

Honeywell  
145 Rt 46 West  
Wayne Interchange Plaza 1  
Wayne, New Jersey 07470  
(973) 890-9500  
(973) 890-1531 Fax

August 1, 2008

IN THE MATTER OF  
DEMAND RESPONSE PROGRAMS  
FOR THE PERIOD BEGINNING JUNE 1, 2009  
MARKET-BASED PROGRAMS  
DOCKET NO. EO08060421

New Jersey Board of Public Utilities Request  
For Proposals To Implement A Market-Based  
Demand Response Program

VIA ELECTRONIC & OVERNIGHT MAIL

Kristi Izzo, Secretary  
Office of the Secretary  
Board of Public Utilities  
Two Gateway Center  
Newark, New Jersey 07102

Dear Secretary Izzo:

Enclosed for filing are the original and ten copies of Honeywell's proposal to operate a Demand Response, Market- Based Program for the New Jersey Board of Public Utilities in the State of New Jersey. Honeywell is also providing this filing to you as an electronic copy.

We stand ready to meet the procedural schedule for this matter and look forward to assisting the State of New Jersey help its citizens and business reduce their annual energy consumption as well as the State's electricity peak load.

Respectfully,

*David Holland*

David Holland  
Honeywell, Account Executive – Energy Services

# Honeywell

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**Submitted by Honeywell  
August 1, 2008**

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## 1.0 EXECUTIVE SUMMARY

Honeywell Utility Solutions (Honeywell) is pleased to submit our concept proposal to implement a Market – Based Demand Response (DR) Program for the New Jersey Board of Public Utilities (NJBPU).

### Outsourcing Partnership

It is Honeywell’s goal to continue to provide long term benefits to the citizens and businesses of New Jersey in helping them manage their energy needs. Through a well constructed DR program sponsored by the NJBPU, Honeywell can provide the tools required to deliver a program that will decrease New Jersey’s total annual electricity consumption and/or reduce the State’s electricity peak load.

### Honeywell’s Enterprise Solution

Honeywell’s Enterprise Solution has several key components:

- A robust database application for DR that can also tie future Smart Meter programs;
- One contact point for NJBPU that understands your EMP and DR goals and objectives;
- Delivery of a consistent brand and voice to your customers;
- Honeywell DR technology that drives the market forward by being able to interact with the SmartGrid systems of the future;
- The ability to staff from local communities fostering and established New Jersey contractors creating the path for “Green Jobs”.

### Point of Control Technology and Accompanying Software

Honeywell has partnered with Cannon Technologies to produce the industry’s leading demand response solutions. Cannon’s Yukon system provides the control software that allows for the demand response events that reduce load as desired. This software provides a suite of capabilities. Both the UtilityPro (Honeywell DR thermostat) and Yukon products will be discussed later within this document.

### Information Technology

Honeywell’s Backbone Client Server (BBCS) runs EVERY Honeywell Utility Solutions program across the country. Energy conservation, DR and meter services – all one application. BBCS has exceptional field work order, back office management, reporting, web interfaces and real time data capabilities. By running this program through BBCS, your management team will have one

### The Honeywell Difference

- 18+ years of experience providing innovative DR and energy efficiency solutions to consumers and businesses of New Jersey.
- Providing turnkey programs that offer marketing, customer service, installation, quality assurance, reporting and system maintenance.
- More DR thermostats installed, by far, than any other provider.
- Consistently high rates of customer satisfaction and customer understanding of program & thermostat.
- 24/7 live customer service.
- An experienced DR management team with proven processes ready to begin ramp-up activities.
- The brand recognition and financial stability of Honeywell, a Fortune 50 company.
- An advanced IT tracking system with electronic work order system.

source for key information regarding the program's production milestones, customer interactions, quality and issue resolution. With Honeywell's BBCS as the "backbone" IT infrastructure – NJBPU will be ensured program consistency, flexibility and accuracy.

#### Marketing and Customer Service

One consistent message – one consistent resource for New Jersey residents and business to reach out to and get answers. Since Honeywell has intimate knowledge of the New Jersey Clean Energy Programs™(NJCEP), we have the knowledge to develop effective marketing campaigns, as well as deliver the highest level of customer service to program participants. To your customers, we are "you" – we take that responsibility very seriously.

#### Program Delivery

While Honeywell is very capable of delivering this DR program, we understand that there are times when utilizing additional resources (utilities, other CSPs) would be desirable to NJBPU. You have established very lofty goals for this initiative and it may take an "all hands on deck" approach in order to fulfill them. Please be aware that Honeywell's enterprise solution facilitates the incorporation of multiple contractors allowing for a program to be delivered under "one umbrella". One umbrella means one information technology system, one operational process, one source for customer service. Ultimately, it means one face of NJBPU to the customer base. We would be happy to discuss this concept further with the NJBPU should it wish to consider a consistent deployment across customer class and service providers.

#### Delivering Day to Day

Before Honeywell had an enterprise solution, we made our reputation delivering our clients' program objectives each and every day. This mindset is still at the heart of our success. A large scale enterprise partnership is only effective if the day to day details for each program, and for every customer in those programs, are effectively managed and mastered. Honeywell is accomplished in the delivery of energy conservation, DR and meter automation – no one can match our resume across all three disciplines. We understand what it takes to deliver excellence to our clients and their customers – and we do it every day.

#### Customer Delight

At the heart of all of our efforts is the New Jersey resident or business. With rising energy costs, emerging technologies and continual press coverage, no other time in our history have customers been as inquisitive about what they can do to save energy, as well as concerned about their rising energy bills. Honeywell will focus on providing the right solution and right application for each

customer. We specialize in not only implementing effective solutions, but also taking the time to educate your customers so that they feel good about the benefits they receive from your programs.

***Honeywell can deliver the foundation on which to build your future success.***

**Program Understanding**

Honeywell understands that NJBPU seeks a qualified contractor(s) to install and operate a DR system through a market-based approach that will result in up to 600 MW’s of new DR over a three year period beginning June 1, 2009. This, when coupled with an EDC plan to deliver an additional 600 MW’s through a parallel effort, will require your vendors to work through many details and processes in order to establish a program that can be coordinated and delivered to New Jersey customers in a concise and consistent way as to avoid sending many mixed messages to the marketplace. That said, there are several key attributes that the NJBPU should look to its vendor to provide including:

- Program design and development support, as well as planning and management;
- Complete installation services for chosen technologies (thermostats, switches, automation systems, etc.);
- Customer appointment scheduling (in coordination with the marketing efforts);
- Complete call center support, operating 7 days per week, 24 hours per day;
- Email and web-based reporting, tied to a real-time DR program database;
- Safety monitoring and quality assurance.

