STATE OF NEW YORK PUBLIC SERVICE COMMISSION

Proceeding on Motion of the Commission to Consider Demand Response Initiatives

Case No. 09-E-0115

Petition of Consolidated Edison Company of New York, Inc. for Approval of Direct Load Control Program Case No. 10-E-0229

Tariff Amendments to Make Various Revisions to Rider U – Distribution Load Relief Program (DLRP) in Compliance with Commission Order Issued April 8, 2009 in this Case

Case No. 08-E-1463

CONSOLIDATED EDISON COMPANY OF NEW YORK, INC. REPORT ON PROGRAM PERFORMANCE AND COST EFFECTIVENESS OF DEMAND RESPONSE PROGRAMS

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Dated: December 2, 2013

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1. INTRODUCTION

Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") submits this evaluation of its demand response programs pursuant to the New York Public Service Commission's ("Commission" or "PSC") October 23, 2009 Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs (the "October Order"). The October Order requires that the Company submit a report to the Commission by December 1 of each year assessing the four demand response programs approved in the October Order. Those programs are the Commercial System Relief Program ("Rider S" or "CSRP"), Residential Smart Appliance Program ("RSAP"), Critical Peak Rebate Program ("Rider T" or "CPRP") and Network Relief Program ("NRP"). The report also includes the Rider U – Distributed Load Relief Program ("Rider U Program" or "DLRP") and the Rider L - Direct Load Control Program ("DLC" or "DLC Program"). In addition, this report addresses reporting requirements pertaining to meter data access during all tests and demand response events for Rider S and Rider U.4 This report covers the cost components and program performance associated with the Company's demand response programs for the 2013 program year, January 1, 2013 through December 31, 2013.

Consolidated Edison Company of New York, Inc. ("Con Edison" or the "Company") submits this evaluation of its demand response programs pursuant to the New York Public Service Commission's ("Commission" or "PSC") October 23, 2009 Order Adopting in Part and

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¹ Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs*, issued and effective October 23, 2009, pp. 25-26.

² CPRP is not discussed in this evaluation because in a subsequent order in this proceeding the Commission allowed the Company to eliminate the CPRP and to create a Voluntary participation option in the CSRP program to accommodate existing CPRP large customer participants. *Order Adopting with Modifications Tariff Amendments Related to Demand Response Programs*, issued and effective March 15, 2012, p. 9.

³ The Commission directed that the DLC evaluation be included as part of the Company's evaluation of its demand response programs in Case 10-E-0229, Petition of Consolidated Edison Company of New York, Inc. for Approval of Direct Load Control Program, Staff Recommends Approval of the Continuation of the Company's Direct Load Control Program as Described in this Memorandum – Approved as Recommended and So Ordered, issued and effective September 22, 2010, p. 10. While not required to do so, the Company has included DLRP in this report in order to provide the Commission with a comprehensive assessment of its demand response programs.

⁴ The Commission directed that the Company file a report on the status of its meter access plan implementation each year as part of its demand response program assessment report. Case 08-E-1463, Plan for Providing Rider U Data Access in a Manner that Supports Market Requirements and Customer Needs, *Staff Recommends that the Company's Proposed Plan Be Approved – Approved as Recommended and So Ordered*, issued and effective July 14, 2011, p. 4.

Modifying in Part Con Edison's Proposed Demand Response Programs (the "October Order"). The October Order requires that the Company submit a report to the Commission by December 1 of each year assessing the four demand response programs approved in the October Order.⁵ Those programs are the Commercial System Relief Program ("Rider S" or "CSRP"), Residential Smart Appliance Program ("RSAP"), Critical Peak Rebate Program ("Rider T" or "CPRP") and Network Relief Program ("NRP").⁶ The report also includes the Rider U – Distributed Load Relief Program ("Rider U Program" or "DLRP") and the Rider L - Direct Load Control Program ("DLC" or "DLC Program").⁷ In addition, this report addresses reporting requirements pertaining to meter data access during all tests and demand response events for Rider S and Rider U.⁸ This report covers the cost components and program performance associated with the Company's demand response programs for the 2013 program year, January 1, 2013 through December 31, 2013.

Con Edison offers two types of demand response programs, contingency and peak shaving, which focus on supporting reliability and reducing costs of operating the electric distribution system. The programs operate during the prescribed summer period of May 1 through October 31 and are summarized in the table below:

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⁵ Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs*, issued and effective October 23, 2009, pp. 25-26.

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Contingency programs;

Program	Acronym	Purpose	Incentive
Distribution Load Relief Program – (NYC and Westchester County)	DLRP	Activated by Con Edison in response to system critical situations (Condition Yellow or voltage reduction). Events last for 5 or more hours. Premium paid for customers who precommit load.	Customers in the Summer Reservation Payment program receive a reservation payment of \$6.00 or \$3.00 per kW-month pledged and performed, depending on location, and performance payments equal to \$0.50 per kWh reduced. Customers in the Voluntary program are paid only a performance payment equal to \$0.50 per kWh reduced.
Direct Load Control – (NYC and Westchester County)	DLC	Activated by Con Edison in system critical situations. Con Edison residential, religious and small business (demand less than 100 kW) customers with central air-conditioning. Allows Con Edison to remotely adjust thermostat settings. Also called for peak shaving events.	Customers receive a free programmable thermostat and an incentive payment of \$25 for residential customers per unique address, and \$50 for small commercial customers per unique building site.

Peak Shaving programs:

Peak Shaving programs;									
Program	Acronym	Purpose	Incentive						
Commercial System Relief Program – (NYC only)	CSRP	Event activated when day-ahead forecast is 96 percent or greater of forecasted summer system peak to relieve system peak load. Premium paid for customers who pre-commit load.	Customers in the Summer Reservation Payment Program receive a reservation payment of \$5/kW pledged and performed for months with fewer than 5 events and \$10/kW during and after a month with 5 or more events. Performance payment equal to \$.50 per kWh for each kW reduced during an event. Customers in the Voluntary program receive a performance payment equal to \$1.50 for each kWh reduced.						
Residential Smart Appliance Program – (NYC only) [Pilot program]	RSAP	Event activated when day-ahead forecast is 96 percent or greater of forecasted summer system peak to relieve system peak load. Con Edison will have ability to turn off enrolled home electrical equipment when an event is called. Available to Con Edison residential customers with a minimum of two window or wall A/C units, an AMR meter and broadband connection.	Participants receive a free home energy management system with installation and participation in 80 percent of all event hour's results in an incentive payment of \$10 for each wall or window A/C unit enrolled and \$10 for the combination of other enrolled appliances.						
Residential Smart Appliance Program (NYC only) [Pilot program]	CoolNYC	Event activated when day-ahead forecast is 96 percent or greater of forecasted summer system peak to relieve system peak load. Con Edison will have ability to turn off window or wall A/Cs when an event is called. Available to Con Edison residential customers (Zone J) with window or wall A/C units and broadband connection.	Participants receive a free smart modern outlet (modlet), remote thermostat and gateway device allowing control via a web portal and smartphones. Participation in event hours results in an incentive payment of \$25.						
Direct Load Control – (NYC and Westchester County)	DLC	Activated by Con Edison in system critical situations. Con Edison residential, religious and small business (demand less than 100 kW) customers with central air-conditioning. Allows Con Edison to remotely adjust thermostat settings. Also called for peak shaving events.	Customers will receive a free programmable thermostat and an incentive payment of \$25 for residential customers per unique address, and \$50 for small commercial customers per unique building site.						

The demand response programs are divided by application type, contingency or peak-shaving, and also by customer type. The Company operates programs that are designed for larger commercial customers (DLRP and CSRP) and programs for smaller commercial and residential

customers (DLC and RSAP). The segmentation by customer type is important, as each program requires specific operational process, equipment, communication and education. This report is structured to reflect this segmentation.

COMMERCIAL DEMAND RESPONSE PROGRAMS

2. DISTRIBUTION LOAD RELIEF PROGRAM ("DLRP")

DLRP is a network contingency demand response program applicable to individual customers who can reduce demand by greater than 50 kW during an event and Curtailment Service Providers ("CSPs") who aggregate greater than 100 kW of demand reduction.

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DLRP has two program options, mandatory and voluntary. The mandatory option of DLRP is also referred to as the Summer Reservation Payments option. This option was added in 2007 to help mitigate network damage and provide a greater margin of protection against major customer service interruptions. The voluntary program option has been offered in the Company's service territory since 2001.

DLRP may be called by the Company to reduce strain on local distribution lines within specific networks and load areas when contingencies occur. The level of the Summer Reservation Payment is \$3.00 per kW-month in Tier One networks and load areas and \$6.00 per kW-month in Tier Two networks. Tier One payments apply to participation in the majority of the Company's networks and load areas; Tier Two payments apply to load reductions in areas that are identified as higher priority and in need of additional demand reduction resources. Performance payments are \$0.50 per kWh in both Tier One and Tier Two networks. Mandatory participants can receive both Summer Reservation Payments and performance payments.

DLRP Program Costs

Table 1 summarizes the costs, by component, associated with DLRP in 2013.

Table 1: DLRP Cost Components for 2013 Program Year9

DLRP 2013 Program Costs										
Component Cost Percentage										
Customer Incentives	\$ 2,399,349	72%								
Program Administration Con Ed	\$ 133,856	4%								
Program Administration Vendor	\$ 540,940	16%								
Program Equipment	\$ 18,400	1%								
Program Marketing	\$ 142,452	4%								
M&V	\$ 78,576	2%								
Total Program Costs	\$ 3,313,573	100%								

Customer Incentives

Customer incentives consist of performance and Summer Reservation Payments paid to customers for their participation and performance in events and tests. The voluntary customers enrolled in DLRP are not tested. The cumulative total of customer incentives (performance payment plus Summer Reservation Payments) amounted to \$2,399,349 (72 percent of the total program cost).

Program Administration – Con Edison

Program Administration – Con Edison consists of Company staff salary and overhead associated with DLRP management and support. This includes (but is not limited to) work performed by program managers, specialists, marketing staff, and legal support team. The costs associated with program administration were \$133,856 (four percent of the total program cost), calculated using a percentage time allocation of staff and support personnel to DLRP activities, with their associated salaries, overhead, and Administrative and Supervisory ("A&S") costs.

<u>Program Administration – Vendor</u>

⁹ Costs for November and December have been estimated

Costs in this category include expenses related to administrative functions performed by Con Edison vendors to manage meter data and payment calculation. For DLRP, the Program Administration costs totaled \$540,940 (16 percent of the total program costs).

Program Equipment

Program equipment costs include the billing interval metering ("BIM") and data acquisition equipment installed on a customer's premises to collect interval load data. The Company's commercial demand response programs require BIMs. The costs associated with BIM installation and maintenance are covered by Con Edison's Mandatory Hourly Pricing and Reactive Power Programs, for customers with demands over 500 kW, or by the program participant, and are therefore not charged to the demand response accounts. The equipment costs incurred are associated with internal functions such as software licenses and professional memberships required to operate demand response programs. Total equipment costs were \$18,400 (one percent of the total program costs).

Program Marketing

Marketing costs include all costs associated with the marketing initiatives required to inform and involve customers in the programs. The costs associated with program marketing were \$142,452 (four percent of the total program cost). This program's marketing cost component does not include Con Edison staff salary associated with time spent on marketing events and marketing material design, which is included in the Program Administration – Con Edison category.

Third parties who are not under the control of the Company execute the vast majority of program marketing. The Company will continue to provide "background" customer education on the demand response concept to support the third party sales process.

Measurement and Verification

Costs included in this category are associated with the performance analysis conducted by outside consultants for the DLRP program. The Company has contracted with an outside vendor to calculate both individual and aggregate results for events and tests, and to generate various

reports as necessary. These demand reduction results are used to determine appropriate payment for customers and the aggregate effect on the Con Edison system. The costs to the system amounted to \$78,576 (two percent of the total program cost).

Cost Effectiveness Summary

DLRP Utility Cost Test

The Company currently applies the utility cost test ("UCT") to determine the cost effectiveness of DLRP by calculating the ratio of the value of the program benefits to the program costs. In this evaluation, the cost component is the sum of utility-incurred costs related to the DLRP for the 2013 program year. The benefit component is based on the avoidance of emergency generator costs of \$3/kW-month that were deemed applicable in the June 2007 Order, with the avoided generator costs including the cost of mobilizing emergency generators in a network (including the costs of renting, dispatching and preparing the generators for use).10

As indicated on Table 1, the total 2013 cost of the program was \$ 3,313,573. This is equivalent to \$3.60/kW/month, down from \$5.13/kW/month in 2012. The improvement in the cost per kW per month of the program is due to the low number of events occurring in Tier 2 networks this year when compared to last year. Only one event in 2013 occurred in a Tier Two network compared to 11 events in Tier Two networks in 2012. The kW achieved is assessed using the customer baseline ("CBL") methodology for mandatory kW achieved (153 MW). The kW achieved is the difference between the CBL and the actual load reduction curve during the test event.

Total costs for DLRP during the 2013 program year were \$3,313,573; the total achieved MW for the program were 153 MW. The benefit to cost ratio was calculated by dividing the total

¹⁰ Case 07-E-0392, Tariff filing of Consolidated Edison Company of New York, Inc. to Modify Rider U – Distribution Load Relief Program, *Staff Recommends that the Tariff Amendments Listed in the Appendix Be Approved, with Modifications, and the Company Be Directed to File Further Tariff Amendments, to Become Effective on Not Less than One Day's Notice on July 1, 2007 on a Temporary Basis – Approved as Recommended and So Ordered*, issued and effective June 21, 2007, pp. 11-12.

program costs by the kW achieved in the program. The result of this calculation was then divided by the six months in the Summer Capability Period. The DLRP benefit to cost ratio is .83.

The Company is currently performing a cost effectiveness study to assess the avoided costs in more detail. The study is evaluating avoided generation capacity costs, avoided transmission and distribution capacity costs, and avoided energy costs. The total avoided costs will be used to determine a total resource cost ("TRC") test for DLRP. Preliminary results indicate that the avoided costs are significantly higher than \$3/kW-month. This is discussed further in the Commercial Programs conclusion.

DLRP Test and Event Performance and Network Impacts

This section focuses on three major areas: evaluation of performance, evaluation of impacts by network, and an assessment of program growth.

The goal of DLRP is to reduce the impact of network and load area contingencies by inducing customer load reductions prior to or at the time of an event. The achieved performance in tests and events is calculated by subtracting customer/aggregator actual load from customer/aggregator baseline load. The performance factor is the ratio of the achieved load reduction to the pledged load reduction. During the 2013 Summer Capability Period, one DLRP test and six DLRP events were initiated. The performance of mandatory participants during the test event and the six DLRP events that occurred in 2013 is assessed in this section.

Customer load reductions are measured using a CBL methodology. A CBL is a representation of a customer's average hourly consumption based on the top five highest days of energy usage within a 10-weekday period selected from the 30 prior weekdays to an event. For weekend events the CBL used the top two highest weekend days from the past three weekends. The CBL is used to calculate a customer's demand response performance during an event by taking the difference of the CBL and the customer's actual load on the event day. Customers have the choice of selecting an average day or weather adjusted CBL depending on how they believe their

load is normally impacted by changes in the weather (usually heat). If the customer does not make a choice, the customer is assigned a weather adjusted CBL.

Test and Event Summary

Performance of all mandatory customers is measured annually via event and/or test performance data. At least one test is conducted per Summer Capability Period. The mandatory component of DLRP represents approximately 88 percent of 2013 total DLRP load enrolled.

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The performance factor on the June 26 DLRP test was 102 percent. The performance factors across the six DLRP events had a wide range, with an average performance factor of 103 percent when excluding outliers. Three of the six DLRP events were called across two networks during the week of the July heat wave, the summer's only heat wave, or 77 percent fewer events than during the previous year's heat waves when as many as 13 DLRP events were called spanning 11 different networks.

The test is a more complete assessment of DLRP performance as it is system wide, but the individual events can shed light on characteristics of program performance under specific conditions. Performance data is summarized in Table 2 below and more detailed DLRP test and event data can be found at the end of the document in Appendix II. Note that the performance data shown in Table 2 is based on raw performance. This may differ from the load reductions used to calculate participant payments, which are capped at 100 percent or zero percent of their individual pledged levels.

Table 2: 2013 Summary of DLRP Test & Events11

Test or Event	Date	Event/Test Hours	Customers Enrolled	MW Enrolled	MW Reduction Achieved	Performance Factor Achieved	Test Event Network or Zone
Event	May 24	9:25 AM – 4:00 PM	3	0.30	1.82	6.06	Roosevelt
Event	June 25	7:00 PM – 12:00 AM	6	1.27	1.43	1.12	Flatbush
Test	June 26	12:00 PM – 1:00 PM	614	151	153	1.02	All Networks
Event	July 6	7:00 AM – 12:00 PM	5	0.70	0.05	0.08	Fox Hills
Event	July 15	5:00 PM – 10:00 PM	8	0.70	0.62	0.90	Fox Hills
Event	July 15	6:00 PM – 11:00 PM	8	1.61	1.49	0.93	Fresh Kills
Event	July 18	5:00 PM – 12:00 AM	5	1.61	1.97	1.23	Fresh Kills

The DLRP test was conducted on June 26, 2013 and included all mandatory customers participating in the DLRP program. Out of approximately 151 MW pledged at the time of the test, approximately 153 MW were curtailed, which established a 102 percent performance factor. This is an improvement from the 2012 DLRP test performance factor of approximately 69 percent. Although the total MW amount pledge in 2013 decreased, many customers who reenrolled from 2012 lowered their pledged amount to a more obtainable load reduction number, which helped improve the overall performance factor for the test event. Testing the entire DLRP portfolio provides the best insight possible at this time into how demand response customers would perform over a large sample. The test provides slightly different insights than CSRP, because mandatory DLRP customers are not penalized for non-performance. In DLRP only derating is applied. This means that in subsequent months after the test or event, customers with less than 100 percent performance will be paid a capacity payment based on actual performance. As the Company continues the integration of demand response into operational planning, understanding and expectations of resource performance grows and gains greater importance.

DLRP event performance can be less predictable and consistent than test performance, as events deal with smaller subsets of customers in different situations (locations and call windows) in each event. Performance during events can be very heavily swayed by the particular subset of participants and their relative MW pledged in the event. Networks with a large portion of their

¹¹ Performance factor is not calculated for the DLRP Voluntary customers. Voluntary enrollment represents approximately 13 percent of 2013 total DLRP enrollment.

total pledged reduction enrolled by a few customers can have their overall performance significantly influenced by the individual performance of those customers. This effect is lessened in DLRP tests as there are significantly more customers participating.

In addition, the fact that a DLRP event can be called on weekends and nighttime hours, which generally are low demand and low staffing times, makes the load reduction achieved during these time periods less reliable.

DLRP Measurement and Methodology

Only 23 percent of customers enrolled in the Summer Reservation portion of DLRP elected to have their performance measured with the average day CBL, the remaining customer performance was measured using the weather adjustment calculation for the test and all events. The weather adjustment allows for a variation range of up to 20 percent in either direction (increase or decrease) from that of an average day assumption.

Only 23 percent of customers enrolled in the Summer Reservation portion of DLRP elected to have their performance measured with the average day CBL, the remaining customer performance was measured using the weather adjustment calculation for the test and all events. The weather adjustment allows for a variation range of up to 20 percent in either direction (increase or decrease) from that of an average day assumption.

DLRP Network Impacts

To assess the potential impacts of DLRP at the network level, the Company analyzed the Summer Reservation and Voluntary enrollment in each network to determine the potential impact in individual networks where the reductions were needed. Summer Reservation performance was analyzed using the DLRP test and Voluntary performance was analyzed using the DLRP events. "Enrolled" is defined as the total pledged MWs in a network, without adjusting for performance factor. "Achieved reductions" were calculated using performance adjusted Summer Reservation enrollments and performance adjusted Voluntary enrollments. Appendix I shows full performance data for all networks.

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Assessment of Network Impacts

Table 3 below shows a summary of performance data for Tier One, Tier Two, and system-wide. Appendix II details program performance and network impacts as a percentage of network peaks for enrolled, anticipated and achieved reductions. The average achieved load reduction of network peaks is approximately 1.07 percent, which indicates that DLRP has a limited impact. The limited impact is partially attributable to the fact that participating customers are dispersed over 83 networks.

Table 3: Summary of Enrolled, Anticipated, and Achieved Impact

	Е	nrollment & Av	verage Impact	Total Average Impact			
	Enrolled DLRP Mandatory	DLRP Mandatory Impact	Enrolled DLRP Voluntary	DLRP Voluntary Impact	Enrolled Mandatory DLRP + Enrolled Voluntary DLRP	Achieved Mandatory DLRP + Achieved Voluntary DLRP	
Tier One Network	135	1.27%	17	0.16%	1.44%	1.16%	
Tier Two Network	22	0.88%	4	0.17%	1.05%	0.73%	
All Networks/ Load Areas	157	1.20%	22	0.17%	1.36%	1.07%	

Assessment of DLRP Program Growth

While DLRP experienced a decrease in both the number of customers participating and the enrolled kW per customer compared to 2012, overall customer performance increased. This resulted in an overall increase in the total MW available in 2013 as compared with 2012. The reduction in the total MW enrolled is a concern, but the increase in the customer performance reliability raises operational confidence in the program.

While DLRP experienced a decrease in both the number of customers participating and the enrolled kW per customer compared to 2012, overall customer performance increased. This resulted in an overall increase in the total MW available in 2013 as compared with 2012. The reduction in the total MW enrolled is a concern, but the increase in the customer performance reliability raises operational confidence in the program.

Table 4 below shows the amount of load enrolled in DLRP in 2013 compared to the load in 2012 for the mandatory Summer Reservation component of the program, while Table 5 shows both Summer Reservation and Voluntary enrollment combined. The tables show enrollment by tier and system wide. As shown in Table 4 the majority of the drop in load occurred in Tier One networks for Summer Reservation customers.

Other demand response programs in the region (New York Independent System Operator, Inc., PJM Interconnection, L.L.C., ISO New England, Inc.) also saw a contraction in their DR program enrollments in 2013. While each has unique rules which impact enrollment, and the Company believes the new EPA Reciprocating Internal Combustion Engine rules also had an impact, the lingering impact of Super Storm Sandy must be recognized. Many customers in the region were still in recovery mode at the time when they would normally have been making enrollment decisions. The Company remains hopeful that in 2014 it will see a re-engagement of those Sandy impact customers that were not able to participate in 2013.

Table 4: DLRP Mandatory Enrollment by Tier and System-Wide

	2012 MW Enrolled	2012 MW with Derating *	2013 MW Enrolled	2013 MW with Derating *	2013 vs. 2012 Change in MW Enrolled % Increase (Decrease)	2013 vs. 2012 Change in MW with Derating % Increase (Decrease)
Tier One Networks	166	110	135	123	-19%	11%
Tier Two Networks	23	20	22	18	-3%	-8%
All Networks/ Load Areas	189	130	157	141	-17%	8%

^{*} Derating based on Performance Factor (Values 0 to 1.0) and Voluntary enrollees excluded from table

Table 5: DLRP Overall Enrollment by Tier and System-Wide

	2012 MW Enrolled	2012 MW with Derating *	2013 MW Enrolled	2013 MW with Derating *	2013 vs. 2012 Change in MW Enrolled % Increase (Decrease)	2013 vs. 2012 Change in MW with Derating % Increase (Decrease)
Tier One Networks	182	111	153	123	-16%	10%
Tier Two Networks	27	21	27	18	-2%	-13%
All Networks/ Load Areas	209	132	179	141	-14%	7%

^{*} Derating based on Performance Factor (Values 0 to 1.0). Voluntary enrollees are included in this table.

Currently customers have to manage their enrollment in DLRP knowing they may be called to participate in events at any time. This is particularly problematic for customers with low load levels and available response staff in the late night hours. It is generally assumed that customers who do participate in DLRP enroll a kW amount that is less than they would be able to provide at a peak consumption time in order to reflect what they expect to be able to provide during a lower consumption time, such as overnight. This assumption has been validated by conversations with stakeholders.

The Company has considered how to maximize the benefits of DLRP resources. When a contingency event occurs the Company generally tries to maximize the impact of any demand response resources by requesting customer response that coincides with the period of most demand on the network in question. Network events that occur during off peak hours generally do not result in the immediate call of customer resources. Instead, the resources are called at a later time that coincides with network peak in order to obtain maximum network impact.

3. COMMERCIAL SYSTEM RELIEF PROGRAM ("CSRP")

CSRP is open to participants in Zone J (predominantly the five boroughs of New York City) who can curtail load or bring on certain on-site generation to reduce their demand by a minimum of 50 kW individually, or to Aggregators/CSPs who aggregate greater than 100 kW of demand reduction with a minimum of 21 hour notice before a planned event. A Planned Event refers to the Company's request for Load Relief when the day-ahead forecasted load level is at least 96 percent of the Company's forecasted summer system peak. In 2012 the program was expanded

to allow participation by service classification SC11 customers who can increase export load to the system during events.¹²

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CSRP includes both a mandatory and a voluntary option. Participants enrolled in the mandatory option receive monthly reservation payments of \$5 per kW per month. During Summer Periods that include five or more Planned Events, the reservation payment is \$10 per kW per month during months in which by the end of the month there have five or more cumulative Planned Events in the network since the Summer Period began. Payment for participation during Unplanned Events is \$5 per average kW reduced during the event. The customer is required to respond to a CSRP Planned Event for a five-hour period, with the time of the event dependent on whether the customer is located in a daytime or nighttime peaking network. Customers in daytime peaking networks are called from 12pm to 5pm and customers in nighttime peaking networks are called from 5pm to 10pm. In addition to the reservation payment, participants in the mandatory option receive a performance payment that is equal to \$0.50 per kWh reduced during an event. The participants in the Voluntary option do not receive reservation payments, but they do receive a higher performance payment of \$1.50 per kWh reduced during a Planned event and \$5 per kWh reduced during an Unplanned event.

¹² See Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, Order Adopting with Modifications Tariff Amendments Related to Demand Response Programs, issued and effective March 15, 2012, p. 8.

¹³ See Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, Order Adopting with Modifications Tariff Amendments Related to Demand Response Programs, issued and effective March 15, 2012, p. 8.

CSRP has environmental and performance requirements, including a 20 percent cap on the program resources enrolled via the use of on-site diesel or gas-turbine generation. Participating diesel electric generating equipment must have an engine of model year vintage 2000 or newer. Enrollment by such generators is accepted on a first come, first served basis. All other electric generating equipment is limited to the following: natural gas-fired rich burn electric generating equipment that incorporates three-way catalyst emission controls; natural gas lean-burn electric generating equipment with an engine of model year vintage 2000 or newer; or electric generating equipment that has a NOx emissions level of no more than 2.96 lb/MWh.

CSRP Program Costs

Table 6 summarizes the costs, by component, associated with CSRP in 2013.

Table 6: CSRP Program Costs14

20	2013 CSRP Program Costs											
Component	Cost	Percentage										
Customer Incentives	\$ 2,778,355	76%										
Program Administration Con Ed	\$ 150,213	4%										
Program Administration Vendor	\$ 494,504	13%										
Program Equipment	\$ 21,081	1%										
Program Marketing	\$ 142,444	4%										
M&V	\$ 78,576	2%										
Total Program Costs	\$ 3,665,173	100%										

Customer Incentives

Customer incentives consist of performance and Summer Reservation payments paid to customers for their participation and performance in events and tests. Table 7 below provides information about the number of CSRP events called in 2013. The cumulative total of customer incentives (performance payment plus Summer Reservation Payments) amounted to \$2,778,355 (76 percent of the total program cost).

Customer incentives consist of performance and Summer Reservation payments paid to customers for their participation and performance in events and tests. Table 7 below provides

¹⁴ Costs for November and December have been estimated.

information about the number of CSRP events called in 2013. The cumulative total of customer incentives (performance payment plus Summer Reservation Payments) amounted to \$2,778,355 (76 percent of the total program cost).

Program Administration – Con Edison

Costs in this category consist of Company staff salary and overhead associated with CSRP management and support. This includes (but is not limited to) work performed by program managers, specialists and marketing staff. The costs associated with program administration were \$150,213 (four percent of the total program cost) calculated using a percentage time allocation of staff and support personnel to CSRP activities, with their associated salaries, overheads and A&S costs.

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Program Administration – Vendor

Costs in this category include expenses related to administrative functions performed by Con Edison vendors to manage meter data and payment calculation. For CSRP, the Program Administration costs totaled \$494,504 (13 percent of the total program costs).

<u>Program Equipment</u>

Program equipment costs include the metering and data acquisition equipment installed on a customer's premises to collect interval load data. The Company's commercial demand response programs require BIMs to collect interval load data. The costs associated with BIM installation and maintenance are covered by Con Edison's Mandatory Hourly Pricing and Reactive Power Programs for customers with demands over 500 kW, or by the program participant, and are therefore not charged to the demand response accounts. The equipment costs incurred are associated with internal functions such as software licenses and professional memberships

required to operate demand response programs. Program Equipment costs amounted to \$\$21,081 (one percent of the total program cost).

Program Marketing

Marketing costs include all costs associated with the marketing initiatives required to inform and involve customers in the programs. The costs associated with program marketing were \$142,444 (four percent of the total program cost). This program's marketing cost component does not include Con Edison staff salary associated with time spent on marketing events and marketing material design, which is included in the Program Administration – Con Edison category.

Marketing costs include all costs associated with the marketing initiatives required to inform and involve customers in the programs. The costs associated with program marketing were \$142,444 (four percent of the total program cost). This program's marketing cost component does not include Con Edison staff salary associated with time spent on marketing events and marketing material design, which is included in the Program Administration – Con Edison category.

Program marketing is also executed by third parties not under the control of the Company, however, the Company continues to provide "background" customer education of the demand response concept to support the third party sales process. A key initiative in this regard this year was the "Load Shaping" video, which provided education on how customers may better control their energy load.

Measurement and Verification

Costs included in this category are associated with the performance analysis conducted by outside consultants for the CSRP program. The Company has contracted with an outside vendor to calculate both individual and aggregate results for events and tests, and to generate various reports as necessary. These demand reduction results are used to determine both appropriate payment for customers and the aggregate effect on the Con Edison system. The costs to the system were generally operation and maintenance and amounted to \$78,576 (two percent of the total program cost).

Costs included in this category are associated with the performance analysis conducted by outside consultants for the CSRP program. The Company has contracted with an outside vendor to calculate both individual and aggregate results for events and tests, and to generate various reports as necessary. These demand reduction results are used to determine both appropriate payment for customers and the aggregate effect on the Con Edison system. The costs to the system were generally operation and maintenance and amounted to \$78,576 (two percent of the total program cost).

CSRP Cost Summary

Total costs for the CSRP during the 2013 program year were \$3,665,173. The increase in costs from \$2,531,737 in 2012 is attributable to five events being called in the month of July, which caused the Summer Reservation Payment rate per kW to increase from \$5 to \$10 per kW for the remaining months of the Summer Capability Period.

Total costs for the CSRP during the 2013 program year were \$3,665,173. The increase in costs from \$2,531,737 in 2012 is attributable to five events being called in the month of July, which caused the Summer Reservation Payment rate per kW to increase from \$5 to \$10 per kW for the remaining months of the Summer Capability Period.

Cost Effectiveness Summary

CSRP Total Resource Cost Test

The Company applies the TRC test to determine the cost effectiveness of CSRP. TRC is applied by comparing the utility's costs and estimated benefits; in this case the program has many benefits including reducing system peak load, reducing network peak peaks, and reducing peaking emissions as compared to the cost of operating the program.

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Total costs for the CSRP during the 2013 program year were \$3,665,173. Given the costs stated above and the benefits of 61 MW of available load reduction, the TRC test value is 1.82 for the

program. The overall TRC value remains above 1.0, even with the reduction in participation levels in the 2013 program year.

CSRP Test and Event Performance

The purpose of CSRP is to reduce energy demand when the day-ahead forecast exceeds 96 percent of the forecasted summer system-wide peak. Program participants are notified at least 21 hours before the peak load shaving event is scheduled to begin and are expected to reduce load, or increase export in the case of SC11 customers, based upon their pledged kW. Accordingly, one of the goals of the program evaluation is to determine whether participants are providing the pledged demand reductions or export increases. The CBL for the day of an event is the estimate of the customer's load level had there been no event. The difference between the CBL and the actual load is used to determine the achieved performance.

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Test and Event Summary

During the 2013 program year, Con Edison called a test event on June 25. The event duration for both daytime and nighttime peaking networks was one hour. The daytime peaking network participants were called to perform between 2 pm and 3 pm while the nighttime peaking network participants were called to perform between 7 pm and 8 pm. Approximately 61 MW were enrolled at the time of the test event and over 64 MW were reduced resulting in an overall program performance factor of 105 percent.

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participants were called to perform between 7 pm and 8 pm. Approximately 61 MW were enrolled at the time of the test event and over 64 MW were reduced resulting in an overall program performance factor of 105 percent.

