Final Report

Recommendations of the NYISO Consumer Advisory Council to the NYISO Board of Directors

November 11, 2013

To the New York Independent System Operator Board of Directors and the Broader NYISO Community:

On behalf of the Consumer Advisory Council, we are pleased to submit our final report.

The Council was appointed by the NYISO Board in January 2011 to advise the NYISO Board of Directors and its President and Chief Executive Officer from the perspective of end-use electricity consumers. The Council consisted of sixteen members from a variety of backgrounds including many that work for or on behalf of consumer organizations. During the Council's tenure, which started in August 2011, it met in person semi-annually (six times) for one-day, plus multiple meetings via webinars and conference calls. The Council spent its first year learning about the NYISO governance and market structures from presentations conducted primarily by NYISO Staff.

Initially, NYISO Staff asked the Council to focus its efforts on strategic issues but with a consumer perspective. The Council drafted two white papers – one on strategic planning and one on consumer institutional issues – that it presented to and discussed with NYISO Staff during the summer of 2012. As the process unfolded, NYISO Staff suggested that the Council's work product be in the form of high-level recommendations instead of short whitepapers. In addition, Staff requested that the Council refrain from addressing issues actively being considered by stakeholders in the NYISO governance structure including the governance structure itself.

We appreciate the NYISO Staff's support of the Council's efforts. We recognize that the Council is charting new territory and many of the important processes regarding defining the Council's mandate, organizational structure, and support had to be worked out in real time. Future NYISO advisory councils would benefit from having in writing a detailed statement of their mandates, a description of the process of council-NYISO interactions, assurances of council independence, and sufficient NYISO staff support to provide the necessary information for the councils' deliberations. The Council stands ready to provide advice and assistance to the NYISO in this regard.

Finally, we thank the Council's members. This report represents the collective views of the Council but not necessarily those of each member on each topic. The members are all participating in their individual capacities and are not necessarily expressing the views of their employers. The Council worked extremely hard and successfully to hear all views and constructively and professionally engage other members even when there were sharp differences in views. We do not expect that the NYISO Board, stakeholders and regulators, will agree with all of our recommendations. We do hope that our report initiates a productive discussion and results in improved NYISO transparency and accountability to the benefit of all New Yorkers.

Sincerely,

James Adams and Frank Felder Co-Chairs, Consumer Advisory Council

Recommendations of the NYISO Consumer Advisory Council to the NYISO Board of Directors

I. Summary of Recommendations to the NYISO Board of Directors

The Consumer Advisory Council makes the following high-level recommendations to the NYISO Board of Directors:

- 1. Expand scenario planning as part of the NYISO's Strategic Plan.
- 2. Institutionalize direct contact with New York end-use consumers and consumer organizations.
- 3. Proactively be more transparent to enhance effectiveness and visibility.
- 4. Build consumer privacy protections into ongoing and future initiatives.
- 5. Ensure that the maximum amounts of cost-effective energy efficiency and demand response are utilized in New York State.
- 6. Capture the full value from emerging real-time digital grid equipment and analytic tools.
- 7. Pursue initiatives to enhance NYISO grid flexibility to meet multiple energy futures.
- 8. Consider and incorporate broader public policy objectives and implications.
- 9. Focus on initiatives that address system resilience to crises including severe weather events and physical/cyber attacks.

II. Introduction

The NYISO Board of Directors asked the Consumer Advisory Council (Council) to provide high-level recommendations for the Board's consideration.¹ The Council recognizes that many NYISO initiatives intended to address issues that the Council is raising are already underway. The Council applauds the NYISO for creating the Office of the Consumer Interest Liaison and the Office's associated efforts to update end-use consumers on NYISO-related activities, and for conducting analyses of major NYISO rule changes. The Council also appreciates the guidance and support from the NYISO Staff regarding the Council's efforts.

