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### STATE OF NEW YORK PUBLIC SERVICE COMMISSION

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### <u>Tariff Filing of Consolidated Edison Company of New York, Inc.</u> to <u>Modify Rider U-Distribution Load Relief Program</u> <u>Case 08-E-0176</u>

March 26, 2008

### Joint Comments of Energy Curtailment Specialists, Inc. and ConsumerPowerline

In accordance with the Notice Soliciting Comments, dated March 14, 2008, Energy Curtailment Specialists, Inc. ("ECS") and ConsumerPowerline (CPL) respectfully file the following comments regarding the filing made by Consolidated Edison Company of New York, Inc. ("<u>Con Edison</u>") in the above captioned proceeding. If appearances are required, this document serves as a motion to intervene and obtain status as interested and active parties.

### I. INTRODUCTION

Energy Curtailment Specialists, Inc. ("ECS") and ConsumerPowerline (CPL) are two of the largest privately held and leading providers of full service demand response and energy management services for commercial, industrial, and institutional customers in the country. ECS currently has over 650 Megawatts (MW) of summer demand response resource capacity under management within the State of New York. The two companies combined represent approximately ninety percent (90%) of all the demand response registered in Con Edison's service territory. This issue is therefore of significance to both ECS and CPL, and each have a vested interest in the outcome of the proceeding.

During the summer 2007 period, Con Ed's Rider U program offered additional incentive payments to demand response resources that enrolled in the program. Despite the large number of resources under contract with ECS in Con Edison territory, for a number of reasons ECS chose not to have its resources participate. The option was presented to the customers, but upon belief none of the thousands of ECS customers actually chose to participate. Likewise, CPL had significant issues with the summer 2007 Rider U rules and therefore had some, but very limited involvement in the program. It is important for the PSC to recognize the underlying reasons as to why ECS and CPL did not register customers within the Con Edison Rider U program last summer. These reasons will be discussed more thoroughly elsewhere within this filing, however, the single most important reason was that the rules of Rider U participation were much too distinct from the NYISO's Special Case Resource (SCR) program. In other words, resources were expected to comply with much different participation rules, including different penalty provisions, much more frequent event calls, etc. ECS and CPL jointly suggest that the rules of the program were problematic and that a much easier approach going forward would be to make the program rules seamless with NYISO's SCR program.

ECS and CPL respectfully submit the following comments.

### II. What is the reasonable compensation level for the response expected by a Rider U customer and what is the basis for that level?

Current demand response participation in the NYC ICAP market is driven by price signals that cover the opportunity costs of customers that enroll in the program. Demand response participants in the NYC control area know well the high opportunity costs that are lost due to power outages, or curtailment events. Given that, many participants are willing and able to curtail for short and infrequent durations. However, the one driving question associated with demand response participation is: Will the availability payment (capacity) provide enough revenue for the participant to justify the loss of revenue from its core business that it will sustain by participating? Without an adequate capacity payment, demand response participation within the NYC control area will not be as robust as it is today. As the PSC is aware, the cost of doing business within the NYC control area is much greater than in other areas of the state.

If lost opportunity costs for customers within the NYC control area are not covered by both capacity payments and/or Rider U payments, participants will no longer have the desire or ability to participate in any demand response program. This will lead to a loss of critical and valuable demand response resources at a time when New York State is by every account looking to further develop and grow demand response. If prices do not justify participation, demand response customers will have little or no financial incentive to continue to participate within these programs.

The NYISO's In-City capacity pricing, up until March of 2008, was clearly sufficient to attract demand response resources in light of the large number of MW's

currently participating; and by no means should that pricing be considered a windfall, especially in light of the price signals being sent from other markets. For example, in California payments being negotiated for demand response in the summer months are much higher than has been the case in the NYC zone. This sends clear price signals to those specializing in demand response (ECS and CPL, both) that California, not New York, is the place to bring our expertise. With lower price signals this is clearly an indication to demand response providers and resources that demand response participation is no longer needed by the market, and demand response companies should look to other areas of the country where stronger price signals indicate a need for resources. If the PSC seeks to further develop demand response resources within the Con Ed service territory adequate price signals are needed.