A summary of the event results is shown in Table 7 below. The mandatory participants produced an average of 59 MW of load relief during the five consecutive events that occurred between July 15 and July 19. This average response of 59 MW is the combination of the average 42 MW during the daytime peaking period and the average17 MW during the nighttime peaking period.

For the first time since the program's inception, CSRP was called five times during the Summer Capability Period. This was not only unique due to the number of times the program was called, but all five events occurred consecutively during the weekdays of the July heat wave from July 15 and ended with Con Edison setting a new system peak demand record on July 19. During the July 19, 2013 event, participants located in the daytime peaking networks produced 46 MW of response and the participants located in the nighttime peaking networks produced 17 MW of response, for a total response of 62 MW. As a result of calling five events in a Summer Capability Period, the Summer Reservation Payment rate doubled from \$5 per kW to \$10 per kW in July once the fifth event was called. The new payment rate remained in effect until the end of the 2013 Summer Capability Period.

The analysis of the five consecutive CSRP events showed an unexpected level of customer performance. With both Con Edison and the NYISO calling demand response events throughout the week, a level of customer fatigue could have been expected, but in this case the most load reduction was seen during the July 19 event, the last day of the event period, as shown in Table 7. The lowest level of performance was experienced on the first day of the event period, with a 56 MW reduction. Performance on Tuesday, Wednesday, Thursday, and Friday were all an improvement over Monday's initial curtailment, with Friday seeing the greatest amount of improvement.

Table 7: 2012 Summary of CSRP Test & Events

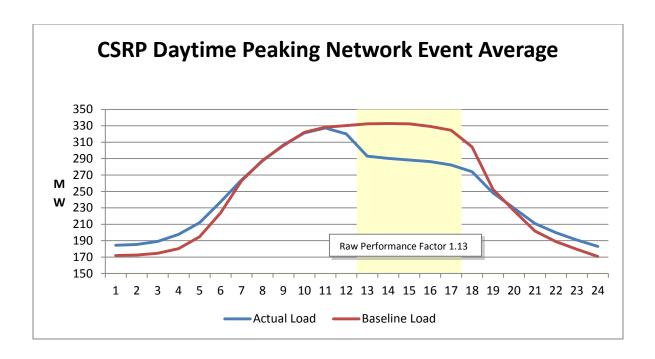
CSI	RP	Day Peak	ing Netwo	orks	Night Pea	Totals			
Test/Event	Date	Event/Test Hours	Enrolled	Reduction	Event/Test Hours	Enrolled	Reduction	Enrolled	Reduction
Test	6/25/2013	12 p.m 1 p.m.	43	38	7 p.m 8 p.m.	18	27	61	64
Event	7/15/2013	12 p.m 5 p.m.	38	38	5 p.m 10 p.m.	18	18	56	56
Event	7/16/2013	12 p.m 5 p.m.	38	43	5 p.m 10 p.m.	18	17	56	60
Event	7/17/2013	12 p.m 5 p.m.	38	43	5 p.m 10 p.m.	18	18	56	61
Event	7/18/2013	12 p.m 5 p.m.	38	42	5 p.m 10 p.m.	18	15	56	57
Event	7/19/2013	12 p.m 5 p.m.	38	46	5 p.m 10 p.m.	18	16	56	62

^{*}MWs enrolled are reflective of the amount approved at the time of the test or event

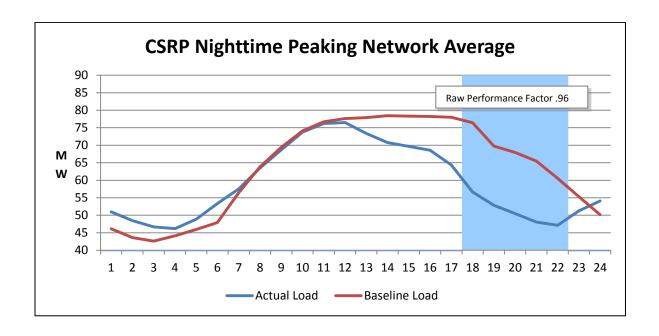
It is important to note that the performance data shown in Table 7 is based on achieved MW performance, which captures the MW performance as seen on the system. This may differ from the load performance used to calculate participant payments, which is capped between zero and 100 percent of the customer's network pledged level. The performance data is used to calculate a network performance factor for each customer/aggregator by dividing the performance achieved by the performance pledged. The performance factor is important as it is used to calculate payments and determine resource reliability.

Performance of 2013 peak shaving daytime resources improved from the previous year. The overall performance factor for the daytime resources was 111 percent compared to the 80 percent performance from the daytime resources in the 2012 Summer Capability Period. For participants enrolled in the 2013 nighttime peaking networks, average performance was 92 percent compared to 2012 performance factor, which was over 100 percent. The overall average program performance factor of the combined daytime and nighttime resources was in line with the test event performance factor of 105 percent.

The following represents the overall performance of all five CSRP events for daytime peaking networks called in July:



The following represents the overall performance of all five CSRP events for nighttime peaking networks called in July:



The Voluntary CSRP customers were called on all five days of the July heat wave event. The MW enrolled and reduced is shown below in Table 8. Performance was significantly lower for the Voluntary compared to the Summer Reservation customers. Nighttime peaking networks

received no reduction from the Voluntary CSRP customers, while daytime peaking networks saw an average of 3.7 MWs of reduction. It is not surprising that commercial customers find nighttime response more difficult, as their load is already low and they have limited staffing available to respond to events.

Table 8: 2012 Summary of CSRP Voluntary Events

CSRP Voluntary		Day Pea	king Netwo	rks	Night Pea	aking Networ	ks	Totals	
Test/Event	Date	Day Event/Test Hours	Enrolled	Reduced	Night Event/Test Hours	Enrolled	Reduced	Total Enrolled	Total Reduced
Event	7/15/2013	12 p.m 5 p.m.	10.18	2.72	5 p.m 10 p.m.	3.7	-0.19	13.88	2.53
Event	7/16/2013	12 p.m 5 p.m.	10.18	3.77	5 p.m 10 p.m.	3.7	-0.19	13.88	3.58
Event	7/17/2013	12 p.m 5 p.m.	10.18	3.55	5 p.m 10 p.m.	3.7	-0.02	13.88	3.53
Event	7/18/2013	12 p.m 5 p.m.	10.18	3.85	5 p.m 10 p.m.	3.7	-0.16	13.88	3.69
Event	7/19/2013	12 p.m 5 p.m.	10.18	4.72	5 p.m 10 p.m.	3.7	-0.01	13.88	4.71

CSRP Measurement and Methodology

As with the DLRP, CSRP uses the CBL methodology to measure load reduction during all tests and events for both Summer Reservation and Voluntary enrolled customers. Only four percent of customers enrolled in the Summer Reservation portion of CSRP elected to have their performance measured with the average day CBL, the remaining customer performance was measured using the weather adjustment calculation for the test and all events.

As with the DLRP, CSRP uses the CBL methodology to measure load reduction during all tests and events for both Summer Reservation and Voluntary enrolled customers. Only four percent of customers enrolled in the Summer Reservation portion of CSRP elected to have their performance measured with the average day CBL, the remaining customer performance was measured using the weather adjustment calculation for the test and all events.

CSRP System Impacts

The goal of the Company's peak shaving programs is to reduce the level of system peak so that more flexibility may be enabled in network design with the associated benefit of reduced customer costs. While the peak shaving programs are in the early stages of development, as illustrated in Table 9 below, the Company is already seeing growth in the impact of the programs

on the network peaks. The average network impact of 0.59 percent for 2013 is an increase over the 2012 level of 0.51 percent. The network impact increase is due to the increased level of reduction during events, despite the overall reduction in enrollment. Full performance data for all networks is presented in the appendices at the end of this report.

The goal of the Company's peak shaving programs is to reduce the level of system peak so that more flexibility may be enabled in network design with the associated benefit of reduced customer costs. While the peak shaving programs are in the early stages of development, as illustrated in Table 9 below, the Company is already seeing growth in the impact of the programs on the network peaks. The average network impact of 0.59 percent for 2013 is an increase over the 2012 level of 0.51 percent. The network impact increase is due to the increased level of reduction during events, despite the overall reduction in enrollment. Full performance data for all networks is presented in the appendices at the end of this report.

Table 9: Summary of Enrolled Anticipated and Achieved Impact

CSRP	E	nrollment & Ave	erage Impact	Total Average Impact		
Test or Event	Enrolled CSRP Summer Reservation	CSRP Summer Reservation Impact	Enrolled CSRP Voluntary	CSRP Voluntary Impact	CSRP Summer Reservation & CSRP Voluntary Impact	Performance Adjusted CSRP Summer Reservation & CSRP Voluntary
Day Peaking Networks	38.09	0.92%	10.18	0.24%	1.16%	1.21%
Night Peaking Networks	22.9015	0.32%	3.70	0.05%	0.37%	0.23%
All Networks	60.99	0.54%	13.88	0.12%	0.66%	0.59%

Assessment of CSRP Program Growth

For the mandatory option of CSRP, enrollment in both the day and nighttime peaking networks decreased in 2013 as seen in Table 10 below. Similarly to DLRP, the amount of load reduction enrolled may have decreased, but the actual amount of load reduction during events has increased when compared to the 2012 CSRP events. This increase in actual load reduction improves the reliability of the program as an operational resource during load peaking events.

¹⁵ This total represent total load reduction enrolled in the program and will differ from total reduction at the time of the CSRP events due to a customer being unable to provide load reduction at that time. The customer was added back once they were again able to provide load relief.

An analysis of Con Edison's DLRP shows that only 36 percent of its resources have enrolled in CSRP, which suggests there may be potential to enroll more of these customers in CSRP. For the mandatory option of CSRP, enrollment in both the day and nighttime peaking networks decreased in 2013 as seen in Table 10 below. Similarly to DLRP, the amount of load reduction enrolled may have decreased, but the actual amount of load reduction during events has increased when compared to the 2012 CSRP events. This increase in actual load reduction improves the reliability of the program as an operational resource during load peaking events. An analysis of Con Edison's DLRP shows that only 36 percent of its resources have enrolled in CSRP, which suggests there may be potential to enroll more of these customers in CSRP.

Table 10: CSRP Overall Enrollment by Call Window and System-Wide

	2012 MW Enrolled	2012 MW with Derating *	2013 MW Enrolled	2013 MW with Derating *	2013 vs. 2012 Change in MW Enrolled % Increase (Decrease)	2013 vs. 2012 Change in MW with Derating % Increase (Decrease)
Daytime Networks	59.3	35.74	48.27	50.39	-19%	41%
Nighttime Networks	26.9	27.38	26.60	16.54	-1%	-40%
All Networks	86.2	63.12	74.86	66.93	-13%	6%

The high level of performance that resulted in the increase of available load was the result of improved performance from customers slightly offsetting both lesser performing customers and the loss of pledged load due to customers not re-enrolling in the program. A secondary reason for the high level of performance is that those who did re-enroll reduced their pledged amounts slightly to more achievable goals. The Company recognizes that substantial additional enrollment growth is necessary for the commercial peak shaving to have any significant positive impact on the costs of operating the distribution system. The Company believes that further program evolution is required and, as explained further in the Commercial Program conclusion, it will be working with stakeholders to drive such evolution.

4. SC 11 CUSTOMERS - EXPORT DEMAND RESPONSE

As required by the Commission's March 15, 2012 *Order Adopting with Modifications Tariff Amendments Related to Demand Response Programs*, ¹⁶ demand response export capacity was accepted as load relief during peak shaving and contingency events in 2013. Two customers participated in the peak shaving program, while only one participated in the contingency program. The two customers have a total demand response export capacity of 6.5 MW for peak shaving and 6 MW for contingency events. This resource was called to perform for the contingency program test, the peak shaving test, and all 5 peak shaving events in July. Performance was over 100 percent.

As required by the Commission's March 15, 2012 *Order Adopting with Modifications Tariff Amendments Related to Demand Response Programs*, demand response export capacity was accepted as load relief during peak shaving and contingency events in 2013. Two customers participated in the peak shaving program, while only one participated in the contingency program. The two customers have a total demand response export capacity of 6.5 MW for peak shaving and 6 MW for contingency events. This resource was called to perform for the contingency program test, the peak shaving test, and all 5 peak shaving events in July. Performance was over 100 percent.

The Company continues to believe that this resource is essentially a supply resource rather than a demand resource, but in compliance with Commission requirements the Company allows such resources to participate in its demand response programs. The Company believes that supply solutions should be serviced via bulk supply market based products rather than distribution demand response products.

¹⁶ Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting with Modifications Tariff Amendments Related to Demand Response Programs*, issued and effective March 15, 2012, p. 8.

¹⁷ Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting with Modifications Tariff Amendments Related to Demand Response Programs*, issued and effective March 15, 2012, p. 8.

The Company does recognize the need to consider and support alternative solutions and, therefore, is committed to further investigating the operational opportunities for resources such as those provided by the SC11 export customers.

5. UPDATE ON METER DATA ACCESS

The Company's Meter Data Access Plan provides commercial customers with 15-minute interval data on a close to real time basis during the Company's demand response events. This access is provided via the customer portal known as Curtailment Manager, which is in turn a sub-site of Con Edison's Customer Care website.

The Company's Meter Data Access Plan provides commercial customers with 15-minute interval data on a close to real time basis during the Company's demand response events. This access is provided via the customer portal known as Curtailment Manager, which is in turn a sub-site of Con Edison's Customer Care website.

The Company has continued to work with the Curtailment Manager vendor, Itron, to improve the speed and quality of the data enabled by Curtailment Manager. In addition the Company is in discussion to improve the customer interface experience.

The most significant metering issue experience by customers in 2013 did not relate to the Curtailment Manager portal, instead it was the impact on metering infrastructure as a consequence of Super Storm Sandy. Customers experienced damage to their meters that required equipment replacement and, in many cases, the meters were not able to communicate even after replacement due to the impact on the equipment of telecommunication providers. These issues continued to be improved through the course of 2013. By way of example, when the CSRP test event was conducted in June approximately 13 percent of customers had metering issues, whereas by the time of the July heat wave this number was down to four percent of CSRP customers.

As part of the drive to continuously improve customer solutions and in line with the national standard, as of late 2012 the Customer Care website, in addition to providing near real time data, allows customers to export their interval meter data in Green Button format.

6. COMMERCIAL PROGRAM CONCLUSIONS

Both DLRP and CSRP experienced similar customer behavior in 2013. The total amount of load pledged decreased for both programs, but was offset by a high level of performance that improved the overall level of network impact and reliability of each program. One additional factor was that customers who re-enrolled from the prior year reduced their total pledged amount this year to a more easily obtainable goal. Given the long-term goals and design of demand response, an improvement in reliability is as important as an increase in amount of load pledged. Both DLRP and CSRP experienced similar customer behavior in 2013. The total amount of load pledged decreased for both programs, but was offset by a high level of performance that improved the overall level of network impact and reliability of each program. One additional factor was that customers who re-enrolled from the prior year reduced their total pledged amount this year to a more easily obtainable goal. Given the long-term goals and design of demand response, an improvement in reliability is as important as an increase in amount of load pledged.

In an effort to better understand what barriers or missing incentives prevented new customers from enrolling and current customers from re-enrolling, the Company conducted a short survey with its market partners. The market partners that participated in the survey consisted primarily of Aggregators who actively enroll customers in Con Edison's demand response programs. The survey results are being reviewed, but are expected to identify program complexities that are deterring customers from enrolling, program areas that would benefit the most from continued enhancements, and opportunities for Con Edison to work in coordination with Aggregators' efforts. The Company will review the current program processes and tariff guidelines to address the identified concerns from the survey.

In addition to enlisting the help of the demand response market to improve product offerings, the Company conducted an extensive demand response cost effectiveness research project. This project is reaching completion and the conclusions from the study will provide important insights

into the costs and benefits of demand response. As the potential value of demand response is better understood, the Company will be better positioned to match the incentives offerings to the benefits received. The goal of better program design is to attract new participants to the program, retain existing participants and encourage those customers who remain enrolled from year to year to increase both pledged and actual reduction amounts. Increased enrollment and improved reliability is the optimal combination to achieve program goals.

RESIDENTIAL DEMAND RESPONSE PROGRAMS

7. DIRECT LOAD CONTROL PROGRAM ("DLC")

The DLC program is comprised of two components, the Residential Direct Load Control ("Residential" or "Residential Component") and the Business Direct Load Control ("Business" or "Business Component"). The DLC program supports electric system reliability and reduces operational costs, by using communication enabled (radio paging and WiFi) thermostats to control participants' central air conditioning units and reduce energy demand at times of critical system need. The thermostats allow customers to remotely control their central air conditioning units. Customers have the ability at all times to over-ride any event the Company has called. DLC participants are able to program their thermostats online through a personal computer or smart phone. The DLC program has been offered in the Company's service territory since 2002.

Con Edison provides and installs, without charge to the enrolling business or residential customer, a thermostat with Internet-enabled technology that becomes the property of the customer. In addition, participants are given a one-time incentive of \$25 or \$50 for enrollment in the residential and business programs, respectively. Approximately 25,000 customers participate in the program, using 31,000 thermostats that provide 35 MW of peak load reduction. In its April 19, 2013 *Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs* ("2013 Order"), the Commission granted the Company's request that it no longer be required to enroll its DLC resources in NYISO's Special Case Resources, Small Customer Aggregation demand response program ("SCR Program"). The Commission was concerned, however, about reduction of NYISO SCR resources and ordered the Company to declare a DLC event for its day-time peaking networks on those occasions when the NYISO

activates its SCR Program.¹⁸ During the 2013 summer, the NYISO called its SCR Program simultaneously with Con Edison's peak shaving programs.

The Company contracted with a new vendor to provide Wi-Fi enabled thermostats at a lower cost to customers, which will increase cost effectiveness and introduce a newer technology. The Company began installing Wi-Fi communicating thermostats in October and will replace any non-communicating paging thermostats with the Wi-Fi thermostats. No thermostats have required replacement since the Order was issued, and a customer satisfaction survey is being conducted during the last quarter of 2013 to gauge customer satisfaction with the new technology.

DLC Program Costs

As indicated on Table 11 below, the total program costs incurred in 2013 are expected to be under the \$4 million allocated budget. While the Company's internal program administration costs are not funded through the Monthly Adjustment Clause ("MAC") and are not included in the budget, they are included in the TRC benefit cost analysis.

Table 11: DLC Program Costs 2013

DLC Program Costs					
Component	2013 Estimated Costs	Percentage			
Program Implementation Vendor/ Other	\$ 1,530,973.50	57%			
Program Equipment	\$ 993,961.50	37%			
Program Marketing	\$ 115,296.23	4%			
Program Administrative Con Ed	-	-			
Customer Incentives	\$ 23,750.00	1%			
Total Program Costs	\$2,663,981.23	100%			

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¹⁸ Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs*, issued and effective April 19, 2013, pp. 9-10.

<u>Program Implementation – Vendor/Other</u>

Costs in this category include expenses related to program operations and management functions performed by Con Edison's vendors. The costs in this category will be approximately \$1,530,973.50.

Equipment

Program equipment costs refer to the thermostat and other equipment related to installing the thermostat, website hosting and communication fees. The costs in this category will be approximately \$993,961.50.

Program Marketing

Marketing costs include all costs associated with the marketing initiatives required to inform and involve customers in the program. These costs include, but are not limited to, program literature, direct mailings, website development, and promotional events. The costs in this category will be approximately \$115,296.23.

<u>Program Administration – Con Edison</u>

Program administration - Con Edison's costs include, but are not limited to, Con Edison employees including a program manager, a program specialist, and an estimate for program marketing, legal, and market research staff. As these costs are embedded in base rates, and not directly collected as part of the DLC program costs, they are not included in the program costs presented. However, these costs are included in the TRC analysis for this program.

Customer Incentives

Customer incentives consist of all payments to customers for program participation based on program design. Costs for this category will be approximately \$23,750.00.

Cost Effectiveness Summary

DLC Total Resource Cost Test

The 2013 DLC program was cost effective based upon the Company's application of the TRC test to the Residential, Business, and combined Residential and Business Components.

The 2013 DLC program was cost effective based upon the Company's application of the TRC test to the Residential, Business, and combined Residential and Business Components.

In order to perform the TRC analysis, the following assumptions were made:

- This analysis includes actual benefits and costs from January through September and estimated figures for the months of October, November, and December 2013.
- Thermostats are estimated to have a 10-year lifespan. Thermostats that were installed at the inception of the program, in 2002, have passed their useful life. The benefits and costs of the program were calculated over 10 years for thermostats installed in 2013. Costs and benefits for thermostats installed prior to 2013 were assessed using a reasonable estimate for average remaining useful life of six years.
- TRC calculations include administration, implementation, maintenance and
 marketing costs. Installation costs were calculated using 2013 adjusted installation
 and equipment costs. Maintenance costs were calculated using 2013 operation and
 maintenance costs for all active thermostats as well as estimates of operation and
 maintenance costs for the remaining life of all active thermostats.
- The benefits for each of the three TRC calculations included capacity and energy benefits derived from the Long Range Avoided Costs ("LRACs") published by the Commission in its January 2009 Order Approving "Fast Track" Utility-Administered Electric Energy Efficiency Programs with Modifications ("Fast Track Order"). 19
- The assumed kW reduction per thermostat is 1.0 kW for residential customers and 1.4 kW for business customers based on actual tests and events.
- The capacity benefits were based on the LRACs, but exclude the 16.5 percent capacity reserve margin in order to be consistent with the NYISO methodology;
 NYISO excludes this factor for DLC enrollment in its SCR program. Capacity

¹⁹ Case 08-E-1007, Petition of Consolidated Edison Company of New York, Inc. for Approval of an Energy Efficiency Portfolio Standard (EEPS) "Fast Track" Utility-Administered Electric Energy Efficiency Program, Order Approving "Fast Track" Utility-Administered Electric Energy Efficiency Programs with Modifications, issued and effective January 16, 2009, pp. 33-34.

- savings are based on actual tests and events conducted and analyses of potential reductions conducted by our vendor for the DLC program.
- Energy savings are an estimate of the MWhs resulting from 2013 tests and events.
 Estimated level of energy savings is assumed for each year going forward.

As in previous years, the Company has determined that the DLC program has proven to be cost effective based on the TRC test.

Table 12: DLC Residential TRC's

Residential Component	
Costs of the Program	\$2,673,502
Benefits of the Program	\$3,179,493
Net Present Value of the Total Resource Costs	\$505,991
Benefit-Cost Ratio of the Total Resource Costs	1.19

Table 13: DLC Business TRC's

Business Component	
Costs of the Program	\$1,280,483
Benefits of the Program	\$2,995,529
Net Present Value of the Total Resource Costs	\$1,715,046
Benefit-Cost Ratio of the Total Resource Costs	2.34

Table 14: DLC Residential and Small Business TRC's

Total: Residential Component + Business Component	
Costs of the Program	\$3,953,985
Benefits of the Program	\$6,175,022
Net Present Value of the Total Resource Costs	\$2,221,037
Benefit-Cost Ratio of the Total Resource Costs	1.56

DLC Test and Event Performance

During the 2013 summer peak period, the Company triggered 15 curtailment and one test events and, on average, Con Edison achieved the expected per demand reductions.

Table 15: 2013 Summary of DLC Test and Events

Date	Time	Event Description	Average MW Per event
June 25	3:00 - 4:00	test event for all groups	26.596
June 25	7:00PM - midnight	Flatbush Brooklyn	0.219
July 6	7:00AM - noon	Fox Hills	0.663
July 15	12:00 - 5:00 PM	Daytime all groups	4.972
July 15	5:00PM - 10:00PM	Nighttime all groups	16.451
July 15	5:00PM - 10:00PM	Fox Hills	1.358
July 15	6:00PM-11:00PM	Fresh Kills	1.133
July 16	12:00 - 5:00 PM	Daytime all groups	5.255
July 16	5:00PM - 10:00PM	Nighttime all groups	16.409
July 17	12:00 - 5:00 PM	Daytime all groups	5.119
July 17	5:00PM - 10:00PM	Nighttime all groups	17.644
July 18	12:00 - 5:00 PM	Daytime all groups	5.253
July 18	5:00PM - 10:00PM	Nighttime all groups	20.617
July 18	5:00PM - 12:00AM	Fresh Kills	0.791
July 19	12:00 - 5:00 PM	Daytime all groups	6.037
July 19	5:00PM - 10:00PM	Nighttime all groups	20.036

The DLC program has achieved the expected 1.0 kW and 1.4 kW reduction per thermostat for Residential and Business, respectively. The DLC customers performed well during the July heat wave and during contingency events called by the Company. Overall, override rates, where participants resume control of their air conditioning equipment during events, were aligned with expectations and previous years' performance at 20 percent. The summer 2013 event book, further detailing all program events, is attached as Appendix IV.

Program Attrition

Customers leave the program or choose to have their thermostats removed for a variety of reasons. A thermostat that stops communicating with the system for an extended period of time is assigned a Non-Responding Thermostat ("NRT") status. The DLC program administrator will then undertake efforts to contact the customer to determine why the thermostat is not communicating.

If the administrator is unable to contact the customer after multiple attempts, the customer is classified as a "Dropout" and is included in the attrition calculation. If one of these Dropout customers calls the call center for assistance, and the communication problem can be resolved, the thermostat is reactivated and returned to active status in the program.

When the program administrator is able to make contact with a customer whose thermostat has been categorized as an NRT, it may be determined that the customer had the thermostat removed by its own contractor without notifying the program administrator or the Company. In these cases, the thermostat and customer are noted as Dropouts. Although the thermostat is the customer's property, whenever possible the thermostat vendor removes the customer's thermostat, with the customer's approval, and it is replaced with a lower cost simple thermostat. The Program thermostat is either recycled back into the Program or disposed of properly. Table 16, below, summarizes program activity regarding Program attrition.

The Company projects that 729 residential and business thermostats will be removed from the Program, or 2.33 percent attrition discussed below (2.86 percent for the Business Component and 2.16 percent for the Residential Component).

Table 16: DLC 2013 Program Attrition*

Activity	Residential	Business
Drop Out	159	82
De-Installs	348	140
Total Thermostats Removed	507	222

^{*} Includes estimates for Oct, Nov, Dec

Customer Service

Con Edison has retained call center services for both the residential and business customers, including, but not limited to, helping customers apply for the DLC program, answering scheduling questions, and handling incentive check inquiries. The call center is available 24 hours a day, seven days a week. During 2013, the Company estimates that 10,625 calls will be received.

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Customer Satisfaction

After the summer season a customer satisfaction survey is sent to 500 residential and business participants, chosen at random. The results of the 2013 survey will not be available until after the 2013 version of this evaluation report is issued. Key outcomes of the 2012 survey include:

- A wide majority of those surveyed report being satisfied with the program (92 percent Residential and 91 percent Business).
- The most common reasons to participate in the program were: the free thermostat (75 percent Residential and 67 percent Business), managing energy use (52 percent Residential and 48 percent Business), helping ensure reliable power for their community (44 percent Residential and 34 percent Business), and the incentive (43 percent Residential and 43 percent Business).
- A minority of participants have used the Internet programming feature (18 percent Residential and 26 percent Business), and even less have used the mobile phone programming feature (6 percent Residential and 11 percent Business). For the Internet feature, the primary reasons were lack of understanding (31 percent Residential and 63 percent Business) and lack of awareness (25 percent Residential and 41 percent Business). A similar reason accounted for customers not using the mobile phone features.
- A significant portion of participants reported overriding their thermostat during at least one curtailment event during the year (33 percent Residential and 40 percent Business), with the primary reason being comfort issues for excessive heat.
- A number of participants reported contacting the call center (16 percent Residential and 20 percent Business), with the majority of those that contacted the call center reporting that the call center was helpful (83 percent Residential and 91 percent Business).

DLC Program Summary

In conclusion, the DLC program has had a largely successful transition year, particularly for the Residential Component, where a total of 1,229 thermostats (0.4 percent more than goal) will have been installed. The Company expects that for its Business Component, a total of 187 thermostats (32 percent less than goal) will have been installed. The business sector is historically difficult to penetrate due to high turnover rates and businesses reluctance to interfere with customer comfort.

In conclusion, the DLC program has had a largely successful transition year, particularly for the Residential Component, where a total of 1,229 thermostats (0.4 percent more than goal) will have been installed. The Company expects that for its Business Component, a total of 187 thermostats (32 percent less than goal) will have been installed. The business sector is historically difficult to penetrate due to high turnover rates and businesses reluctance to interfere with customer comfort.

Using the new Wi-Fi communicating thermostats allows the Company to retrieve run time data more frequently and at a lower cost²⁰. The costs per kW will continue to decrease as the Wi-Fi thermostats proliferate in the market place. However, as the number of paging thermostats decrease the per-unit costs of keeping the paging communication technology operational will increase. There are approximately 125,000 pager thermostats in use nationwide; the Company relies on 31,000 of these thermostats to operate the DLC program. Our supplier, Carrier, no longer manufactures pager thermostats and the cost of maintaining the paging system will continue to increase per thermostat, as older units are removed or upgraded. Going forward, the Company will pilot different thermostat technologies to include in the DLC program.

²⁰ Wi-Fi communicating thermostats rely on the customers' Wi-Fi.

8. RSAP EXTENSION – COOLNYC

RSAP was created in 2009, as a pilot targeting residential customers with curtailable electrical appliances.²¹ Participants receive a rebate for each smart or demand response (DR)-ready appliance, and in return, the Company curtails the appliances as needed during system critical conditions. The original motivation for RSAP was to extend demand response to a broader population, however, the availability and adoption of smart appliances in the market was slower than anticipated. Recognizing this market condition, the Company looked to target appliances that have the most significant impact on our peak demand. In a small customers' home, the room air conditioner ("AC") is one of the largest loads, and we make the unit "smart" or "DR-ready" for participation in the Company's demand response program.

RSAP was created in 2009, as a pilot targeting residential customers with curtailable electrical appliances.²² Participants receive a rebate for each smart or demand response (DR)-ready appliance, and in return, the Company curtails the appliances as needed during system critical conditions. The original motivation for RSAP was to extend demand response to a broader population, however, the availability and adoption of smart appliances in the market was slower than anticipated. Recognizing this market condition, the Company looked to target appliances that have the most significant impact on our peak demand. In a small customers' home, the room air conditioner ("AC") is one of the largest loads, and we make the unit "smart" or "DR-ready" for participation in the Company's demand response program.

There are over six million room air conditioners in the Company's service territory representing approximately 2,500 MW of peak load. Company forecasts suggest that as many as another one million room air conditioning units will be deployed over the next 3-5 years. Enabling customers to better manage these devices will be beneficial for customers, while at the same time providing a significant opportunity for small customer integration into demand response

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²¹ Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs*, issued and effective October 23, 2009.

²² Case 09-E-0115, Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs*, issued and effective October 23, 2009.

programs. This is especially important as we continue to see load growth in networks that are predominantly residential.

Evolution Timeline of RSAP

- 2010 to 2012 RSAP targeted customers with Automated Meter Reading ("AMR") meters and implemented a Tendril home area network ("HAN") solution.
- 2011 Research and development initiative with ThinkEco jointly developed a
 prototype of a room air conditioning demand response technology on top of
 ThinkEco's self-installable plug-load management solution. A 500 AC unit proof-ofconcept pilot was conducted at a master-metered building complex in New York City
 to implement the Modlet SmartAC technology.
- 2012 Company expanded the proof-of-concept pilot as an extension of the RSAP pilot. The RSAP extension CoolNYC deployed 10,000 AC units (3,916 customers) with a focus on the Greenwood load pocket and master metered buildings.

In April 2013, the Commission approved and funded \$4M for CoolNYC to continue the initiative as a pilot for an additional two years (2013 and 2014).²³ The Company will deploy an additional 10,000 units and continue to pursue the initial pilot goals of demonstrating the pilot is both cost and operationally effective.

The 2013 Order also addressed rapid evolution of connectivity options and technology and stated the Company should continue to refine the product offering while remaining open to other technology options.

For 2013 the Company augmented key program components and identified key areas for improvement of the CoolNYC pilot in order to meet the above goals. The end of year survey provided positive feedback and usage information regarding changes in program design and

²³ Case 09-E-0115 Proceeding on Motion of the Commission to Consider Demand Response Initiatives, *Order Adopting in Part and Modifying in Part Con Edison's Proposed Demand Response Programs*, issued and effective April 19, 2013.

technology. For example, during the five day July heat wave, the Company made changes to the demand response event parameters (set temperature for 2 days vs. variable off-set the following 3 days) in response to customer feedback. The changes were welcome and customers participated but were still comfortable during the events. The pilot performed as expected with demand reductions of 0.716 kW per participating customer or 0.311 kW per participating unit, averaged over two years.

