



***Energy Curtailment Specialists, Inc.***  
**Response to Docket No. E008060421**  
**Issued by The State of New Jersey Board**  
**of Public Utilities**  
**Re: Market Based Demand Response**

**Aug 1, 2008**

**Submitted by:**

**Energy Curtailment Specialists, Inc.**  
Paul Tyno  
Executive VP of Program Development  
877-711-5453 x229  
Email: [ptyno@ecsgrid.com](mailto:ptyno@ecsgrid.com)

## **Overall Philosophy & Approach**

Energy Curtailment Specialists', Inc. (ECS) has built its reputation on being the most reputable and experienced demand response service provider in the industry. With offices in Buffalo, Albany, New York City, San Francisco, San Diego, Boston and Kansas City, Missouri, ECS is one of the largest full-service demand response companies in the world, with in excess of 1000 megawatts (MW) of capacity under contract. ECS' proposal is for a turnkey full-service demand response program. The various parameters of its demand response program are described in detail including design, marketing, program implementation and customer relations. If successful, ECS intends to provide The State of New Jersey with a fully integrated and supported demand response product that has been a demonstrated success.

*“ECS clearly demonstrates dominance in terms of their experience, reputation and most importantly, actually delivering megawatts. Their personable approach and willingness to work hand in hand with us made them our obvious choice.”*

- **Jason Jones, Manager of Demand Response Programs, Kansas City Power & Light**

Customer satisfaction is of top importance to ECS. As a privately held company, ECS has the ability to be flexible, be responsive to client needs, and be in position to make key decisions quickly. Without barriers to decision making, we have the unique opportunity to offer customers and affiliates custom-made programs, built collaboratively and tailored to the needs of individual entities. Using a hands-on approach with clients, we form relationships rather than simply collect contracts. Current ECS resources across all markets are 'home-grown' not the result of the buy out of smaller demand response aggregators for the purpose of 'piecing' together a group of resources. By paying personal attention to each and every customer, we have achieved a client retention rate in excess of 93%, which positively impacts client performance. Testimonials and experience show that we practice what we preach and deliver on promises.

To build a sustainable and broad customer base, ECS formulates an aggressive marketing plan. With more than 4,000 customer facilities participating in demand response programs across the United States and Canada, ECS is experienced in all aspects of DR implementation. From creating industry specific marketing material to training sales people on engineering fundamentals, ECS accelerates resource readiness by utilizing our experienced and knowledgeable staff for all aspects of our demand response programs, as well as providing consultation and training for customers. All departments interact effectively to ensure that demand response objectives are met in a timely fashion.

With global warming concerns and environmental issues at the forefront of American business, ECS is a leader in providing an eco-friendly alternative to other costly supply, procurement and delivery options. It is becoming increasingly important for companies to manage their resources more effectively. The landscape is rapidly changing, with costs for infrastructure construction and generation rising. It is crucial that alternative energy sources, such as renewables, DSM techniques and energy efficiency projects be implemented. ECS provides a sustainable energy solution in which all stakeholders benefit, while producing a positive impact on the community. ECS' practical demeanor and entrepreneurial spirit cultivate opportunities and promote all the components relevant to helping solve our power challenges. Our company's goal is to run a successful and profitable business while providing cost effective opportunities. Customer survey results indicate that the majority of the financial incentives DR resources earn for participation are allocated to other energy initiatives.

**August 1, 2008.**

*State of New Jersey Board of Public Utilities  
Market Based Programs for the Period Beginning June 1, 2009  
Docket No. EO08060421*

ECS' demand response programs are an investment in your community, your customer and the environment; an investment that consistently yields a high return. Consider this perspective, if a dollar needs to be spent to meet demand, that dollar may be better spent with a current customer, where the return may be more long-term (i.e. energy efficiency) than outside the service territory for crisis procurement.

With the requisite team and infrastructure in place, ECS assures the Board of Public Utilities that it can handle the next several years of transition expected within the demand response arena. The following proposal will illustrate the *Five Phases of a Successful Demand Response Program*, including program parameters, incentives, notification, penalties, event triggers, resource flexibility and technical products. Based on the filing request in relation to the docket, we will address the specific issues raised for consideration in this matter. ECS will also describe creating a reduction action plan and engaging customers to be environmentally responsible. We will show that building a successful demand response program is literally a reinvestment in the community itself.