The PSC seeks comments on what would be a reasonable compensation level for the response expected under the Rider U program, for customers. Last summer's Rider U payments of \$3.00 kW/month (May – October), along with the 2007 summer NYISO Installed Capacity price of \$12.77 kW/month, only attracted less than 10% of the total NYISO Zone J SCR participants into the Rider U program. This clearly shows that Rider U's additional payment of \$3.00 kW/month did not provide enough financial compensation associated with the additional increase in potential event calls. In order to increase the level of participation within the Rider U program the PSC should seek to increase the summer payment level to reflect a minimum participation payment equal to or greater than last summer's NYISO and Rider U combine payment of \$15.77 kW/month. With no winter payment under Rider U, and the current level of capacity payments for the winter (\$1.00 kW/month), this reflects an 80% cost of new entry level as a payment level for demand response participation.

Accordance to the NYISO Demand Curve reset for 2008-2011 the annual installed capacity required for a new peaking unit in the New York City location (zone J) is \$123.00 kW/year. With an estimated 10% of grid infrastructure used to meet peak load only 1% of the time, siting new peaking units annually to meet the peak demand will have a larger financial impact on ratepayers than compensating demand response customers (whom are also ratepayers) at 80% of the cost of new entry. If demand response participation falls by 20% this summer the market will look to install a 100 MW peaking unit at a cost to ratepayers far exceeding the cost of demand response participation. The loss of demand response participation within NYC will only drive up NYISO wholesale capacity prices and place larger burdens on ratepayers as peaking units will need to be quickly sited and built to meet demand. Based on the current demand curve prices (2007/2008), the current level of available In-City capacity (including demand response), and the percentage of capacity that clears through the NYISO ICAP market (not including bilateral trades) if 100 MW's of demand response seeks to leave the market this would have a financial impact of around \$6 ml per year in-city and another \$3 ml for the NYCA. Similarly a loss of just 200 MW's of demand response will cause ratepayers to see increased wholesale capacity prices close to \$18 ml monthly (summer 2008). Further, the implementation of demand response with capacity programs that engage to support system reliability, helps to create the load-control infrastructure that permits the resource to easily enroll in economic demand-response programs. The loss of demand response will not only have financial impacts on the wholesale capacity prices but will also have a significant impact on wholesale real-time energy prices, as demand response will not be available to mitigate price spikes on peak demand days.

### 111. If customers participate in Rider U as well as the NYISO Special Case Resource (SCR) program, should there be an upper limit on combined compensation? If yes, upon that what should that upper limit be based and how should it be structured?

Based on the following comments, the PSC could seek to place a cap on compensation tied to a percentage of the cost of new entry, which is established through the demand curve reset process. ECS and CPL could operate successfully in a market in which the PSC looks to cap revenue compensation, with combined program participation, at 10% to 20% above the cost of new entry. The current annual installed capacity required for a new peaking unit in the New York City location (zone J) is \$123.00 kW/year (cost of new entry for capacity). ECS and CPL cite several reasons, such as performance factors that indicate high reliability, reduction of carbon, no reliance on fossil fuel, no costly infrastructure needed, and the ability to increase demand response is almost real-time.

To date, demand response resources have established a proven performance record in most cases in excess of 90% availability during peak periods.<sup>1</sup> Demand response participants have been viewed and measured based on their ability to reduce a percentage of their load. Although this is a critical component for demand response, we have forgotten about a significant benefit that is gained through demand response reductions - the conservation impact. We must not overlook the fact that demand response resources are a valuable tool in helping to assist and maintain grid stability, while also assisting in meeting greater environmental impacts.

<sup>&</sup>lt;sup>1</sup> As one example, performance in New York State's mandatory Special Case Resource program during five days of NYISO-initiated events in July and August of 2006 was approximately 91%. As another example, performance in Texas' early 2008 reserve-market call was better than 100%, with only 10 minutes notice.

There are two factors we must consider as environmental impacts. The first is demand response's ability to reduce the start up of expensive and environmentally unfriendly generation. The second comes when demand response is activated and loads reduce their consumption by eliminating the need for the MW. The cleanest and "greenest" MW is the MW that is never consumed! Load curtailment without the use of distributed or back-up generation is what ECS and CPL call "pure" load curtailment. Pure load curtailment assists in reducing carbon emissions, and requires no use of fossil fuel to be activated. With the current state of environmental issues, such as the Regional Greenhouse Gas Initiative, it is even more important to look to valuable demand response participants for additional load curtailment.