Honeywell understands the magnitude that DR can contribute to allowing New Jersey to meet its capacity requirements of the future. We know that the NJBPU is interested in a potential two pronged approach (EDCs, Market-base) in order to reach its’ goals. We have the people, the expertise, the tools, and the processes to effectively implement the DR program, and to leverage our BBCS database for streamlined management and maximized efficiencies. Honeywell’s ability to deliver seamless integration of work tasks and customer-facing presence will make all the difference for NJBPU.

Our depth of experience has provided us with key insights into the success factors necessary to meet these goals, they include:

**Best-in-Class Customer Care**

*“If only all service companies were as competent!” ...*

*“Everybody that I interacted with knew their stuff and was very polite. A pleasant surprise. Thanks!” ....*

*“Your technician was most courteous and helpful” ...*

*“Being senior citizens and not very knowledgeable with today’s computerized world, he was most helpful and gracious.” ...*

*“Customer Service rep was superb”*

- Hydro Ottawa Customer

### Unmatched Customer Care

Another customer value/benefit we offer is unmatched customer care. For example, under the pilot DR program we recently implemented for Hydro Ottawa, our Technicians and Customer Service Representatives (CSRs) provided world-class bilingual customer service for Hydro Ottawa's customers. Over 97% of Hydro Ottawa's customers rated our CSRs as good/excellent, and over 98% rated Technicians as good/excellent.

Successful completion of our extensive customer service training program by both field technicians and call center employees is required for assignment to the program. We have monthly refresher trainings for all our teams, and customer service and support topics are often the subject of these meetings. We achieve high levels of customer satisfaction and many unsolicited customer compliments regarding our work. We recognize the importance of pleasing our clients' customers, and our focus on this has enabled our success in programs over the years.

### Firmness/Persistence of Demand Response Capacity

Our DR programs deliver long-lasting controllable load/savings. Programs we began in the early 1990's are still providing reliable and substantial controllable load for those clients. Having installed 800,000 points of control over the last 18 years, we know how to deliver value for the long-term benefit of our clients. Our technical / installation processes and customer retention capabilities help our clients to realize the longest possible and consistent return on the dollars invested in for their programs.

### Seamless Connectivity Between Marketing and Installation

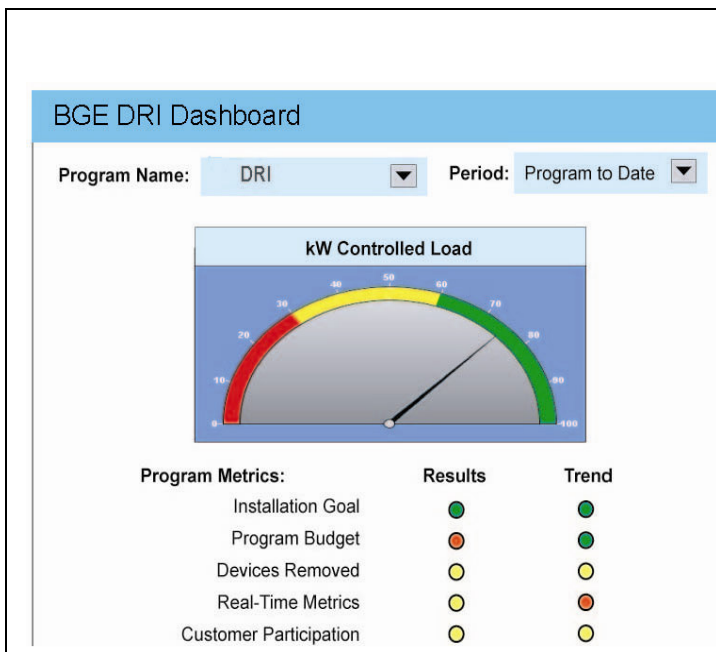
By selecting Honeywell for both the marketing and the DR installations, NJBPU will enjoy seamless integration of the marketing and installation functions. Honeywell also has the capability to market for AMI programs, which we would suggest play an important role in the future of New Jersey's energy, demand and GHG reduction plans. Such linkage of DR and AMI will provide customers with more robust choices. We would be happy to discuss these concepts with the NJBPU.

Our DR team will work with the marketing team to develop a timeline of meetings and strategy-sharing. We will support the efforts of the marketing team, and be fully prepared for project roll-out and the ramp up of requested volumes. Honeywell has performed this type of coordination before with both marketing vendors and utility clients' in-house marketing teams. On many of our DR programs, the marketing is included in Honeywell's work-scope, so we know exactly what needs to be done and how smooth coordination can effect strong program outcomes.

**Innovation**

Innovation is built into Honeywell’s new, state-of-the-art DR thermostat, with its wide range of demand-response functionalities, and its customer-friendly VisionPRO platform. We believe customer acceptance levels for this thermostat will be very high.

In addition, our BBCS data system includes all the data tracking, data quality assurance, and client reporting capabilities that you would expect from a sophisticated application specifically developed to support load control implementation projects. With its **Dashboard-Driven Data Management**, we will deliver high



quality data and offer a full, dashboard-based data access system for NJBPU. Our tracking system is a sophisticated and proven application that has been specifically developed to support load control implementation projects. It is a modular system that we will configure to support this initiative, and its functionality includes equipment inventory tracking, lead and backlog tracking, scheduling and customer service, installation work orders, wireless dispatch and resolution with field technicians, web-based, and dashboard-configured access for NJBPU.

It can also sort data from the client CIS to identify those customers most likely to be eligible and among those, most likely to participate. It can also track customer participation over multiple utility programs, and ad-hoc reports can be generated quickly to meet client needs. It is especially valuable in facilitating analysis of program results and identifying best practices. Our systems allow us to track all activity, including every interaction that one of our employees has with a customer.

We also deliver innovation through our advanced training programs, addressing customer service, field processes, technical issues and safety, for all our DR programs.