## **Program Description**

Active demand response is crucial for both power system reliability and market efficiency. Efforts to enable demand side participation in electricity markets are providing significant benefits to utilities, transmission operators and end users alike. Aside from the inherent value in developing sound energy management habits these load management programs provide crucial grid stability during times of high electricity demand while creating an alternative to expensive capital investment in 'part-time' peaking generation or the need to acquire costly supply side resources during a crisis.

The first phase of a successful demand response implementation is the program design itself. Attention must be paid to constructing the curtailment parameters in a manner which effectively balances the interests of the utility in ensuring reliability amongst other motivating factors and the reduction participant themselves who must consider numerous issues including lost opportunity costs. If *Energy Curtailment Specialists* is successful with respect to this proposal a full scale DR program will be launched within New Jersey as limited or directed by the Board of Public Utilities (BPU).

The following components represent a suggested structure fostering a robust and sustainable demand response curriculum. The development of a comprehensive program will be a collaborative effort with the BPU in support of their initiatives and statewide needs.

### **Thresholds for Participation, Minimum kW**

It is first important to establish the minimum load reduction threshold (i.e. the smallest amount of reduction that the program would permit). The lower that threshold the less restrictive the program is allowing for a broader class of participating resources. Broadening that range of availability not only enhances the program from the standpoint of MWs it further develops interest in the community regarding energy efficiency and conservation opportunities. In many cases, demand response literally acts as the catalyst for further energy initiatives.

By nature, programs administered by *Energy Curtailment Specialists* provide a significant amount of resource diversity. Participants come from a variety of industries including all areas of the manufacturing sector, school systems, hotels, retail, healthcare facilities and various other commercial properties. The programs themselves are simple, straightforward and inclusive as demonstrated by both the number of resources that participate but also in the range of curtailment levels per participant.

### **Resource Availability**

Energy Curtailment Specialists participates in both seasonal and full-year demand response markets, so we are experienced, successful and comfortable with both. Effective demand response curriculums need to consider call frequencies, event durations and curtailment seasons. It is critical to set the time frame in which resources will be needed daily, weekly, annually, or for a stated number of months. This allows a potential resource to consider effectively the exposure and lost opportunity costs their business is exposed to enabling them to make an informed decision.

The goal is load certainty and having reliable, consistent resources within a portfolio. Clearly defining the client's maximum exposure so that an intelligent, informed participation decision can be made is the foundation of the aforementioned reliability. Furthermore, predetermined call parameters allow you the flexibility to engage the portfolio regardless of what precipitates the need, be it operational, emergency or economic.

### **Event Notification**

ECS respectfully suggests that at the very least New Jersey BPU consider providing a *courtesy* advance notification on a **day-ahead basis with an in-day confirmation**. Programs that provide a courtesy advanced notification have much higher performance ratings vs. those requiring an almost immediate response. Even if only a courtesy notice, you can maximize participation and performance during event calls by allowing your resource to literally 'schedule' the interruption.

There are alternatives that utilize a clear and definable event trigger such as a load forecast threshold, which would potentially effectuate an event call the following day. In those circumstances, even though the actual notice would be in-day, a resource would have a standard against which they could anticipate a call.

Energy Curtailment Specialists', Inc. certainly understands the value to New Jersey BPU that flexible dispatch ability brings and we are by no means suggesting that day of options not be incorporated into your portfolio. In fact, our position is quite the opposite. We would encourage the BPU to value 2-hour or 30-minute type resources differently, i.e. higher, based on that response time. The key to this approach is acknowledging that only a small portion of the possible curtailment pool maybe willing and/or capable of providing load under those circumstances. Therefore, you do not want to limit participation as a whole by structuring a program focused solely on that group. Accommodate them as a component, take advantage of the flexibility you will have from a dispatch standpoint and, by all means, reward them for their capabilities just keep in mind the irreplaceable value of broad-based participation and portfolio diversity.

We believe that the model utilized in New York represents a solid balance between the need to provide advance notification vs. the need of the grid operator to react in a timely fashion. In New York where ECS contributes approximately 800 MW's of load reduction or 70% of the Special Case Resource portfolio total, there is a day-ahead courtesy notice provided by 3:00 PM the day before. This is followed by a 2 (two) hour in-day confirmation. The NYISO actually confirms approximately 75% of the time. This consistency sends a clear message to the resource that their contribution is necessary and not arbitrary while it provides the ISO with some additional flexibility and the option of pulling back the call if the operational need has changed.