Lastly, when signing up customers and enrolling these customers into a demand response program there is little infrastructure needed, other than a meter change-out, therefore there is little cost to ratepayers as additional infrastructure is eliminated. In addition, customers can be enrolled into the program and be operational within a few short weeks, or within the month. This allows for almost real-time value being established, which can be critical during summer months. As ECS has seen in other demand response programs (i.e. California Capacity Bidding Program), premiums are given for participation in summer months as these are the critical peak demand months.

### IV. If a customer participated in Rider U as well as the SCR program, how should the sequence of program activation be coordinated?

ECS and CPL believe that the sequence of program activation should continue to be determined either by the wholesale market, or Con Edison. If the NYISO determines there is a need for an activation call, or that the wholesale market needs to trigger an event, then the NYISO should call the event and penalties and performance ratings should apply to the event based on the NYISO market rules. Accordingly, if Con Edison determines that load relief is warranted, due to a distribution issue, then Con Edison should activate the program and penalties and performance criteria for Con Edison's Rider U program should apply. However, those rules need to be significantly changed from the rules in effect in summer 2007, in order to bring consistency to the SCR and Rider U programs.

## V. Should the compensation levels and participation requirements be different for the participants who utilize generation behind the meter?

Due to current issues surrounding demand response participation (DEC looking to limit the amount of back-up generation that can participate in NYISO SCR program) using back-up or behind the meter generation, ECS and CPL believe that demand response participants that curtail load without the use of generation represent a high value to both the wholesale market and Con Edison's Rider U program. This higher value should be represented in Con Edison's Rider U program payment for loads that curtail usage without the use of fossil fuel burning units. As environmental issues, such as RGGI and HEDD continue to be pushed forward, demand response through pure load curtailment will be looked to as a resource that can assist the state in reducing greenhouse gas emissions on high electric demand days. The PSC should look to value demand response more highly that does not use environmentally unfriendly sources to reduce peak load.

### VI. Other Comments

### **Event Triggers**

Under Section D of Con Edison's proposed Rider U, it states that no less than a thirty minute advance notice will be provided for commencement of a load relief event. ECS and CPL respectfully submit that at the very least Con Edison should consider providing an advance notice on a day-ahead basis. The current NYISO SCR/EDRP program provides this advance notice, and studies have shown that day-ahead programs that intend to access load-relief that is, in part, manual, are much more reliable and more inclusive. Certainly there are automated curtailment abilities by some customers that can comply with an in-day notification of no less than two hours ahead. However the largest of loads in New York are the manufacturing loads and these loads will be unable to comply with an in-day notice, as advance notice is needed to shift production schedules. By implementing only an in-day notice, under Rider U, Con Edison is leaving a significant majority of potential demand response prospects out of its program. ECS's current manufacturing load, over 70%, in Con Edison's service territory represents a large number of our total portfolio. This same manufacturing load would also represent approximately 35% of the total NYISO SCR demand response participation within the NYISO Zone J. These loads will not participate in a day-of program no matter how much money is involved in most cases. It is a matter of feasibility on that level.

The current day-ahead NYISO SCR/EDRP program has approximately 1,400 MW of summer reliable demand response customers. Based on a current study of ECS and CPL customers, ECS and CPL conclude that only 15 to 20 percent of our customers would be able to respond to an in-day program. Due to the timing of last years program being implemented and the fact that a large number of our resources would require a day-ahead notice, were deciding factors for ECS to not enroll customers in Rider Uand for CPL to enroll only a limited number of customers for the summer of 2007. ECS and CPL are not suggesting that a day-of program be done away with, or that it has no value, but rather that a day-ahead notice program can provide much more demand response than an in-day program alone. Day-ahead notices can come in the form of courtesy notifications, subject to confirmation on the following day. This can provide resources with adequate day-ahead notice to prepare their facilities to respond to in-day events.