### CPP Expertise

We have expertise with Critical Peak Pricing (CPP) programs and have participated in various pilots throughout the Northeast. Honeywell Utility Solutions provides key program support services. These pilots were designed to test two-way communications for residential customers using a combination of technologies including two-way meters, load management, and Time-Of-Use with critical peak pricing (TOU). Customer data is collected remotely using a number of technologies from various equipment manufacturers.

Honeywell provides:

- A toll-free customer care phone line to respond to customer calls including:
- A Customer Service Specialist (CSS) responsible to work with pilot participants on detailed billing inquiries, perform program reporting functions, maintain the program tracking system and be the “point of contact” for hardware/installation vendors. Knowledge the TOU pricing structures, pilot segmentation strategy, and billing format.
- Schedule program equipment installations for several contractors across the various segments of the program.
- Install the utility activated load management equipment.
- Perform independent third-party quality control inspections.
- Provide oversight and management of the myPower data base of customer information including customer contact and installation records as well as customer demographic data for program evaluation.

### Implementation Resources

We plan to implement the DR program using a blend of internal and subcontracted installation labor. Considering the size of the program, this approach will give us maximum flexibility, and with a sizeable internal and contracted work force, we can manage the process effectively. For both internal and subcontracted technicians, all safety and quality benchmarks will be the same.

### Safety

Honeywell has an enviable safety record in the implementation of DR programs. Our attention to stringent safety and health practices, including the consistent use of PPE equipment, design of task-specific safe work practices, and our consistent focus on safety in all operations, will help to further bolster NJBPU’s reputation in the regulatory industry as a leader to promoting safety. We have often been complemented by our clients for our safety and injury prevention, and we have consistently done very well on formal safety audits.

## Conclusion

Through 800,000 switch, thermostat, and gateway installations, Honeywell has developed the expertise and the resources needed to assist the NJBPU in meeting its goals under this program. We plan to bring to the project the latest in DR-enabled thermostat technology, as well as our best practices gained through our years of load management deployment throughout North America.

In closing, our concept proposal represents a unique combination of the right people, the right technology and processes, the best credentials, and the organizational readiness needed to provide a peerless offering for NJBPU.

## Contact Person, Honeywell Utility Solutions

The contact person for this concept proposal is:

David Holland, Account Executive – Energy & Demand Services  
Honeywell Utility Solutions  
(973)-890-9500  
Dave.Holland@honeywell.com

## 2.0 TARGETED CAPACITY REDUCTION

Honeywell has carefully considered the amount of targeted DR it could contribute to NJBPU's goal in concert with the participation by the local EDC's as well as other providers including energy suppliers, curtailment service providers (CSPs). Given this, Honeywell is pleased to nominate 100 MW of residential DR reduction and 150 MW of commercial DR reduction.

Honeywell anticipates utilizing its' UtilityPRO thermostat for all of the residential and small commercial customer base. The UtilityPRO thermostat can be used to control CAC and heat pump units in the residential and small commercial markets. Typical DR kW rates average approximately 1kW for residential application per stat, and up to 3kW for small commercial application per thermostat. Although there are programs of all sizes, it is our experience that a customer participation penetration rates can effectively be designed for a DR program to attract up to 10% (short term) and up to 25% (longer term 5+ years).

## 3.0 PROGRAM DESIGN

Honeywell acknowledges that the NJBPU desires to have both an EDC and Market-Based suite of DR programs to assist it in achieving a relative goal of nearly 1200 MWs of dispatchable load within a 3 year period commencing in June 1, 2009. To do this, Honeywell believes it will truly take an "all hands on deck" approach whereby multiple parties (EDC's, CPS's, etc.) will be required to serve various market segments (residential, small commercial, larger C&I) in order to achieve the desired results.

### Residential/Small Commercial Markets

Honeywell believes that the NJBPU may best serve and grow the residential DR program through the already existing EDC programs currently serving this marketplace. A recent study performed by Summit Blue acknowledges that recent trends in technology as well as marketplace technical potential (within this market segment) exist to significantly grow the utility delivered programs of today. These programs have demonstrated that several hundred thousand points of control can be installed cost effectively, timely and through tried and proven full turnkey program approaches.

Honeywell is prepared to support the EDC's in this endeavor as we have been providing DR resources in the State since the early 90's. Or, should it be the preference of the NJBPU, Honeywell can work to design an independent program approach that can work in concert with the local EDC's.