In sum, we would incorporate the following:

- ? Day ahead courtesy notification with an in-day confirmation provided a minimum of two hours in advance of the event start time.
- ? Allow for and provide a different incentive for clients able to respond with less notice, possibly 2 hours or even 30 minutes.

### **Resource Flexibility.**

This is another important element of a strong, well-rounded and consistent portfolio. A demand response program should be constructed to allow individual resources to change their committed curtailment level on a month-to-month or other periodic basis providing a mechanism to offset fluctuating demands and curtailment abilities. For example, if a facility can provide a megawatt of reduction in June but only 500 kW in September (due to an operational need or product seasonality) the resource should be permitted to change its commitment level. If the utility does not facilitate this flexibility then the resource in this example would have to commit to a 500 kW curtailment figure and the utility loses the other 500 kW in June. The CSP can manage this aspect of the program while providing the utility with the agreed to level of curtailment from the portfolio in the aggregate.

### **Inducement for the Interruption**

In this section, we would like to provide a brief comment regarding how that incentive can be most effectively provided to the resource.

A recent survey, conducted within one of our portfolios, reflected very high marks from clients when they were provided a direct payment vs. a simple bill credit. Participants welcome the opportunity to spend those incentive dollars where they deem most appropriate and according to our survey, the vast majority of that incentive goes back into another energy initiative within the facility.

Demand response participation is a low or no cost proposition that has a significant impact on resource management beyond actual curtailment hours. Amongst other benefits, the financial incentive can certainly be a catalyst for investment in energy efficiency.

This quote from a DR participant frames the issue very well. *“As the price of energy increases we need to take measures that offset some of the increased cost, such as conservation and upgrades to equipment for better efficiency. We will always continue to run the operation and use the energy so we need to remain vigilant with regard to energy conservation.”*

Granted it may appear to be an insignificant issue on the surface but in reality, there is a substantial benefit to the overall economics of the program itself whether you are utilizing a Rate Impact Measure, a Total Resource Cost analysis or some modified version of either.

ECS certainly is aware that a direct payment option may not be achievable dependant on system constraints. As previously stated, we work under both conditions in other markets, so a bill-credit settlement system will not preclude us from reaching targeted curtailment goals. It is simply a matter of better maximizing the dollar spent in securing a participating resource. We are amenable to either methodology.

### **Liquidated Damages for Non-Performance, Performance Guarantees and Other Risk Mitigation Methods**

When devising a penalty structure a number of competing interests must be balanced. There is potentially no single component of a demand response offering more significant to a participating resource than their financial exposure as the result of under or not performing when called. One must also take into consideration how the penalty structure affects program marketability and portfolio reliability.

That being said, there are two extremes that must be avoided; first we cannot have a reliable demand response curriculum *without* a penalty clause otherwise the program will be viewed as voluntary and hence unreliable. Secondly, steps must be taken to ensure that the penalty obligation is not so onerous that participation fails to merit even first-glance consideration. Facilities will not incur the significant opportunity cost of shutting down, shifting operations or aggressively reducing load unless the compensation is adequate and the sanction for failure to comply is reasonable.

When considering the penalty structure as it relates to the demand response provider itself, it is important to view success or failure in terms of the aggregate performance of the portfolio as a whole. In other words if our agreement with New Jersey BPU requires delivery of X number of MW in total from a pool of resources then how those megawatts are proportioned within the pool itself is of no significance provided the total meets or exceeds the requirement. Each customer's performance results in a plus or minus compared to their target. If, in the end, the total MW delivered is a positive figure then 100% performance has been achieved. Energy Curtailment Specialists typically contracts for more capacity than we are contractually obligated to provide.

This approach allows a CSP, like Energy Curtailment Specialists, to better ‘manage’ the pool, calling upon resources that can potentially over-perform to offset a resource that maybe having difficulty in its curtailment effort for that particular event.

Another important aspect of this structure is the fact that the penalty applies to Energy Curtailment Specialists and not the resource directly. ECS will manage their own risk and negotiate as needed with resources that may want to assume responsibility for failing to perform. In managing the risk, ECS will move new resources in and eliminate poor performing participants ultimately creating a reliable and consistently performing portfolio that New Jersey BPU can count on. ECS is open to discussing alternative penalty methodologies with New Jersey BPU as well.