CoolNYC Program Costs

Table 17: Costs Associated with the CoolNYC Program

CoolNYC Program Costs November 2012 through October 2013			
Component	Cost	Percentage	
Customer Incentives	\$57,400.00	1.98%	
Program Administration - Con Edison	\$107,596.54	3.71%	
Program Administration – Vendor	\$1,024,693.65	35.35%	
Program Equipment	\$1,430,066.58	49.33%	
Program Marketing	\$275,492.72	9.50%	
MV&E	\$ 3,515.13	0.12%	
2013 Program Costs	\$2,898,764.62	100.00%	

Customer Incentives

Customers received incentive payments for their participation in demand response events and tests. For the 2013 program year, incentive payments of \$25 e-gift cards were made to 2,296 customers for their participation over six peak load shaving events totaling \$57,400.00. Incentives continue to be one of the smallest components of program costs for a pilot of this size. However, in order to ensure cost effectiveness and sustainability of the program, the Company is looking at different incentive structures and to lower total incentive costs as the program grows in size.

Program Administration Costs - Con Edison

Program Administration – Con Edison cost of \$107,597 consists of Company staff salary and overheads associated with CoolNYC management and support. In addition to labor costs, Con Edison administration costs have been loaded for investments in R&D, employee training, market research, and the development of a business intelligence platform.

Program Administration Costs - Vendor

Program Implementation – Vendor cost of \$1,024,694 are the expenses associated with consultants contracted by Con Edison, mainly ThinkEco Inc., the CoolNYC program implementation vendor. ThinkEco provides the energy management technology and associated services for the program. These costs include administration, installation support, software hosting, online engagement and customer care.

Program Equipment Costs

Program equipment cost of \$1,430,067 includes the hardware and software for the Modlet SmartAC technology. The 10,000 units for the 2013 and 2014 periods were all ordered this year, with the next year's equipment costs being minimal.

Program Marketing Costs

Marketing costs of \$275,492 includes all costs associated with the marketing initiatives required to inform and involve customers in the programs. These costs include, but are not limited to, CoolNYC literature, email and social media campaigns, program enrollment website, and educational videos.

Measurement, Verification and Evaluation (MV&E)

Costs included in the MV&E of \$3,515 category are associated with the performance analyses conducted by ThinkEco, the program implementation vendor. As one of the deliverables, ThinkEco calculates the individual results of CoolNYC customers for events and to generate reports as necessary. These demand reduction results are used to determine the aggregate effect on the Con Edison system. Costs also include a Company Energy Efficiency and Demand Side Management customer satisfaction survey.

Cost Effectiveness Summary

CoolNYC Total Resource Cost Test

The Company performed a TRC benefit cost analysis consistent with the methodology used in the Energy Efficiency Portfolio Standard proceeding. For avoided energy costs, a minor factor in a DR program, the Company used an estimate of the NYISO's Location-based Marginal Prices ("LMBP") for the highest-load 60 hours of the year. For avoided generation and distribution capacity costs, the Company used the Commission LRACs as stated in the Fast Track Order.²⁴ The TRC result for the 2013 CoolNYC program is 1.23, an indication that the program is cost-beneficial. At the end of the two-year assessment period in 2014, the Company will prepare a revised TRC as part of any proposal to transition the pilot to a full scale program.

Table 18: Total Resource Cost Test

Total Resource C	ost Test
Costs of the Program	\$22,193
Benefits of the Program	\$27,194
Benefit-Cost Ratio	1.23

ThinkEco also performed a ten-year cost benefit analysis on the program from inception in 2012 to 2021 based on a combined 10,000 unit deployment in 2013 and 2014; and 13,000 and 16,900 unit deployments in 2015 and 2016, respectively. The calculation produces a Return on Investment ("ROI") value of 1.03. This ROI value only includes DR benefits and does not reflect the value and savings of providing customers with control of their appliances and the ability to set energy savings scheduled through the air-conditioning season. When including energy efficiency benefits, the ROI increases to 1.21.25

Table 19: Return On Investment Test

	Lifetime ROI	
	DR Benefits Only	With EE Benefits
Total Pilot Cost	\$25,292,440	\$25,292,440
Program Administration - Con Edison	\$25,994,734	\$30,550,657
ROI	1.03	1.21

CoolNYC Program Operations

Event performance

RSAP targets peak shaving demand response from a wide cross-section of residential customers with ACs in the New York City (NYISO Zone J) service territory. Con Edison activates the

²⁴ Fast Track Order, pp. 33-34.

²⁵ Inputs were coordinated with Company personnel and the New York Standard Approach for Estimating Energy Savings from Energy Efficiency Programs.

program when the day ahead forecast is 96 percent (or greater) of the forecasted summer peak demand.

The process by which energy demand is reduced is referred to as temperature offset. During an event either the target temperature is increased by a number of degrees or the thermostat is set to a specific temperature. For example, one customer may prefer a two degree variation to whatever their current temperature setting is whereas another customer may set a capped temperature of 78 degrees. In the 2011 proof-of-concept the Company used the temperature increase model. In 2012 the set temperature model was used. For 2013, a combination of both methods was used during the July heat wave. Included in the analysis is customer response based on the methodology selected.

To determine the actual reductions and compare them to the estimated 1kW reduction per customer (0.4 kW reduction per unit) the same methodology as last year (validated by KEMA) was used. The demand reductions for the six 2013 demand response events were calculated using the full summer's dataset for baseline purposes. Five of the events occurred on July 15, 16, 17, 18, and 19 during one of the longest heat waves in New York City recorded history. On July 19, the Con Edison system registered a record high peak demand of 13,322 MW. This is also the longest period of consecutive event days Con Edison has had. The sixth and final event was called on August 22. All events were nighttime peaking and called for five hours each night with average load reductions of 0.220 kW per actively participating AC. For more details see Appendix I. Results were as follows:

Table 20: 2013 Summary of CoolNYC Demand Reductions

Event Date	Method	Demand Reduction
7/15 Mon	Set 82 F	23%
7/16 Tue	Set 82 F	27%
7/17 Wed	+ 5 degrees	24%
7/18 Thurs	+ 5 degrees	22%
7/19 Fri	+ 5 degrees	16%
8/22 Thu	+5 degrees	32% (New Setups)
	+5 degrees	25% (less than 3 opt outs)
	+3 degrees	18% (3 or more opt outs)

- Customer satisfaction was higher with the + 5 degree method but the demand reduction was slightly higher with the set 82 F degrees method. Both conservation methodologies worked well. It is recommended that both methods continue to be used to achieve the desired reductions.
- Opt out per event ranged from 21 percent to 45 percent.
- Consistent with KEMA's approved methodology, the demand reduction calculation takes the overall average of the six events and arrives at a 22 percent reduction.

Table 21: 2013 Summary of CoolNYC Events

Event	Date	Event Hours	Participants Enrolled*	kW Reduction Achieved
Event	07/15/2013	5-10 pm	799	153.44
Event	07/16/2013	5-10 pm	771	155.57
Event	07/17/2013	5-10 pm	814	171.34
Event	07/18/2013	5-10 pm	808	194.04
Event	07/19/2013	5-10 pm	768	124.83
Event	08/22/2013	5-10 pm	975	126.80

^{*} Participants enrolled includes only those that had not actively opted out of the event before its start

Taking the 2012 and 2013 demand reductions, the average demand reductions across two summers is 0.311 kW per actively participating AC, or AC's participating in the event. In 2013, the average AC's per home is 2.21 resulting in approximately 0.486 kW per customer. Therefore, the average demand reduction across two summers is 0.716 kW per actively participating customer per Table 22 below. This is shy of the estimated 1 kW per customer but average size of AC compressor and average number of AC's per customer decreased in 2013. This is a direct result of targeting more direct metered customers, as opposed to master metered customers with bigger and older units. The program experienced customer fatigue during the five-day consecutive heat wave, which reduced performance reflected in Table 21 (7/19/2013 Event).

Table 22: 2013 CoolNYC Average Demand Reductions

Demand Reductions	2012	2013	2 Year Average
Per AC	0.402 kW	0.220 kW	0.311 kW
Per Customer	0.945 kW	0.486 kW	0.716 kW

^{* 2012} Average ACs per home is 2.36, 2013 Average AC per home is 2.21

Technology performance

The original setup in 2011 included the USB gateway, which required the customer's computer to be on all the time. At the time, the USB gateway was the most economical option for the pilot costing about \$24 per USB device. In 2012, on a very small part of the population, the Company tested broadband or Ethernet gateways to move away from dependence on an always-on laptop or cellular gateways for customers who did not have broadband. The gateway devices proved more reliable, but at a cost of \$104 versus the \$24 USB device. The cellular gateways, although most reliable in terms of communications reliability, came with a high connectivity cost for 3G Verizon service without scale. For 2013, the Company swapped out the cellular gateways for broadband gateways, at the same time increasing the gateway population to 39 percent of the total. The Company plans to revisit the wireless option for certain demographics where broadband is not available, such as small businesses.

Ethernet gateways were sent to all participants who had two or more AC units. Some customers requested the Ethernet gateways specifically to enable smartphone control of their ACs without the need to keep their computers on all the time, while most of the customers served were those who did not have a permanent computer in their homes. Through testing and implementing the Ethernet gateway device, the Company has increased connectivity options for customers and increased communications reliability for the program.

The CoolNYC program technology is self-installable and with that comes the inherent challenges of installation rate. Of the 5,370 units distributed this year, 125 were returned to inventory because the customer failed to give a correct address. Out of the 5,245 units delivered, 3,015 were setup, leading to an installation rate of 58 percent. Similar to last year where nearly 20 percent of the units shipped out were recovered, the program plans to recoup some of the uninstalled units by the end of this year. It is projected that the program will recover approximately 1,000 units by next June, bringing the net installation rate for 2013 to be 71 percent (3015 divided by 4245).

The Company expanded the program technology solution by interfacing with various systems and equipment. For example, as part of the Company's Department of Energy SmartGrid Demonstration Project in late 2012 to early 2013, the program's Modlet SmartAC solution was

able integrate with the Siemen's platform, the chosen technology for the Demonstration Project. Through the Siemen's software, Company operators are able to perform impact analysis, visually monitor and control connected room ACs or any plug load, and support interoperability between control center systems for automatic initiation of demand response. This is possible because the program technology is based on open standards and meets cyber security requirements. The Modlet technology successfully passed the Type II SOC 2 security audit.

The Company is working with a room AC manufacturer, Friedrich, to expand the technical range of the program's offering to include Wi-Fi ACs. Friedrich is the only commercially available Wi-Fi room AC on the market, and as part of a sub-pilot, the Company and ThinkEco will work with the manufacture to make the AC DR-ready and able to participate in the program. In 2013, preparation work (Friedrich development, testing and integration) was done in order to do a sub-pilot for summer 2014. The Company is also looking to expand program technology with split units and Wi-Fi Modlets.

On the hosting side, bandwidth was added in preparation for the summer as additional servers were set up. Added functionality included:

- Based on user feedback, the program gave customers the ability to adjust the temperature swing on the thermostat remotes. Customers could now select a 1 or 2 degree swing through mysmartAC kit.com.
- New capability to deliver updates to hardware over the air. This eliminates the need for future site visits as the firmware evolves and improves.
- Added the capability to remotely commission SmartAC kits, Ethernet gateways, and USB gateways. Customer support was able to more rapidly and efficiently help customers troubleshoot technical issues.

Marketing performance

After the 2012 program ended the program continued to accept applications and subsequently reached out to those participants during spring 2013 to ask whether those customers were still interested in participating. Recruitment efforts moved away from in-person events and focused on recruiting participants virtually. SmartAC kit distribution is as follows:

Table 23: 2013 CoolNYC Installations

	ACs	Customers
2013 Sign-ups	7,010	2,920
2013 Distributed	5,370	2,090
2013 Installed	3,015	1,400
Total Setups (2012 and 2013)	7,160	3,368

In contrast to 2012 where the focus was on table recruitment, the program's 2013 recruitment was focused mainly around online outreach efforts. This proved to be much more cost effective than the in-person recruitment events from 2012. To support recruitment efforts, marketing materials from last year were updated and new ones were created, leveraging all three brand assets: CoolNYC, Con Edison Green Team, and ThinkEco. The program website www.coolnycprogram.com served as the central repository of information as well as the vehicle for online sign-ups. Four new how-to videos were developed to educate the coolNYC community. Each focused on a different topic: "Using mysmartAC kit.com," "Using the smartAC Thermostat," "Setting up the smartAC kit," and "All About the SmartAC app." Social media channels were also used for recruitment, encouraging users to share the program on Facebook and Twitter with their friends.

The program was able to secure partnerships with local green and tech organizations to help advertise the coolNYC program. By reaching out to their participants, coolNYC was made available to an environmentally minded community through email, social media, and events. Groups included: GrowNYC, 1000 Green Supers, White Roof Project, MamaNYC, NYC Energy Drinks, NY Tech Meet Up, and Young Professionals in Energy. CoolNYC also participated in the following Earth Day recruitment events: Time Warner Earth Day Celebration, Earth Day NYC, and Great Forest Earth Day.

Recyclebank, a New York City-based company that rewards people for taking every day green actions with discounts and deals from thousands of local and national businesses, was also used to recruit new participants. Recyclebank has more than 4.5 million community members around the world, with more than 15,000 of those members located in New York City. The ThinkEco-Recyclebank relationship is built on several actions, including placement of coolNYC ads in geo-

targeted outbound Recyclebank emails, ad units on Recyclebank webpages for inbound customers, and a virtual coolNYC presence on the Recyclebank Partners page. Users are taken to the coolNYC recruitment portal for program sign-up through a coolNYC ad that they've come across through Recyclebank.com or in an outbound email. Users who indicated that they were referred to the program by Recyclebank during the signup process were rewarded with 30 Recyclebank points. 163 participants came through the Recyclebank channel for a total of 392 AC units. These participants are considered high-value participants, given their self-identification with green lifestyles.

Direct email campaigns were conducted to residents in the Williamsburg, Park Slope, and Yorkville neighborhoods. Yield on email campaigns to these customers was 9.3 percent, i.e. for every 100 emails that were sent out, 9 ACs were signed up for the program. This was higher than the 7 percent rate during 2012.

In order to promote a high level of customer engagement, the program performed the following:

- Conducted nightly outbound phone calls to all members of the coolNYC program to encourage setup and provide immediate technical support.
- Held contests for participants to incentivize a quicker setup. The most successful contest offered entry into a drawing for Mets baseball tickets for those who had set up a Modlet.
- Conducted multiple email campaigns to reengage customers. See Table 24 for email campaigns, dates, and open statistics.

Table 24: 2013 CoolNYC E-mail Campaign

Email Campaign Title	Date	E-mail Open Rate
Greener AC: Tips on How to Set Up your Unit	04/17/13	44.4%
coolNYC 2013 Kickoff: Time to Dust off your AC	05/20/13	44.5%
coolNYC 2013: Ready, Set, Save!	06/14/13	46.5%
coolNYC: Your Chance to Win Mets Tickets	07/03/13	39.6%
Love It or Leave It (Get It While It's Hot)	07/26/13	34.6%
Use It or Lose It	08/03/13	41.2%

The level of customer engagement was a very important metric for this program, as it is a residential program where user satisfaction is a good predictor of future growth prospects and reenrollment. The various metrics that were tracked are summarized:

• Significant smartphone app use: An 8 percent growth in Android downloads and a 31 percent growth in iPhone downloads was observed from last year.

Table 25: 2013 CoolNYC Annual App Downloads

	Annual Downloads
Android	1,150
iPhone	1,419
Total	2,569

 Active software use by participants: An average of 38 percent off users logged in during the June to August months.

Table 26: 2013 CoolNYC Average Website Log-Ons

	Percentage
June	31%
July	46%
August	37%
Average	38%

• Over 73 percent of users took advantage of the SmartAC kit web application, logging in at least once during the summer

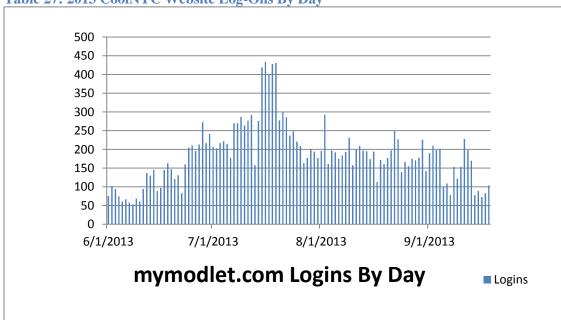


Table 27: 2013 CoolNYC Website Log-Ons By Day

The greatest number of logins during the hottest week of the summer: from July 14th – July 18th. The most logins in a single day was 434 users on July 16th, 2013.

- Proactive messages of appreciation by participants. A few examples include:
 - o "LOVE this program. Please keep us as a part of it for years to come."
 - "For serious, THANKS! Thanks a whole bunch for this program. I've been in and out of town all summer so scheduling has been kind of way beyond me especially considering my erratic comings and goings but being able to turn off and on my a/c from a mobile device saved me this summer. My A/C bill was cut by 65 percent by just being able to see if it's on and turning the damn thing off; I am woefully forgetful in that regard and far beyond self-improvement. You guys are lifesavers."
 - "Loved everything! Everything was very easy from ordering, to the setup, to the app."
 - "Love the ability to not waste energy!"
 - o "It served as a consistent reminder to be more conscious of my energy usage."
 - o "I liked it that it was win-win. The users saved money and could enjoy cool air as soon as they got home, and the city had less energy used."

- Customer feedback from the end-of-program survey was very positive. Program
 achieved a response rate of 58 percent. Notable improvements from the 2012 program
 show a much more active and engaged coolNYC community:
 - Did you download and use the phone app

[YES]

2013: 81 percent

2012: 60 percent

 By participating in the program and seeing your window air conditioner energy usage, did you change the way you used your air conditioners?

[YES]

2013: 72 percent

2012: 52 percent

o Overall, how satisfied are you with participating in the coolNYC program?

[Highest satisfaction levels]

2013: 90 percent

2012: 92 percent

In addition to comparing the 2012 and 2013 survey responses as above, this year's responses were also segmented to see if participants who signed up last year responded any differently than participants who signed up this year. The sample of questions as follow show very similar responses for both groups:

• Did you initially install the SmartAC kit software and hardware on your own?

	2012	2013
Signups	77%	75%

• Were you satisfied with how the technology allowed you to opt out of the program?

	2012	2013
N/A – I never tried to opt out	41%	44%
No – it was difficult to opt out	5%	5%
Yes – it was easy to opt out	54%	51%

• Did you feel that 24 hours was enough advance notice about the upcoming conservation events?

	2012	2013
Yes	41%	44%
No	5%	5%

• How many MORE conservation events would you have been willing to participate in?

	2012	2013
1-2	42%	45%
3 or more	43%	42%
Zero	15%	13%

• Please rate how the conservation events affected the comfort level in your home.

	2012	2013
It was slightly warmer	35%	31%
It was too hot	19%	15%
It was totally comfortable	17%	16%
N/A	9%	16%
No change – I did not even notice the event was happening	21%	22%

• By participating in the program and seeing your window air-conditioner energy usage, did you change the way you used your air-conditioners?

	2012	2013
No	28%	29%
Yes	72%	71%

RSAP Conclusion

Connectivity options and communications protocol are rapidly evolving. Balancing the pilot costs to both the company and the customer and keeping ahead of the trends has been a challenge. Regarding gateway choices, the USB gateways were the most economical option and first configuration deployed. Looking to become independent of the computer, a broadband and cellular were developed and deployed. As stated earlier in the report, broadband gateways now make up 39 percent of the population, recognizing the increase and importance of communications reliability. If and when the pilot becomes an established program, the Company will look to the cellular gateways to be the most reliable gateway of choice and look to lower connection fees without compromising bandwidth or security. The Company is continuing its

effort to work with Verizon and other router manufacturers to create an interface between the USB gateway and routers. This will allow us to keep the cost down and be computer independent at the same time.

Regarding communications protocol, the program started with ZigBee as the means for the devices to communicate within the Home Area Network (Tendril technology). With all the up and coming choices available, such as Bluetooth and Wi-Fi, the Company must implement a strategy that won't make the program technology outdated. The Company has decided to move forward by adding Wi-Fi to the technology choice.

The key to moving forward is constant innovation of technology and marketing. The program technology needs to be easy to use and provide an added benefit to the customer. The technology needs to be open and scalable. Currently, the program is looking at Wi-Fi capabilities, different DR strategies, and integration with other Company offerings, to expand the program's technology range. Customer performance is based on customer engagement, and the Company strives to find new ways to enhance the customer experience, from recruitment to control and use of the technology, and to engage with the customer to incent and improve participation.

9. RESIDENTIAL PROGRAMS – CONCLUSION

As the Company continues to see new patterns of load growth in our residential networks, largely driven by a shift in demographics and associated energy consumption patterns, the Company needs to focus on the associated challenges of integrating newer technologies to further penetrate the market. Due to these load shifts, residential markets are an important aspect of any DR Program and continue to be more challenging than commercial markets. Residential customers provide less kW per customer and take a larger investment of resources in order to reach the same value of demand response in these networks.

In 2013 the Company introduced new WiFi thermostats into the DLC program and in 2014 will be looking to increase the number of participating/ approved thermostats available to its customers. Con Edison will continue to use the radio paging technology in parallel with WiFi

thermostats to meet DR Program objectives in 2014. The Company will continue to conduct market research and follow customer satisfaction with the new technologies.

The Company needs to be prepared to meet the customers' needs and stay in-line with current market technology offerings in order to drive program growth, maximize program participation and retention. Con Edison is also concerned that it currently has nearly 25 percent of the nation's paging technology in our service territory, moving to WiFi thermostats for new customers helps alleviate some of that concern by communicating with customer equipment via an alternate means. This helps assure a more reliable DR program in the future.

As the marketing and popularity of the products grow and the need to reduce demand in night time peaking networks increases, the Company will need to increase distribution of controllable AC devices.

10. NETWORK RELIEF PROGRAM

NRP was designed to target specific networks that have a particular need for constraint relief. As proposed, the program anticipates issuing RFPs to the market (individual customers, aggregators/curtailment services providers, building managers, etc.) to provide specific quantities of MW relief during certain hours for an agreed number of years. The purpose of the program is to obtain long-term commitments from customers to shed load during regular peak periods (day or night) on specific networks. Successful implementation of NRP would allow the Company to incorporate reduced customer energy demand into its resource planning and defer network capacity upgrades that would otherwise be required. Additionally, NRP could function as an extra layer of relief in networks already being addressed by the Company's Targeted Demand Side Management ("TDSM") program, which defers infrastructure projects, and related capital spending, through the implementation of permanent energy efficiency measures to reduce network peak demand at customers' homes and businesses.

The Company initiated an RFP under the NRP in late 2010 for load relief in the Cooper Square network for a two-year period, but received no formal responses. Based upon its subsequent

investigation, the Company determined that the market needs greater confidence that the NRP opportunity will continued for an extended period in order to secure financially viable results.

In late 2011, the Company filed a petition to, *inter alia*, allow it to secure contracts under the NRP for periods longer than the two-year period for which NRP was originally approved. In March 2012, the Commission extended the NRP for two years so that RFPs may be issued to potential participants and contracts may be entered into between the Company and enrollees. ²⁶ The Commission specified that while the enrollment period has a defined period, contracts could be entered into that go beyond that period.

As of the issuance of this report, the Company is investigating the deployment of an RFP under NRP to support load relief in constrained networks and will continue communication with Department of Public Service Staff with regard to the RFP and the potential extension of the NRP availability.

11. CON EDISON'S DEMAND RESPONSE PROGRAM REPORT CONCLUSIONS

As identified within this report, the Company offers a range of demand response programs designed to engage customers in various ways. Unlike the vast majority of demand response programs offered in the country, which are focused on wholesale energy markets, the Company's demand response programs are designed specifically to support the operation of the electric distribution system.

The nuances of operating demand response to support the Company's distribution system, which is arguably the most complex in the country, are many and require continued assessment. The Company is pursuing independent research to ensure that full value of demand response has been fully recognized. In the context of a system as complex as ours the Company believes that value may have gone unrecognized and so it is hoped that this research will provide a future framework for managing such complexity.

²⁶ Case 09-E-0115, Order Adopting with Modifications Tariff and Amendments Related to Demand Response Programs, issued and effective March 15, 2012, p. 10.

The Company continually reviews and, where appropriate, deploys new technology, as seen by the coolNYC initiative. While direct resource control has been seen as the norm for quite some time in the context of residential demand response, this is not the case for commercial demand response. While some customers have the ability to allow their resources to be securely controlled in a remote and automated fashion, the majority do not. Of those that do have the ability for such control, many are not yet motivated to allow this control to be given to a third party, such as a utility. New secure control technologies are being developed and deployed which should provide added comfort and opportunity to customers.

The Company will continue to work with all stakeholders to leverage previously unrecognized value and the evolution of reliable control technology to expand demand response offerings and engagement in a way that helps support and deliver greater operational flexibility to our electric distribution system.

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Appendix I

Peak Load Shaving Performance Charts

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Figure 1: CSRP Summary July 15 Network Event – All Participants

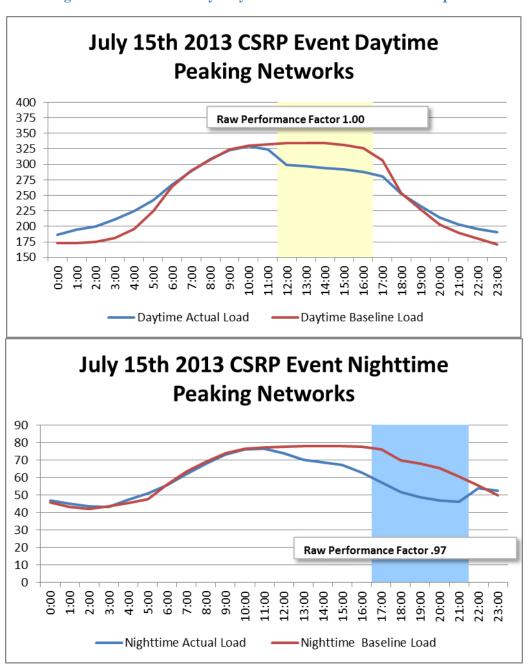


Figure 2: CSRP Summary July 16 Network Event – All Participants

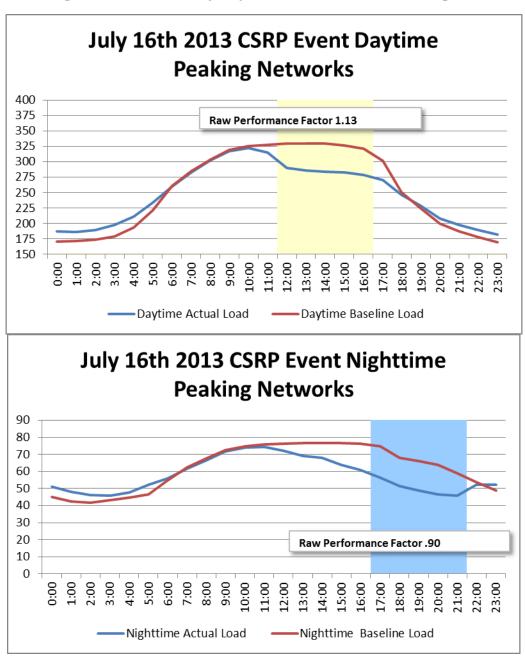


Figure 3: CSRP Summary July 17 Network Event – All Participants

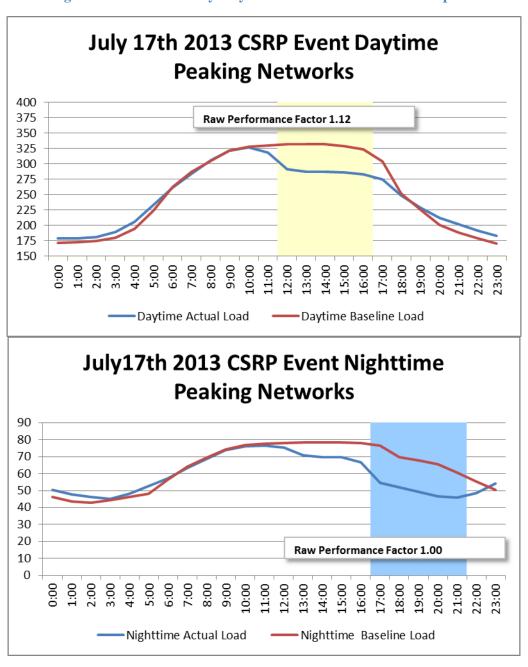


Figure 4: CSRP Summary July 18 Network Event – All Participants

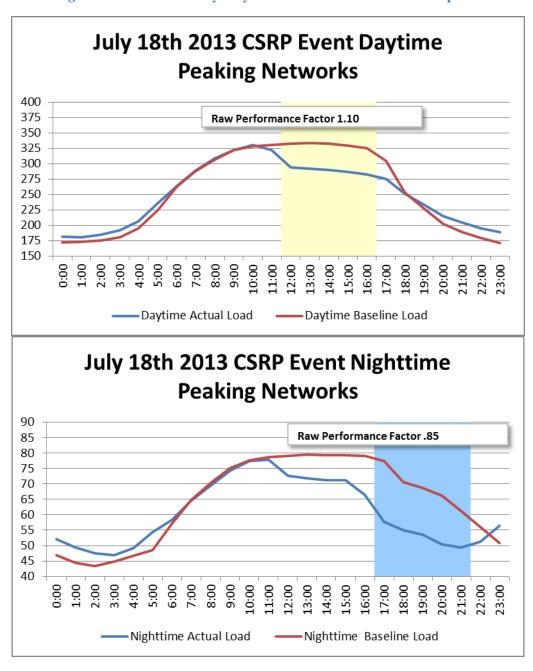


Figure 5: CSRP Summary July 19 Network Event – All Participants

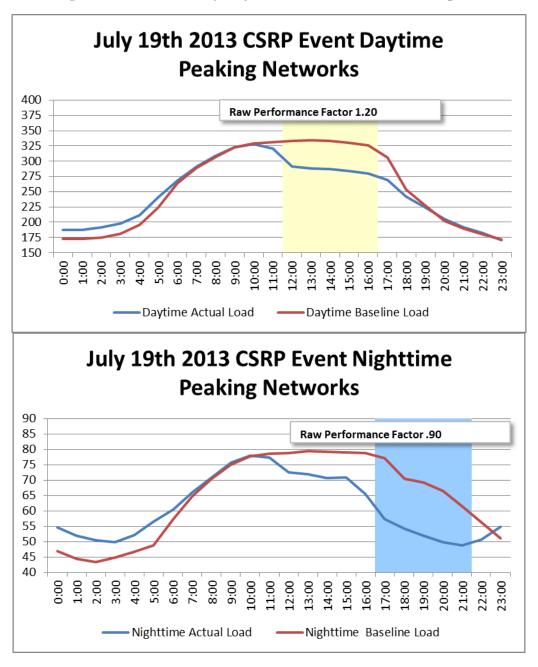


Figure 6: CSRP Summer Reservation and Voluntary Programs - Enrolled and Achieved System Impacts