The Council's recommendations center around three important drivers:

- a. The fundamental purpose of the NYISO is to serve the consumers of New York by ensuring a reliable electric grid, administering efficient wholesale electricity markets, and exercising leadership by informing policymakers, stakeholders and ultimately the public of the implications of policies, new technologies, and industry changes.
- b. Technology, and consequently the electric power industry, is advancing at an extremely rapid pace, creating many opportunities and risks. These changes are blurring the distinction between wholesale and retail and expanding the interactions between end-use consumers and the NYISO.
- c. The needs of society in the area of energy will drive significantly more small customers to directly interact with the NYISO. It will become much more important to think beyond the current direct customers and immediate stakeholders and to seek to understand better NYISO's current customer's customers. This will require expanding communications and interactions with end-use consumers. The consequences of these actions extend well beyond reliability and market efficiency, and drive the need for increased transparency, responsiveness and accountability.

The following high-level recommendations are based upon a consensus of the Council.

¹ Council members are listed in Appendix I. The Council provided NYISO Staff with two white papers during the summer of 2012 on Strategic Planning and NYISO Institutional Changes to Improve Consideration of End-Use Consumer Issues, which are appended to this report. The Council presented its preliminary findings to the Chair of the NYISO Board of Directors, the NYISO President and Chief Executive Officer and other NYISO Staff on April 29, 2013 and invited both oral and written feedback. A draft written report was provided to the NYISO on August 1, 2013 for comment. After receiving none, the final report was submitted, with only minor editorial changes from the August draft, to the NYISO on November 11, 2013.

III. High-level Recommendations

1. Strategic Planning: Expand scenario planning within the Strategic Plan

Reasons

Scenario planning promotes a full understanding of potential changes and a means of communicating with consumers and customers. It also generates ideas and options in response to changing conditions.

Recommendations

1.1 Raise the emphasis on end-use consumer issues in future strategic plans.

1.2 Facilitate additional consumer interaction with the NYISO to hear about strategic changes consumers perceive now and those consumers anticipate in the future.

1.3 Analyze specific and detailed risks and opportunities (cyber/physical security, fuel diversity, research and development, price, etc.).

1.4 Identify changes to each aspect of the industry, including consumers.

Reference: Strategic Planning White Paper, August 2, 2012, Appendix II to this report.

2. Direct Contact with Consumers: Institutionalize direct contact with New York end-use consumers and consumer organizations

Reasons

Ultimately, the mission of the NYISO is to serve end-use consumers. The NYISO currently has very limited interaction with end-use consumers, and the Council is not currently representative of NYISO's end-use consumers.

Recommendation

2.1 Establish a successor to the Council that includes New York end-use consumers and industry experts.

2.2 Work to make the NYISO relevant and understood by end-use consumers by supporting activities such as:

2.2.1 Providing web-based methods to provide relevant and timely information for enduse consumers such as web-based discussions;

2.2.2 Offering a portion of the NYISO web site specifically written to help end-use consumers;

2.2.3 Offering periodic well publicized and readily available webinars on topics end-use consumers identify as important;

2.3.4 Reconstituting the Council with more small business and residential consumer representatives, especially those from New York.

Reference: Institutional Changes to Improve Consideration of End-Use Consumer Issues by the NYISO, 2012, Appendix III to this report.

3. Transparency: Proactively be more transparent to enhance effectiveness and visibility

Reasons

The NYISO is a key leader in shaping the future of the New York energy system and its ultimate success depends on the confidence that end-use consumers have in the NYISO's mission. Currently, few consumers are aware of the NYISO and what it does for them. Consumers' support must be earned.

Recommendations

3.1 To increase credibility and transparency, the NYISO should initiate and widely disseminate:

3.1.1 Periodic independent reviews of the NYISO stakeholder governance structure to assess whether it favors any incumbent interests;

3.1.2 Independent and comprehensive management audit of the NYISO;²

3.1.3 Independent review and audit of market monitoring, mitigation and fraud provisions to identify deficiencies, recommend corrective actions, and provide a public report.