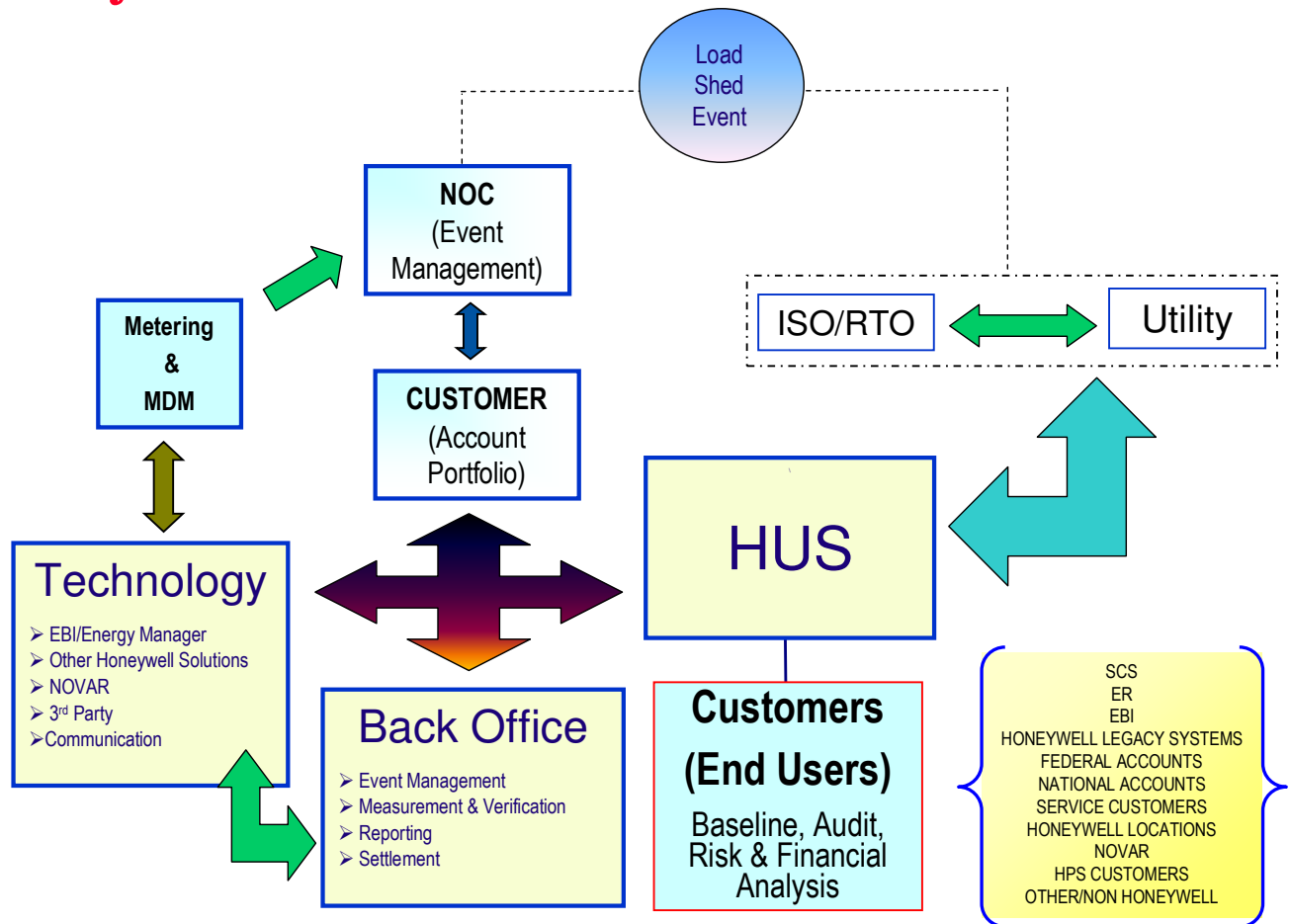
## Commercial – Industrial Markets

Honeywell’s Commercial and Industrial DR offering provides a robust, responsive and scalable end to end solution. Honeywell offers a suite of products for medium and large commercial, Industrial and Institutional clients. Honeywell has a well established base of small, medium and large Commercial and Industrial customers that have Honeywell/Novar controls installed in their facilities. In addition to this, Honeywell also services and maintains many facilities that have automation systems manufactured by other vendors.

Honeywell has enabled DR offerings at many client locations including large commercial, institutional and big box retailers across the country. Honeywell has over 150 professionally certified engineers on their staff to conduct an in-depth analysis of customers’ loads to determine the appropriate curtailment strategy that meets the customer needs. We take a “bottoms-up” approach to identify the curtailable loads and conduct many ideation sessions with the customer to develop a strategy that meets the customer needs. Our solution is truly co-authored to ensure maximum participation. Honeywell has a dedicated national energy analysis team [Honeywell Energy Analysis Team (HEAT)] that specializes in setting up baselines and carrying measurement and verification protocols as required by the utility

Our solutions will be tailored to meet the needs of New Jersey Board of Public Utilities and the Utilities serving the customers to deliver or exceed the contracted capacity while creating a “win-win” for all stake holders. For a look at a typical commercial DR program flow, please see the chart on the following page.

Honeywell



## Program Components

As previously mentioned, we have the complete breath of turnkey services (including DR product, marketing, installation, QA, tracking and reporting) in order to get the job done. Below, we address several of these areas:

### New Demand Response Thermostat Technology

As a technology leader in the DR industry, Honeywell's research and development team has created a new, state-of-the-art DR thermostat that is designed precisely to gain customer acceptance of these programs. The UtilityPRO® thermostat incorporates all the best features and functionality of our existing thermostat combined with the latest technological advancements based on regulatory trends, market trends, and input from our DR clients. The UtilityPRO features a top-of-the-line customer interface, full DR functionality, and Cannon Technology's Yukon software platform.



Honeywell shares NJBPU's vision and passion for the potential of DR, and we have invested substantial time, expertise, and financial resources to remain the DR leader. Honeywell was the first implementation contractor to undertake DR programs on a large scale in the late 1980's, and we remained firmly in the business when it lost favor in the 1990's. As environmental, capacity, and transmission issues resurfaced, and DR technologies improved, Honeywell was there, ready to serve utilities. Today, we are still at the forefront, staying ahead of the ever-evolving technological, regulatory, and market landscape in order to best serve our DR program clients.

### UtilityPRO Thermostat Design Overview

The new UtilityPRO thermostat is based on our VisionPRO platform. The UtilityPRO has a brand new customer interface and ergonomically appealing design.

Just a few of the key features are:

- ✓ Allows a utility to send messages to the customer;
- ✓ Allows a utility to send billing data to the customer, including both dollar cost and year-over-year comparative monthly kWh consumption data;
- ✓ A large, easy to read, backlit display;

- ✓ Allows for priority in overriding customer settings during peak periods.
- ✓ Ability to integrate with AMI for two-way communication.

We believe that any customer would be excited to own and use this new thermostat. It is a top-of-the-line device that, in addition to full function DR technology, will provide customer with a wide range of strategies and features for saving energy in the home.

Honeywell’s new thermostat takes proven DR technologies and combines them with state-of-the-art thermostat technologies. Our VisionPRO platform is the market leader, and more than 500,000 units are sold each month. We believe this new thermostat will have strong appeal among your customers, as it has elsewhere. The UtilityPRO is programmable via the internet, and provides many other customer-pleasing features.