		Demand Impacts (MW) Demand Impact (% of Netwo					work Peak)				
Day Peaking Network	2012 Network Peak Demand (MW)	Enrolled CSRP Summer Reservation	Achieved CSRP Summer Reservation Reduction (Most Recent Event - July	Enrolled CSRP Voluntary	Achieved CSRP Voluntary Reduction (Most Recent Event - July 19)	Total Enrolled CSRP Summer Reservation and Voluntary	Total Achieved CSRP Summer Reservation and Voluntary Reduction (Most Recent Event - July	Enrolled CSRP Summer Reservation	Enrolled CSRP Voluntary	Total Enrolled CSRP Summer Reservation and Voluntary	Total Achieved CSRP Summer Reservation and Voluntary Reduction (Most Recent Event - July 19)
		2212	19)			2.015	19)	2 121			
Battery Park City	72	2.245	2.98	1.6	0.04	3.845	3.02	3.12%	2.22%	5.34%	4.19%
Beekman	128	1.75	2.53	0.275	0.20	2.025	2.73	1.37%	0.21%	1.58%	2.13%
Borden	108	0	0.00	0.05	0.12	0.05	0.12	0.00%	0.05%	0.05%	0.11%
Boro Hall	285	0.99	1.33	0.1	0.02	1.09	1.34	0.35%	0.04%	0.38%	0.47%
Bowling Green	118	0.8	1.05	2.4	2.51	3.2	3.56	0.68%	2.03%	2.71%	3.02%
Canal	108	0.02	-0.02	0.125	-0.03	0.145	-0.05	0.02%	0.12%	0.13%	-0.04%
Central Bronx	155	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%
City Hall	151	1.025	1.00	0	0.00	1.025	1.00	0.68%	0.00%	0.68%	0.66%
Cortlandt	68	0.435	0.09	0	0.00	0.435	0.09	0.64%	0.00%	0.64%	0.13%
Empire	61	1.925	1.50	0	0.00	1.925	1.50	3.16%	0.00%	3.16%	2.46%
Fashion	68	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%
Fordham	257	0.5	1.47	0	0.00	0.5	1.47	0.19%	0.00%	0.19%	0.57%
Freedom	16	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%
Fulton	115	2.83	1.79	0.6	0.16	3.43	1.95	2.46%	0.52%	2.98%	1.70%
Grand Central	199	4.08	4.22	0.35	0.12	4.43	4.34	2.05%	0.18%	2.23%	2.18%
Greeley Square	70	0	0.00	1	0.13	1	0.13	0.00%	1.43%	1.43%	0.18%
Greenwich	68	0.305	0.30	0	0.00	0.305	0.30	0.45%	0.00%	0.45%	0.44%
Herald Square	105	0.15	0.37	0	0.00	0.15	0.37	0.14%	0.00%	0.14%	0.35%
Hunter	80	0.7	0.70	0	0.00	0.7	0.70	0.88%	0.00%	0.88%	0.88%
Lenox Hill	263	1.05	1.14	0	0.00	1.05	1.14	0.40%	0.00%	0.40%	0.43%
Long Island City	231	0.3	0.29	0.35	0.02	0.65	0.32	0.13%	0.15%	0.28%	0.14%
Park Place	86	0.31	0.40	0	0.00	0.31	0.40	0.36%	0.00%	0.36%	0.46%
Pennsylvania	240	2.205	5.27	0	0.00	2.205	5.27	0.92%	0.00%	0.92%	2.20%
Plaza	153	2.82	3.75	0.4	0.09	3.22	3.84	1.84%	0.26%	2.10%	2.51%
Rockefeller Center	86	2.329	2.68	0	0.00	2.329	2.68	2.71%	0.00%	2.71%	3.11%
Roosevelt	81	0.25	0.17	0	0.00	0.25	0.17	0.31%	0.00%	0.31%	0.21%
Sheridan Square	168	0.16	0.47	0	0.00	0.16	0.47	0.10%	0.00%	0.10%	0.28%
Sutton	143	2.376	3.56	1.025	0.45	3.401	4.01	1.66%	0.72%	2.38%	2.81%
Times Square	158	4.11	3.37	1.45	0.46	5.56	3.83	2.60%	0.92%	3.52%	2.43%
Turtle Bay	127	1.225	1.71	0.45	0.41	1.675	2.11	0.96%	0.35%	1.32%	1.67%
Washington Heights	188	3.2	3.56	0	0.00	3.2	3.56	1.70%	0.00%	1.70%	1.89%

				De	mand Impacts (KW)				De	mand Impact (% of Network Peak)	Network Peak)		
Night Peaking Network	2012 Network Peak Demand (MW)	Enrolled CSRP Summer Reservation	Achieved CSRP Summer Reservation Reduction (July 19)	Enrolled CSRP Voluntary	Achieved CSRP Voluntary Reduction (July 19)	Total Enrolled CSRP Summer Reservation and Voluntary	Total Achieved CSRP Summer Reservation and Voluntary Reduction (July 19)	Enrolled CSRP Summer Reservation	Enrolled CSRP Voluntary	Total Enrolled CSRP Summer Reservation and Voluntary	Total Achieved CSRP Summer Reservation and Voluntary Reduction (July 19)		
Bay Ridge	225	1.499	0.86	0	0.00	1.499	0.86	0.67%	0.00%	0.67%	0.38%		
Brighton Beach	104	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Central Park	229	0.025	-0.01	0	0.00	0.025	-0.01	0.01%	0.00%	0.01%	-0.01%		
Chelsea	227	0.2	0.16	0	0.00	0.2	0.16	0.09%	0.00%	0.09%	0.07%		
Columbus Circle	130	1.71	0.63	0.1	-0.01	1.81	0.62	1.32%	0.08%	1.39%	0.48%		
Cooper Square	251	0.32	0.43	0	0.00	0.32	0.43	0.13%	0.00%	0.13%	0.17%		
Crown Heights	205	0.52	0.40	0	0.00	0.52	0.40	0.25%	0.00%	0.25%	0.20%		
Flatbush	273	0.13	0.07	0	0.00	0.13	0.07	0.05%	0.00%	0.05%	0.03%		
Flushing	375	4.955	0.42	0	0.00	4.955	0.42	1.32%	0.00%	1.32%	0.11%		
Fox Hills	214	0.38	0.32	0	0.00	0.38	0.32	0.18%	0.00%	0.18%	0.15%		
Fresh Kills	205	0	0.00	0.05	0.00	0.05	0.00	0.00%	0.02%	0.02%	0.00%		
Harlem	190	0.245	1.10	0	0.00	0.245	1.10	0.13%	0.00%	0.13%	0.58%		
Hudson	56	0.5	0.04	0	0.00	0.5	0.04	0.89%	0.00%	0.89%	0.07%		
Jackson Heights	191	0.1	0.02	0	0.00	0.1	0.02	0.05%	0.00%	0.05%	0.01%		
Jamaica	448	1.085	0.89	0	0.00	1.085	0.89	0.24%	0.00%	0.24%	0.20%		
Kips Bay	120	0.76	-0.35	0	0.00	0.76	-0.35	0.63%	0.00%	0.63%	-0.29%		
Lincoln Square	157	0.26	0.24	0	0.00	0.26	0.24	0.17%	0.00%	0.17%	0.15%		
Madison Square	253	0.495	0.35	0.75	-0.04	1.245	0.31	0.20%	0.30%	0.49%	0.12%		
Maspeth	251	1.153	0.89	0	0.00	1.153	0.89	0.46%	0.00%	0.46%	0.35%		
Northeast Bronx	111	0.265	-0.02	0.1	0.02	0.365	0.00	0.24%	0.09%	0.33%	0.00%		
Ocean Parkway	170	0.05	-0.01	0	0.00	0.05	-0.01	0.03%	0.00%	0.03%	-0.01%		
Park Slope	223	0.425	0.20	0	0.00	0.425	0.20	0.19%	0.00%	0.19%	0.09%		
Prospect Park	61	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Randalls Island	26	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Rego Park	238	0.61	0.37	0.1	0.01	0.71	0.39	0.26%	0.04%	0.30%	0.16%		
Richmond Hill - BK	324	0.29	0.25	0	0.00	0.29	0.25	0.09%	0.00%	0.09%	0.08%		
Ridgewood	196	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Riverdale	101	0.347	0.22	0	0.00	0.347	0.22	0.34%	0.00%	0.34%	0.22%		
Sheepshead Bay	164	0.06	0.06	0	0.00	0.06	0.06	0.04%	0.00%	0.04%	0.04%		
Southeast Bronx	211	6	8.81	0	0.00	6	8.81	2.84%	0.00%	2.84%	4.17%		
Sunnyside	79	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Triboro	136	0.38	0.12	0	0.00	0.38	0.12	0.28%	0.00%	0.28%	0.09%		
Wainwright	95	0	0.00	0.4	0.00	0.4	0.00	0.00%	0.42%	0.42%	0.00%		
West Bronx	218	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Williamsburg	246	0.135	0.10	2.2	0.02	2.335	0.12	0.05%	0.89%	0.95%	0.05%		
Willowbrook	91	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Woodrow	119	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Yorkville	306	0	0.00	0	0.00	0	0.00	0.00%	0.00%	0.00%	0.00%		
Day	4156	38.09	45.68	10.175	4.72	48.27	50.39	0.92%	0.24%	1.16%	1.21%		
Night	7219	22.90	16.55	3.700	-0.01	26.60	16.54	0.32%	0.05%	0.37%	0.23%		
Total	11375	60.99	62.22	13.875	4.71	74.86	66.93	0.54%	0.12%	0.66%	0.59%		
Raw Performance			1.02		0.34		0.89				•		

Figure 7: Graph of CoolNYC Event

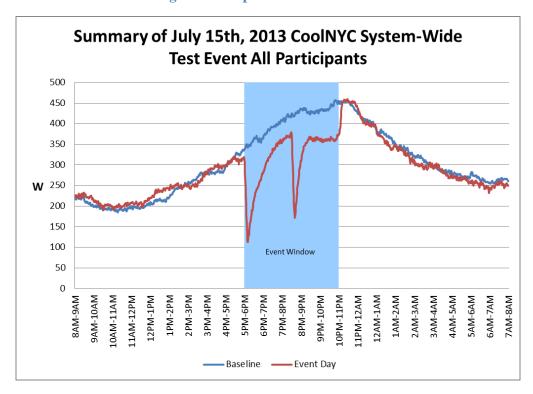


Figure 8: Graph of CoolNYC Event

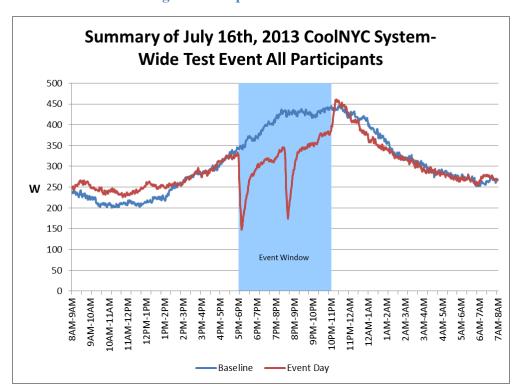


Figure 9: Graph of CoolNYC Event

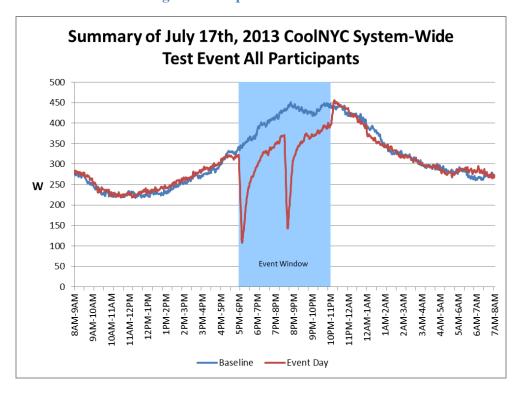
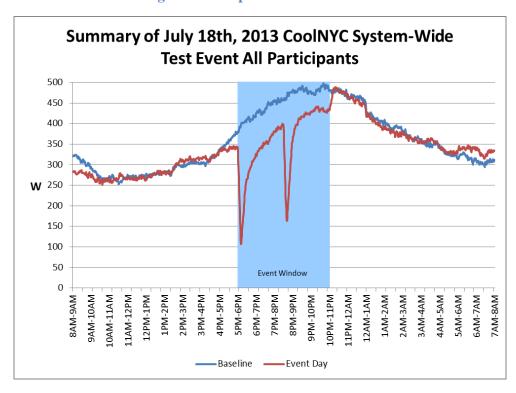


Figure 10: Graph of CoolNYC Event





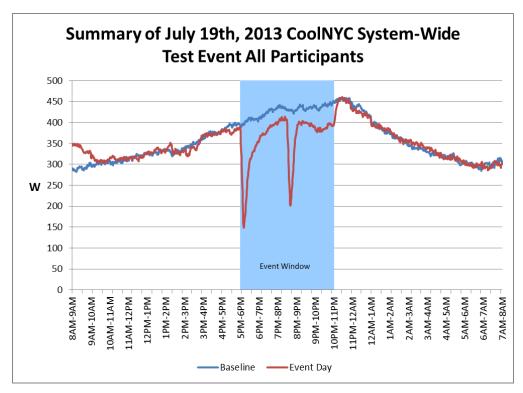


Figure 12: Small Business DLC Daytime Zone I Network Event - 15 Jul 2013

Resource: Zone I All Daytin	ne Groups	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 15, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	251

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	3.63	3.76	3.89	3.87	3.68	3.77
Per unit kW - Event	2.29	2.51	2.61	2.42	2.41	2.45
Cumulative Overrides	2.5%	6.2%	0.7%	2.8%	6.0%	3.6%
Per unit kW reduction	1.34	1.25	1.28	1.46	1.26	1.32
Per unit kW reduction without overrides	1.38	1.33	1.29	1.50	1.34	1.37
Total kW without curtailment	912	943	976	972	923	945
Total kW with curtailment	575	629	654	607	606	614
Total kW load reduction	337	313	322	365	317	331

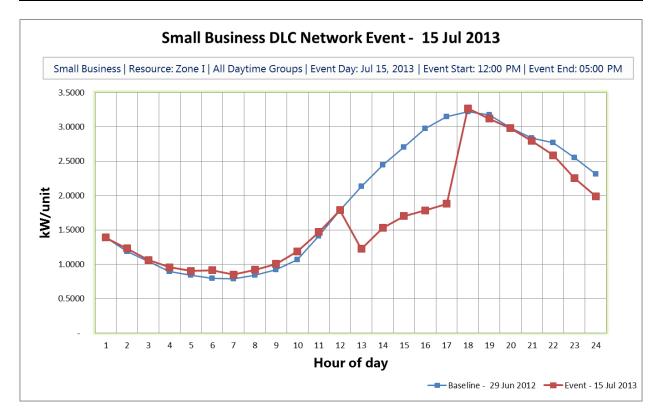


Figure 13: Small Business DLC Daytime Zone J Network Event - 15 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 15, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	1,294

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	3.70	3.91	4.01	3.98	3.88	3.90
Per unit kW - Event	2.32	2.88	2.98	2.60	2.61	2.68
Cumulative Overrides	4.5%	11.5%	1.4%	6.1%	12.0%	7.1%
Per unit kW reduction	1.38	1.02	1.02	1.38	1.28	1.22
Per unit kW reduction without overrides	1.44	1.16	1.04	1.47	1.45	1.31
Total kW without curtailment	4,790	5,056	5,183	5,155	5,023	5,041
Total kW with curtailment	3,004	3,729	3,857	3,370	3,372	3,467
Total kW load reduction	1,786	1,326	1,325	1,785	1,650	1,575

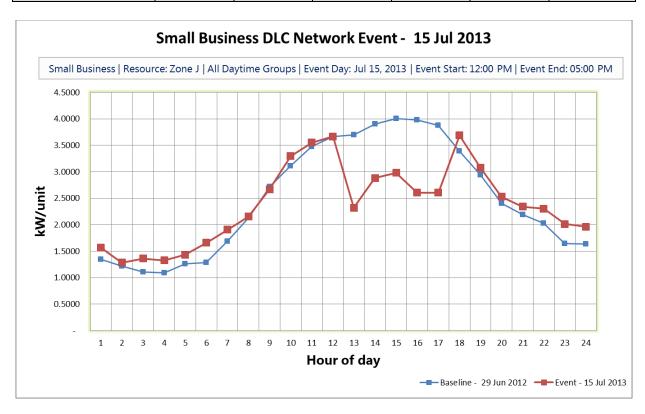


Figure 14: Residential DLC Daytime Zone I Network Event - 15 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 15, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	2,677

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	2.14	2.45	2.70	2.98	3.15	2.68
Per unit kW - Event	1.22	1.53	1.70	1.79	1.88	1.63
Cumulative Overrides	1.0%	3.2%	1.2%	3.9%	7.0%	3.3%
Per unit kW reduction	0.91	0.92	1.00	1.19	1.27	1.06
Per unit kW reduction without overrides	0.92	0.95	1.01	1.24	1.36	1.09
Total kW without curtailment	5,718	6,549	7,235	7,976	8,429	7,181
Total kW with curtailment	3,278	4,097	4,558	4,782	5,037	4,350
Total kW load reduction	2,440	2,452	2,677	3,195	3,391	2,831

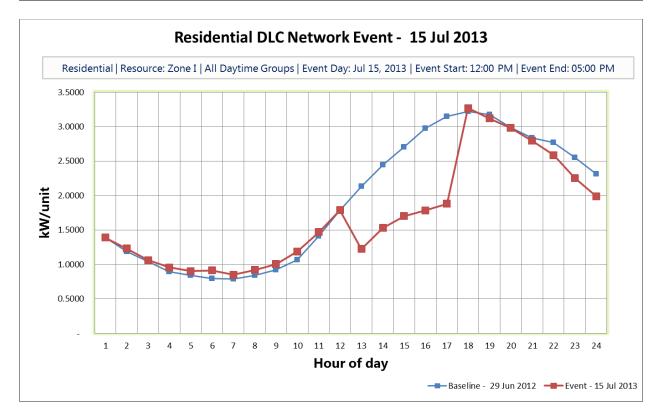


Figure 15: Residential DLC Daytime Zone J Network Event - 15 Jul 2013

Resource: Zone J All Daytir	ne Groups	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 15, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	345

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	1.49	1.55	1.71	1.81	1.98	1.71
Per unit kW - Event	0.79	1.03	0.99	1.03	1.29	1.03
Cumulative Overrides	1.5%	4.0%	1.4%	4.2%	7.4%	3.7%
Per unit kW reduction	0.70	0.51	0.72	0.78	0.68	0.68
Per unit kW reduction without overrides	0.72	0.54	0.73	0.81	0.74	0.71
Total kW without curtailment	515	535	590	623	682	589
Total kW with curtailment	272	357	340	354	446	354
Total kW load reduction	243	178	250	269	236	235

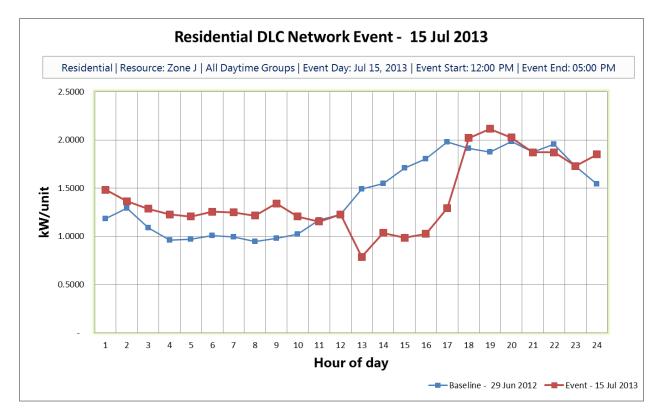


Figure 16: Small Business DLC Nighttime Zone H Network Event - 15 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	215

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.14	2.88	2.52	1.91	1.63	2.42
Per unit kW - Event	2.06	2.08	1.86	1.48	1.28	1.75
Cumulative Overrides	2.1%	5.8%	0.2%	1.3%	2.1%	2.3%
Per unit kW reduction	1.09	0.79	0.67	0.43	0.35	0.67
Per unit kW reduction without overrides	1.11	0.84	0.67	0.44	0.36	0.68
Total kW without curtailment	676	619	542	411	351	520
Total kW with curtailment	443	448	399	318	276	377
Total kW load reduction	234	171	143	93	75	143

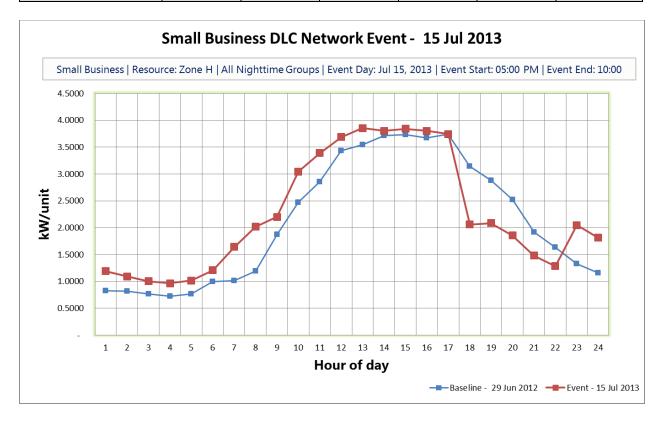


Figure 17: Small Business DLC Nighttime Zone I Network Event - 15 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	701

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.35	2.83	2.38	1.96	1.79	2.46
Per unit kW - Event	1.96	1.95	1.82	1.47	1.35	1.71
Cumulative Overrides	3.1%	7.5%	0.6%	2.1%	3.2%	3.3%
Per unit kW reduction	1.39	0.88	0.56	0.49	0.44	0.75
Per unit kW reduction without overrides	1.44	0.95	0.56	0.50	0.46	0.78
Total kW without curtailment	2,350	1,983	1,667	1,374	1,253	1,725
Total kW with curtailment	1,374	1,367	1,274	1,031	943	1,198
Total kW load reduction	976	616	392	342	310	527

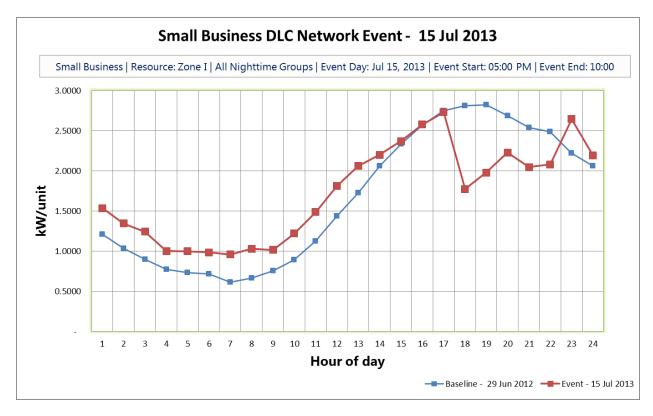


Figure 18: Small Business DLC Nighttime Zone J Network Event - 15 Jul 2013

Resource: Zone J All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	4,600

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.32	2.97	2.58	2.19	1.90	2.59
Per unit kW - Event	2.02	2.05	1.82	1.40	1.32	1.72
Cumulative Overrides	3.6%	8.5%	0.6%	2.4%	4.2%	3.9%
Per unit kW reduction	1.30	0.92	0.76	0.79	0.58	0.87
Per unit kW reduction without overrides	1.35	1.01	0.76	0.81	0.60	0.90
Total kW without curtailment	15,268	13,678	11,867	10,072	8,741	11,925
Total kW with curtailment	9,278	9,436	8,385	6,453	6,080	7,926
Total kW load reduction	5,991	4,242	3,483	3,619	2,661	3,999

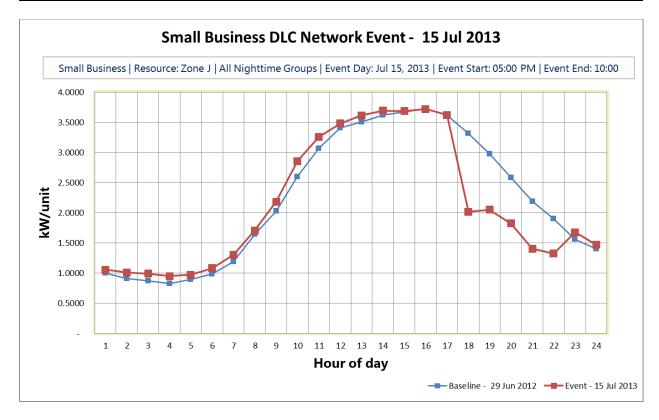


Figure 19: Residential DLC Nighttime Zone H Network Event - 15 Jul 2013

Resource: Zone H All Night	time Groups	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	2,109
Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.76	2.73	2.58	2.30	2.16	2.51
Per unit kW - Event	1.58	1.82	1.96	1.81	1.85	1.81
Cumulative Overrides	2.3%	7.3%	2.2%	7.6%	13.1%	6.5%
Per unit kW reduction	1.17	0.91	0.62	0.49	0.31	0.70
Per unit kW reduction without overrides	1.20	0.98	0.64	0.53	0.35	0.75
Total kW without curtailment	5,812	5,760	5,448	4,848	4,557	5,285
Total kW with curtailment	3,342	3,848	4,135	3,812	3,911	3,810
Total kW load reduction	2,470	1,912	1,312	1,036	646	1,475

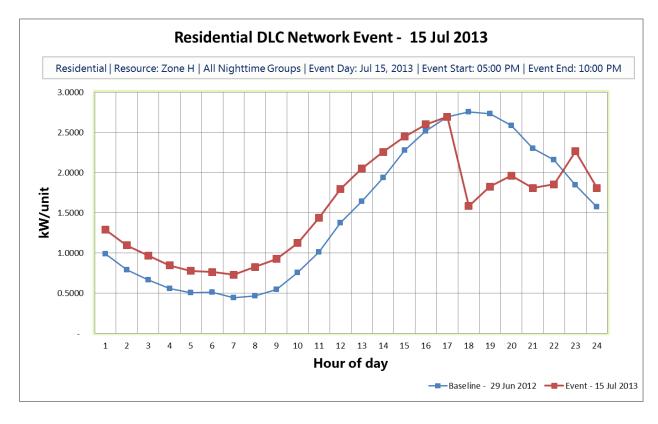


Figure 20: Residential DLC Nighttime Zone I Network Event - 15 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	3,957

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.81	2.83	2.69	2.54	2.49	2.67
Per unit kW - Event	1.77	1.98	2.23	2.05	2.08	2.02
Cumulative Overrides	2.6%	7.8%	1.9%	7.0%	12.4%	6.3%
Per unit kW reduction	1.04	0.85	0.46	0.49	0.41	0.65
Per unit kW reduction without overrides	1.07	0.92	0.47	0.53	0.47	0.69
Total kW without curtailment	11,128	11,184	10,631	10,055	9,851	10,570
Total kW with curtailment	7,019	7,829	8,817	8,101	8,235	8,000
Total kW load reduction	4,109	3,354	1,814	1,954	1,616	2,569

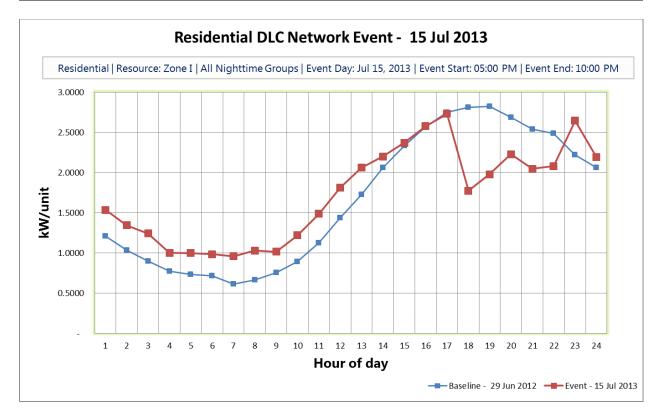


Figure 21: Residential DLC Nighttime Zone J Network Event - 15 Jul 2013

Resource: Zone J All Night	time Groups	Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	13,630

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.14	2.20	2.18	2.06	2.00	2.12
Per unit kW - Event	1.32	1.57	1.69	1.52	1.64	1.55
Cumulative Overrides	2.6%	7.7%	2.0%	6.9%	11.9%	6.2%
Per unit kW reduction	0.83	0.63	0.49	0.53	0.36	0.57
Per unit kW reduction without overrides	0.85	0.68	0.50	0.57	0.41	0.61
Total kW without curtailment	29,209	29,965	29,767	28,016	27,254	28,842
Total kW with curtailment	17,952	21,367	23,054	20,768	22,385	21,105
Total kW load reduction	11,256	8,598	6,713	7,248	4,869	7,737

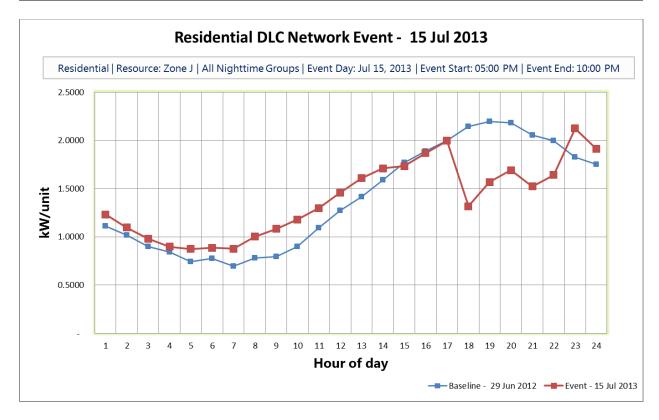


Figure 22: Small Business DLC Daytime Zone I Network Event - 16 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 16, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	252

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	3.44	3.60	3.77	3.74	3.57	3.62
Per unit kW - Event	2.23	2.63	2.82	2.53	2.47	2.53
Cumulative Overrides	1.4%	4.4%	1.1%	3.7%	7.1%	3.5%
Per unit kW reduction	1.21	0.97	0.95	1.22	1.10	1.09
Per unit kW reduction without overrides	1.23	1.01	0.96	1.26	1.18	1.13
Total kW without curtailment	866	907	949	943	899	913
Total kW with curtailment	561	664	710	636	621	639
Total kW load reduction	305	243	239	306	277	274

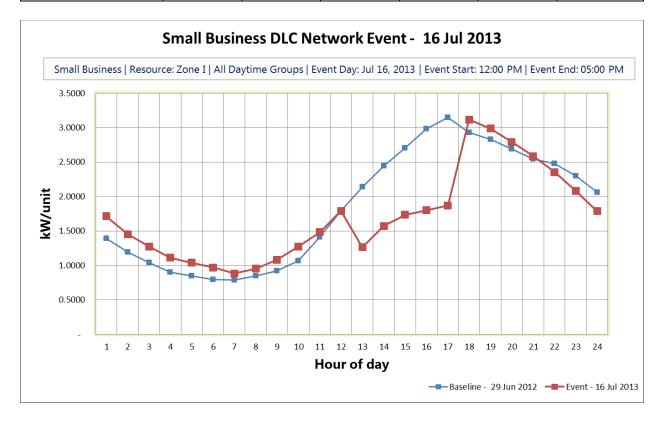


Figure 23: Small Business DLC Daytime Zone J Network Event - 16 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 16, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	1,294

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	4.09	4.23	4.39	4.28	4.24	4.25
Per unit kW - Event	2.26	2.79	2.99	2.70	2.77	2.70
Cumulative Overrides	4.6%	11.8%	1.7%	7.8%	14.3%	8.0%
Per unit kW reduction	1.83	1.44	1.40	1.58	1.47	1.54
Per unit kW reduction without overrides	1.91	1.63	1.43	1.71	1.72	1.68
Total kW without curtailment	5,289	5,471	5,679	5,538	5,489	5,493
Total kW with curtailment	2,926	3,610	3,863	3,497	3,583	3,496
Total kW load reduction	2,363	1,861	1,816	2,041	1,907	1,997

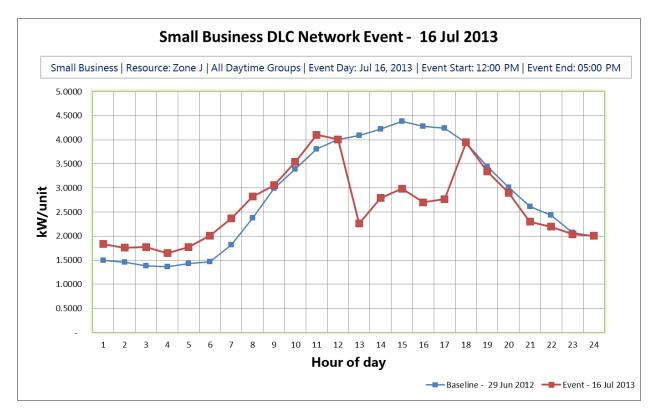


Figure 24: Residential DLC Daytime Zone I Network Event - 16 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 16, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	2,680

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	2.14	2.45	2.70	2.98	3.15	2.68
Per unit kW - Event	1.26	1.57	1.74	1.80	1.87	1.65
Cumulative Overrides	1.0%	2.9%	0.9%	3.3%	6.6%	3.0%
Per unit kW reduction	0.88	0.88	0.97	1.18	1.28	1.04
Per unit kW reduction without overrides	0.88	0.90	0.98	1.22	1.37	1.07
Total kW without curtailment	5,734	6,562	7,248	7,990	8,443	7,195
Total kW with curtailment	3,387	4,214	4,652	4,825	5,018	4,419
Total kW load reduction	2,347	2,348	2,596	3,165	3,425	2,776

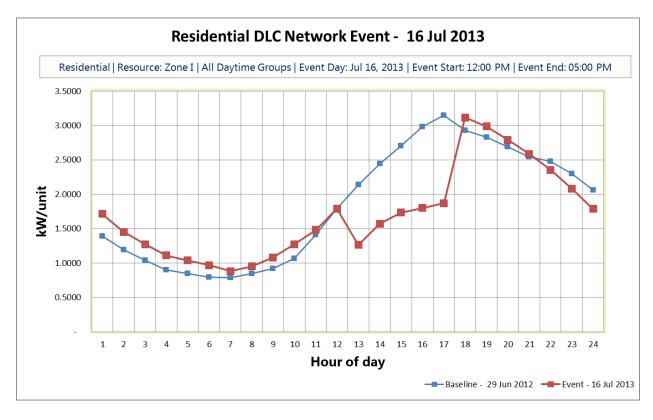


Figure 25: Residential DLC Daytime Zone J Network Event - 16 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 16, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	346

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	1.58	1.64	1.80	1.89	2.05	1.79
Per unit kW - Event	0.91	1.15	1.24	1.26	1.40	1.19
Cumulative Overrides	2.4%	5.6%	1.0%	3.8%	7.1%	4.0%
Per unit kW reduction	0.68	0.48	0.55	0.63	0.65	0.60
Per unit kW reduction without overrides	0.69	0.51	0.56	0.66	0.70	0.62
Total kW without curtailment	548	566	622	655	709	620
Total kW with curtailment	314	399	431	437	484	413
Total kW load reduction	234	167	192	218	224	207