### **Baseline Calculation**

When looking at the average peak minimum demand baseline calculation it is necessary to understand in New York there is no mechanism for demand response participants to receive credit for energy efficiency upgrades unless the average peak monthly demand baseline is utilized. This baseline gives credit to participants based on their average usage from the last like capacity season. Unlike other ISO's, i.e. ISO-NE, New York has no way to credit demand response participants for energy efficiency upgrades. Therefore demand response participants that perform energy efficiency upgrades in the current year stand to lose capacity credit if an energy efficiency upgrade is done. Without a market mechanism, such as utilizing an average peak demand from the last like capability period, then there is little incentive for demand response participants to perform energy efficiency upgrades.

Another reason why the average peak monthly demand is utilized in New York is due to the fact that generators are credited for their capacity in the same manner as demand response participants. In New York generators are allowed to perform their DMNC (Dependable Maximum Net Capability) under the best conditions. This capacity is claimed throughout the capability period, even though in some situations (weather) generators are not able to perform up to the upper operating limit that is claimed throughout the capability period. An example would be a gas turbine that performs a DMNC test at 120 MW's of capacity for the summer period. The unit is allowed to claim this capacity for the entire summer period, even through during the hottest days the unit will not be able to perform at this upper operating limit. If the PSC, or other parties seek to change rules that apply to demand response we should also seek to change the way generators are compensated for their capacity credit as well.

Some argue that because Rider U is a distribution level load relief program that by using the CBL method to credit demand response participants for their availability will allow Con Edison the ability to be able to know in real time what will actually be delivered during and emergency call. ECS and CPL respectfully submit that this is a false statement and is misleading in general. There is really no way for Con Edison, or even the demand response aggregator to know in real time what will come to the market—often, more is delivered than is contracted for. Demand response participants have business needs that determine how and when they will participate in curtailment events, either at the wholesale level or the distribution level. To state that the CBL calculation will bring surety to how demand response customers perform during events is a false statement.

In addition, of the one or two aggregators that support CBL, rather than the APMD method, these market participants have filed public documents (i.e. California) that point to several areas were the CBL is unfavorable, especially when looking at AC loads. Accordingly, the baseline methodology is not simply a settlement issue, it establishes an accurate and unbiased baseline methodology, and is the single most important element in determining load impact performance for demand response resources. California is an excellent example of how it is possible to design a suboptimal CBL approach. This approach has been proven to be an inaccurate method, and the California Public Utilities Commission is currently evaluating approaches for measuring demand response load impacts in Rulemaking R.07-01-041. In New York this baseline is calculated based on not only the highest summer peak months, July and August, but also utilizes peak demands from June and September as well, thereby mitigating free-ridership. Additionally, NYISO requires the peak to have occurred during the 12:00 pm to 8:00 pm window, thus eliminating gaming by off-peak peaking facilities. It is also important to look to other ISO/RTO's that recently have filed with the Federal Regulatory Energy Commission ("FERC") to change the CBL method, because of gaming that has occurred within the market.<sup>2</sup>

<sup>&</sup>lt;sup>2</sup> Docket No. ER08-538-000, & http://www.pjm.com/committees/mic/downloads/20080227item-01-20080130-mic-minutes.pdf

There are several widely-cited industry and academic studies published that discuss the accuracy and bias of CBL approaches and several more under development.<sup>3</sup> CBL approaches may not provide an accurate reflection of customers' load reductions and therefore almost by definition would not qualify as a "well-designed" CBL. However, the research available today has found that a CBL using a combination of load data prior to a demand response event (e.g. 10 days, 3 highest days of prior 10, etc), when combined with a day-of adjustment factor, can result in a very accurate measurement of a customer's actual load reductions. These studies do not evaluate the APMD approach and one could argue that the AMPD approach was not evaluated due to its inherent inability to accurately reflect the actual load reductions of a customer during an event.

No matter the outcome of the CBL method versus the APMD method, ECS and CPL both feel that it is very important that the measurement rules for Rider U are consistent with the measurement rules for SCR. In any other scenario, it will be complex and ineffective for our firms to engage customers in providing needed relief under Rider U over the near- or middle-term.