Following are key features of the new UtilityPRO thermostat:

Easy to Read / Easy to Use Customer Interface

- ✓ Large display area
- ✓ Back lit
- ✓ Touch screen
- ✓ Completely programmable
- ✓ Scrollable, deletable text messages
- ✓ Flashing backlight for new messages
- ✓ Customer-specific information
  - kW usage / \$ value
  - “So far this month”
  - “This time last year”
- ✓ Indication of a DR event

Demand Response features:

- ✓ Cycling
- ✓ Temp. ramping
- ✓ Temp. ramping w/cycling
- ✓ Temp. set back
- ✓ Complete utility control / override
- ✓ 100% forward/backward compatibility with Cannon communications technology and Yukon software

The Honeywell UtilityPRO® thermostat meets the full range of DR needs and customer preferences:

<b>Thermostat Features</b>	<b>UtilityPRO Functionality</b>
Individually addressable	✓
Local intelligence and non volatile memory	✓
Remote programmability	✓
Multiple set points for heating and cooling	✓
7 day programming (5-1-1)	✓
Rate period programming	✓
Manual programming override	✓
Tactile control buttons	✓
Easy to read display	✓
Ease of operation and programming	✓
Power stealing	✓
Accuracy to +/- 0.5 Degree C	✓
Control event indication	✓
Duty cycle control	✓
Adaptive algorithms	✓
Heat pump and commercial customer compatible	✓
Compatible with gas, oil and electric	✓
Accommodate critical period pricing	✓
Remote control over the internet	✓
Bi-directional communication	✓
Flexible event/cycling parameters	✓
Upper/lower temperature limits	✓
Event data logging	✓
Load rebound protection	✓
Flexible open standard communication media	✓
Future compatibility with smart meter data	✓



The UtilityPro Programmable Demand Response thermostat combines Cannon's load management communications and control with a Honeywell programmable thermostat. The innovative pre-cool/ramp-in/ramp-out command combines the best aspects of air conditioner cycling and temperature control. The thermostat is a joint alliance effort of Honeywell, the recognized leader of home comfort control systems and Cannon Technologies, the Industry Leader of cost effective load control solutions. Cannon Technologies has helped Honeywell add the key features to the thermostat for Utility Price Response and Demand Response programs. These features include advanced thermostat capabilities and the turnkey solution for delivery to utilities.



**Master Station Overview**

The Cannon software system is a suite of programs for load management, data collection, control, and distribution automation, collectively named YUKON™.



Design emphasis for Yukon has been placed on integration to other systems because of the needs of today's utility operations center. The master station is built to work as a standalone system or in concert with SCADA/EMS. All the programs are inherently "two-way", that is they gather and use data from real, pseudo, or calculated points and are then capable of sending data updates or control signals. Electric utilities use Yukon to run commercial, industrial and residential load management programs, control distributed generation, and manage power factor. The software is designed to be both simple to use and scalable to a very large system. Cannon personnel have extensive load management implementation experience which allows them to offer start-up, training and support services geared to PacifiCorp's specific needs.

In addition to its support of meters from ABB, Siemens, Schlumberger, GE and others, the software is designed as a generalized system for control and data acquisition. The specifics of the metering and control devices are kept separate from the business logic, making the system device independent. We have strong relationships with all major metering vendors but we are allied with none in particular. Both directly and through the GE/Harris family of communications gateway products, Yukon supports intelligent electronic devices and integration with many different systems from billing to SCADA.

### **Load Management Control Center**

Cannon Technologies is the single point of contact for all technical support for the Yukon load management system. All calls will come into the Cannon Support Desk. Records are made and updated after every customer consultation. A continuous, online history for each customer is shared among Cannon engineers to facilitate a quick response in addressing customer software questions or problems.

### **Marketing of DR Programs**

Honeywell provides turnkey marketing services for energy efficiency, DR, meter services, and renewable energy program to customers across North America to ensure that program participation goals are met. Our marketing capabilities include:

- a full suite of Internet-based marketing strategies
- direct mail
- broadcast and print advertising
- point-of-purchase materials
- focused community outreach efforts
- media outreach
- inbound and outbound telemarketing
- direct selling

We provide turnkey marketing services for:

- Residential outreach programs
- Market transformation programs to recruit residential customers and contractors/suppliers
- Programs to target small- and medium-sized commercial installations including multi-family properties
- Marketing for “umbrella” conservation programs for utilities that incorporate multiple conservation program under an inclusive umbrella to create consistency in messaging and cross-selling opportunities
- Launch for pilot programs

Honeywell’s marketing strategies, plans and materials are customized for each utility and program. We also provide complete tracking, measurement and reporting on marketing results to drive strategy and forward planning. Our marketing team carefully coordinates our outreach efforts with our call center, field operations and information technology teams to optimize our ability to measure marketing effectiveness, manage the flow of customer enrollments, control quality and costs, and adapt the marketing programs dynamically to ultimately deliver program participation goal. The following are overviews of several marketing programs that Honeywell currently implements for our DR customers

**Kansas City Power & Light**

Honeywell provides complete marketing services for KCP&L’s Energy Optimizer DR program. Honeywell was initially selected to market the Energy Optimizer’s 3-year pilot program and in spite of a one year delay due to regulatory issues, Honeywell delivered the installations a year and a half ahead of schedule. Honeywell provides outreach to residential, multi-family and small commercial customers through direct mail, advertising, email and community outreach. Honeywell has enrolled over 24,000 KCP&L customers to date.



*Above: An example of a direct mail piece created by Honeywell Utility Solutions.*

**Baltimore Gas & Electric**

BGE recently launched the PeakRewards program to help customers save energy, money and improve the environment. BGE is one of the first utilities to install Honeywell’s UtilityPRO smart thermostat and has set aggressive goals to enroll nearly half of the territory’s eligible customers in the program in less than four years. Honeywell is deploying all marketing programs to achieve that goal including internet marketing, direct mail, community outreach, events, and advertising in newspaper, magazine, transit, billboard cinema and television.