3.2 The NYISO customer interface should be designed to accommodate a greater number of end-use consumer interactions.

3.3 Key NYISO studies should undergo an independent peer review process.

3.4 Provide a written response to the Analysis Group, January 2011 report on NYISO consumer responsiveness programs as well as any other reports whose recommendations have not been completely addressed.

² The NYISO informed the Council on May 1, 2013 that it expects the New York State Public Service Commission to initiate a management audit at a future date. The Council recommends such a management audit to be conducted as soon as possible without any duplication of efforts.

4. Privacy Protections: The NYISO should build-in consumer privacy protections in its current and future initiatives

Reasons

The potential advantages of smart grid may be thwarted if consumers are not confident that data related to their electricity usage is secure. Few technological developments will impact data privacy as significantly as the smart grid. The smart grid will transmit energy usage data, in some cases, down to the appliance level, from households to energy suppliers, resulting in a rich cache of consumers' most personal information that must be protected. The Council recognizes that the NYISO's role in this area is limited but believes it may expand in the future.

Recommendations

4.1 Recognize and address data security concerns over consumers' ability to exercise control over whether third-parties may access personal data.

4.2 Consider supporting policies that will ensure that utilities and other entities refrain from sharing individual consumers' energy usage data with third-parties without consumers' authorization.

4.3 Establish policies for securing, managing, accessing, sharing and disposing of data to ensure and protect end use privacy.

5. Energy Efficiency and Demand Response: The NYISO should work with federal and state regulators to ensure that the maximum amount of cost-effective energy efficiency and demand response is utilized in New York State

Reasons

Energy efficiency is often the most cost effective means of meeting demand and achieving climate goals such as New York's 15% by 2015 and 80% by 2050 initiatives. Measures to reduce demand for electricity can benefit consumers by lowering energy bills, slowing the need for capital equipment, lessening the vulnerability to fuel price volatility and by enhancing reliability. FERC Order 1000 calls for greater utilization of non-transmission alternatives in transmission planning. The NYISO is in a unique position to drive comprehensive least cost energy system planning.

Recommendations

5.1 Encourage energy efficiency and other end use measures that are deemed superior to transmission solutions and ease the process for regulated cost recovery.

5.2 Facilitate the adoption of technologies such as distributed generation, community energy storage, smart grid technologies and microgrids.

6. New Technologies: The NYISO should capture the full value from emerging real-time digital grid equipment and analytic tools

Reasons

Rapid advancements in information technology and distributed computing are transforming the power system. Digital devices in protection and control are addressable and have substantial embedded computational capability. The nation will be commissioning a continental network of over 1200 phasor measurement units (PMU) that will deliver sub-second data to support situational awareness and new real-time tools. The challenge is how to cost effectively extract full value from these trends to enhance current NYISO operations today and position to capture emerging value streams over the next decade.

Trends in new digital devices and pervasive computing create a challenge in data management and cyber security for the NYISO today. The volume and velocity of reliability data will challenge current NYISO business practices. More importantly, however, this new level of realtime transparency offers substantial potential benefit and value in terms of:

- Wide area situational awareness across NYISO and the New England area;
- Faster on-line security analysis to detect and manage voltage issues in the system;
- Use of high performance computing to drive state estimation and contingency analysis to the SCADA scan rate of 2-4 seconds for enhanced reliability; and
- Use of PMU data and high performance computing to, for the first time, be able to predict the dynamic trajectory of the transmission system (faster than real-time dynamic simulation) to better manage transmission congestion (dynamic line rating) and improve reliability.

Recommendations:

6.1 The Council recognizes and strongly endorses the NYISO program to install a PMU network in conjunction with the ARRA Investment Grants awarded in 2011.