### **Impact on Existing PJM/Utility Programs**

Participants’ switching from existing programs is certainly a consideration. There is no value in merely moving resources from one portfolio to another, unless there is an enhanced value to the State in some manner (perhaps more available hours, etc). The advantage in offering programs in conjunction with PJM/Utility is the ability to slot a resource comfortably into a program with curtailment requirements that are manageable, based on their operational characteristics as that generates load reduction certainty.

An alternative program may better position the resource for successful participation allowing the State to retain both the resource and their curtailment contribution. Additionally it is conceivable that under different terms a resource maybe able to contribute more than currently positioned under an existing program.

### **Tools needed to enable interruptions**

The only thing required by the customer would be interval metering, the extent of which depends on their current meter setup via their utility. The criteria for success of a properly structured demand response curriculum does not require the installation or associated expense of automated response equipment **for each and every participant**. When evaluating a demand response opportunity from a participant’s perspective, their criteria for success includes:

- ? Value beyond DR participation (efficiency/resource management, data exchange, emissions impacts).
- ? Tools to make sound financial decisions.
- ? Allow user control / input to manage events.
- ? Ability to protect the core business i.e. critical loads.

It has been our experience that as participants become more indoctrinated in demand response they become more amenable to the use of automated controls, either to enhance their participation or simplify it. The key is to design the program allowing for manual participation at a minimum while letting the resource evolve to more sophisticated methods. Should New Jersey BPU be interested in promoting a 30 minute or 2 hour notification program, automated equipment to enable participation may be necessary as well. In that case, we will discuss this directly with New Jersey BPU at the appropriate time.

**August 1, 2008.**

*State of New Jersey Board of Public Utilities  
Market Based Programs for the Period Beginning June 1, 2009  
Docket No. EO08060421*

**Case in point; The Spence School in New York City.** A prestigious school located on 91<sup>st</sup> and 93<sup>rd</sup> streets in New York City. Originally the school enrolled in demand response and curtailed via primarily *manual* load reduction strategies. In order to increase their participation in DR, Spence enlisted the assistance of ECS. A project was initiated utilizing, in part, demand response incentives earned. The project focused on automating their participation in DR while further enabling the facility staff to remotely monitor/control all building energy functions (six buildings total at three locations) from a single location in an automated fashion. The finished enhancement provides instant load reduction, temperature set backs for conservation measures, peak management and consumption controls for economic reasons, real time load information allowing trends to be monitored for efficiency purposes. Interval meters at all buildings provide instantaneous load profiles. Chiller compressors, pumps and fans throughout the buildings were also connected to an existing but severely underutilized Building Management System (BMS). Spence School is now able to temporarily reduce its demand by 300kW during emergency grid events by the push of a button via laptop or mobile phone, vs. the 100 kW reduction realized via manual methods. The project provided Spence School with positive revenue the first month after it was installed because of the incentives earned via DR participation dollars and state financial incentives. ECS retained oversight of the project to ensure it met the subsidy requirements. This was familiar territory for the curtailment service provider who has experienced and qualified engineers, energy consultants, and industry knowledgeable professionals on staff. It can be a rather intimidating process to an inexperienced entity. Not only are they better enabled for that load reduction call but they're much better energy managers the other 350 plus days of the year outside the need for DR.

*"The success of this project shows the huge potential of our new demand response platform. This technology will not only reduce the school's energy cost but will make the world a greener, more energy-smart place...These incentives...allowed us to take our energy conservation to the next level. It helps us do our part in reducing our carbon footprint."*

**-G.J., Director of Facilities, Spence School**

In many cases, resources provided by Energy Curtailment Specialists significantly outperform competitors' portfolios, many of whom advocate the use of their own proprietary equipment as a participation requirement.

With a focus on demand response vs. selling proprietary automation equipment, Energy Curtailment Specialists will incorporate these devices only when the situation warrants and there is a measurable benefit to all parties. This case-by-case approach is far more cost effective. The CSP is responsible for positioning that resource to deliver load with certainty, which includes understanding their operational characteristics, developing a reduction action plan with the resource collaboratively, educating them on curtailment techniques and actively monitoring their participation.