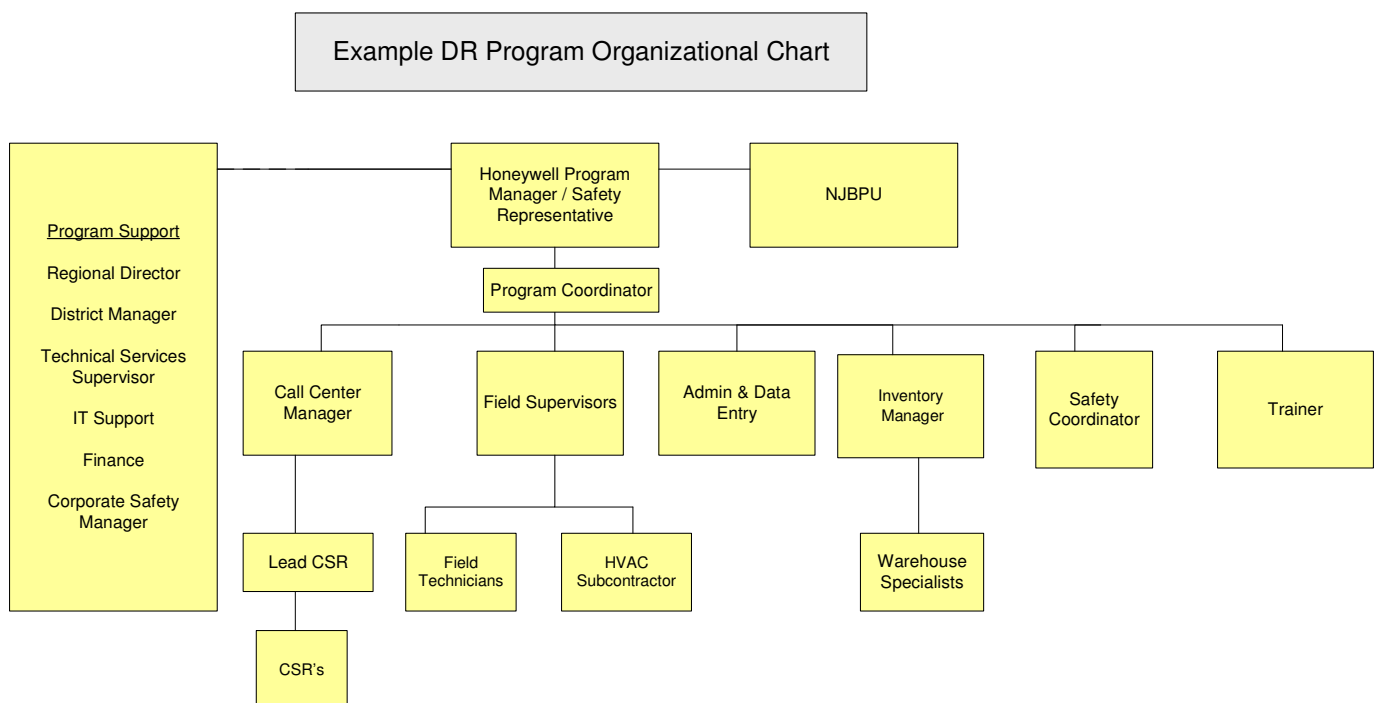
**Southern California Edison**

Through direct selling, Honeywell markets SCE’s innovative Night Shift load shift program which promotes “Ice Bear” technology to commercial buildings. Honeywell designed and now manages the entire program, including the creation and distribution of marketing materials including brochures, outreach via telemarketing and direct sales, presentation materials and application forms. Honeywell also created a website (<http://www.nightshiftprogram.com>) describing the new technology and the program benefits.



**Program Management**

A key to having a successful program is to ensure that there is a comprehensive management structure in place that can meet the challenges associated with such a large DR program envisioned by NJBPU. Please refer to the following chart for a view of a typical organization chart that plots the relationships of each position to the overall program organization.

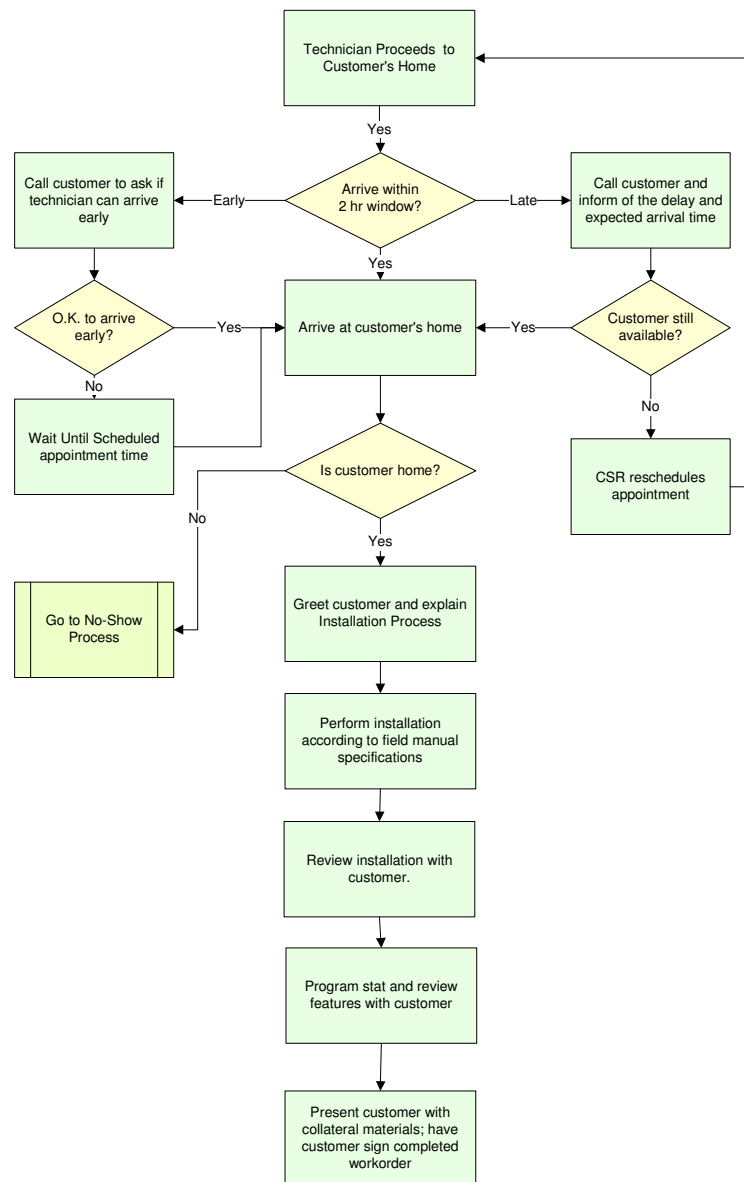


## Deployment

Deployment of DR program's vary depending on which market segment is served. For example, for the residential market, key aspects of this deployment approach would include:

- Appointment Scheduling
- Installer/Customer Appoint
- Program Briefing
- Installer Site Inspection
- Signal Testing
- Equipment Installation
- Site Visit Closeout
- Complete WorkOrder
- Customer Training
- Data Upload

The flow chart to the right depicts the installation process:



### **Customer Care Center**

Honeywell owns and operates a Global Service Response Center located in Atlanta, GA. This is a 25,000 square feet, customer service facility that has been in operation since 1982. It is staffed 24 hours a day, seven days a week by 85 fully trained service professionals. In addition to being fully trained in all areas of customer service, the staff is also highly experienced. The average tenure for these professionals is nine (9) years. Each year, they handle over 1.8 million customer transactions including phone, data/alarm, and electronic requests. The efficiency of these professionals is well above average. Of all inbound calls, 92% are answered by a live person within 12 seconds and 95% are answered by a live person within 30 seconds.