6.2 The Council strongly encourages the NYISO to begin defining an agenda to progressively extract multiple benefits from this PMU network in advanced applications for existing reliability practices and to actively explore emerging new concepts that offer potential net benefits to New York consumers. Specific topics to consider include:

6.2.1 Prepare to utilize emerging NYISO PMU data streams to enhance situational awareness tools and enhance state estimator operations.

6.2.2 Monitor DOE R&D results in the Advanced Grid Modeling Program to identify how high performance computing (HPC) can transform operational tools (minutes to seconds) and planning tools (days to minutes).

6.2.3 Assess the potential benefits of emerging new paradigms of real-time tools that leverage PMUs and HPC to develop predictive real-time tools.

6.2.4 Examine new concepts for handling the high volume and high velocity data sets that far exceed current practices.

7. Flexible Grid: The NYISO should pursue initiatives to enhance grid flexibility to meet multiple energy futures in New York

Reasons

The NYISO should adopt policies and programs that maximize the financial benefit of system modifications across a range of energy futures. The recent emergence of new natural gas supplies and the resultant drop in gas prices is one of the biggest transformations in the U.S. electric industry this century. This change was a big surprise and is an example of the need to consider uncertainty in system design and investment. Increasing use of intermittent generation (renewables) and demand response are additional examples of dramatic change in system characteristics. System planning and design must address the need for inherent flexibility to handle multiple energy futures and potential disruptive future technologies. Cost effective solutions that provide flexibility in terms of ancillary services, adaptive control and energy storage (of all types) will enable the NYISO to better adapt to future consumer needs.

End-use consumers and the NYISO benefit from system flexibility by being able to ensure reliability and efficient markets in the face of varied energy futures. This same flexibility enables NYISO to engage innovations that meet consumer needs in the future, such as voluntary demand response, preferred environmental profiles, and increased system efficiency (energy) and asset utilization (economic efficiency).

Recommendations:

7.1 The NYISO should enact programs and policies to identify optimal means of leveraging emerging demand response and smart grid concepts at scale, across all customer types. NYISO should closely monitor the emerging "transactive energy" community of innovation and R&D to monitor "lessons learned" elsewhere that offer insight on how to expand the role of demand response at scale consistent with the New York regulatory environment.

7.2 The NYISO should extend its evaluation of energy storage as part of their system planning to identify optimal levels of storage to provide the balancing and regulation services needed for multiple energy futures in New York State.

7.3 The NYISO should work with industry, DOE and regulators to examine how to provide a common approach for signaling, measurement and verification of ancillary services for New York, New England and the nation.

8. Broader Public Policy Context: The NYISO should be vigilant in considering and incorporating broader public policy objectives and implications

Reasons

The NYISO has a key role in decisions that have considerable impact on public policy, and its success depends on the entire set of outcomes affected by the New York State electric power system and beyond. The NYISO Board of Directors is an independent authority not appointed by elected officials.

Recommendations

8.1 The NYSIO should acknowledge that its decisions may have consequences for New York residents beyond reliability and the competitiveness of wholesale electricity markets.

8.2 The NYISO should work with public policy makers and the public to address these consequences.

8.3 The increased utilization of natural gas is an example and should be considered in this context.

9. Crisis Management: Focus on initiatives that address system resiliency to crises including severe weather events and physical/cyber-attacks

Reasons

The NYISO plays a key role in reliability planning efforts, and its operations will be impacted by any changes made to physical assets. The rapidly evolving electric sector is increasingly dependent on information technology and the telecommunications infrastructure. The breakdown of these systems could potentially shut down power to all of New York State, with implications for surrounding regions.

Recommendations

9.1 Evaluate impacts to operations from potential changes in transmission and generation.

9.2 Make appropriate updates to emergency operations plans to address the experiences of recent severe events and possible future events.

9.3 Conduct a security risk assessment with respect to cyber/physical security assuring the proper implementation of tools, standards, procedures and restoration planning.