## **Megawatt Objectives and Market Potential**

Generally speaking, markets are able to *ultimately* realize anywhere from 2% to 8% of their peak in the form of demand response. That range is impacted by numerous factors, including the composition of the load within the service territory, penetration of existing demand response or interruptible rate programs, compensation to the participant, level of assistance from the utility and fundamental program design elements as discussed previously.

As an example, in the State of New York, currently just less than 4% of the state's peak load is registered to participate in NYISO demand response programs. The programs offered in the New York market are relatively mature, having been operational more or less since 2001.

In order to successfully deliver the MW's of load reduction, a ramping schedule needs to be established. That schedule will be influenced heavily by program parameters, contract length, and participants' financial incentive, as mentioned herein. Therefore creating that schedule now would be difficult until additional information is shared. Setting a ramping rate that is either too conservative or too aggressive serves no one's best interests. ECS would be amenable to generating a schedule in accordance with the State. Our model allows for easy set-up in new markets. It is simple, proven and able to ramp up in a short period of time. Given the location of ECS' headquarters and concentration of staff in close proximity to New Jersey, we can provide a seamless transition and immediate results.

## **Process, Technology and/or System for Event Notification and Monitoring**

Our technology platform can be modeled to support virtually any type of DR program the BPU requires. Currently the platform supports the operating programs in the NYISO, ISO-NE, PJM, Kansas City Power & Light, California and Ontario markets. Because of the flexibility provided by the platform, the BPU/Utility could roll out multiple DR programs with different goals and benefits. All of these support the previously discussed option of multiple notification periods within the portfolio, allowing the New Jersey BPU to accommodate almost any type of resource who desires to contribute.

Furthermore, our programs are designed to provide entities with the tools and systems required to quickly target a specific market without having to incur the expense and risk associated with reinventing a complete data collection, participant, contract, contact, baseline, and performance tracking system. The program can be tailored to model the exact requirements for New Jersey BPU, as well as compatibly interface with any proposed Advanced Metering Infrastructure or other related initiatives.

With respect to verification, ECS will work with New Jersey BPU to establish the appropriate verification tool necessary to demonstrate participation by the portfolio resources. All data can be validated, according to industry, market and customer specific standards or rules. Typical validation includes data gaps, identification of negative or zero intervals and deviation identification. It is somewhat difficult at this stage to propose a detailed or specific plan without further insight into the metering systems currently employed and proposed for the future within the territory. Suffice it to say that ECS has worked in a number of markets involving several different verification protocols, and we will likewise work collaboratively with New Jersey BPU to develop a system that ensures program integrity.

## **Marketing**

ECS is most exceptional and flexible when it comes to planning and marketing a program in order to acquire consistent and reliable resources. If ECS is awarded a contract under the New Jersey BPU initiative, we are fully capable of managing all aspects of marketing the new program. Upon collaboration and approval of New Jersey BPU, ECS will adjust marketing and customer interaction efforts to align with New Jersey BPU's preferences.

*Branding:* An important early step is to brand the proposed program in the New Jersey BPU territory as its own.

*Marketing Materials:* ECS develops targeted marketing materials for all prospects within the resource pool, sensitive to their core business.

*Direct Mail Campaign:* It is crucial to promote the new program to all potential DR participants consistently and frequently.

*Development of Internet Website:* ECS can develop an independent internet website devoted solely to New Jersey BPU's demand response program, whether this program is an ECS specific curriculum or co-branded with New Jersey BPU or participating utilities.

*Webinars/Seminars:* Education is the key to a successful demand response program. In addition to written material, it is equally important to host seminars and webinars in order to identify with the customers and introduce the fundamentals of DR. Seminars especially allow the customer to recognize the program and interact with the presenter(s).

*“Joining ECS’ demand response program is part of our campaign to reduce environmental impact of our hotels and adopt more sustainable energy initiatives...participating in this program reduces our operating costs and helps all electricity consumers.”*

**-Major Hotel Chain, current ECS program participant**

## **Program Cost**

How much is demand response worth? In other words, what is the value per kW brought into the portfolio? Clearly, the higher the compensation, the more MW you will get, and the more reliable those MW will be. At this point, we do not have enough information available to provide an appropriate estimate of program cost. As the process evolves and parameters are determined, determinations regarding program pricing can then be formulated.