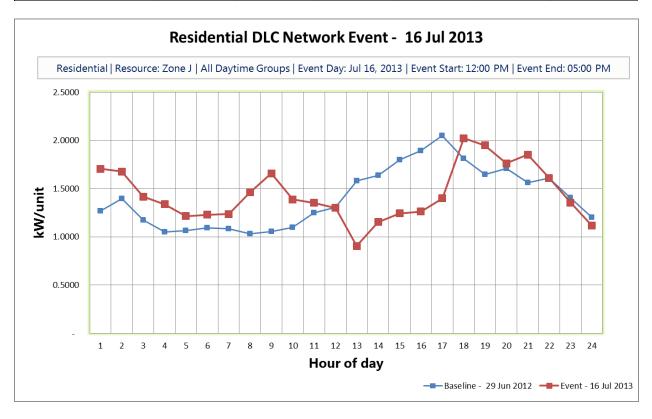


Figure 26: Small Business DLC Nighttime Zone H Network Event - 16 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 16, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	216

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.03	2.79	2.42	1.83	1.54	2.32
Per unit kW - Event	2.10	1.87	1.64	1.50	1.46	1.71
Cumulative Overrides	2.4%	4.9%	0.9%	2.6%	3.4%	2.8%
Per unit kW reduction	0.93	0.92	0.78	0.33	0.08	0.61
Per unit kW reduction without overrides	0.95	0.97	0.79	0.34	0.08	0.63
Total kW without curtailment	654	602	523	395	333	501
Total kW with curtailment	454	404	354	323	316	370
Total kW load reduction	201	198	168	72	18	131

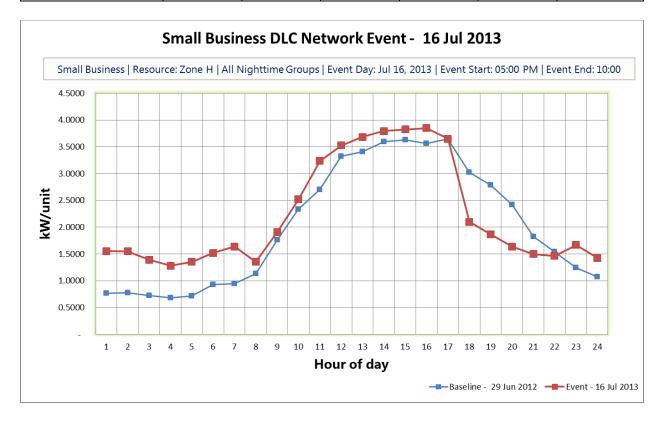


Figure 27: Small Business DLC Nighttime Zone I Network Event - 16 Jul 2013

Resource: Zone I All Night	httime Groups Cycling Strat		y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 16, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	701

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.31	2.79	2.34	1.93	1.76	2.43
Per unit kW - Event	2.04	1.99	1.80	1.60	1.43	1.77
Cumulative Overrides	3.0%	7.4%	0.2%	0.6%	0.9%	2.4%
Per unit kW reduction	1.27	0.81	0.54	0.33	0.33	0.66
Per unit kW reduction without overrides	1.31	0.87	0.55	0.33	0.34	0.67
Total kW without curtailment	2,323	1,957	1,642	1,355	1,235	1,703
Total kW with curtailment	1,432	1,392	1,260	1,125	1,002	1,242
Total kW load reduction	891	565	381	231	233	460

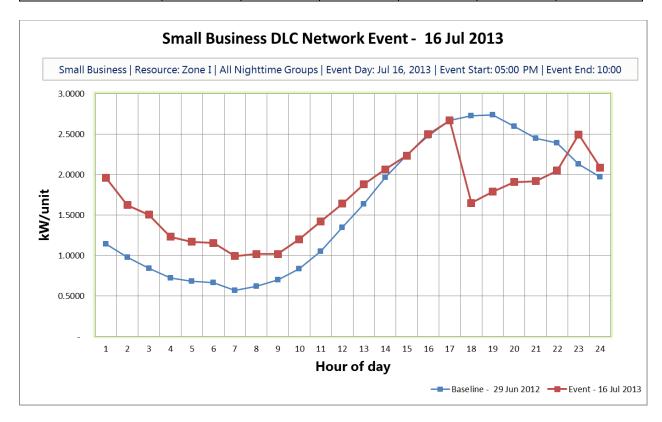


Figure 28: Small Business DLC Nighttime Zone J Network Event - 16 Jul 2013

Resource: Zone J All N	Nighttime Groups	Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 16, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	4,602

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.42	3.06	2.67	2.26	1.97	2.68
Per unit kW - Event	2.02	2.08	1.85	1.61	1.46	1.80
Cumulative Overrides	3.1%	7.7%	0.6%	1.5%	1.9%	3.0%
Per unit kW reduction	1.39	0.98	0.82	0.66	0.51	0.87
Per unit kW reduction without overrides	1.44	1.07	0.83	0.67	0.52	0.90
Total kW without curtailment	15,718	14,097	12,298	10,415	9,069	12,320
Total kW with curtailment	9,304	9,569	8,507	7,386	6,708	8,295
Total kW load reduction	6,414	4,528	3,791	3,029	2,361	4,025

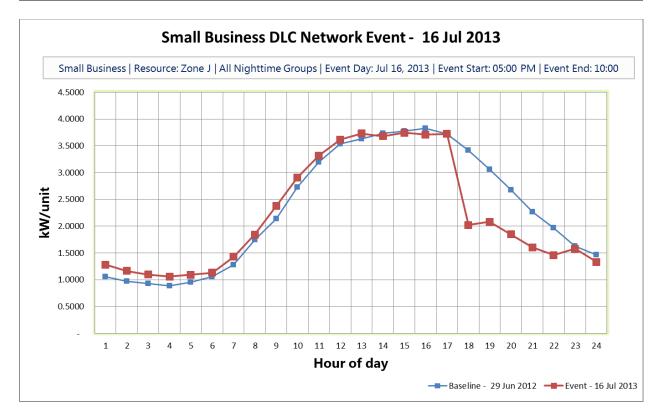


Figure 29: Residential DLC Nighttime Zone H Network Event - 16 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 16, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	2,110

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.74	2.71	2.57	2.28	2.14	2.49
Per unit kW - Event	1.60	1.85	1.87	1.83	1.80	1.79
Cumulative Overrides	2.7%	8.4%	1.6%	4.7%	7.8%	5.0%
Per unit kW reduction	1.14	0.87	0.69	0.46	0.34	0.70
Per unit kW reduction without overrides	1.17	0.95	0.70	0.48	0.37	0.74
Total kW without curtailment	5,781	5,726	5,414	4,813	4,523	5,251
Total kW with curtailment	3,379	3,893	3,955	3,852	3,803	3,776
Total kW load reduction	2,402	1,833	1,459	962	720	1,475

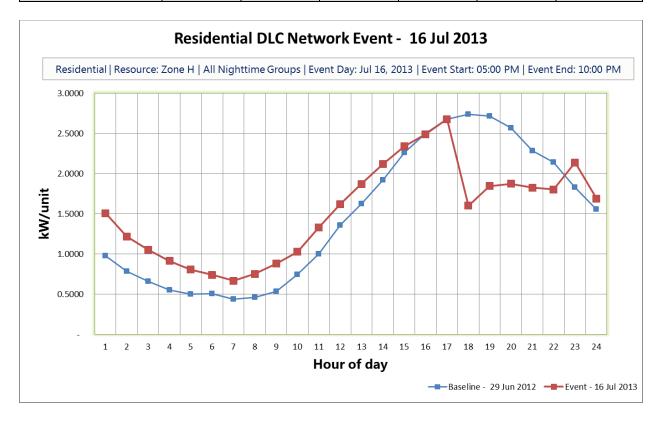


Figure 30: Residential DLC Nighttime Zone I Network Event - 16 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 16, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	3,959

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.73	2.74	2.60	2.45	2.39	2.58
Per unit kW - Event	1.65	1.79	1.91	1.92	2.05	1.86
Cumulative Overrides	2.4%	6.7%	1.5%	5.0%	8.5%	4.8%
Per unit kW reduction	1.08	0.95	0.69	0.53	0.34	0.72
Per unit kW reduction without overrides	1.10	1.02	0.70	0.56	0.38	0.75
Total kW without curtailment	10,797	10,848	10,277	9,687	9,471	10,216
Total kW with curtailment	6,532	7,075	7,556	7,595	8,109	7,374
Total kW load reduction	4,265	3,773	2,720	2,092	1,362	2,842

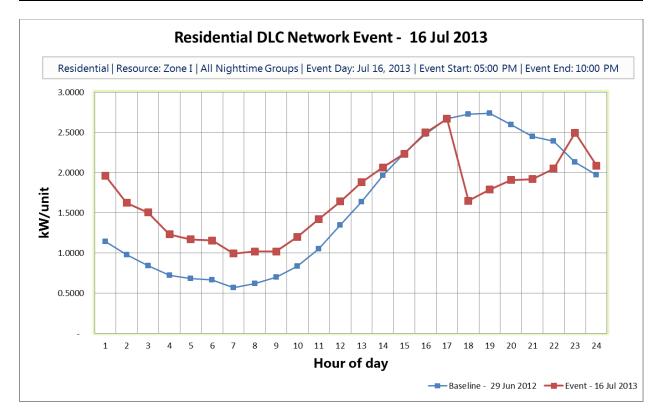


Figure 31: Residential DLC Nighttime Zone J Network Event - 16 Jul 2013

Resource: Zone J All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 16, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	13,634

Demand (kW)	Hour ending	Average				
	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	J
Per unit kW - Baseline	2.19	2.24	2.23	2.10	2.04	2.16
Per unit kW - Event	1.31	1.59	1.69	1.73	1.73	1.61
Cumulative Overrides	2.6%	7.3%	1.8%	5.2%	8.1%	5.0%
Per unit kW reduction	0.88	0.65	0.54	0.37	0.32	0.55
Per unit kW reduction without overrides	0.90	0.70	0.55	0.39	0.35	0.58
Total kW without curtailment	29,805	30,538	30,375	28,577	27,844	29,428
Total kW with curtailment	17,853	21,740	23,061	23,590	23,520	21,953
Total kW load reduction	11,952	8,798	7,314	4,987	4,324	7,475

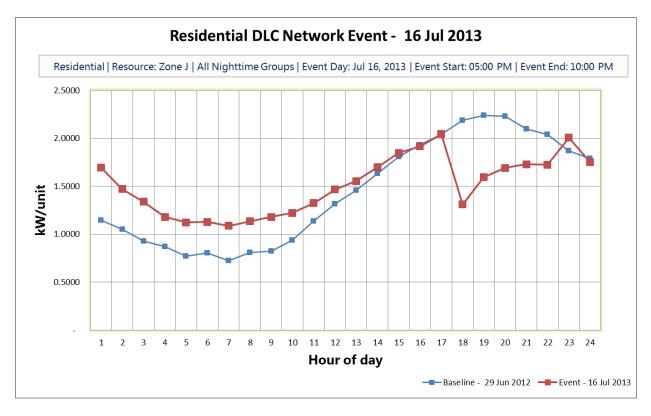


Figure 32: Small Business DLC Daytime Zone I Network Event - 17 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 17, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	253

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	3.62	3.74	3.88	3.86	3.67	3.75
Per unit kW - Event	2.10	2.63	2.84	2.69	2.42	2.54
Cumulative Overrides	1.4%	4.6%	6.7%	7.2%	9.0%	5.8%
Per unit kW reduction	1.52	1.12	1.04	1.17	1.25	1.22
Per unit kW reduction without overrides	1.54	1.17	1.12	1.26	1.37	1.29
Total kW without curtailment	916	947	982	977	928	950
Total kW with curtailment	532	664	717	681	613	641
Total kW load reduction	384	283	264	296	315	308

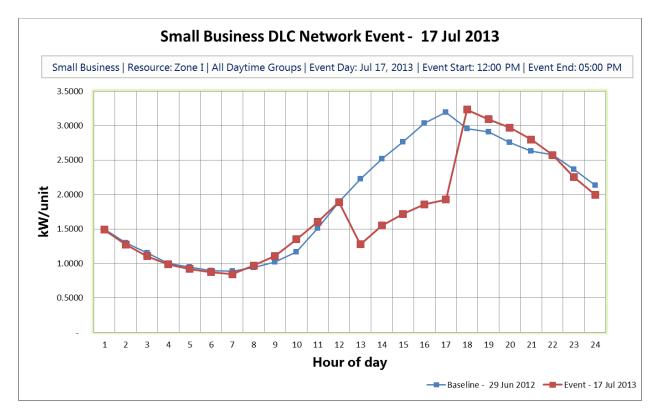


Figure 33: Small Business DLC Daytime Zone J Network Event - 17 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 17, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	1,295

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	4.05	4.19	4.35	4.24	4.21	4.21
Per unit kW - Event	2.51	2.98	3.19	3.19	2.76	2.93
Cumulative Overrides	5.4%	13.2%	17.0%	20.5%	26.1%	16.4%
Per unit kW reduction	1.54	1.21	1.16	1.05	1.45	1.28
Per unit kW reduction without overrides	1.63	1.39	1.39	1.32	1.96	1.53
Total kW without curtailment	5,242	5,426	5,635	5,493	5,450	5,449
Total kW with curtailment	3,249	3,864	4,137	4,131	3,572	3,790
Total kW load reduction	1,993	1,562	1,498	1,362	1,878	1,659

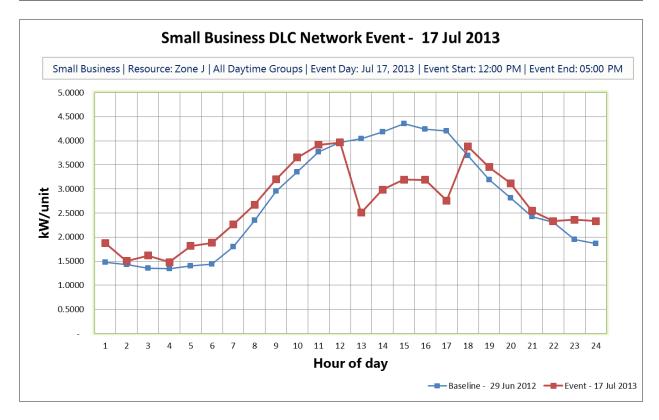


Figure 34: Residential DLC Daytime Zone I Network Event - 17 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 17, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	2,683

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	2.23	2.52	2.77	3.04	3.20	2.75
Per unit kW - Event	1.28	1.55	1.72	1.86	1.93	1.67
Cumulative Overrides	0.9%	3.0%	5.0%	7.1%	10.0%	5.2%
Per unit kW reduction	0.95	0.97	1.05	1.18	1.27	1.08
Per unit kW reduction without overrides	0.96	1.00	1.10	1.27	1.41	1.14
Total kW without curtailment	5,983	6,755	7,421	8,152	8,578	7,378
Total kW with curtailment	3,431	4,156	4,614	4,985	5,172	4,471
Total kW load reduction	2,552	2,599	2,808	3,167	3,406	2,907

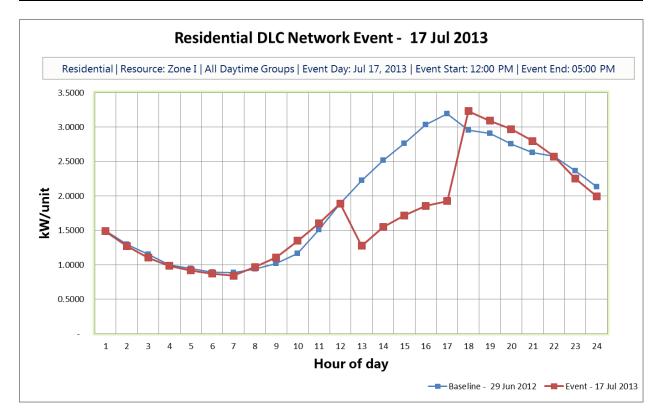


Figure 35: Residential DLC Daytime Zone J Network Event - 17 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 17, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	346

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	1.68	1.72	1.87	1.96	2.11	1.87
Per unit kW - Event	0.89	1.05	1.17	1.34	1.34	1.16
Cumulative Overrides	1.9%	5.3%	7.9%	10.2%	12.1%	7.5%
Per unit kW reduction	0.79	0.67	0.70	0.62	0.77	0.71
Per unit kW reduction without overrides	0.81	0.71	0.76	0.69	0.87	0.77
Total kW without curtailment	581	596	649	677	728	646
Total kW with curtailment	308	364	405	464	463	401
Total kW load reduction	273	232	243	213	266	245

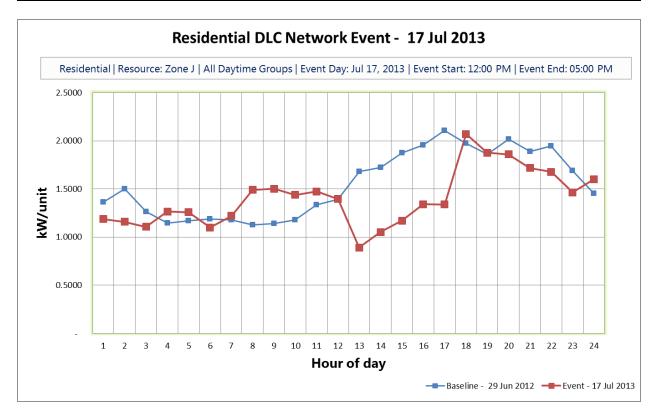


Figure 36: Small Business DLC Nighttime Zone H Network Event - 17 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 17, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	217

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.05	2.80	2.44	1.84	1.56	2.34
Per unit kW - Event	2.11	2.42	1.93	1.61	1.40	1.89
Cumulative Overrides	3.6%	9.0%	11.3%	12.6%	13.5%	10.0%
Per unit kW reduction	0.93	0.38	0.51	0.23	0.16	0.44
Per unit kW reduction without overrides	0.97	0.42	0.57	0.27	0.19	0.49
Total kW without curtailment	662	608	529	400	338	507
Total kW with curtailment	459	525	419	349	303	411
Total kW load reduction	203	84	111	50	35	97

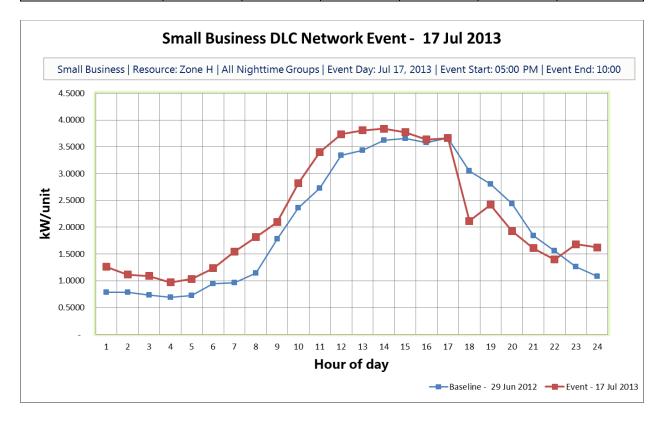


Figure 37: Small Business DLC Nighttime Zone I Network Event - 17 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 17, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	701

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.51	2.99	2.54	2.07	1.92	2.61
Per unit kW - Event	2.29	2.27	1.98	1.68	1.47	1.94
Cumulative Overrides	3.9%	9.5%	11.3%	11.6%	11.7%	9.6%
Per unit kW reduction	1.22	0.72	0.56	0.39	0.45	0.67
Per unit kW reduction without overrides	1.27	0.80	0.63	0.44	0.51	0.74
Total kW without curtailment	2,463	2,098	1,779	1,452	1,343	1,827
Total kW with curtailment	1,608	1,593	1,385	1,181	1,027	1,359
Total kW load reduction	855	505	394	271	315	468

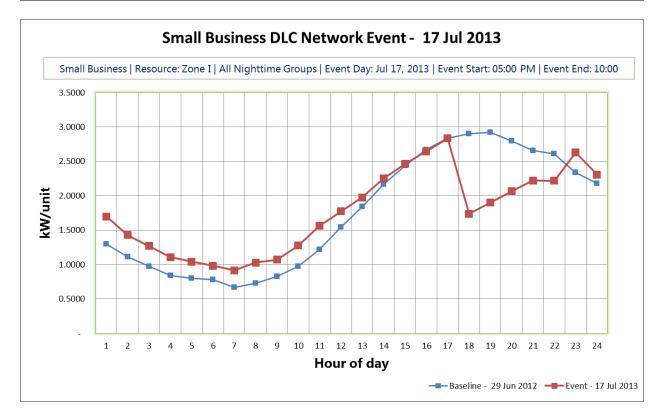


Figure 38: Small Business DLC Nighttime Zone J Network Event - 17 Jul 2013

Resource: Zone J All Nighttime Groups		y: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 17, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	4,603

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.54	3.19	2.82	2.38	2.09	2.80
Per unit kW - Event	2.18	2.32	2.05	1.74	1.53	1.96
Cumulative Overrides	3.9%	9.3%	11.5%	12.4%	13.0%	10.0%
Per unit kW reduction	1.36	0.88	0.77	0.64	0.57	0.84
Per unit kW reduction without overrides	1.42	0.97	0.87	0.73	0.65	0.94
Total kW without curtailment	16,315	14,704	12,964	10,937	9,633	12,911
Total kW with curtailment	10,046	10,667	9,430	8,012	7,029	9,037
Total kW load reduction	6,269	4,037	3,534	2,925	2,604	3,874

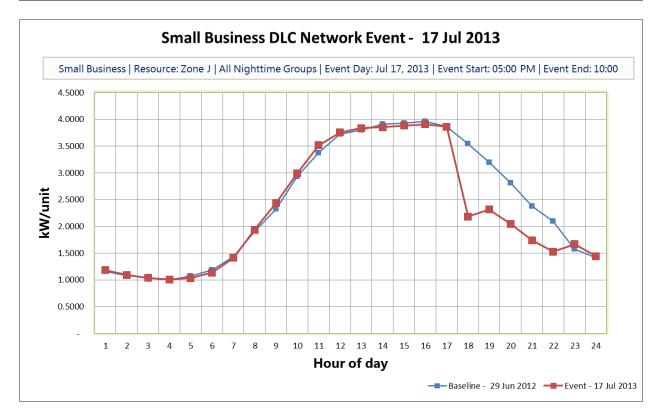


Figure 39: Residential DLC Nighttime Zone H Network Event - 17 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 17, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	2,111

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.86	2.85	2.71	2.43	2.29	2.63
Per unit kW - Event	1.65	1.96	2.04	2.02	1.99	1.93
Cumulative Overrides	3.1%	9.3%	14.0%	17.3%	20.7%	12.9%
Per unit kW reduction	1.21	0.90	0.67	0.41	0.29	0.69
Per unit kW reduction without overrides	1.25	0.99	0.77	0.49	0.37	0.80
Total kW without curtailment	6,038	6,022	5,711	5,125	4,826	5,544
Total kW with curtailment	3,491	4,128	4,307	4,262	4,208	4,079
Total kW load reduction	2,547	1,894	1,405	863	618	1,465

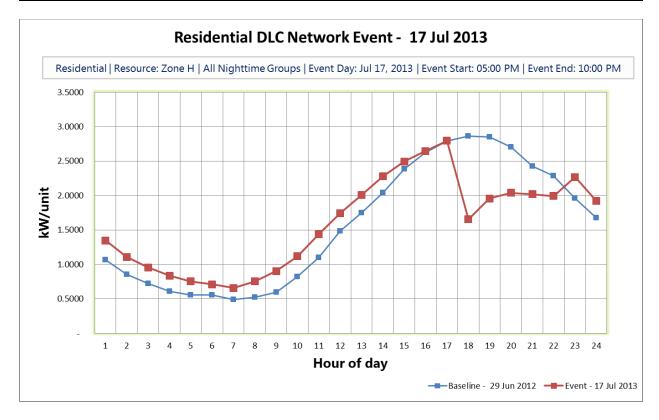


Figure 40: Residential DLC Nighttime Zone I Network Event - 17 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 17, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	3,960

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.91	2.92	2.80	2.66	2.61	2.78
Per unit kW - Event	1.74	1.90	2.07	2.22	2.22	2.03
Cumulative Overrides	2.6%	7.6%	11.7%	15.4%	18.9%	11.2%
Per unit kW reduction	1.17	1.02	0.73	0.43	0.39	0.75
Per unit kW reduction without overrides	1.20	1.11	0.83	0.51	0.49	0.85
Total kW without curtailment	11,508	11,579	11,079	10,523	10,349	11,007
Total kW with curtailment	6,886	7,526	8,185	8,804	8,785	8,037
Total kW load reduction	4,623	4,053	2,893	1,719	1,563	2,970

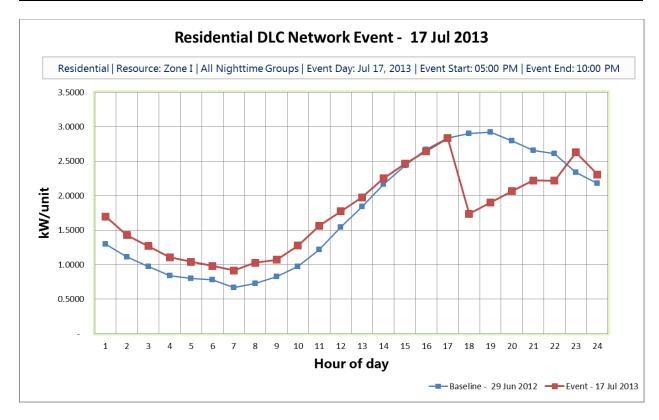


Figure 41: Residential DLC Nighttime Zone J Network Event - 17 Jul 2013

Resource: Zone J All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 17, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	13,635

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.28	2.33	2.33	2.19	2.14	2.26
Per unit kW - Event	1.37	1.57	1.69	1.71	1.73	1.61
Cumulative Overrides	2.5%	7.4%	11.2%	14.3%	17.2%	10.5%
Per unit kW reduction	0.91	0.76	0.64	0.49	0.41	0.64
Per unit kW reduction without overrides	0.94	0.82	0.72	0.57	0.50	0.72
Total kW without curtailment	31,146	31,803	31,751	29,906	29,225	30,766
Total kW with curtailment	18,680	21,386	23,016	23,289	23,609	21,996
Total kW load reduction	12,465	10,417	8,735	6,617	5,616	8,770

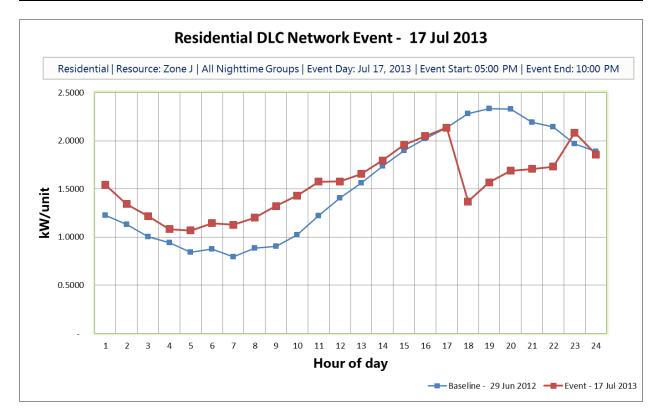


Figure 42: Small Business DLC Daytime Zone I Network Event - 18 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 18, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	253

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	3.84	3.88	4.02	4.00	3.79	3.90
Per unit kW - Event	2.25	2.48	2.64	2.47	2.36	2.44
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Per unit kW reduction	1.58	1.39	1.37	1.53	1.44	1.46
Per unit kW reduction without overrides	1.58	1.39	1.37	1.53	1.44	1.46
Total kW without curtailment	971	981	1,016	1,011	960	988
Total kW with curtailment	570	629	668	625	596	618
Total kW load reduction	400	352	348	386	364	370

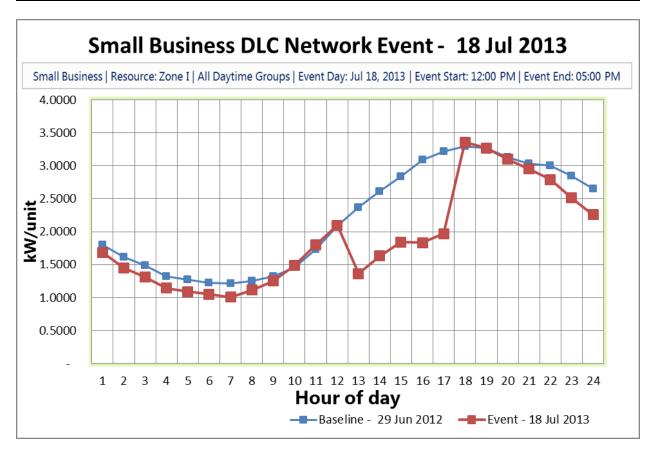


Figure 43: Small Business DLC Daytime Zone J Network Event - 18 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 18, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	1,294

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	4.18	4.32	4.46	4.36	4.29	4.32
Per unit kW - Event	2.69	3.16	3.37	3.06	3.17	3.09
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Per unit kW reduction	1.50	1.16	1.09	1.29	1.13	1.23
Per unit kW reduction without overrides	1.50	1.16	1.09	1.29	1.13	1.23
Total kW without curtailment	5,413	5,586	5,769	5,636	5,554	5,591
Total kW with curtailment	3,475	4,084	4,358	3,964	4,097	3,996
Total kW load reduction	1,938	1,502	1,411	1,672	1,456	1,596

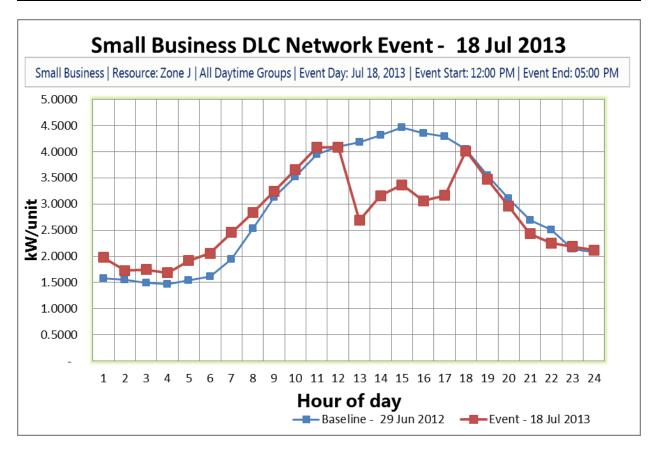


Figure 44: Residential DLC Daytime Zone I Network Event - 18 Jul 2013

Resource: Zone I All Daytime Groups Cycling Strategy: 50% Cycling									
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats			
Residential	July 18, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	2,684			
Demand (kW)	Hour ending	Hour ending	Hour ending	Hour ending	Hour ending	Average			
Demand (RVV)	1:00 PM	2:00 PM	3:00 PM	4:00 PM	5:00 PM	Average			
Per unit kW - Baseline	2.37	2.61	2.84	3.09	3.21	2.82			
Per unit kW - Event	1.36	1.63	1.84	1.83	1.97	1.73			
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	3.3%			
Per unit kW reduction	1.00	0.98	1.00	1.26	1.24	1.10			
Per unit kW reduction without overrides	0.00	0.00	0.00	0.00	0.00	1.13			
Total kW without curtailment	6,352	7,011	7,615	8,289	8,625	7,578			
Total kW with curtailment	3,663	4,381	4,942	4,920	5,285	4,638			
Total kW load reduction	2,689	2,630	2,673	3,369	3,340	2,940			

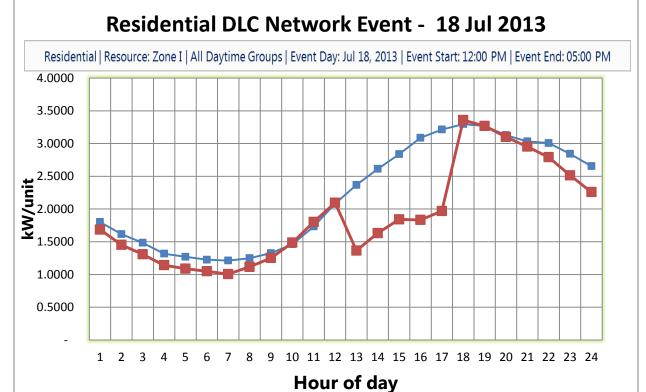


Figure 45: Residential DLC Daytime Zone J Network Event - 18 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 18, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	345

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	2.25	2.30	2.40	2.54	2.70	2.44
Per unit kW - Event	1.17	1.42	1.51	1.50	1.56	1.43
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	4.3%
Per unit kW reduction	1.08	0.88	0.90	1.04	1.14	1.01
Per unit kW reduction without overrides	0.00	0.00	0.00	0.00	0.00	1.05
Total kW without curtailment	776	793	828	877	932	841
Total kW with curtailment	405	489	520	519	538	494
Total kW load reduction	371	304	309	358	394	347