9.4 Explicitly examine earth system models in determining the magnitude of future events (floods, temperature extremes, wind, etc.).

Appendix I: Members of the New York ISO Consumer Advisory Council

James R. Adams, director of utilities, Department of Energy & Sustainability, Cornell University

Darrel J. Aubertine, commissioner, New York State Department of Agriculture and Markets

Peter A. Baynes, executive director, New York State Conference of Mayors and Municipal Officials

J. David Brown, president and CEO, Capital District YMCA

William B. Eimicke, founding director of the Picker Center for Executive Education, School of International and Public Affairs, Columbia University

Joel Eisenberg, Oak Ridge National Laboratory program manager, office of weatherization and inter-governmental program at DOE

Fredrick W. Erlich, CEO, Living Resources

Frank Felder, Ph.D., associate research professor and director of the Center for Energy, Economic and Environmental Policy, Bloustein School of Planning and Public Policy, Rutgers University

Michael B. Gerrard, Andrew Sabin Professor of Professional Practice and director of the Center for Climate Change Law, Columbia Law School

Pamela Jones Harbour, partner, Fulbright & Jaworski, L.L.P.

Carl Imhoff, manager, electric infrastructure market sector, Pacific Northwest National Laboratory

Irene E. Leech, Ph.D., associate professor, consumer affairs, Virginia Tech, president, Virginia Citizens Consumer Council, and vice president, Consumer Federation of America

Anastasia Song, CEO, The Haugland Group (prior to appointment to the NYISO Board of Directors)

Gerald Stokes, associate director for global and regional solutions, Brookhaven National Laboratory

Rebecca Wingenroth, senior project manager, Electric Power Research Institute

Randy Wolken, president, Manufacturers Association of Central New York

Appendix II:

White Paper on NYISO Strategic Planning Process

New York ISO Consumer Advisory Council

August 2, 2012

I. Introduction

The NYISO has requested that the Consumer Advisory Council (Council) review the NYISO's Strategic Plans and provide input from a consumer perspective, specifically to determine if there are major elements missing from them.

The NYISO strategic planning process is extensive, and it is not practical for the Council to conduct a comprehensive analysis. Instead, our efforts are limited to a high-level review based upon two webinars in which NYISO staff described its strategic planning process and a review of the NYISO's 2011-2015 and 2012-2016 Strategic Plans, which are publicly available. In addition, the Council has participated in meetings, webinars, and conference calls describing other elements of the NYISO such as governance, markets, and smart grid. The Council anticipates that this draft white paper may be revised upon further discussions with the NYISO, in particular during a conference call tentatively scheduled for May 10, 2012.

The Council recognizes that the annual NYISO Strategic Plans do not explicitly reflect all of the discussions, analyses, and supporting documentation that culminated in their formation. That being said, the Council believes that the NYISO Strategic Plans are important documents that could communicate to end-use consumers, particularly those not involved directly in the NYISO governance process, substantially more information than they currently provide on the context and specifics of various NYISO strategic initiatives and how they benefit end-use consumers.

II. Preliminary Findings

- 1. The NYISO 2012-2016 Strategic Plan would benefit from recognizing the importance of enduse consumers. Whereas the 2011-2015 Strategic Plan had several groupings of initiatives directed towards consumers (e.g., Consumer Outreach Initiatives, Consumer Metric Development), the 2012-2016 Strategic Plan does not.
- 2. The NYISO 2012-2016 Strategic Plan would benefit from including more discussion on the following key elements:
 - a. It does not connect each strategic initiative with specific benefits, either qualitatively or quantitatively, to end-use consumers, and, therefore, end-use consumers may not understand why these initiatives are important and worthwhile.
 - b. It does not discuss potential risks and opportunities and how they may affect the NYISO strategic initiatives depending on how those risks and opportunities play out. It does not discuss the conditions under which pursuing a specific initiative makes sense, how the

NYISO assesses whether those conditions exist, and what revisions to the plan are necessary if those future conditions do not materialize as anticipated.