## **Conclusion**

At this time, we feel that it would be premature for us to weigh in on questions relating to the solicitation/auction process. That being said, we will offer some general comments based on our experience in other markets. We also welcome the opportunity to actively participate in the design process as it develops.

A possible framework to consider would be the Capacity Bid Program currently offered in California. This statewide program created at the direction of the CPUC provides “a home” for load reduction resources procured by third-party aggregators. In other markets, we have responded to requests for proposals where awards have been given to single and multiple entities. As stated previously, we also are engaged in direct contractual relationships with a number of utilities. An open market scenario breeds the innovation necessary to help New Jersey reach its goals of decreasing total energy consumption and/or reducing the State’s peak electricity load.

In regards to the interface with PJM, consider that “all DR is good”. By encouraging New Jersey based participants in PJM programs to enroll in a BPU program, you can take advantage of their established DR experience. At the same time, the BPU enjoys the benefits of having its own portfolio ready to respond to specific internal needs; however, a mechanism must be established to address concurrent calls.

Our experience is that DR participants can reduce their carbon footprints and become better energy managers year-round. Many use the proceeds from program participation to stimulate energy efficiency initiatives while adopting behavioral changes with respect to energy conservation. With ECS’ hand-holding approach and blue-collar attitude, our resources become fully invested in achieving their maximum benefit utilizing a proactive approach. Potential exists for positive benefits beyond what has already been realized, and we look forward to working with New Jersey BPU to achieve this and more.

## **Relevant Qualifications & Experience**

ECS offers dependable programs and services in established DR markets, and actively participates in markets that are still developing their DSM initiatives. We pride ourselves on our flexibility in working with the particular needs of each market, each customer, and each utility. What follows will demonstrate our ability to successfully interact in restructured markets where we are responsible for soliciting, securing and enabling DR resources. Recently we have secured contracts with a number of significant utilities across the country with respect to their demand response objectives. Those services range from a simple review / analysis of existing absence of a current workable program, actually collaboratively establishing a complete program(s). As of late and on a more frequent basis we have been asked to simply bring DR resources directly to the utility independently.

### **1. New York State**

A NYISO registered Responsible Interface Party in good standing; ECS is the largest demand response provider in the State of New York, with thousands of enrolled facilities. We administer the 'Operation Save New York' and PowerPay New York programs, both sub-programs branded by ECS and developed under the NYISO's Installed Capacity/Special Case Resources (IC/SCR) program. ECS currently manages a portfolio of resources that represents approximately 70% of the state's demand response reserves, approaching 800 MW of load offline during the most recent a NYISO-initiated summer event call. Participants come from a variety of industries, including all areas of the manufacturing sector, education (pre-k through college), hospitality, retail, healthcare facilities and various other commercial properties. ECS continues to grow its New York load, and projects to have in excess of 850 MW in New York State alone by the fall of 2008.

### **2. California**

ECS has a presence throughout the three major California utility service areas, all under the auspices of 'Cut Back California', another ECS-branded program. ECS currently participates in the following utility-based programs that have been approved by the California Public Utilities Commission:

✍ **Pacific Gas & Electric (PG&E)**

ECS has a direct contract with PG&E to provide in excess of 50 MW of demand response resources. Our original contract was 40MW over a period of 5 years. However, because of our success in recruiting participants and enabling their subsequent exemplary performance, we were granted an accelerated ramp-up and increased contract cap. Additionally, ECS brings excess capacity enrolled over and above the PG&E contract limit to the Capacity Bid Program (CBP), a statewide demand response program.

✍ **Southern California Edison (SCE)**

SCE recently awarded ECS a direct contract to provide up to 50 MW of resources over the next five years. We are already contributing resources under CBP.

✍ **San Diego Gas & Electric (SDG&E)**

ECS also administers the Capacity Bid Program (CBP) in the SDG&E territory. Within six months, and with only a limited marketing campaign, we were able to secure approximately two-thirds of every MW under contract in the territory.

3. Kansas City Power & Light (KCP&L)

ECS is the exclusive demand response provider for KCP&L in both their Missouri and Kansas service territories. DR is a key component of KCP&L's Comprehensive Energy Plan. The collaboration began with ECS providing a significant amount of input into the creation of their new MPower tariff-based demand response program. Our recently initiated program with KCP&L demonstrates the impact of well-designed program structure. In this particular territory, there was a 30MW objective to be delivered by September 2008. Program recruitment began in March 2008 and to date ECS has contracted 24.595MW. ECS is also responsible for performing the measurement and verification protocol. The Kansas City portfolio is trending exactly as we projected at the time the program was proposed. Given our existing knowledge of and presence in the Tri-State area, we are confident that New Jersey's goals can be met in a similar fashion.