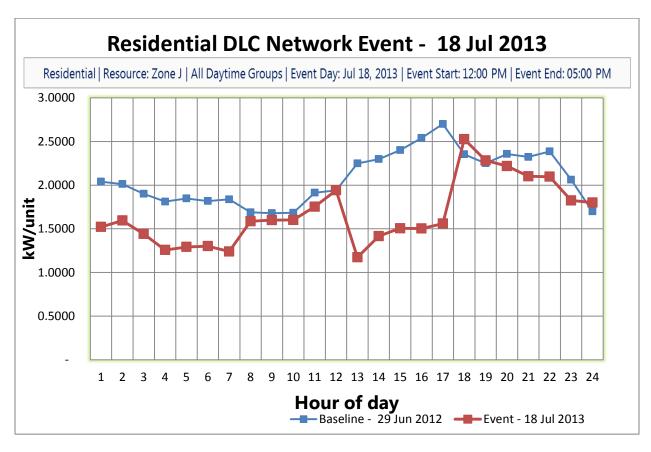


Figure 46: Small Business DLC Nighttime Zone H Network Event - 18 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 18, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	217

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.50	3.20	2.81	2.13	1.82	2.69
Per unit kW - Event	2.37	2.11	1.93	1.60	1.36	1.87
Cumulative Overrides	3.2%	7.9%	0.2%	1.9%	3.6%	3.4%
Per unit kW reduction	1.13	1.09	0.88	0.53	0.46	0.82
Per unit kW reduction without overrides	1.17	1.18	0.88	0.54	0.48	0.85
Total kW without curtailment	759	695	609	463	395	584
Total kW with curtailment	514	458	419	348	295	407
Total kW load reduction	245	237	190	115	100	177

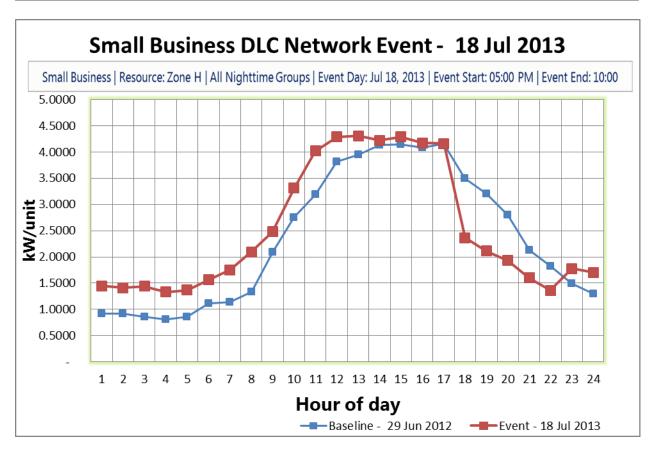


Figure 47: Small Business DLC Nighttime Zone I Network Event - 18 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling					
	Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
	Small Business	July 18, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	704

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.58	3.06	2.61	2.13	1.98	2.67
Per unit kW - Event	2.28	2.21	1.96	1.63	1.48	1.91
Cumulative Overrides	4.6%	10.4%	0.4%	1.9%	3.6%	4.2%
Per unit kW reduction	1.30	0.85	0.66	0.50	0.50	0.76
Per unit kW reduction without overrides	1.37	0.95	0.66	0.50	0.52	0.80
Total kW without curtailment	2,520	2,154	1,840	1,498	1,393	1,881
Total kW with curtailment	1,602	1,555	1,376	1,150	1,042	1,345
Total kW load reduction	918	599	464	349	352	536

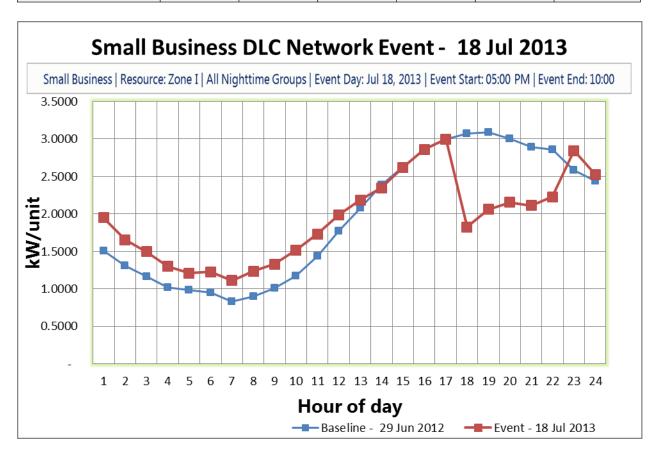


Figure 48: Small Business DLC Nighttime Zone J Network Event - 18 Jul 2013

Resource: Zone J All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 18, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	4,604

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.71	3.35	2.99	2.53	2.27	2.97
Per unit kW - Event	2.36	2.51	2.20	1.68	1.56	2.06
Cumulative Overrides	4.7%	10.8%	0.7%	3.3%	5.7%	5.1%
Per unit kW reduction	1.35	0.85	0.79	0.85	0.71	0.91
Per unit kW reduction without overrides	1.42	0.95	0.80	0.88	0.75	0.96
Total kW without curtailment	17,086	15,443	13,769	11,643	10,447	13,678
Total kW with curtailment	10,868	11,534	10,123	7,721	7,182	9,485
Total kW load reduction	6,219	3,909	3,647	3,921	3,265	4,192

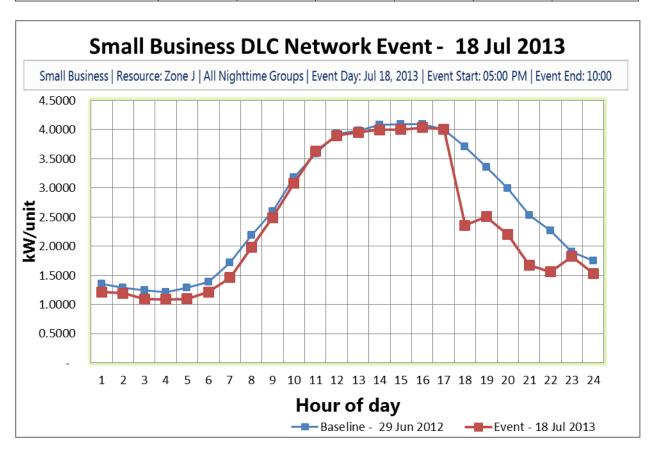


Figure 49: Residential DLC Nighttime Zone H Network Event - 18 Jul 2013

Resource: Zone H All Night	Resource: Zone H All Nighttime Groups									
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats				
Residential	July 18, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	2,112				
Domand (IAM)	Hour ending	Hour ending	Hour ending	Hour ending	Hour ending	Average				
Demand (kW)	6:00 PM	7:00 PM	8:00 PM	9:00 PM	10:00 PM	Average				
Per unit kW - Baseline	3.07	3.10	2.99	2.78	2.62	2.91				
Per unit kW - Event	1.73	1.99	2.12	1.95	1.97	1.95				
Cumulative Overrides	3.1%	9.2%	2.2%	7.6%	13.4%	7.1%				
Per unit kW reduction	1.34	1.11	0.87	0.83	0.64	0.96				
Per unit kW reduction without overrides	1.39	1.23	0.89	0.90	0.74	1.03				
Total kW without curtailment	6,482	6,543	6,309	5,865	5,531	6,146				
Total kW with curtailment	3,643	4,194	4,475	4,117	4,169	4,120				
Total kW load reduction	2,839	2,349	1,834	1,748	1,362	2,026				

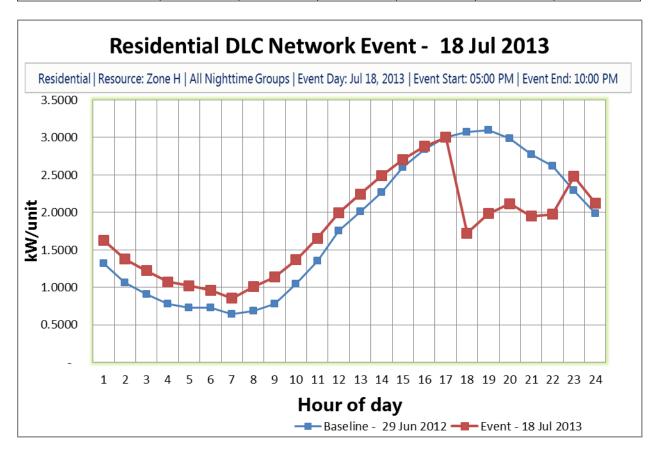


Figure 50: Residential DLC Nighttime Zone I Network Event - 18 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 18, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	3,959

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.08	3.09	3.00	2.89	2.86	2.98
Per unit kW - Event	1.82	2.06	2.15	2.11	2.23	2.08
Cumulative Overrides	3.2%	9.3%	1.9%	6.9%	12.5%	6.8%
Per unit kW reduction	1.25	1.03	0.85	0.78	0.63	0.91
Per unit kW reduction without overrides	1.29	1.13	0.86	0.84	0.72	0.97
Total kW without curtailment	12,179	12,230	11,879	11,448	11,326	11,812
Total kW with curtailment	7,223	8,154	8,531	8,362	8,817	8,218
Total kW load reduction	4,956	4,076	3,347	3,085	2,509	3,595

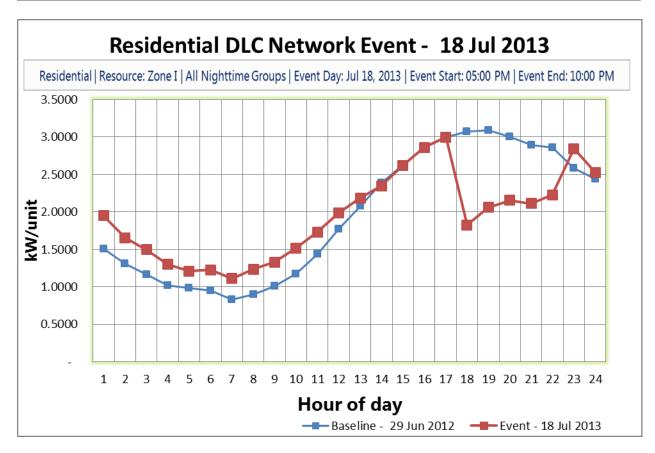


Figure 51: Residential DLC Nighttime Zone J Network Event - 18 Jul 2013

Resource: Zone J All Nighttime Groups		Cycling Strategy: 50% Cycling					
	Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
	Residential	July 18, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	13,636

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.41	2.46	2.47	2.34	2.29	2.39
Per unit kW - Event	1.41	1.70	1.76	1.66	1.75	1.65
Cumulative Overrides	3.0%	8.3%	1.9%	7.1%	12.4%	6.5%
Per unit kW reduction	1.00	0.77	0.71	0.68	0.55	0.74
Per unit kW reduction without overrides	1.03	0.83	0.72	0.73	0.62	0.79
Total kW without curtailment	32,865	33,557	33,662	31,858	31,287	32,646
Total kW with curtailment	19,200	23,122	23,966	22,651	23,838	22,555
Total kW load reduction	13,665	10,435	9,696	9,207	7,449	10,090

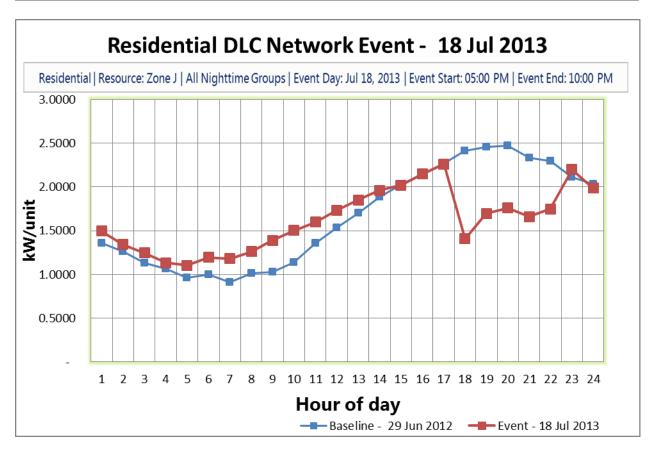


Figure 52: Small Business DLC Daytime Zone I Network Event - 19 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 19, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	253

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	3.95	3.95	4.09	4.07	3.87	3.99
Per unit kW - Event	2.33	2.90	2.95	2.48	2.50	2.63
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Per unit kW reduction	1.62	1.05	1.14	1.59	1.37	1.35
Per unit kW reduction without overrides	1.62	1.05	1.14	1.59	1.37	1.35
Total kW without curtailment	1,001	1,001	1,036	1,030	978	1,009
Total kW with curtailment	590	734	747	628	632	666
Total kW load reduction	410	267	289	401	346	343

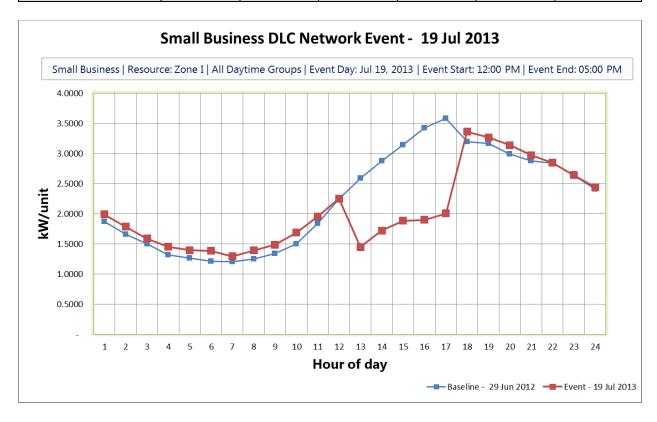


Figure 53: Small Business DLC Daytime Zone J Network Event - 19 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 19, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	1,295

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	4.42	4.64	4.75	4.73	4.62	4.63
Per unit kW - Event	2.95	3.34	3.59	3.00	3.38	3.25
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Per unit kW reduction	1.46	1.30	1.16	1.73	1.24	1.38
Per unit kW reduction without overrides	1.46	1.30	1.16	1.73	1.24	1.38
Total kW without curtailment	5,719	6,010	6,154	6,124	5,979	5,997
Total kW with curtailment	3,826	4,327	4,653	3,890	4,376	4,214
Total kW load reduction	1,893	1,683	1,501	2,234	1,602	1,783

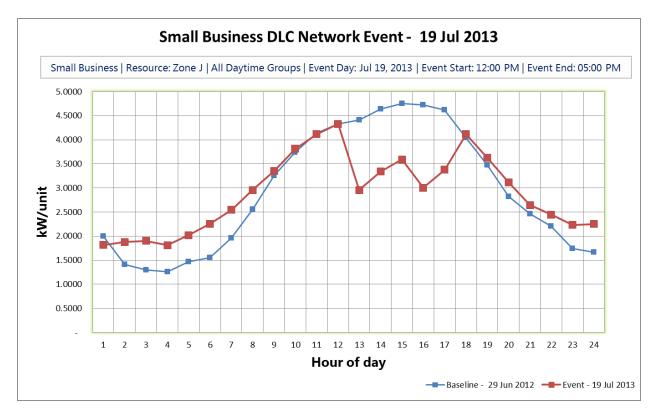


Figure 54: Residential DLC Daytime Zone I Network Event - 19 Jul 2013

Resource: Zone I All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 19, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	2,685

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	2.59	2.88	3.14	3.43	3.58	3.12
Per unit kW - Event	1.45	1.72	1.88	1.90	2.00	1.79
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	3.8%
Per unit kW reduction	1.14	1.16	1.26	1.53	1.58	1.33
Per unit kW reduction without overrides	0.00	0.00	0.00	0.00	0.00	1.39
Total kW without curtailment	6,953	7,736	8,435	9,199	9,617	8,388
Total kW with curtailment	3,889	4,624	5,056	5,102	5,380	4,810
Total kW load reduction	3,063	3,112	3,379	4,098	4,237	3,578

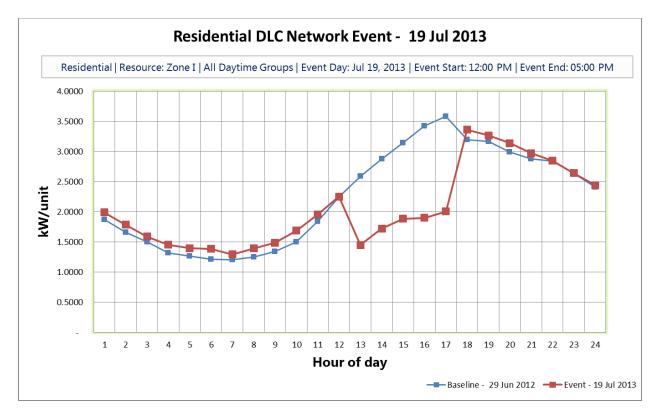


Figure 55: Residential DLC Daytime Zone J Network Event - 19 Jul 2013

Resource: Zone J All Daytime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 19, 2013	June 29, 2012	12:00 PM	5:00 PM	2:00 PM	345

Demand (kW)	Hour ending 1:00 PM	Hour ending 2:00 PM	Hour ending 3:00 PM	Hour ending 4:00 PM	Hour ending 5:00 PM	Average
Per unit kW - Baseline	2.22	2.30	2.41	2.58	2.72	2.45
Per unit kW - Event	1.29	1.47	1.51	1.51	1.61	1.48
Cumulative Overrides	0.0%	0.0%	0.0%	0.0%	0.0%	5.6%
Per unit kW reduction	0.93	0.83	0.90	1.07	1.11	0.97
Per unit kW reduction without overrides	0.00	0.00	0.00	0.00	0.00	1.03
Total kW without curtailment	767	794	832	890	939	844
Total kW with curtailment	446	507	522	521	556	510
Total kW load reduction	321	288	310	369	383	334

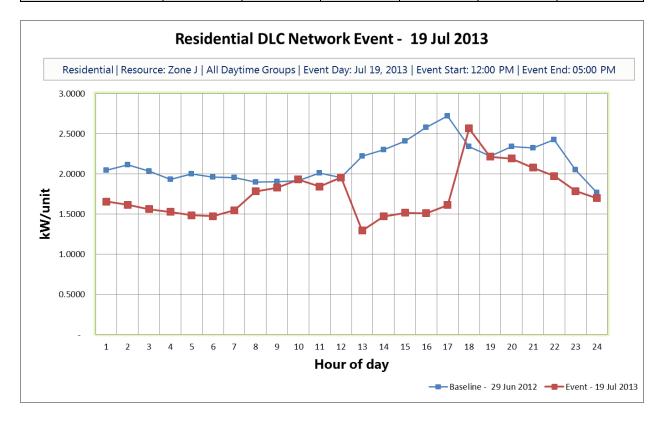


Figure 56: Small Business DLC Nighttime Zone H Network Event - 19 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 19, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	217

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.26	2.98	2.63	2.00	1.70	2.51
Per unit kW - Event	2.43	2.38	2.29	1.65	1.48	2.05
Cumulative Overrides	4.1%	9.4%	0.2%	1.1%	2.4%	3.4%
Per unit kW reduction	0.83	0.60	0.34	0.35	0.22	0.47
Per unit kW reduction without overrides	0.87	0.67	0.34	0.36	0.22	0.49
Total kW without curtailment	708	646	571	435	369	546
Total kW with curtailment	527	515	497	358	322	444
Total kW load reduction	181	131	74	76	47	102

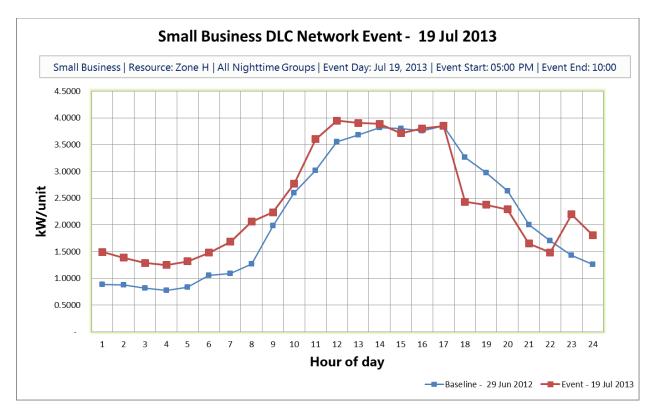


Figure 57: Small Business DLC Nighttime Zone I Network Event - 19 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 19, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	704

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.61	3.10	2.66	2.17	2.02	2.71
Per unit kW - Event	2.34	2.35	2.06	1.75	1.67	2.03
Cumulative Overrides	5.0%	11.0%	0.3%	1.5%	3.1%	4.2%
Per unit kW reduction	1.27	0.75	0.61	0.42	0.35	0.68
Per unit kW reduction without overrides	1.34	0.85	0.61	0.42	0.36	0.71
Total kW without curtailment	2,542	2,183	1,874	1,526	1,424	1,910
Total kW with curtailment	1,646	1,653	1,447	1,231	1,179	1,431
Total kW load reduction	897	530	427	295	245	479

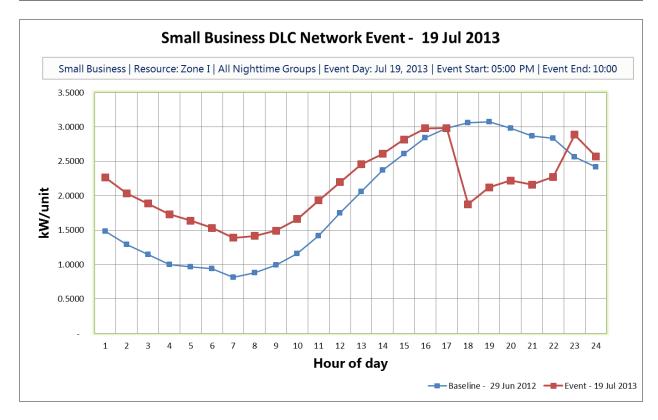


Figure 58: Small Business DLC Nighttime Zone J Network Event - 19 Jul 2013

Resource: Zone J All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 19, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	4,605

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.66	3.31	2.94	2.48	2.22	2.92
Per unit kW - Event	2.35	2.49	2.22	1.68	1.60	2.07
Cumulative Overrides	4.7%	10.6%	0.4%	2.6%	4.9%	4.6%
Per unit kW reduction	1.31	0.82	0.72	0.80	0.62	0.85
Per unit kW reduction without overrides	1.38	0.91	0.73	0.82	0.65	0.90
Total kW without curtailment	16,852	15,233	13,534	11,432	10,211	13,453
Total kW with curtailment	10,808	11,474	10,202	7,750	7,374	9,522
Total kW load reduction	6,044	3,759	3,333	3,682	2,838	3,931

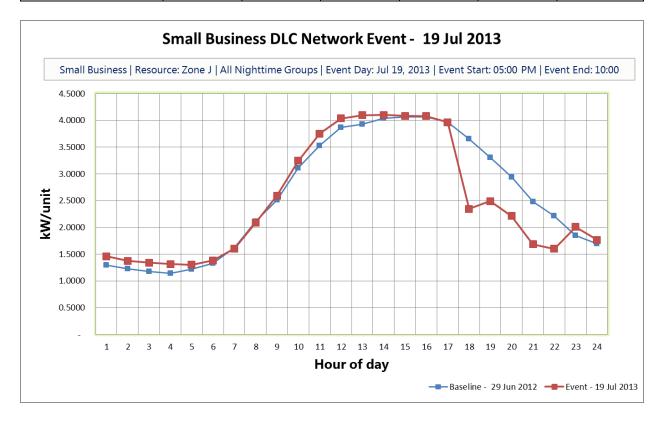


Figure 59: Residential DLC Nighttime Zone H Network Event - 19 Jul 2013

Resource: Zone H All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 19, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	2,112

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.02	3.05	2.93	2.69	2.54	2.85
Per unit kW - Event	1.71	2.01	2.07	1.92	1.96	1.93
Cumulative Overrides	3.8%	10.5%	1.7%	5.9%	10.8%	6.5%
Per unit kW reduction	1.31	1.04	0.86	0.78	0.58	0.91
Per unit kW reduction without overrides	1.37	1.16	0.87	0.82	0.65	0.98
Total kW without curtailment	6,384	6,440	6,182	5,688	5,365	6,012
Total kW with curtailment	3,607	4,239	4,366	4,051	4,142	4,081
Total kW load reduction	2,776	2,200	1,815	1,637	1,223	1,930

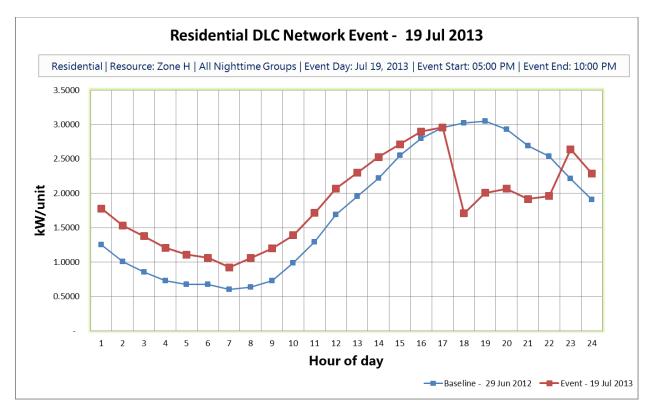


Figure 60: Residential DLC Nighttime Zone I Network Event - 19 Jul 2013

Resource: Zone I All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 19, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	3,961

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	3.06	3.08	2.99	2.87	2.84	2.97
Per unit kW - Event	1.88	2.12	2.22	2.16	2.27	2.13
Cumulative Overrides	3.8%	9.7%	1.6%	5.9%	10.7%	6.3%
Per unit kW reduction	1.19	0.95	0.76	0.71	0.57	0.84
Per unit kW reduction without overrides	1.23	1.06	0.78	0.75	0.63	0.89
Total kW without curtailment	12,133	12,187	11,824	11,377	11,247	11,754
Total kW with curtailment	7,435	8,409	8,796	8,566	9,009	8,443
Total kW load reduction	4,698	3,778	3,028	2,811	2,238	3,311

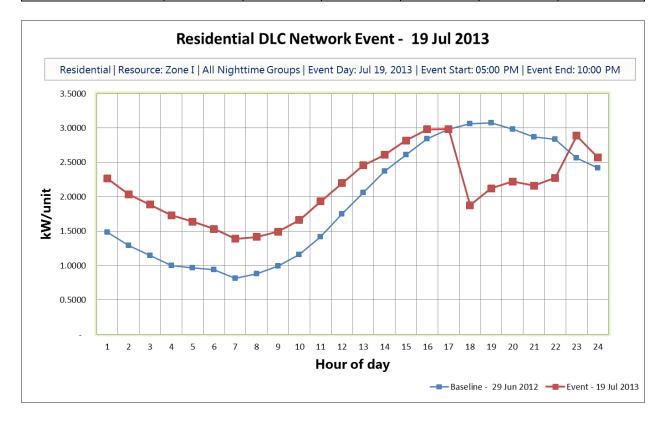
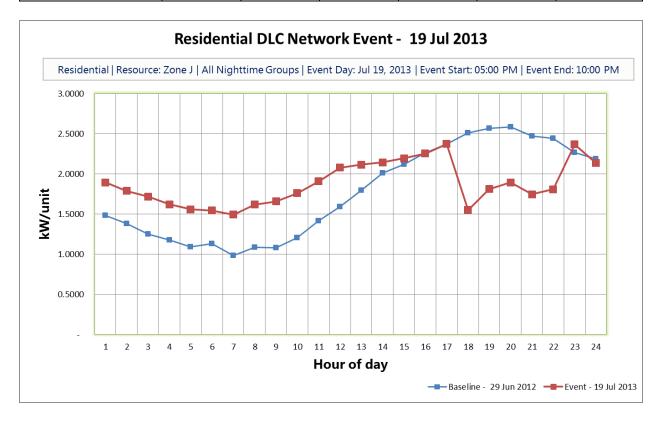


Figure 61: Residential DLC Nighttime Zone J Network Event - 19 Jul 2013

Resource: Zone J All Nighttime Groups		Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 19, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	13,632

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.51	2.57	2.59	2.47	2.44	2.52
Per unit kW - Event	1.55	1.81	1.89	1.75	1.81	1.76
Cumulative Overrides	3.2%	9.0%	1.7%	6.5%	11.5%	6.4%
Per unit kW reduction	0.96	0.76	0.69	0.73	0.64	0.75
Per unit kW reduction without overrides	0.99	0.83	0.71	0.78	0.72	0.81
Total kW without curtailment	34,211	34,984	35,275	33,722	33,320	34,303
Total kW with curtailment	21,131	24,675	25,821	23,814	24,657	24,020
Total kW load reduction	13,079	10,310	9,454	9,908	8,663	10,283



Appendix II

Contingency Programs Performance Charts

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Figure 62: DLRP Summary of Roosevelt Network Event – All Participants

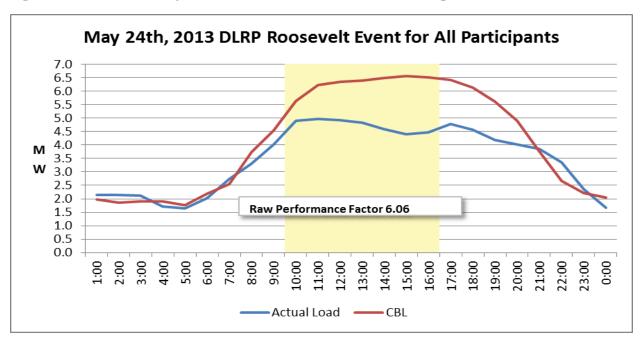


Figure 63: DLRP Summary of Flatbush Network Event – All Participants

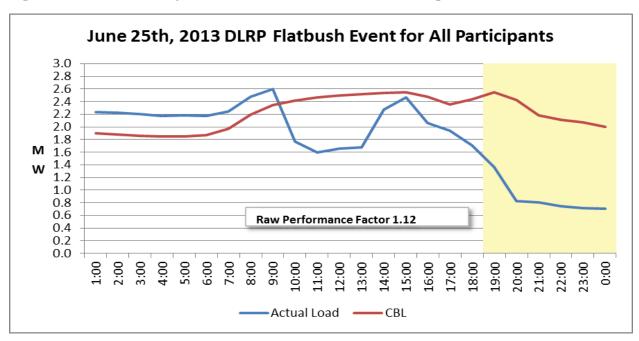


Figure 64: Small Business DLC Network Event - 25 Jun 2013

Resource: Zone J Flatbush	(Group-26)	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	June 25, 2013	June 1, 2011	7:00 PM	12:00 AM		175

Demand (kW)	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Hour ending 11:00 PM	Hour ending 12:00 AM	Average
Per unit kW - Baseline	2.18	1.89	1.64	1.20	1.02	1.59
Per unit kW - Event	1.34	1.18	1.04	0.91	0.78	1.05
Cumulative Overrides	1.8%	4.2%	4.7%	4.9%	5.2%	4.2%
Per unit kW reduction	0.84	0.71	0.60	0.29	0.23	0.53
Per unit kW reduction without overrides	0.85	0.74	0.63	0.31	0.25	0.56
Total kW without curtailment	381	330	288	211	178	278
Total kW with curtailment	235	207	183	159	137	184
Total kW load reduction	147	123	105	51	41	93

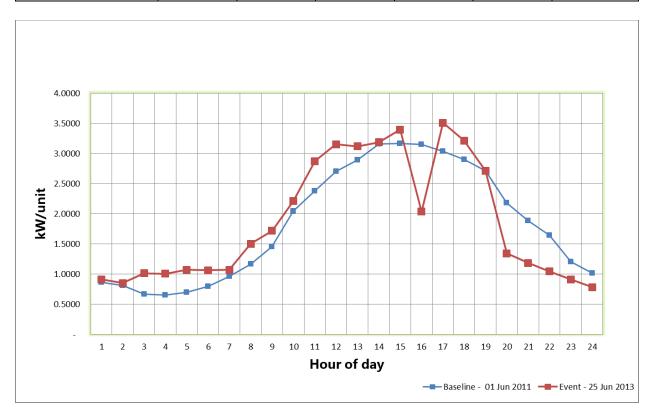


Figure 65: Residential DLC Network Event - 25 Jun 2013

Resource: Zone J Flatbush	(Group-26)	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	June 25, 2013	June 1, 2011	7:00 PM	12:00 AM		341

Demand (kW)	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Hour ending 11:00 PM	Hour ending 12:00 AM	Average
Per unit kW - Baseline	1.68	1.67	1.71	1.56	1.62	1.65
Per unit kW - Event	1.19	1.27	1.30	1.32	1.34	1.28
Cumulative Overrides	2.8%	8.1%	12.7%	16.7%	19.8%	12.0%
Per unit kW reduction	0.49	0.41	0.42	0.24	0.28	0.37
Per unit kW reduction without overrides	0.53	0.47	0.50	0.30	0.32	0.42
Total kW without curtailment	574	570	585	532	553	563
Total kW with curtailment	407	432	442	450	457	438
Total kW load reduction	166	139	142	82	97	125