- c. It does not link the prior Strategic Plans and its outcomes to the current Strategic Plan. For example, in the 2012-2016 Strategic Plan, there is no discussion of what was accomplished in the previous Strategic Plan, what initiatives need to be continued in the current plan, what technical, regulatory or economic factors have changed since the last one requiring the NYISO to address, and why various initiatives are being pursued.
- d. The NYISO 2012-2016 Strategic Plan should be more specific. From the brief description of many of the initiatives, it is not at all clear how the NYISO or anyone else would determine that an initiative has been completed. Many of the initiatives are described as "enhancing," "supporting" and "strengthening," but the plan does not articulate what constitutes success or completion.

III. Suggested Issues for the NYISO to Consider in its Strategic and System Planning Processes

This section provides more details on the items that the Council believes that the NYISO should include in its strategic and system planning processes.

- 1. Raising the Emphasis on End-Use Consumer Issues in the NYISO Strategic Plan
 - a. The NYISO provides monopoly services, regulated by the Federal Energy Regulatory Commission, that electricity consumers must use, either directly or indirectly. The purpose of the electric power system and markets is to serve end-use consumers, and the NYISO Strategic Plans should reflect this overarching priority.
 - b. The NYISO 2012-2016 Strategic Plan has only one initiative that mentions consumers: "Enhance transparency and consideration of consumer impacts in NYISO initiatives" (p. 5).
 - c. This initiative is vague: it is not clear what is meant by "enhance" or "consideration".
 - i. This initiative does not require the NYISO to benefit consumers in its initiatives, only to consider impacts.
 - ii. Future NYISO Strategic Plans need to make clear that obtaining meaningful and substantial benefits to end-use consumers is the focus of the NYISO at the strategic level.
- 2. <u>Serving Additional Customer Interaction with the NYISO</u>
 - a. The Council believes that substantial additional customer interaction due to demand response, load aggregation, smart grid, and microgrids may require the NYISO to add to its current operations the capability to handle a much larger number of customers buying/selling directly into the NYISO administered markets than occurs today. In addition, there are likely to be customers who are

much smaller sized than existing NYISO customers. Many customers in the future may have the ability for direct control of electronic devices (i.e., electric vehicles, appliances, other electro-technology) and perhaps even paying their electric bills by device that could require additional NYISO customer services. The NYISO planning should accommodate for much more customer interaction, as well as the additional administration and technical sophistication that would accommodate a much greater number of customers or their third party service providers.

- i. Although the NYISO 2012-2016 Strategic Plan contains four initiatives related to additional customer interaction due to demand response, load aggregation, smart grid and microgrids, the Council believes that more emphasis and details are warranted related to accommodating more consumer interaction with the NYISO.
- ii. As end-use consumer interactions with the NYISO increase, issues of privacy of consumer data, cyber-security, and possible terrorist attacks become more of a concern.
- 3. Analyzing Specific and Detailed Risks and Opportunities in System Planning
 - a. The Council believes that there are numerous new challenges that the NYISO system planning process must address. Although the Council has not reviewed the NYISO system planning process, we suspect that many of the issues listed in d. below are being considered by the NYISO and its stakeholders in the NYISO planning processes.
 - b. That being said, the Council would like to make sure that the following two questions are being answered by the NYISO:
 - i. Which, if any, of these challenges from d. below should be raised to the strategic level and be reflected in the NYISO Strategic Plans?
 - ii. Has the NYISO conducted a detailed risk analysis of the opportunities and threats these challenges raise individually and in combination not only from the perspective of the NYISO and its direct customers, but also from the vantage point of end-use consumers?
 - c. From the list in item d. below, there are several system planning issues that the Council believes the NYISO should consider addressing in its Strategic Plans. They are the following:
 - i. Cyber security: Concerns about cyber security in the electric power industry are well known and will only increase with the introduction of smart grid.
 - ii. Fuel diversity: With existing and impending federal environmental air and water regulations, the desire to shutdown the Indian Point nuclear reactors, and the low price of natural gas, fuel diversity may become a critical issue,

particularly if additional transmission infrastructure is delayed or does not materialize.