4. PJM

ECS has been marketing aggressively in PJM and will expand our work in the territory over the next several years. In our first year in PJM, our signature approach proved effective once again - with only 45 days between market launch and the summer 2008 deadline, ECS signed more than 60 resources. Our resources bring capacity to PJM's emergency program and additionally participate in PJM's economic program. ECS is a voting member of PJM.

5. New England

ECS is a full voting member of NEISO and actively participates in a limited capacity in the New England Forward Capacity Market.

6. Ontario

ECS recently signed a direct agreement to provide the OPA with 25MW of demand response resources.

7. Pending

ECS is currently in discussions and active contract negotiations with several utilities and municipal districts across the US and internationally.

**Key Personnel**

Energy Curtailment Specialists, Inc. brings an implementation team that has expertise in all phases of program design and activation.

Executive Oversight

The company's Executive team oversees all aspects of new and existing programs, ensuring all departments work together to ensure quick ramp-up, smooth transition, and effective program operation and communication.

**Glen E. Smith, President, Chief Executive Officer and Co-Founder:**

Glen oversees company operations, program administration, and interaction with members and regional ISOs/RTOs. He has expertise in electricity supply, installed capacity, operating reserve, transmission grid operations, and analysis of utility tariffs, rules and regulations. In September of 2007, he was elected to a two-year term on the planning committee for North American Electric Reliability Corporation (NERC). Prior to co-founding ECS, Glen was Vice President at a large NYS EScO. Glen holds a B.A. in Political Science, International Economics and Business Administration, and a Juris Doctorate.

**Stephen P. Lynch, Principal and Co-Founder:**

Stephen administers all technical aspects of the program including interval metering, load profiles, power factors, and general member consultation. He also oversees company operations. Stephen has expertise in facility power management, advanced metering and DSM technology. In November 2007, he was named Chairman of NYISO Price Responsive Load Working Group Committee. Stephen worked in nuclear power systems engineering at General Dynamics, and held a senior management position with the world's largest manufacturer of cubic zirconia. He also served on the Board of Directors for the Greater Niagara Manufacturer's Association. Stephen has a B.S. in Electrical Engineering from Northeastern University.

**Advisory Team**

Our exclusive advisory team brings experience and invaluable insight into the legislative, regulatory and business development fields.

**William Flynn, Strategic Advisor**

Bill is the leader of the Energy and Telecommunications Practice Groups at Harris Beach, PLLC. He was Chairman of the New York State Public Service Commission and prior to that was the President of the New York State Energy Research & Development Authority (NYSERDA). During his tenure at the PSC, he was known for being one of the most active proponents of demand response in the country.

**Paul Afonso, Strategic Advisor**

Paul is Government Law and Strategies Group practice leader at Brown Rudnick, and is noted for his expertise in regulatory policies and legislation related to electricity and other public utilities and services. He served as Chairman of the Massachusetts Department of Telecommunications and Energy (DTE, now the Public Utilities Commission) for several years. He also served as Chairman of the Massachusetts Energy Facilities Siting Board and as General Counsel for the Massachusetts DTE.

**Senior Staff**

Senior Staff bring extensive knowledge and experience to new programs and day-to-day operations.

**Paul Tyno, Executive Vice President Program Development**

Paul has been intensely involved in the energy arena since the beginning of electricity deregulation several years ago. He is responsible for the implementation of the ECS demand response curriculum in both existing and new markets (regulated or restructured) working closely with utility companies, regulatory agencies, prospective clients, current participants, business / trade associations, economic development corporations and affiliate service providers. Paul has been a featured speaker at numerous Demand Response and Demand Side Management conferences and hearings throughout the country, and is on the Board of Directors of the Peak Load Management Alliance. He has a degree in Business Administration.

**Michael Jaeger, Director of Operations:**

Mike is responsible for ECS's participation in NYISO Markets and Operations. He came to ECS from NYISO, where he received 11 Power Plus awards and the Customer Service Award for excellence in external customer service. Mike has a background in nuclear power propulsion, electrical generation, wholesale energy markets and virtual bidding. He is a graduate of the US Naval Nuclear Power Program.