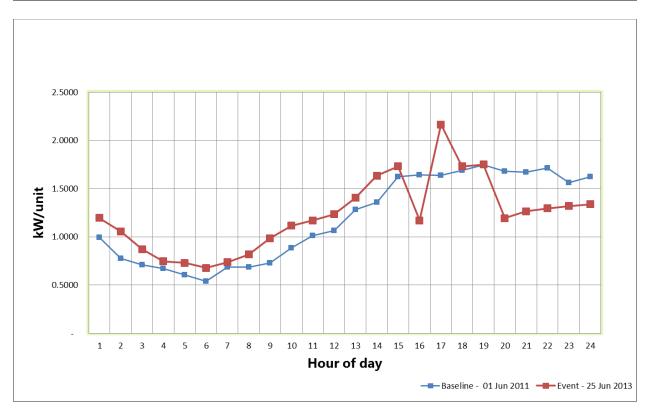


Figure 66: DLRP Summary of Test Event – All Participants

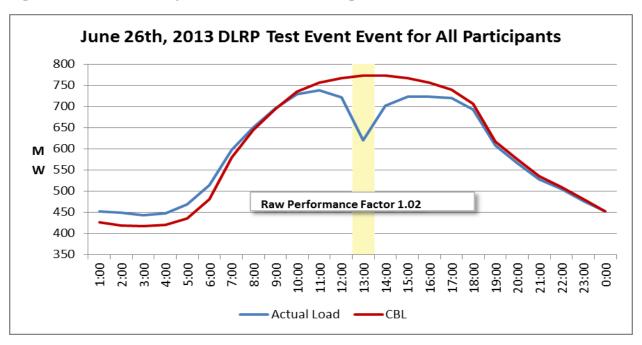


Figure 67: DLRP Summary of Fox Hills Network Event – All Participants

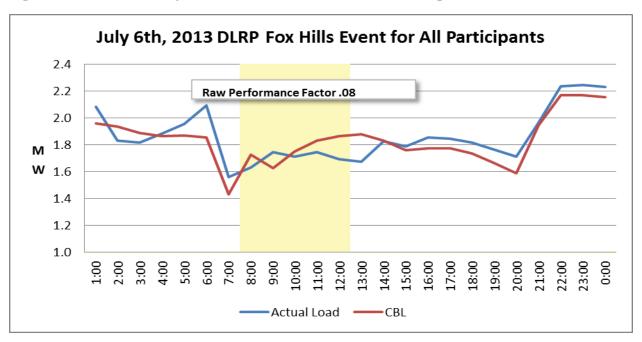


Figure 68: Small Business DLC Network Event - 06 Jul 2013

Resource: Zone J Fox Hills	Group -82	Cycling Strategy	r: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 6, 2013	August 10, 2013	7:00 AM	12:00 PM	9:00 AM	165

Demand (kW)	Hour ending 8:00 AM	Hour ending 9:00 AM	Hour ending 10:00 AM	Hour ending 11:00 AM	Hour ending 12:00 PM	Average
Per unit kW - Baseline	1.56	1.92	1.95	2.33	2.48	2.05
Per unit kW - Event	1.15	1.33	1.67	2.00	1.83	1.60
Cumulative Overrides	0.8%	2.5%	2.2%	6.0%	9.9%	4.3%
Per unit kW reduction	0.41	0.58	0.29	0.33	0.65	0.45
Per unit kW reduction without overrides	0.41	0.60	0.30	0.35	0.72	0.47
Total kW without curtailment	258	316	322	385	409	338
Total kW with curtailment	190	220	275	331	302	263
Total kW load reduction	68	96	48	54	107	75

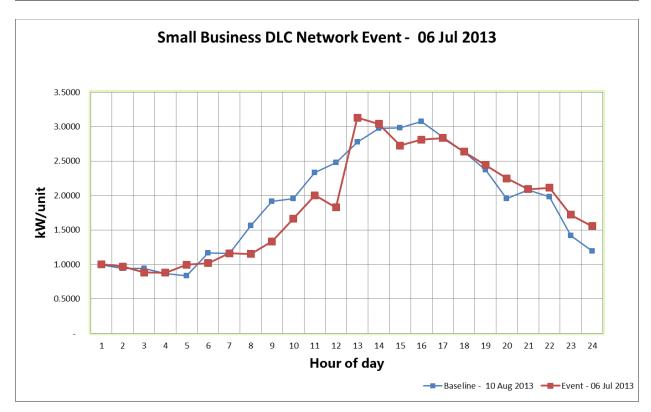


Figure 69: Residential DLC Network Event - 06 Jul 2013

Resource: Zone J Fox Hills (Group -82	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 6, 2013	August 10, 2013	7:00 AM	12:00 PM	9:00 AM	1,835
Demand (kW)	Hour ending	Hour ending	Hour ending	Hour ending	Hour ending	Average
Demand (KVV)	8:00 AM	9:00 AM	10:00 AM	11:00 AM	12:00 PM	Average
Per unit kW - Baseline	1.18	1.45	1.49	1.64	1.73	1.50
Per unit kW - Event	1.09	1.00	1.17	1.33	1.30	1.18
Cumulative Overrides	0.2%	1.4%	1.6%	4.3%	7.2%	2.9%
Per unit kW reduction	0.09	0.45	0.31	0.31	0.43	0.32
Per unit kW reduction without overrides	0.09	0.46	0.32	0.33	0.46	0.33
Total kW without curtailment	2,165	2,667	2,729	3,018	3,166	2,749
Total kW with curtailment	1,995	1,836	2,156	2,440	2,378	2,161
Total kW load reduction	170	831	573	578	789	588

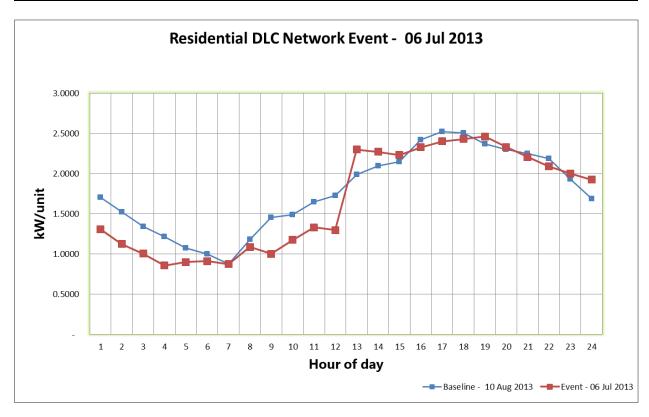


Figure 70: DLRP Summary of Fox Hills Network Event – All Participants

Figure 71: DLRP Summary of Fox Hills Network Event – All Participants

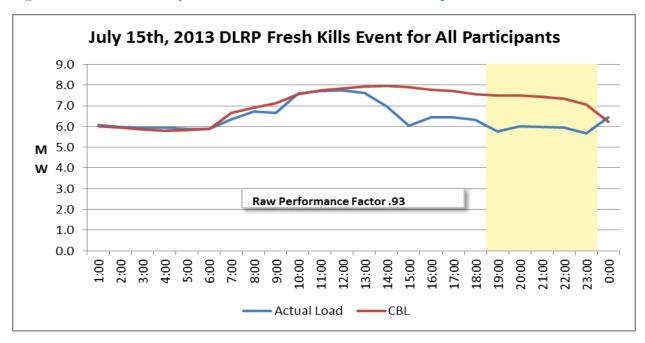


Figure 72: Small Business DLC Network Event - 15 Jul 2013

Resource: Zone J Fresh Kills	s (Group-83)	Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 15, 2013	June 29, 2012	6:00 PM	11:00 PM	8:00 PM	154

Demand (kW)	Hour ending 1:00 AM	Hour ending 2:00 AM	Hour ending 3:00 AM	Hour ending 4:00 AM	Hour ending 5:00 AM	Average
Per unit kW - Baseline	3.90	3.70	3.31	2.84	2.52	3.25
Per unit kW - Event	2.38	2.53	2.30	2.00	1.70	2.18
Cumulative Overrides	3.0%	7.3%	2.7%	6.7%	7.9%	5.5%
Per unit kW reduction	1.52	1.17	1.01	0.83	0.82	1.07
Per unit kW reduction without overrides	1.57	1.27	1.04	0.89	0.89	1.13
Total kW without curtailment	601	570	510	437	387	501
Total kW with curtailment	367	390	354	309	261	336
Total kW load reduction	234	181	156	128	126	165

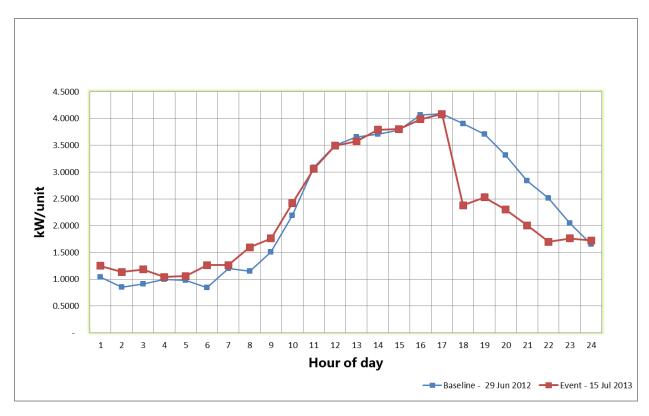
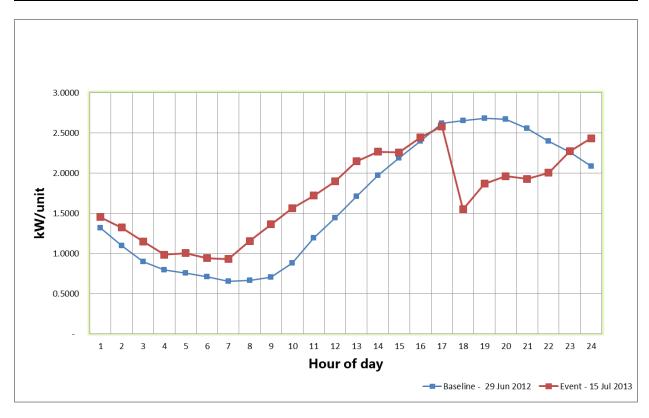


Figure 73: Residential DLC Network Event - 15 Jul 2013

Resource: Zone J Fresh Kills	s (Group-83)	Cycling Strategy: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 15, 2013	June 29, 2012	6:00 PM	11:00 PM	8:00 PM	1,329

Demand (kW)	Hour ending 1:00 AM	Hour ending 2:00 AM	Hour ending 3:00 AM	Hour ending 4:00 AM	Hour ending 5:00 AM	Average
Per unit kW - Baseline	2.65	2.68	2.67	2.56	2.40	2.59
Per unit kW - Event	1.55	1.87	1.96	1.93	2.01	1.86
Cumulative Overrides	2.6%	7.4%	2.7%	7.4%	10.4%	6.1%
Per unit kW reduction	1.10	0.81	0.71	0.63	0.39	0.73
Per unit kW reduction without overrides	0.00	0.88	0.73	0.68	0.44	0.78
Total kW without curtailment	3,524	3,563	3,548	3,399	3,185	3,444
Total kW with curtailment	2,060	2,484	2,606	2,563	2,665	2,475
Total kW load reduction	1,465	1,079	942	837	520	968





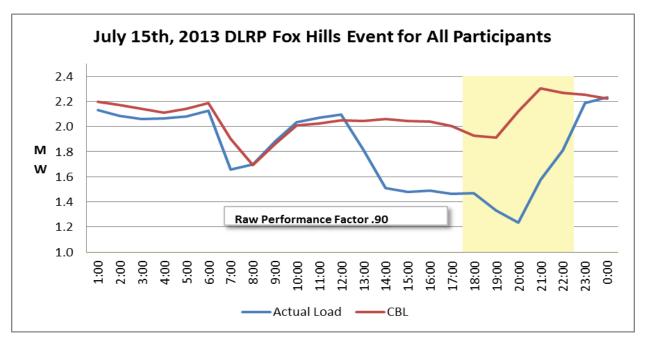


Figure 75: Small Business DLC Network Event - 15 Jul 2013

Resource: Zone J Fox Hills	Group -82	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	165

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.65	2.26	1.99	1.60	1.39	1.98
Per unit kW - Event	1.74	1.76	1.59	1.27	1.19	1.51
Cumulative Overrides	2.7%	6.6%	0.5%	2.2%	3.8%	3.2%
Per unit kW reduction	0.91	0.50	0.40	0.33	0.20	0.47
Per unit kW reduction without overrides	0.94	0.54	0.40	0.34	0.20	0.48
Total kW without curtailment	437	374	328	264	229	326
Total kW with curtailment	287	291	262	209	197	249
Total kW load reduction	150	83	66	55	32	77

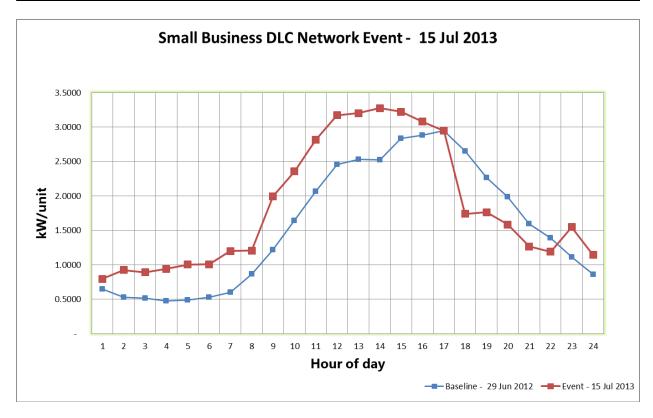
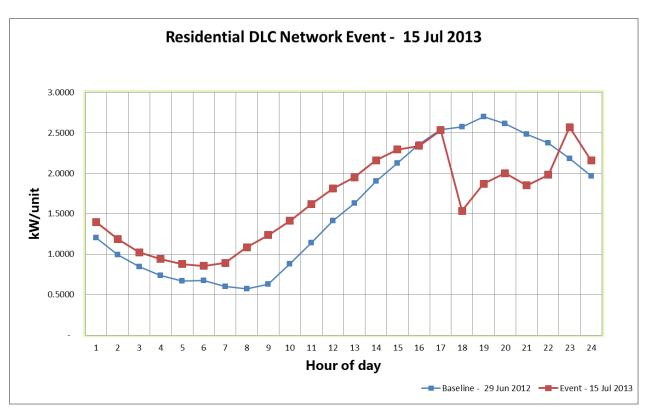


Figure 76: Residential DLC Network Event - 15 Jul 2013

Resource: Zone J Fox Hills	Group -82	Cycling Strategy	y: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 15, 2013	June 29, 2012	5:00 PM	10:00 PM	7:00 PM	1,828

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Average
Per unit kW - Baseline	2.57	2.70	2.61	2.48	2.38	2.55
Per unit kW - Event	1.54	1.87	2.00	1.85	1.98	1.85
Cumulative Overrides	2.6%	8.0%	1.8%	6.8%	12.1%	6.3%
Per unit kW reduction	1.04	0.83	0.61	0.63	0.40	0.70
Per unit kW reduction without overrides	1.06	0.90	0.62	0.68	0.45	0.75
Total kW without curtailment	4,701	4,934	4,779	4,536	4,345	4,659
Total kW with curtailment	2,808	3,418	3,659	3,383	3,621	3,378
Total kW load reduction	1,893	1,516	1,120	1,153	724	1,281





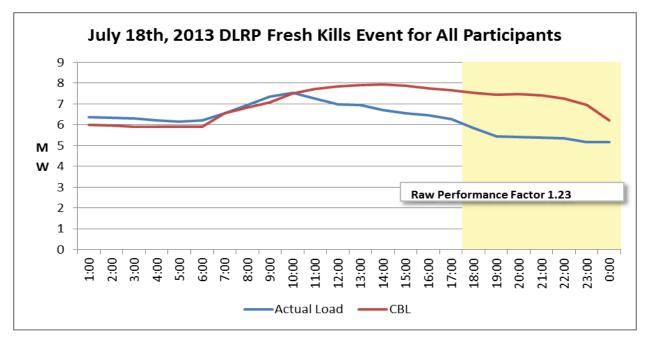


Figure 78: Small Business DLC Network Event - 18 Jul 2013

Resource: Zone J Fresh Kills	s Group-83	Cycling Strategy	: 50% Cycling			
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Small Business	July 18, 2013	June 29, 2012	5:00 PM	12:00 AM	7:00 PM	154

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Hour ending 11:00 PM	Hour ending 12:00 AM	Average
Per unit kW - Baseline	4.10	3.88	3.51	3.03	2.69	2.27	1.87	3.05
Per unit kW - Event	2.85	3.30	2.86	2.31	2.18	1.86	1.64	2.43
Cumulative Overrides	7.3%	16.4%	1.5%	6.1%	9.7%	10.6%	10.9%	8.9%
Per unit kW reduction	1.25	0.58	0.65	0.73	0.51	0.41	0.23	0.62
Per unit kW reduction without overrides	1.35	0.69	0.66	0.77	0.57	0.46	0.25	0.68
Total kW without curtailment	632	598	541	467	415	349	288	470
Total kW with curtailment	439	509	441	355	336	286	253	374
Total kW load reduction	192	89	100	112	79	63	35	96

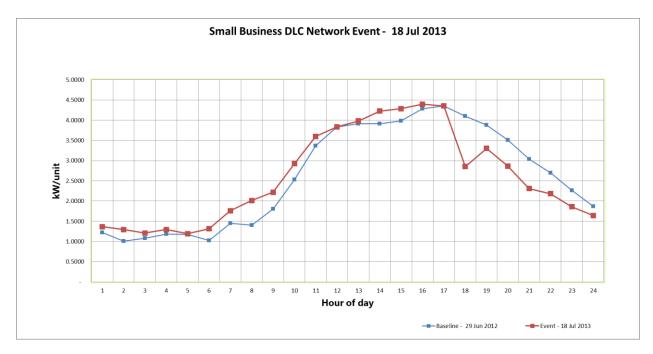


Figure 79: Residential DLC Network Event - 18 Jul 2013

Resource: Zone J Fresh Kills	Cycling Strategy	: 50% Cycling				
Category	Event Day	Baseline Day	Start Time	End Time	Event Refresh	# of Thermostats
Residential	July 18, 2013	June 29, 2012	5:00 PM	12:00 AM	7:00 PM	1,328

Demand (kW)	Hour ending 6:00 PM	Hour ending 7:00 PM	Hour ending 8:00 PM	Hour ending 9:00 PM	Hour ending 10:00 PM	Hour ending 11:00 PM	Hour ending 12:00 AM	Average
Per unit kW - Baseline	2.81	2.84	2.84	2.75	2.59	2.45	2.27	2.65
Per unit kW - Event	1.82	2.10	2.20	2.00	2.11	2.40	2.27	2.13
Cumulative Overrides	2.6%	7.7%	1.9%	6.4%	10.8%	14.5%	17.3%	8.7%
Per unit kW reduction	0.99	0.74	0.64	0.75	0.48	0.06	0.00	0.52
Per unit kW reduction without overrides	1.02	0.81	0.65	0.80	0.53	0.06	0.01	0.57
Total kW without curtailment	3,732	3,770	3,771	3,651	3,438	3,255	3,020	3,519
Total kW with curtailment	2,413	2,782	2,921	2,651	2,804	3,181	3,014	2,824
Total kW load reduction	1,319	987	850	1,000	634	74	6	696

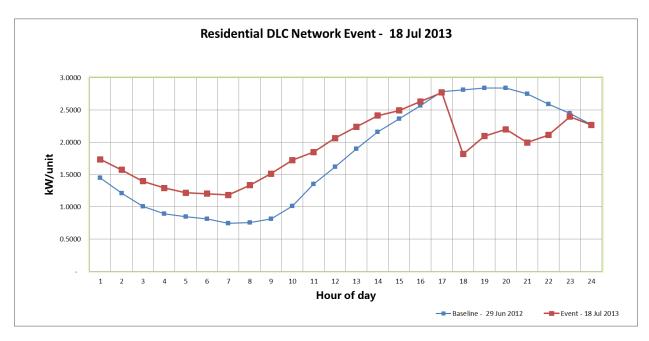


Figure 80: DLRP Summer Reservation and Voluntary Programs – Enrolled and Achieved System Impacts

					Demand	Impacts (MW	/)			Demand Im	pact (% of Netwo	rk Peak)
Network	Tier	2013 Networ k Peak Demand (MW)	Enrolled Summer Reservation	Achieved Summer Reservation Reduction (Most Recent Event)	Enrolled Voluntary	Achieved Voluntary Reduction	Total Enrolled Summer Reservation and Voluntary	Total Achieved Summer Reservation and Voluntary Reduction (Most Recent Event)	Enrolled Summer Reservation	Enrolled Voluntary	Total Enrolled Summer Reservation and Voluntary	Total Achieved Summer Reservation and Voluntary Reduction (Most Recent Event)
Battery Park City	1	72	3	3.054	1.6	0.000	4.6	3.054	4.17%	2.22%	6.39%	4.24%
Bay Ridge	1	225	4.235	1.385	0.5	0.000	4.735	1.385	1.88%	0.22%	2.10%	0.62%
Beekman	1	128	2.47	2.892	0.275	0.000	2.745	2.892	1.93%	0.21%	2.14%	2.26%
Borden	1	108	2.48	3.330	0.05	0.000	2.53	3.330	2.30%	0.05%	2.34%	3.08%
Boro Hall	2	285	3.575	3.727	0.25	0.000	3.825	3.727	1.25%	0.09%	1.34%	1.31%
Bowling Green	1	118	1.005	1.035	2.45	0.000	3.455	1.035	0.85%	2.08%	2.93%	0.88%
Brighton Beach	1	104	0.26	0.391	0	0.000	0.26	0.391	0.25%	0.00%	0.25%	0.38%
Buchanan	1	122	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Canal	1	108	12.145	0.404	0.125	0.000	12.27	0.404	11.25%	0.12%	11.36%	0.37%
Cedar Street	1	105	0.165	0.023	0	0.000	0.165	0.023	0.16%	0.00%	0.16%	0.02%
Central Bronx	1	155	2.067	1.712	0.85	0.000	2.917	1.712	1.33%	0.55%	1.88%	1.10%
Central Park	1	229	1.685	1.667	0	0.000	1.685	1.667	0.74%	0.00%	0.74%	0.73%
Chelsea	1	227	2.705	3.373	0	0.000	2.705	3.373	1.19%	0.00%	1.19%	1.49%
City Hall	1	151	1.075	1.050	0.7	0.000	1.775	1.050	0.71%	0.46%	1.18%	0.70%
Columbus Circle	1	130	2.685	3.357	0.1	0.000	2.785	3.357	2.07%	0.08%	2.14%	2.58%
Cooper Square	1	251	1.335	1.001	0	0.000	1.335	1.001	0.53%	0.00%	0.53%	0.40%
Cortlandt	1	68	0.74	0.900	0	0.000	0.74	0.900	1.09%	0.00%	1.09%	1.32%
Crown Heights	2	205	0.83	1.741	0	0.000	0.83	1.741	0.40%	0.00%	0.40%	0.85%
Elmsford No. 2	1	171	0.075	0.000	0.5	0.000	0.575	0.000	0.04%	0.29%	0.34%	0.00%
Empire	1	61	2.255	1.461	0	0.000	2.255	1.461	3.70%	0.00%	3.70%	2.39%
Fashion	1	68	0.43	0.491	0	0.000	0.43	0.491	0.63%	0.00%	0.63%	0.72%
Flatbush	2	273	1.27	1.622	0	0.000	1.27	1.622	0.47%	0.00%	0.47%	0.59%
Flushing	2	375	6.99	2.072	0.3	0.000	7.29	2.072	1.86%	0.08%	1.94%	0.55%
Fordham	1	257	2.01	2.775	0	0.000	2.01	2.775	0.78%	0.00%	0.78%	1.08%
Fox Hills	1	214	0.695	0.622	0	0.000	0.695	0.622	0.32%	0.00%	0.32%	0.29%
Freedom	1	16	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Fresh Kills	1	205	1.605	1.490	0.05	0.000	1.655	1.490	0.78%	0.02%	0.81%	0.73%
Fulton	1	115	2.9	2.841	0.8	0.000	3.7	2.841	2.52%	0.70%	3.22%	2.47%
Grand Central	1	199	3.923	3.827	0.35	0.000	4.273	3.827	1.97%	0.18%	2.15%	1.92%
Granite Hill	1	226	0.65	0.579	0.1	0.000	0.75	0.579	0.29%	0.04%	0.33%	0.26%
Grasslands	1	113	2	2.663	0.31	0.000	2.31	2.663	1.77%	0.27%	2.04%	2.36%
Greeley Square	1	70	0.15	0.120	1	0.000	1.15	0.120	0.21%	1.43%	1.64%	0.17%
Greenwich	1	68	0.482	0.330	0	0.000	0.482	0.330	0.71%	0.00%	0.71%	0.49%
Harlem	1	190	2.45	2.727	0	0.000	2.45	2.727	1.29%	0.00%	1.29%	1.44%
Harrison	1	236	0.685	1.160	0.1	0.000	0.785	1.160	0.29%	0.04%	0.33%	0.49%
Herald Square	1	105	2.305	1.122	0	0.000	2.305	1.122	2.20%	0.00%	2.20%	1.07%
Hudson	1	56	3.725	3.406	0	0.000	3.725	3.406	6.65%	0.00%	6.65%	6.08%
Hunter	1	80	0.71	1.242	0.1	0.000	0.81	1.242	0.89%	0.13%	1.01%	1.55%
Jackson Heights	1	191	2.349	2.406	0.1	0.000		2.406	1.23%	0.00%	1.23%	1.26%
Jamaica	1	448	2.925	2.441	0	0.000	12,349 12,349 12,355	2.441	0.65%	0.00%	0.65%	0.54%
Kips Bay	1	120	2.55	1.877	0	0.000	2.55	1.877	2.13%	0.00%	2.13%	1.56%
Lenox	1	263	1.37	0.000	0	0.000	1.37	0.000	0.52%	0.00%	0.52%	0.00%

DLRP Summer Reservation and Voluntary Programs - Enrolled and Achieved System Impacts (cont.)

	Tier	2013	Enrolled	Achieved Summer	Enrolled	Achieved	Total Enrolled	Total Achieved Summer	Enrolled	Enrolled	Total Enrolled	Total Achieved
Network		Network	Summer	Reservation	Voluntary	Voluntary	Summer	Reservation and Voluntary	Summer	Voluntary	Summer	Summer Reservation
		Peak	Reservation	Reduction (Most	,	Reduction	Reservation	Reduction (Most Recent	Reservation	,	Reservation and	and Voluntary
		Demand		Recent Event)			and Voluntary	Event)			Voluntary	Reduction (Most
		(MW)										Recent Event)
Long Island City	1	231	1.15	0.694	0.35	0.000	1.5	0.694	0.50%	0.15%	0.65%	0.30%
Madison Square	1	253	1.855	2.025	0.95	0.000	2.805	2.025	0.73%	0.38%	1.11%	0.80%
Maspeth	1	251	2.353	1.739	0	0.000	2.353	1.739	0.94%	0.00%	0.94%	0.69%
Millwood West	1	85	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Mohansic	1	8	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Northeast Bronx	1	111	1.095	0.965	0.1	0.000	1.195	0.965	0.99%	0.09%	1.08%	0.87%
Ocean Parkway	1	170	1.32	1.101	0	0.000	1.32	1.101	0.78%	0.00%	0.78%	0.65%
Ossining West	1	78	0.185	0.193	0	0.000	0.185	0.193	0.24%	0.00%	0.24%	0.25%
Park Place	1	86	4.37	4.622	0	0.000	4.37	4.622	5.08%	0.00%	5.08%	5.37%
Park Slope	2	223	0.86	0.598	1	0.000	1.86	0.598	0.39%	0.45%	0.83%	0.27%
Pennsylvania	1	240	5.01	5.573	0	0.000	5.01	5.573	2.09%	0.00%	2.09%	2.32%
Plaza	1	153	3.08	3.803	0.65	0.000	3.73	3.803	2.01%	0.42%	2.44%	2.49%
Pleasantville	1	80	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Prospect Park	1	61	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Randalls Island	1	26	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Rego Park	2	238	1.5	0.770	0.1	0.000	1.6	0.770	0.63%	0.04%	0.67%	0.32%
Richmond Hill	2	324	1.9	1.849	0	0.000	1.9	1.849	0.59%	0.00%	0.59%	0.57%
Ridgewood	2	196	0.525	0.878	0	0.000	0.525	0.878	0.27%	0.00%	0.27%	0.45%
Riverdale	1	101	1.345	1.349	0.8	0.000	2.145	1.349	1.33%	0.79%	2.12%	1.34%
Rockefeller Center	1	86	3.537	4.789	0	0.000	3.537	4.789	4.11%	0.00%	4.11%	5.57%
Rockview	1	92	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Roosevelt	1	81	0.5	0.549	0	0.000	0.5	0.549	0.62%	0.00%	0.62%	0.68%
Sheepshead Bay	2	164	2.905	2.730	0.5	0.000	3.405	2.730	1.77%	0.30%	2.08%	1.66%
Sheridan Square	1	168	0	0.000	0.15	0.000	0.15	0.000	0.00%	0.09%	0.09%	0.00%
Southeast Bronx	1	211	9.47	14.867	0	0.000	9.47	14.867	4.49%	0.00%	4.49%	7.05%
Sunnyside	1	79	0	0.000	0	0.000	0	0.000	0.00%	0.00%	0.00%	0.00%
Sutton	1	143	4.905	5.300	1.025	0.000	5.93	5.300	3.43%	0.72%	4.15%	3.71%
Times Square	1	158	3.315	5.709	1.65	0.000	4.965	5.709	2.10%	1.04%	3.14%	3.61%
Triboro	1	136	0.35	0.319	0	0.000	0.35	0.319	0.26%	0.00%	0.26%	0.23%
Turtle Bay	1	127	1.894	1.735	0.55	0.000	2.444	1.735	1.49%	0.43%	1.92%	1.37%
Wainwright	1	95	0	0.000	0.4	0.000	0.4	0.000	0.00%	0.42%	0.42%	0.00%
Washington Hgts	1	188	5.05	0.000	0	0.000	5.05	0.000	2.69%	0.00%	2.69%	0.00%
Washington Street	1	213	0.3	0.432	0	0.000	0.3	0.432	0.14%	0.00%	0.14%	0.20%
West Bronx	1	218	4.025	3.418	0	0.000	4.025	3.418	1.85%	0.00%	1.85%	1.57%
White Plains	1	240	2.29	0.810	0.85	0.000	3.14	0.810	0.95%	0.35%	1.31%	0.34%
Williamsburg	2	246	1.848	2.350	2.2	0.000	4.048	2.350	0.75%	0.89%	1.65%	0.96%
Willowbrook	1	91	0.04	0.000	0	0.000	0.04	0.000	0.04%	0.00%	0.04%	0.00%
Woodrow	1	119	0.42	0.367	0	0.000	0.42	0.367	0.35%	0.00%	0.35%	0.31%
Yorkville	1	306	1.295	1.314	0	0.000	1.295	1.314	0.42%	0.00%	0.42%	0.43%
Tier 1		10615	135.25	122.647	17.44	0	152.682	122.64668	1.27%	0.16%	1.44%	1.16%
TICL I					i			i	i			
Tier 2		2529	22.20	18.338	4.35	0	26.553	18.3375	0.88%	0.17%	1.05%	0.73%

Appendix III

DLC Impact Analysis

During all events, the DLC Program participants had their central air conditioner compressors cycled off for 30 minutes each hour. As observed during past curtailment events, the number of customer overrides increased over time, and was directly related to the length of each event. The Company has the ability to refresh (reset) compressor cycling and overcome customer overrides of the Company's direct load control. The Company refreshed the events at various times for each event. In an attempt to decrease customer fatigue and further deinstallations, the Company did not refresh all of the events.

Impacts for these events were determined based on run-time data collected from participant thermostats. The run-time data (minutes per hour) is converted to duty cycle percentages and used to measure the percent of time that compressors were on. The data was then compared to a similar non-controlled (baseline) day. Connected load data (nameplate rating) was collected from a sample of participants. This data was adjusted downward from the stated nameplate connected load by applying an adjustment factor (15 percent), as determined from metered amperage readings for a sample of units during hot days. This adjusted connected load kW or maximum kW draw was the basis for converting the run-time to kW impacts.

Curtailment impacts, which included the effect of overrides, were comparable to prior experience at the applicable temperatures.

Net Impact Analysis

A baseline condition is defined for DLC purposes as the energy use of a central air conditioning system during peak operating hours that are *similar* in time and weather conditions to a test or event curtailment day. Calculating Program impacts for each of the 2013 events required selecting a comparable baseline day using cooling degree-days and reported weather conditions. The selection of each specific baseline day considered the following key factors;

- Comparable cooling degree days (temperature and humidity levels),
- Comparable heat build-up of consecutive 90+ degree days,
- Comparable day of week (midweek versus beginning or end of week) and
- Day within a few weeks of the curtailment, as cooling usage patterns typically vary across the season.