In addition to a superior staff, this call center will offer multiple services to the NJBPU customer. To accommodate the approximate ten other languages spoken in NJBPU's service territory, there is a multi-lingual service which offers dispatching and/or scheduling support to the Honeywell Business Solutions Americas Service Organization with over 80,000 customer locations available. Remote monitoring and technical assistance is offered in support of over 30 different facility energy management systems. Technical Assistance Center (TAC) Dispatching and Level 2 Engineering support is readily available.

Honeywell's Global Service Response Center has been ISO 9001:2000 registered since 1995. It was the first North American Monitoring Organization to gain this approval. We follow a full training roadmap and certification plan that will guarantee high quality service to the NJBPU customers.

In order to maintain the highest quality and efficiency of customer service, this call center maintains full business continuity and a disaster recovery plan. There are two 450 Kw Diesel generators and UPS ready to go in case of an emergency. Redundant servers operate with daily data back up and onsite storage, and weekly offsite storage. Northern Telecom/Lucent phone switches are used. All phone calls are recorded, maintained (for approximately one year) and traced (in the US). These precautions ensure quality service for every NJBPU customer that calls in.

### **Language Interpreter**

Our call center offers multi-lingual staff, and there is a multi-lingual service which offers dispatching and/or scheduling support to the Honeywell project team.

### Call Center Quality Assurance and Monitoring

Utilizing our Load Manager database, all interactions with the customer are recorded and available for review and reporting purposes. This allows Honeywell to manage the appointment process and track multiple sequential customer contacts until the customer's installation is successfully completed.

Honeywell performs its own internal quality assurance audits by listening in on randomly-selected calls, both announced and unannounced to the CSR, and by conducting weekly analyses of call volumes and other metrics handled by each CSR, as well as such metrics as abandoned calls and escalated calls. We also invite our clients to visit our call center and review with us the same metrics, and listen in on calls if desired.

### Data Management, Tracking And Reporting

#### Work Order Management System/Handheld Data Phone

Our BBCS system serves as the core of an automated work order system which loads the work orders onto the installers' data cell phones each day. As work orders are completed, they are uploaded wirelessly from the field to the BBCS system. This real-time updating of BBCS maximizes quality, and empowers us with maximum productivity. For example, the office support team can view site-by-site results and if there are any outliers of data on a work order or missing barcode data etc., the installer can be immediately contacted and instructed to return to that home for remedial steps.

Each day's workorders will be electronically downloaded to the handhelds the previous evening, and each schedule updates can be communicated automatically via the internet from Load Manager to each installer's phone on a nightly basis. Changes to schedules will be communicated on a real time basis.

Key benefits of our BBCS / handheld workorder and data management system include:

**Real Time Customer Service.** When a customer calls, it is imperative to be able to provide clear and concise answers and resolution of their concern or question while that customer is on the phone. Our real time capabilities ensure that this happens. If a customer were to call at any time, our CSRs are able to see instantly what occurred at their location, and by whom and when. This not only leaves the customer with the best possible impression, using our real-time customer service processes, but it also enables us to maintain high levels of productivity.



*The Honeywell Handheld: electronic workorder, Barcode scanning, schedule updates, etc.*

**Inventory.** Inventory is also tracked in real-time. At any point in time, you can search inventory by serial number to determine the disposition of any thermostat or switch. Once the hardware is released for installation, it will be loaded into a warehouse and tracking begins. In addition, there is a real-time inventory check-out/check-in process directly linked the scheduled and completed work.

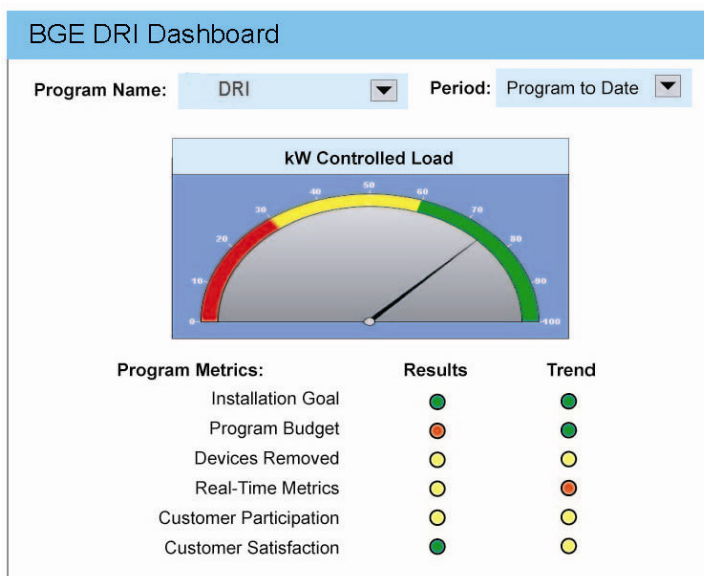
Our handheld technologies have been instrumental in the success of our meter automation projects, and now we have brought this tool to deployment under our DR programs, as well.

Honeywell will submit reports to NJBPU using internet electronic transfer of program performance data using our standard, proven format. We perform this service for almost all of our dozens of utility clients. The reports will show current activity and will be submitted at least once each week. Daily timesheets with work codes will also be compiled. Our handheld captures to job code and time, and this data is uploaded to our Load Manager system for tracking and quality

Honeywell proposes to create a dashboard system providing consolidated data for all three of the programs Honeywell has submitted proposals for. The dashboard will give key NJBPU and Honeywell managers data

on important program metrics at a glance. Our goal is to provide a single user interface for all the programs, with which the user can easily toggle between programs.

The screen view to the right (BGE Program) is a sample of what this interface could look like.



At the top, the user would

select the program they were interested in and the period they were looking for (PTD, YTD, Current). Once they select the criteria, we would have a single dial view (or maybe two dials on the left side of the screen) displaying the most important element(s) of the individual program, with additional program metrics listed with the period and trend rating in a scrollable window.



