Energy Economy will create. Workforce development and wage equity are critical. New York's Green Jobs/Green NY planning process included union/labor representation and acknowledged this need. This need can be well served by a public engagement effort that includes

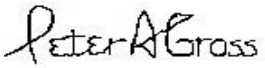
unions and community-based-organizations, as well educational institutions to create workforce development training programs.

Clearwater greatly appreciates the opportunity to participate in these proceedings and to comment on REV Straw Proposal. We hope that our comments will influence the outcome of these proceedings in a way that addresses the climate crisis by significantly reducing our carbon footprint, that makes considerable progress toward the implementation of many megawatts of renewable energy infrastructure and energy efficiency measures, and that ensures environmental justice for all. The Hudson River ecosystem and the people living and working in its watershed and throughout New York State will be important beneficiaries of our success.

Thank you for considering these comments and for the work involved in this huge and historic undertaking.

Sincerely,

Manna Jo Greene, Environmental Director



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Appendix 1: Sustainable Energy Indicators from Mid-Hudson Regional Sustainability Plan.

5.4 Indicators

Table 5.12 presents a series of sustainability indicators for the energy focus area. These indicators should be used by local government and by regional institutions to track performance in achieving the objectives listed in Section 5.3. The data sources and calculations methodologies for each metric can be found in Appendix B.

5.4.1 Metrics and Targets

Table 5.12 Indicator Inventory: Tier 1 Indicators

Objective	Metric	Current Value (2010)	Target 2020	Target 2035	Target 2050
EN1: Become radically less energy and fossil fuel intensive while strengthening the regional economy					
1a. Reduce energy intensity	Regional energy consumption (MMBtu) per capita[129]	157.2	133.6 (-15 %)[130]	110.1 (-30%)	78.6 (-50%)
1b. Reduce stationary fossil fuel consumption	Stationary fossil fuel use (MMBtu) per capita[131]	80.2	68.2 (-15%)	56.1 (-30%)	40.1 (-50%)
1c. Reduce stationary fuel consumption GHG emissions	Stationary fuel consumption GHG emissions (MTCO2e)	12,162,375	10,336,019 (-15%)[132]	7,297,425 (-40%)	4, 256,831 (-65%)
EN2: Grow renewables exponentially as an energy source across the Region					
2a. Increase installed renewable generation capacity	Installed capacity (MMBtu) per capita[133]	0.382	1.15 (+200%)	8.02 (+2000%)	76.79[134] (+20000%)
EN3: Improve the resilience of the energy delivery system					
	See Tier 2 Indicators				