In cases where the candidate for best baseline day did not sufficiently match the curtailment event day, the baseline day was adjusted, typically using the hours just prior to the curtailment event on both the baseline and curtailment event day to judge the best match and required scaling adjustments.

The adjusted connected load data for the central air conditioning system, coupled with the run-time data collected for each unit, is used to produce a baseline load shape. The baseline load shape will vary for specific customers depending upon the type of equipment, the way in which the equipment is sized, and how the customer operates the equipment. The aggregate baseline load shapes represent the hourly kW load for a typical customer's air conditioner compressor during a comparable summer day (24 hours).

Demand Saving Methodology

The methodology designed to calculate net demand savings is as follows;

- Obtain run-time data for participants on baseline and control days.
- Select baseline days comparable to control days, primarily from cooling degree days, using LaGuardia Airport weather.
- Compute weather adjustment for baseline, if necessary. Multiply baseline day
 run-times for each hour and participant by weather adjustment factor. This is at
 100 percent run-time for any given hour. If necessary, use comparison of Duty
 Cycle between baseline and curtailment day for additional small adjustments
 using pre-curtailment hour data.
- Controlled Duty Cycle is determined by averaging the run-time data for all
 participants during each hour of control during the curtailment day. This run-time
 data includes the effect of overrides.
- Duty Cycle reduction is determined by subtracting the curtailment event day Duty Cycle from the baseline Duty Cycle.
- Per unit kW reductions are determined by first multiplying the baseline Duty
 Cycle and controlled Day Duty Cycle by the estimated adjusted connected load²⁷,

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²⁷ The connected load (kW draw) is based on nameplate data for all participants, adjusted based on results of spot metering from a randomly selected sample of units to develop the ratio of actual maximum kW load draw to connected load. The spot metering includes the use of a power meter/power harmonics analyzer that measures voltage, sign wave, harmonics, power, wattage, and power factor.

with transmission and distribution line losses applied to both. This will result in kW per hour for both baseline and control days. The per unit kW reduction is the result of subtracting the controlled day kW from the baseline day kW. Total kW reduction is determined by multiplying the per unit kW reduction by the number of units under control.

Mathematically, the net impact is calculated as follows;

Duty Cycle Reduction = Baseline Duty Cycle_i - Controlled Duty Cycle_i

Multiply duty cycles by estimated adjusted connected load

Per Unit kW Reduction_i = Baseline kW_i - Control Day kW_i

 $Total\ kW\ Reduction_i = Per\ Unit\ kW\ Reduction_i * Number\ of\ Units$

Where i = the average of the curtailment period.

The following assumptions support the business net load impact analysis;

Connected load with incorporated line losses	$5.80 \mathrm{\ kW}$
 Line losses at system peak 	7.2% 28
 Adjusted connected load 	4.99 kW
Amp meter adjustment	15.0%
Connected load	5.87 kW

The following assumptions support the residential net load impact analysis;

•	Connected load ²⁹	4.66 kW
•	Amp meter adjustment ³⁰	15.0%
•	Adjusted connected load	3.96 kW
•	Line losses at system peak	14.0%

²⁸ Line losses were reduced to 7.2% as per Order EEPS order

²⁹ Based on nameplate data collected for CAC systems participating in the Program.

³⁰ Based on spot metering for sampling of participating CAC systems.

Connected load with incorporated line losses

4.61 kW

When interpreting the impacts, the following definitions should be understood;

- Participating thermostats are defined as thermostats that received the control signal from the two-way paging network.
- Net impacts are the impacts derived directly from run-time data. These impacts include the effects of customers who override the control signal.
- Gross impacts are the impacts that would have occurred had customers not been allowed to override the control signal in order to show full potential. These impacts are calculated by removing the effects of overrides from the net impacts.

Appendix IV

2013 - 2011 Con Edison Event Review

As of October 31, 2013

Con Edison Contingency Program;

Program	Acronym	Purpose	Incentive
Distribution Load Relief Program (NYC and Westchester County)	DLRP	Activated by Con Edison in system critical situations (condition yellow or voltage reduction). Customers have two hours notice to begin response for five hour event duration. Premium paid for customers who precommit load. A Customer must provide least 50 kW of load reduction or 50 kW of load delivery. An Aggregator must provide at least 100 kW of load reduction or 100 kW of load delivery.	Customers receive a reservation payment of \$6.00 or \$3.00 per kW pledged and performed, depending on location, and energy payments equal to \$0.50 per kWh reduced. Energy only option available for those who do not pre-commit kW.

Con Edison Peak Shaving Programs

Program	Acronym	Purpose	Incentive
Commercial System Relief Program (NYC only)	CSRP	Event activated when day-ahead forecast is 96% or greater of forecasted summer system peak to relieve system peak load. Premium paid for customers who pre-commit load. A Customer must provide least 50 kW of load reduction or 50 kW of load delivery. An Aggregator must provide at least 100 kW of load reduction or 100 kW of load delivery.	Customers who pre-commit kW receive a reservation payment of \$5/kW pledged and performed. Energy Payment equal to \$.50 per kWh for each kW reduced during an event. Customers who do not pre-commit load receive an energy payment equal to \$1.50 for each kWh reduced.
Residential Smart Appliance Program Extension: CoolNYC (NYC only) [Pilot program]	CoolNYC	Event activated when day-ahead forecast is 96% or greater of forecasted summer system peak to relieve system peak load. Con Edison will have ability to turn off window or wall A/Cs when an event is called. Available to Con Edison residential customers with window or wall A/C units and broadband connection.	Participants receive a free smart modern outlet (modlet), remote thermostat and gateway device allowing control via a web portal and smartphones. Participation in event hours results in an incentive payment of \$25.
Residential Smart Appliance Program (NYC only) [Pilot program] Three year pilot program concluded in 2012.	RSAP	Event activated when day-ahead forecast is 96% or greater of forecasted summer system peak to relieve system peak load. Con Edison will have ability to turn off enrolled home electrical equipment when an event is called. Available to Con Edison residential customers with a minimum of two window or wall A/C units, an AMR meter and broadband connection.	Participants receive a free home energy management system with installation and participation in 80% of all event hour's results in an incentive payment of \$10 for each wall or window A/C unit enrolled and \$10 for the combination of other enrolled appliances.

NYISO Programs;

Program	Acronym	Purpose	Incentive
Emergency Demand Response Program	EDRP	Deployed in energy shortage situations to maintain the reliability of the bulk of power grid. EDRP is a voluntary program.	Energy Payment: Equal to the greater of \$.50 for each kWh curtailed, or the real-time zonal locational-based marginal price, but no less than \$.50 per kWh curtailed paid to curtailment service provider/aggregator.
ICAP Special Case Resource	SCR	Deployed in energy shortage situations to maintain the reliability of the bulk power grid. SCR are paid for a commitment.	Energy Payment: Equal to the greater of \$.50 for each kWh curtailed, or the real-time zonal locational-based marginal price for an event, but no less than \$.50 per kWh curtailed paid to RIP Reservation (capacity): Monthly Capacity payment based on ICAP auction clearing price. (2013 Approximately \$14 per kW)
Day Ahead Demand Response Program	DADRP	Allows energy users to bid their load reductions, or "negawatts", into the Day-Ahead energy market.	Market based.
Demand Side Ancillary Services Program	DSASP	Provides the opportunity to bid load curtailment capability into the DAM and/or Real-Time Market to provide Operating Reserves and regulation service.	Market based.
Targeted Demand Response Program	TDRP	Deployed in targeted areas within Load Zone J under certain specific conditions and in response to a request for assistance from the Transmission Owner. There are 9 sub-load pockets within Zone J. While TDRP targets SCR customers, participation is completely voluntary.	Energy Payment: Equal to the greater of \$.50 for each kWh curtailed, or the real-time zonal locational-based marginal price, but no less than \$.50 per kWh curtailed paid to curtailment service provider/aggregator

NYISO TDRP - County/Network/Subzone

County	Network	Subzone
ВК	Bay Ridge	J3
ВК	Boro Hall	J8
BK	Brighton Beach	J3
BK	Crown Heights	J8
ВК	Flatbush	J3
BK	Ocean Parkway	J3
BK	Park Slope	J3
BK	Prospect Park	18
ВК	Richmond Hill	J8
BK	Ridgewood	J8
BK	Sheepshead Bay	J3
BK	Williamsburg	J8
BX	Central Bronx	J8
BX	Fordham	J1
BX BX	Northeast Bronx	J1 J1
 	Riverdale	
BX	Southeast Bronx	J1
BX	West Bronx	J2
MN	Battery Park	18
MN	Beekman	J3
MN	Bowling Green	J8
MN	Canal	J7
MN	Central Park	J8
MN	Chelsea	J7
MN	City Hall	J7
MN	Columbus Circle	J6
MN	Cooper Square	J7
MN	Cortlandt	J8
MN	Empire	J3
MN	Fashion	J3
MN	Freedom	J8
MN	Fulton	J8
MN	Grand Central	J3
MN	Greeley Square	J7
MN	Greenwich	J7
MN	Harlem	J8
MN	Herald Square	J6
MN	Hudson	J6
MN	Hunter	J2
MN	Kips Bay	J7
MN	Lenox	J8
MN	Lincoln Square	J6

County	Network	Subzone
MN	Madison Square	J7
MN	Park Place	J7
MN	Pennsylvania	J6
MN	Plaza	J6
MN	Randalls Island	J2
MN	Rockefeller Cen	J6
MN	Roosevelt	J2
MN	Sheridan Square	J7
MN	Sutton	J2
MN	Times Square	J6
MN	Triboro	J8
MN	Turtle Bay	J2
MN	Washington Hgts	J1
MN	Yorkville	J2
QN	Borden	J3
QN	Flushing	J5
QN	Jackson Heights	J5
QN	Jamaica	J5
QN	Long Island Cit	J5
QN	Maspeth	J3
QN	Rego Park	J5
QN	Richmond Hill -	J8
QN	Sunnyside	J3
SI	Fox Hills	J4
SI	Fresh Kills	J4
SI	Wainwright	J4
SI	Willowbrook	J4
SI	Woodrow	J4
WS	Buchanan	Н
WS	Cedar Street	I
WS	Elmsford	I
WS	Granite Hill	I
WS	Grasslands	I
WS	Harrison	I
WS	Millwood West	Н
WS	Mohansic	Н
WS	Ossining West	Н
WS	Pleasantville	I
WS	Rockview	ı
WS	Washington	1
WS	White Plains	·

2013 Demand Response Program Activity

Friday, May 24, 2013

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	9:25 AM (ASAP)	4:00 PM	Roosevelt	Event	0.29	3
Con Edison	DLC	9:25 AM (ASAP)	4:00 PM	Roosevelt	Event	0.009	8

Tuesday, June 25, 2013

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	CSRP - Day	2:00 PM	3:00 PM	Zone J	Test	54.30	113
Con Edison	CSRP - Night	7:00 PM	8:00 PM	Zone J	Test	16	67
Con Edison	CSRP - Day	2:00 PM	3:00 PM	*	Test	0.50	1
Con Edison	CSRP - Night	7:00 PM	8:00 PM	*	Test	6	1
Con Edison	DLRP	7:00 PM	12:00 AM	Flatbush	Event	0.44	3
Con Edison	DLC	7:00 PM	12:00 AM	Flatbush	Event	0.48	431

and are export demand response resources

Wednesday, June 26, 2013

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	12:00 PM	1:00 PM	All Networks	Test	91.3	583
Con Edison	DLRP	12:00 PM	1:00 PM		Test	8	1

^{*} is an export demand response resource

Saturday, July 6, 2013

Administrator	<u>Program</u>	<u>Time Start</u>	Time End	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	7:00 AM	12:00 PM	Fox Hills	Event	0.45	4
Con Edison	DLC	8:00 AM	12:00 PM	Fox Hills	Event	1.688	1,802

Tuesday, July 9, 2013

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	Modlet	6:00 PM	7:00 PM	Zone J	Test	1.9	1,955

Monday, July 15, 2013

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	CSRP - Day	12:00 PM	5:00 PM	Zone J	Event	30.47	150
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Zone J	Event	18.48	91
Con Edison	CSRP - Day	12:00 PM	5:00 PM	*	Event	0.50	1
Con Edison	CSRP - Night	5:00 PM	10:00 PM	*	Event	6	1
Con Edison	DLC	12:00 PM	5:00 PM	Zone J	Event	4.2	3,725
Con Edison	DLC	5:00 PM	10:00 PM	Zone J	Event	21.8	20,065
Con Edison	Modlet	12:00 PM	5:00 PM	Zone J	Event	1.9	1,955
Con Edison	DLRP	5:00 PM	10:00 PM	Fox Hills	Event	0.21	4
Con Edison	DLC	5:00 PM	10:00 PM	Fox Hills	Event	1.69	1,802
Con Edison	DLRP	6:00 PM	11:00 PM	Fresh Kills	Event	1.11	8
Con Edison	DLC	6:00 PM	11:00 PM	Fresh Kills	Event	1.25	1,364
NYISO	SCR	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	363.30**	5,616
NYISO	EDRP	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	4**	92
NYISO	SCR	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-
NYISO	EDRP	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-

^{*} and are export demand response resources
**MW's only within Con Edison's service territory; Zones H, I, & J

Tuesday, July 16, 2013

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>	
Con Edison	CSRP - Day	12:00 PM	5:00 PM	Zone J	Event	30.47	150	
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Zone J	Event	18.48	91	
Con Edison	CSRP - Day	12:00 PM	5:00 PM	*	Event	0.50	1	
Con Edison	CSRP - Night	5:00 PM	10:00 PM	*	Event	6	1	
Con Edison	DLC	12:00 PM	5:00 PM	Zone J	Event	4.20	3,725	
Con Edison	DLC	5:00 PM	10:00 PM	Zone J	Event	21.80	20,065	
Con Edison	Modlet	5:00 PM	10:00 PM	Zone J	Event	1.90	1,955	
NYISO	SCR	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	363.30**	5,616	
NYISO	EDRP	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	4**	92	
NYISO	SCR	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-	
NYISO	EDRP	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-	

are export demand response resources **MW's only within Con Edison's service territory; Zones H, I, & J

Wednesday, July 17, 2013

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	CSRP - Day	12:00 PM	5:00 PM	Zone J	Event	30.47	150
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Zone J	Event	18.48	91
Con Edison	CSRP - Day	12:00 PM	5:00 PM	*	Event	0.50	1
Con Edison	CSRP - Night	5:00 PM	10:00 PM	*	Event	6	1
Con Edison	DLC	12:00 PM	5:00 PM	Zone J	Event	4.20	3,725
Con Edison	DLC	5:00 PM	10:00 PM	Zone J	Event	21.80	20,065
Con Edison	Modlet	5:00 PM	10:00 PM	Zone J	Event	1.90	1,955
NYISO	SCR	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	363.30**	5,616
NYISO	EDRP	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	4**	92
NYISO	SCR	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-
NYISO	EDRP	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-

and are export demand response resources

Thursday, July 18, 2013

				1, , ,			
<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	CSRP - Day	12:00 PM	5:00 PM	Zone J	Event	30.47	150
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Zone J	Event	18.48	91
Con Edison	CSRP - Day	12:00 PM	5:00 PM	*	Event	0.50	1
Con Edison	CSRP - Night	5:00 PM	10:00 PM	*	Event	6	1
Con Edison	DLC	12:00 PM	5:00 PM	Zone J	Event	4.20	3,725
Con Edison	DLC	5:00 PM	10:00 PM	Zone J	Event	21.80	20,065
Con Edison	Modlet	5:00 PM	10:00 PM	Zone J	Event	1.90	1,955
NYISO	SCR	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	363.30**	5,616
NYISO	EDRP	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	4**	92
NYISO	SCR	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-
NYISO	EDRP	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-
Con Edison	DLRP	5:00 PM (ASAP)	12:00 AM	Fresh Kills	Event	1.11	8
Con Edison	DLC	5:00 PM (ASAP)	12:00 AM	Fresh Kills	Event	1.25	1,364
Con Edison	DLRP	10:59 PM	N/A	Williamsburg	Event	DR resources were not called	-

^{*} and are export demand response resources

^{**}MW's only within Con Edison's service territory; Zones H, I, & J

^{**}MW's only within Con Edison's service territory; Zones H, I, & J

Friday, July 19, 2013

Administrator	<u>Program</u>	Time Start	Time End	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	3:00 AM	N/A	Washington Street	Event	DR resources were not called	-
Con Edison	CSRP - Day	12:00 PM	5:00 PM	Zone J	Event	30.47	150
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Zone J	Event	18.48	91
Con Edison	CSRP - Day	12:00 PM	5:00 PM	*	Event	0.50	1
Con Edison	CSRP - Night	5:00 PM	10:00 PM	*	Event	6	1
Con Edison	DLC	12:00 PM	5:00 PM	Zone J	Event	4.20	3,725
Con Edison	DLC	5:00 PM	10:00 PM	Zone J	Event	21.80	20,065
Con Edison	Modlet	5:00 PM	10:00 PM	Zone J	Event	1.90	1,955
NYISO	SCR	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	363.30**	5,616
NYISO	EDRP	1:00 PM	6:00 PM	Zones G, H, I, J, K	Event	4**	92
NYISO	SCR	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-
NYISO	EDRP	1:00 PM	6:00 PM	Zones A, B, C, D, E, F	Event	N/A	-
Con Edison	DLRP	11:03 PM	N/A	South East Bronx	Event	DR resources were not called	-

^{*} and are export demand response resources
**MW's only within Con Edison's service territory; Zones H, I, & J

Saturday, July 20, 2013

Administrator	<u>Program</u>	Time Start	Time End	Zone/Network	Event/ Test	MW Pledged after De-rating	Accounts
Con Edison	DLRP	1:12 AM	N/A	Fordam	Event	DR resources were not called	-

Thursday, August 8, 2013

<u>Administrator</u>	<u>Program</u>	Time Start	Time End	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	SCR	1:00 PM	2:00 PM	Zones B, C, D, E	Test	DR resources were not called	-
NYISO	SCR	2:00 PM	3:00 PM	Zones A	Test	DR resources were not called	-
NYISO	SCR	3:00 PM	4:00 PM	Zones J	Test	DR resources were not called	-
NYISO	SCR	4:00 PM	5:00 PM	Zones F, G, H, I, K	Test	DR resources were not called	-

Thursday, October 17, 2013

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	SCR	3:00 PM	4:00 PM	Zones J	Test	DR resources were not called	-

Wednesday, October 30, 2013

Administrator	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	6:58 PM	7:52 PM	Brighton Beach	Event	DR resources were not called	-
Con Edison	DLRP	6:58 PM	7:52 PM	Flatbush	Event	DR resources were not called	-

2012 Demand Response Program Activity

Tuesday, May 29, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	SCR	1:00 PM	6:00 PM	Zones A, B, C, D, E, F,	Event	436.09*	2,517
				G, H, I, J, K			

^{*}MW's only within Con Edison's service territory; Zones H, I, & J

Wednesday, June 20, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	4:57 PM (ASAP)	12:00 AM	Williamsburg	Event	2.95	19
Con Edison	DLRP	4:57 PM (ASAP)	12:00 AM	Sheepshead Bay	Event	1.53	8
Con Edison	DLRP	4:57 PM (ASAP)	12:00 AM	Jamaica	Event	2.72	19
Con Edison	DLC	4:57 PM (ASAP)	12:00 AM	Williamsburg	Event	0.48	357
Con Edison	DLC	4:57 PM (ASAP)	12:00 AM	Sheepshead Bay	Event	0.38	288
Con Edison	DLC	4:57 PM (ASAP)	12:00 AM	Jamaica	Event	0.75	664
Con Edison	DLRP	5:18 PM (ASAP)	1:00 AM	Maspeth	Event	1.46	21
Con Edison	DLC	5:18 PM (ASAP)	1:00 AM	Maspeth	Event	0.42	322
Con Edison	DLRP	6:18 PM (ASAP)	2:00 AM	Richmond Hill	Event	1.36	14
Con Edison	DLC	6:18 PM (ASAP)	2:00 AM	Richmond Hill	Event	0.51	433
NYISO	SCR	2:00 PM	6:00 PM	Zones C,G,H,I,J	Event	436.09*	2,517
NYISO	EDRP	2:00 PM	6:00 PM	Zones C,G,H,I,J	Event	58.97*	55

^{*}MW's only within Con Edison's service territory; Zones H, I, & J

Thursday, June 21, 2012

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<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	CSRP - Day	12:00 PM	5:00 PM	Zone J	Event	50.20	230
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Zone J	Event	11.93	66
Con Edison	DLC	12:00 PM	5:00 PM	Zone J	Event	3.47	1,995
Con Edison	DLC	5:00 PM	10:00 PM	Zone J	Event	31.64	22,609
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Xx-Xx Xxxx**	Event	11.40	1
Con Edison	RSAP	5:00 PM	10:00 PM	Zone J	Event	0.14	145
Con Edison	DLRP	8:00 AM	3:00 PM	Flushing Network	Event	3.52	20
Con Edison	DLRP	8:00 PM	3:00 AM	Park Slope	Event	1.27	21
Con Edison	DLRP	9:00 PM	4:00 AM	Sheepshead Bay	Event	1.53	8
Con Edison	Modlet	5:00 PM	10:00 PM	Zone J	Event	0.38	966

NYISO	SCR	1:00 PM	6:00 PM	Zones A,B,C,D,E,F,G,H,I,J,K	Event	436.09*	2,517
NYISO	EDRP	1:00 PM	6:00 PM	Zones A,B,C,D,E,F,G,H,I,J,K	Event	58.97*	55

^{*} MW's only within Con Edison's service territory; Zones H, I, & J

** is an export demand response resource

Friday, June 22, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	7:00 AM	2:00 PM	Flatbush	Event	1.07	9
Con Edison	DLRP	5:00 PM	10:00 PM	Williamsburg	Event	2.95	19
Con Edison	DLRP	12:00 PM	1:00 PM	All Networks	Test	132.50	806
Con Edison	DLRP	12:00 PM	1:00 PM	**	Test	11.40	1
NYISO	SCR	1:00 PM	6:00 PM	Zones G,H,I,J,K	Event	436.09*	2,517
NYISO	EDRP	1:00 PM	6:00 PM	Zones G,H,I,J,K	Event	58.97*	55

^{*}MW's only within Con Edison's service territory; Zones H, I, & J

Wednesday, July 04, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	9:06 PM (ASAP)	2:00 AM	Flatbush	Event	1.07	9

Thursday, July 05, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	3:00 PM	8:00 PM	Crown Heights Network	Event	1.16	9
Con Edison	DLRP	10:30 PM	N/A	South East Bronx	Event	DR resources were not called	-

Friday, July 06, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	Modlet	6:00 PM	10:00 PM	Zone J	Event	0.38	966
NYISO	TDRP	3:00 PM	11:00 PM	J1, J3, J8	Event	Program was on standby but not called	-
NYISO	DLC	4:00 PM	5:00 PM	Zones I,J	Test	21.68	18,067

Saturday, July 07, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	Modlet	6:00 PM	10:00 PM	Zone J	Event	0.38	966
NYISO	TDRP	3:00 PM	11:00 PM	J1, J3, J8	Event	Program was on standby but not called	-

^{**} is an export demand response resource

Monday, July 16, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	TDRP	3:00 PM	11:00 PM	J3	Event	Program was on standby but not called	-
Con Edison	DLRP	1:20 PM (ASAP)	9:00 PM	Turtle Bay	Event	1.61	16

Tuesday, July 17, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	TDRP	6:00 PM	11:00 PM	J3	Event	55.00*	Not Available
NYISO	TDRP	6:00 PM	11:00 PM	J8	Event	Program was on standby but not called	-
NYISO	SCR	1:00 PM	7:00 PM	Zones A, B, C, D, E, F, G, H, I, J, K	Event	Program was on standby but not called	-
Con Edison	DLC	3:00 PM	8:00 PM	Bay Ridge, Fashion, Empire, Grand Central, Borden	Event	0.34 - Network Initiated Peak Shaving	255
Con Edison	DLC	5:00 PM	10:00 PM	Brighton Beach, Flatbush, Ocean Parkway, Park Slope, Sheepshead Bay, Beekman, Maspeth, Sunnyside	Event	2.46 - Network Initiated Peak Shaving	1,891
Con Edison	Modlet	5:00 PM	10:00 PM	Zone J	Event	0.38	966

^{*}J3 MW's may not be indicative of actual demand reduction due to voluntary basis and as large commercial customer base called outside general commercial hours.

Wednesday, July 18, 2012

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<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	7:09 AM (ASAP)	3:00 PM	Sutton	Event	4.59	21
Con Edison	CSRP-Day	12:00 PM	5:00 PM	Zone J	Event	50.20	230
Con Edison	CSRP - Night	5:00 PM	10:00 PM	Zone J	Event	11.93	66
Con Edison	CSRP - Night	5:00 PM	10:00 PM	**	Event	11.40	1
Con Edison	RSAP	5:00 PM	10:00 PM	Zone J	Event	0.14	145
Con Edison	DLRP	5:09 PM (ASAP)	12:30 AM	Ocean Parkway	Event	1.39	12
Con Edison	DLRP	9:00 PM	N/A	Flushing	Event	DR resources were not called	-
NYISO	SCR	2:10 PM	6:00 PM	Zones G, H, I, K	Event	48.09*	126
NYISO	SCR	1:00 PM	6:00 PM	Zone J	Event	388.00	2,391
NYISO	TDRP	6:00 PM	10:00 PM	J3	Event	55.00***	Not Available

^{*} MW's only within Con Edison's service territory; Zones H, I, & J

^{**} is an export demand response resource

^{***}J3 MW's may not be indicative of actual demand reduction due to voluntary basis and as large commercial customer base called outside general commercial hours.

Thursday, July 19, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	TDRP	6:00 PM	10:00 PM	J3	Event	Program was on standby but not called	-

Tuesday, July 24, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	TDRP	3:00 PM	10:00 PM	J3	Event	Program was on standby but not called	-

Thursday, July 26, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	TDRP	3:00 PM	10:00 PM	J3	Event	Program was on standby but not called	-

Friday, July 27, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
NYISO	TDRP	3:00 PM	10:00 PM	J3	Event	Program was on standby but not called	-

Thursday, August 02, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	12:00 PM	5:00 PM	Riverdale	Event	1.40	11
NYISO	SCR	4:00 PM	5:00 PM	E, F, G, H, I	Test	48.09*	126
NYISO	SCR	5:00 PM	6:00 PM	J,K	Test	388.00*	2,391

^{*}MW's only within Con Edison's service territory; Zones H, I, & J

Thursday, August 09, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	1:00 AM	N/A	Sheridan Square	Event	DR resources were not called	-

Wednesday, August 15, 2012

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	5:00 PM	N/A	Sheepshead Bay	Event	DR resources were not called	-
Con Edison	Modlet	5:00 PM	10:00 PM	Zone J	Event	0.38	966

Friday, August 24, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	11:00 AM	N/A	West Bronx	Event	DR resources were not called	-

Friday, August 31, 2012

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<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	5:30 AM	N/A	Central Park	Event	DR resources were not called	-

Sunday, September 16, 2012

<u>Administrator</u>	<u>Program</u>	Time Start	Time End	Zone/Network	Event/ Test	MW Pledged after De-rating	<u>Accounts</u>
Con Edison	DLRP	10:48 AM (ASAP)	7:00 PM	Brighton Beach	Event	1.17	8
Con Edison	DLRP	10:48 AM (ASAP)	7:00 PM	Flatbush	Event	1.07	9

2011 Demand Response Program Activity

Wednesday, June 08, 2011

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Reduction Achieved	<u>Accounts</u>
Con Edison	DLRP	3:00 P.M.	4:00 P.M.	All	Test	127.62	701
Con Edison	DLC	3:00 P.M.	4:00 P.M.	All	Test	28.63	20,442
Con Edison	RSAP	4:00 P.M.	5:00 P.M.	J	Test	0.01	110

Thursday, June 09, 2011

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Reduction Achieved	<u>Accounts</u>
Con Edison	CSRP	2:00 P.M.	3:00 P.M.	All	Test	17.04	115
Con Edison	CSRP	5:00 P.M.	6:00 P.M.	All	Test	4.16	30

Tuesday, July 19, 2011

<u>Administrator</u>	<u>Program</u>	Time Start	<u>Time End</u>	Zone/Network	Event/ Test	MW Reduction Achieved	<u>Accounts</u>
NYISO	SCR (ICAP)	3:00 P.M.	4:00 P.M.	н&।	Test	42.20	84
NYISO	SCR (ICAP)	4:00 P.M.	5:00 P.M.	J	Test	473.53	1,346

Thursday, July 21, 2011

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Reduction Achieved	<u>Accounts</u>
Con Edison	RSAP	11:00 A.M.	7:00 P.M.	J	Event	0.01	110
Con Edison	CSRP - Day	12:00 P.M.	5:00 P.M.	J	Event	21.40	115
Con Edison	CSRP - Night	5:00 P.M.	10:00 P.M.	J	Event	6.20	30
Con Edison	DLC	1:00 P.M.	6:00 P.M.	All	Event	32.38	20,442
NYISO	SCR (ICAP)	1:00 P.M.	6:00 P.M.	All	Event	515.73	1,430
NYISO	EDRP	1:00 P.M.	6:00 P.M.	All	Event	65.55	48

Friday July 22, 2011

<u>Administrator</u>	<u>Program</u>	Time Start	Time End	Zone/Network	Event/ Test	MW Reduction Achieved	<u>Accounts</u>			
Con Edison	CSRP - Day	12:00 P.M.	5:00 P.M.	J	Event	29.52	115			
Con Edison	CSRP - Night	5:00 P.M.	10:00 P.M.	J	Event	6.72	30			
Con Edison	DLRP	7:00 A.M.	3:00 P.M.	Elmsford	Event	0.30	9			
Con Edison	DLC	7:00 A.M.	3:00 P.M.	Elmsford	Event	0.78	809			
Con Edison	DLRP	7:00 A.M.	3:00 P.M.	Maspeth	Event	2.66	18			
Con Edison	DLC	7:00 A.M.	3:00 P.M.	Maspeth	Event	0.37	275			
Con Edison	DLRP	6:00 P.M.	11:00 P.M.	Richmond Hill	Event	1.98	14			
Con Edison	DLC	6:00 P.M.	11:00 P.M.	Richmond Hill	Event	0.34	163			
Con Edison	DLRP	6:00 P.M.	11:00 P.M.	Fox Hills	Event	0.79	5			
Con Edison	DLC	6:00 P.M.	11:00 P.M.	Fox Hills	Event	1.66	1,493			
Con Edison	DLC	6:00 P.M.	11:00 P.M.	Ossining West	Event	0.50	384			
Con Edison	DLRP	6:00 P.M.	11:00 P.M.	Sheepshead Bay	Event	3.20	8			
Con Edison	DLC	6:00 P.M.	11:00 P.M.	Sheepshead Bay	Event	0.27	249			
Con Edison	DLRP	7:31 P.M. (ASAP)	11:00 P.M.	Granite Hill	Event	0.90	4			
Con Edison	DLC	7:31 P.M. (ASAP)	11:00 P.M.	Granite Hill	Event	0.63	590			
Con Edison	DLRP	8:19 P.M. (ASAP)	11:00 P.M.	Buchanan	Event	-0.01	1			
Con Edison	DLC	8:19 P.M. (ASAP)	11:00 P.M.	Buchanan	Event	0.70	653			
Con Edison	DLRP	9:03 P.M. (ASAP)	6:00 A.M.	Ridgewood	Event	-0.12	9			
Con Edison	DLC	9:03 P.M. (ASAP)	6:00 A.M.	Ridgewood	Event	0.08	143			
Con Edison	DLRP	9:03 P.M. (ASAP)	6:00 A.M.	Rego Park	Event	0.23	12			
Con Edison	DLC	9:03 P.M. (ASAP)	6:00 A.M.	Rego Park	Event	0.43	526			
NYISO	SCR (ICAP)	12:00 P.M.	6:00 P.M.	J	Event	473.53	1,346			
NYISO	EDRP	12:00 P.M.	6:00 P.M.	J	Event	61.85	39			
NYISO	SCR (ICAP)	1:00 P.M.	6:00 P.M.	H & I	Event	42.20	84			
NYISO	EDRP	1:00 P.M.	6:00 P.M.	H & I	Event	3.70	9			

Saturday, July 30, 2011

<u>Administrator</u>	<u>Program</u>	<u>Time Start</u>	<u>Time End</u>	Zone/Network	Event/ Test	MW Reduction Achieved	<u>Accounts</u>
Con Edison	DLRP	12:00PM	12:00 A.M.	Central Park	Event	0.21	8