- iii. Research and development: Sustainable and long-term consumer benefits depend on innovation and technological advancements. The NYISO has an important R&D role that should be integrated with other government and industry research initiatives. The NYISO should publish its research plan, including its funding sources. To the extent that consumers are funding NYISO sponsored R&D, then consumers should be part of the decision-making process and obtain the associated intellectual property rights and other R&D benefits commensurate with their funding.
- d. Specific Risks and Opportunities that the NYISO should assess are the likelihood and impact on NYISO system planning using a formal risk analysis methodology (although do not necessarily need to be addressed in the NYISO Strategic Plans).
 - i. Advances in technologies such as energy storage, renewable energy resources, distributed generation, energy efficiency, and demand response.
 - ii. Major state and federal policy changes such as air and water emission requirements, re-regulation of electricity markets, shut-down of nuclear power plants, and regulatory changes related to shale gas.
 - iii. Aging Workforce and retirement of personnel whose experience and expertise cannot be quickly and easily replaced.
 - iv. Terrorism attacks on cyber security, physical assets including the NYISO owned buildings, and NYISO personnel.
 - v. Interactions among these risks and opportunities also need to be formally evaluated.

The Council looks forward to its continued dialogue with the NYISO on these important topics and believes that this dialogue would be enhanced with a written response by the NYISO to this white paper.

Appendix III:

White Paper Institutional Changes to Improve Consideration of End-Use Consumer Issues by the NYISO

2012

Introduction

This white paper raises a number of possible actions that NYISO should consider in order to have a meaningful and constructive dialogue between end-use consumers and the NYISO. This paper specifically addresses ways the NYISO can create better institutional linkages to the end-user communities to improve its responsiveness to their interests.

Although the Consumer Advisory Council (Council) can provide worthwhile input to NYISO decision-makers, the Council is not in itself, representative of end-use consumers, although some members of the Council are end-use consumers or work on the behalf of end-use consumers. The NYISO Consumer Interest Liaison can help engage consumers in the NYISO footprint to ensure that consumer interests are presented to the NYISO, particularly those consumer interests that participate in the NYISO governance structure. The Council is concerned that the Consumer Interest Liaison activities by themselves will not be sufficient for end-use consumers.

The NYISO should, therefore, consider engaging those consumers and their representative organizations directly in discussions about how best to provide them the opportunity for dialogue and input to the NYISO decision making process. Having financial support, perhaps provided by state or local governments, to that ongoing engagement is instrumental to putting flesh on the bones of any structure that is created.

The NYISO has taken several steps to comply with requirements of FERC Order 719 to insure that practices and procedures are in place to be responsive to the needs of customers and stakeholders including end-use customers.

These steps include the following:

- End-use customer representation on working groups and task forces.
- Creation of the Consumer Interest Liaison.
- Creation of the Consumer Advisory Council.
- Revision of its mission statement to include "benefits to consumers.

In taking these steps, and having end-use consumer representation on the Management Committee, the NYISO has created the potential to increase the end-use consumer understanding of the NYISO's roles and responsibilities in the New York electric power system. The purpose of this white paper is to explore whether the NYISO would be well served by still other institutional steps to enhance interaction with end-use consumers, in particular small volume and residential consumers.

Other ISOs and RTOs have also responded to FERC Order 719 requirements regarding

consideration of consumer issues. This memorandum notes a number of responses and initiatives taken elsewhere in response to FERC 719 that, together with NYISO actions, highlight some best practices in this arena. These are summarized briefly.