## Engineering

Our Engineering team is responsible for managing all technical aspects of program implementation and management.

### **Dan Perez**, Vice President of Technology

Dan works closely with ECS participants and prospects, upgrading their capabilities in reference to enabling technologies and automated response. He works closely with new markets as they evolve and assures compatibility on the technology side. Additionally, Dan is responsible for the measurement and verification aspect of the ECS demand response portfolio, and oversees all technology deployments to assure their success. Dan has more than 15 years experience in the automation and communications engineering field. Over the past several years, he has emerged as a leader in the field of building automation, energy management systems and data access. While working with mechanical engineering firms, Dan assisted in designing and developing energy efficient specifications and standards for large commercial facility development. He holds degrees in Computer Science and Network Engineering and is an Associate member of ASHRAE and USGBC LEED NYC Chapter.

### **Gerard O'Sullivan**, Director of Engineering

Gerard's responsibilities include coordination of the engineering team, conducting site surveys for demand response opportunities, and grant writing for NY State energy incentives for our customers. He specializes in site surveys, building auditing, utility bill analysis and sustainability. Gerard has a BS and MS in Mechanical Engineering and is currently pursuing an MBA.

## Market Administration

The Market Administration Department manages all phases of customer recruiting and enrollment, including tracking and implementing market-specific rules and processes, and start-to-finish program oversight. In addition to an exceptional level of commitment to customer service, team members bring a broad diversity of experience and training, including engineering, business administration, legal and finance.

**Jeffrey Bonerb**, Market Administration Manager and New York Market Manager

**Brendan Biddlecom**, National Accounts and Ontario Market Administrator

**Brenda Brant**, KCP&L Market Administrator

**Michael Chase**, PJM Market Administrator

**Joseph Sinicki**, New England Market Administrator

**Brooke Walker**, California Market Administration

***New Specialist***, State of New Jersey Market Administrator

**Industry & Community Involvement**

We are proud of our position in the industry. In the early days, Glen and Steve were intimately involved in the development of the NYISO SCR Demand Response Program, and ECS was the first demand response provider to offer a large-scale program in the New York City area.

Numerous agencies and groups have sought us out across the country for our opinions and experience in energy conservation and blackout prevention in congested areas. We also regularly participate in government and regulatory discussions on issues relating to demand response and demand-side management. We have brought valuable information and insight many organizations, including ISO's and RTO's, the US Department of Energy (DOE) and the Federal Energy Regulatory Commission (FERC), at times representing over 40 Curtailment Service Providers (CSPs).

In 2007, company President and CEO Glen Smith was elected to the North American Electric Reliability Corporation (NERC) Planning Committee, and a short time later, co-founder Stephen Lynch was appointed Chair of the NYISO Price Responsive Load Working Group Committee. Vice President Paul Tyno currently serves on the Board of Directors of the Peak Load Management Alliance. ECS is also involved with the Pricing and Demand Response Committee of the Association of Energy Service Professionals and the Women's Council on Energy and the Environment. ECS is currently in discussions and contract negotiations with several utilities and municipal districts across the US.

Acknowledged leaders in the field, ECS is also regularly featured at industry events, addressing conferences and providing workshops, and providing testimony to government entities both in the US and abroad. ECS has been featured at events sponsored by Platts, the Peak Load Management Alliance, EUCI, and industry groups including the International Facility Managers Association, regional associations like the California Association of Independent Colleges and the California Manufacturers & Technology Association. We have also contributed to topic-specific forums, including the Outage Management Forum in Miami, the DR Expo in Chicago, and others too numerous to list., Executive Vice President of Program Development Paul Tyno was recently invited to present a pre-conference Demand Response Workshop for EUCI in October of this year.

We are also actively involved in the communities where we do business, with groups like Re-Tree Western New York, an organization dedicated to replacing the 30,000 trees damaged or destroyed in the devastating storm of October 2006. We are invested in education, working with groups like the New York City Schools' Green School Alliance, a research and resource center for city schools wishing to 'go green,' and the Alliance for Green Schools and Communities, an organization dedicated to educating schools and businesses in improving their 'green' performance. We encourage participating schools to turn DR program participation – and events – into learning opportunities, providing educational materials and guidance to every school we enroll.