#### Penalty Structure

<sup>&</sup>lt;sup>3</sup> - KEMA-XENERGY, 2003. Protocol Development for Demand Response Calculation — Findings and Recommendations, California Energy Commission.

<sup>-</sup> Quantum Consulting and Summit Blue, 2006. Evaluation of 2005 Statewide Large Nonresidential Day-Ahead and Reliability Demand Response Programs, Southern California Edison.

Coughlin, Katie, "Estimating DR Load Impacts: Evaluation of baseline load models for commercial buildings in California", Preliminary Results, Lawrence Berkeley National Laboratory, July 9, 2007.
Goldberg, Miriam L. and G. Kerinedy Agnew 2003. Protocol Development for Demand-Response calculations: Findings and Recommendations. Prepared for the California Energy Commission by KEMA-Xenergy. CEC 400-02-017F.

<sup>-</sup> Working Group 2 Demand Response Program Evaluation – Program Year 2004 Final Report. Prepared for the Working Group 2 Measurement and Evaluation Committee, by Quantum Consulting Inc. and Summit Blue Consulting, LLC, 2004.

Evaluation of 2005 Statewide Large Nonresidential Day-ahead and Reliability Demand Response Pragrams. Prepared for Southern California Edison and the Working Group 2 Measurement and Evaluation Committee, by Quantum Consulting Inc. and Summit Blue Consulting, LLC, 2006.

The PSC should look to the implement the same penalty structure that is currently in place with the NYISO SCR program. By adopting the same rules as the NYISO SCR program this will allow customers that participate in both programs the ability to clearly understand the rules, thereby creating synergies between both the NYISO program and Con Edison's Rider U program. The PSC should seek to make rules for these program simple and clear to understand for participants, allowing for a more fluent understanding of what is expected in both of the programs.

#### **Shadow Metering**

According to Section F, Metering, customers and aggregators who are enrolled in the NYISO's Special Case Resource Program that do not have interval meters and telecommunications services used by Con Edison for billing may participate in Rider U's program up to the kW amount that the customer or aggregator had enrolled in the NYISO SCR program if they were enrolled in the Con Edison's 2007 Rider U program.

The impact of requiring Con Edison meters for all participants that were not enrolled in the Rider U program for the summer of 2007 would preclude Con Edison from substantially increasing participation for the summer of 2008. With only 10% of the SCR participants registered in Rider U during the summer of 2007 requiring utility interval meters for 90% of the Zone J demand response participants would create a troublesome utility bottleneck, and thereby would cause unnecessary delays for hundreds of willing demand response customers. These same customers already have interval metering installed and are already providing reliable demand response to the wholesale market. If Con Edison now requires a utility interval meter for customers that did not participate in last summers Rider U program, these customers will be unable to participate until a utility meter is installed.

Should the PSC determine that interval meters must now be installed by Con Edison the PSC should also seek to establish a time frame for these installations. Currently, third party aggregators contract for interval shadow meter installations, which have a very quick turn around time, no longer than a week or two at best. Any delays in interval meters would seek only to deter participation for the summer 2008.

### VII. CONCLUSION

In conclusion, ECS and CPL respectfully submit that the PSC should direct Con Edison to amend and make further improvements to the Rider U. As it stands, Con Edison's proposal to impose harsh penalties, provide a short notification window, without a well-defined trigger for the event calls, without an adequate payment for demand response services will not increase demand response participation but will only seek to limit the amount of demand response this summer. ECS and CPL believe with the right terms in place, Con Edison's program in precarious Zone J, can deliver a significant amount of demand response resources for this summer. In addition, it will also help to keep the current level of MW's registered in the NYISO SCR program and Con Edison's Rider U program, providing both wholesale power issues as well as distribution level issues.

ECS and CPL would like to thank the PSC and appreciates the opportunity to provide our comments. In conclusion the PSC should consider the impact of approving Rider U as filed by Con Edison. Such approval would send the wrong message to customers and aggregators looking to become more involved in a targeted demand response program, and customer's ability to continue involvement in both the wholesale demand response program and Con Edison's Rider U program.

Respectfully submitted,

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### **V. COMMUNICATIONS**

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All communications, correspondence, and documents related to this proceeding should be directed to the following persons:

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