In addition, issues raised by consumer advocacy groups including the National Association of State Utility Consumer Advocates (NASUCA), the National Consumer Law Center (NCLC), Public Citizen, and the AARP in their comments in a FERC Technical Conference on this subject are noted. These may indicate further opportunities to improve two-way communications in addition to those taken by the ISOs.

ISO Practices with Respect to End-Use Consumers

The FERC 719 docket defined "responsiveness" as "practices and procedures to directly receive concerns and recommendations from customers and other stakeholders, and to fully consider and take actions in response to the issues that are raised."

Actions taken by ISOs and RTOs elsewhere to meet this objective that should be considered in New York include the following:

- 1. The creation of "issues papers" to be distributed to end-use consumer representatives to highlight important policy issues in a timely way so that input from the end-user community can be gathered (CAISO). These can be combined with a web posting site for end-use consumer comment and the requirement that the Board post direct and specific responses to the comments on the site.
- 2. The creation of a Consumer Liaison Committee to provide a wider opportunity for enduse consumers to consider ISO issues and provide input directly to the ISO Board (New England and PJM). Though there is end-use consumer representation on some NYISO committees, there is no regular vehicle that allows small-volume and residential consumers to voice their concerns.
- 3. "Hot Topics" discussions between the Advisory or Liaison Committee and the Board to insure that high priority or special interest topics are regularly addressed (MISO). As the NYISO Consumer Interest Liaison identifies topics for impact analysis, as was done for Coordinated Transaction Scheduling, these issues can be scheduled for discussion between the Board and end-use consumer representatives on a regular basis.
- 4. End-use consumer representation on the Board (ERCOT).

These are institutional approaches that can be considered by NYISO in conjunction with or supplementary to those already taken.

The key issue to be considered in regard to these or other changes is the degree to which the NYISO provides the end-use community the opportunity to be made aware of and identify their interests in important issues in a timely fashion and provide input to the NYISO decision making process. This requires two-way communication vehicles that actively engage both parties. While the NYISO Consumer Interest Liaison is slated to engage small end-use consumers directly, the Board is not doing so to the Council's knowledge.

Another fundamental problem cited by NASUCA and others, is the basic resource imbalance among the NYISO and many of its stakeholders versus the small-consumer community. The

latter cannot devote the time and resources to the wholesale and producer environment that is required for fully informed participation in the governance process. While doing so is part of the paid employment of NYISO and many stakeholders, small consumers must do this without compensation in addition to earning an income. Likewise, in addition to the time costs, consumers must finance the travel and participation costs themselves while other participants' costs are paid by their employers. This creates very different circumstances for the groups involved. Absent funding to support participation and support for expertise to back up that participation, institutional change will not fulfill the mandate of FERC 719 to be "responsive" in the full meaning of that term. The structures, however, well intended, will not result in a genuine dialogue between the NYISO and end-use customers. The NYISO's current efforts to reduce the costs of stakeholder participation in its governance structure should continue and perhaps increase to help address this funding disparity.

Other Suggestions from Consumer Organizations

The Consumers Union, Consumer Federation of America, AARP, NCLC, and Public Citizen responded as a group at the FERC 719 Technical Conference. In addition to consumer representation on the ISO or RTO Boards this group suggested that "FERC or Congress could set up an Office of Consumer Advocate that would, among other duties, represent consumers at RTO/ISO proceedings and provide the Commission with feedback regarding any problems with the process or instances where FERC should investigate or disapprove rates that are not just and reasonable." This suggestion highlights the fact that the regulatory body with responsibility for the ISO's performance is, in fact, a federal one where there is currently no systematic representation of consumer interests. As previously noted, the resource imbalance between small consumers and their organizational representatives and large organizations and institutions like ISOs and industrial consumers makes it difficult to consider or even formulate the small customers' perspective. The creation of a FERC Office of Consumer Advocate could help remedy this problem. These consumer groups also place emphasis on the need for direct representation of small end-use consumers on the Boards of Directors of ISOs and RTOs.