The data dashboard for the program will include the deemed kW will be shown from our data, driven by thermostats/switches installed and the deemed savings we capture. Other data we propose to show on the main dashboard screen will include projected controlled load, switch and thermostats installations, customer removals, and % market penetration, program backlog, and inventory. This information will be displayed in a high-level format as shown on the following mock up, with the ability to drill down for more detailed information.

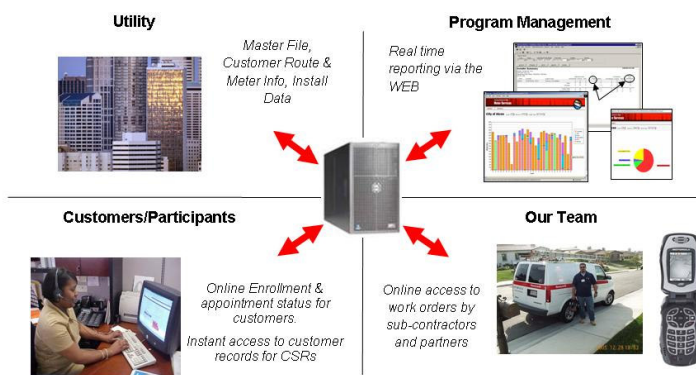
The benefits to this type of system include:

- Ability to have a single user interface, one place for all programs, with minimal training involved;
- Ability to add additional program metrics quickly without changes to main system;
- Current status and trend view;
- User-definable ranges for color scheme (green, yellow, red);
- Ability to add additional, non-Honeywell managed programs (with data import);
- Data drill down capabilities to raw data.

We will keep all books, records, and supporting customer data readily available for the purposes of regulatory inquiries/compliance. We readily and capably respond to our regulators requests for data from our present utility clients and are pleased to do so for this project.

Honeywell's *Load Manager* system is a proprietary software system written in PowerBuilder. *Load Manager* has been used for a number of years to provide the development foundation for multiple programs across the country. It is a scalable database that allows for flexible data entry and tracking across all program activity, running in the latest version of Oracle and PowerBuilder. It is WAN compliant and Internet enabled. The modular and generic nature of the system allows rapid customization based on a large number of user-defined statuses and fields. Our *Load Manager* data management system maintains all customer interaction information, offers start-up support for new programs, and provides a common basis for tracking customer and enrollment information across all load

**Integrated Data Management with Honeywell's BBCS**



**Seamless Integration & Real-Time Access to Data**

management programs. The *Load Manager* system, designed for flexibility, makes full use of Oracle's data security and data integrity enforcement capabilities.

## Reporting

Built into *Load Manager* is a set of standard management reports used to review and manage program status. The reports contain data on inventory levels, backlog management, scheduling activity, production status, member enrollment status, installed devices, controlled appliance data, complaint resolution, and quality assurance. Reporting is possible on any data captured within the system and the reports can be comprehensive in content and presentation. Described below is a sample of the standard set of *Load Manager* reports. The system is also capable of integrating other requested reports or additional sorting criteria such as installations by substation or county.

- Management Summary - A standard backlog report that presents the number of member enrollments for a date range by work order type and status;
- Current Status Report - A listing of all participants for a date range and work order status;
- Status History Report;
- Installation Summary - A list of all the installed devices and services performed for a date range which can also report the detail of the appliances controlled for each member;
- Production Report - A list of the participants who received program services within a date range;
- Site Visit Backlog Report;
- Backlog Aging Report;
- Customer Dropout Report;
- Installer Schedule Report;
- Schedule Backlog Report;
- Appointment Cancellation Report;
- Inventory Management Report;
- Field Technician Production Summary Report;
- Field Technician Production Detail Report;
- Invoice Processing;
- Invoice Back up Report.

## Quality Assurance

Honeywell believes that quality begins with our employees. As such, our human resource group is involved early in our program development.

Our human resources policies include checking references and verifying the credentials of prospective new hires, and all new employees are required to undergo drug screening and criminal background checks as one of the final steps before being hired, and ongoing screening, as well.. Potential new hires who will be driving in the field are also required to sign an authorization for Honeywell to review their driving record.

Honeywell provides merit raises based on work performance and compliance with safety polices and other company guidelines. On some programs, we also provide extra incentive pay for meeting production goals, and bonuses to call center staff for achieving high levels of customer care.

We promote from within based on capabilities, workmanship, and ongoing professional development, without regard for race, ethnicity or other personal characteristics.

Any employee who is not performing his or her work up to standards is removed form the field provided refresher training, and may be retrained for a different position, or simply dismissed if performance does not improve. We also do not tolerate violations of our safety rules, and although rare, any employee who does show a lack of concern for prevention and safety may be subject to dismissal for cause.

Next, Honeywell regards effective and comprehensive training to be essential to meeting all program customer service, productivity and operational goals. Honeywell routinely administers initial orientation (for new employees) and on-going supportive training to both office and field personnel. Training is not seen as a one-time effort only. Weekly and monthly office and field staff meetings are viewed as opportunities to provide feedback and reinforcement as well as training in new program developments. These sessions focus on input from the various quality assurance programs, as well as customer comments and employee suggestions.

We have people whose sole responsibility is training, and our training is delivered both in the classroom and in the field. No installer is allowed to conduct an installation without meeting all Honeywell requirements: technical training; customer service; data management; safety;

theoretical exam; practical test; etc. Honeywell can include staff from NJBPU in our trainings as well.

All installation technicians are required to pass a pre-qualification test to evaluate experience and technical competency prior to hiring or training. Upon acceptance into Honeywell's training process, they are provided orientation in the details, procedures, and policies of the program. They are then given specific technical training in switch and thermostat installation procedures, communications protocols, customer instruction, and testing/verification procedures.

Our training curriculum includes both classroom instruction, utilizing tools such as videotapes, and demonstration equipment; as well as field exercises -- applying hands-on training in customer service, data collection techniques, installation procedures, testing and diagnostics, and more.

In our training of field staff, we place great emphasis on customer sensitivity, service, and communication techniques. The training agenda consists of an initial classroom training module, followed by a one-week specialized field-training program and an additional one to two weeks of in-field training and close supervision. To emphasize and reinforce the material presented in our training sessions, and to provide a resource for future reference, we supply all trainees with a comprehensive installation manual. At the conclusion of all Installation and Service Training, each trainee will be required to take and pass the Honeywell Certification Test. Only upon passing this test will our field personnel be allowed to accept field assignments.

In the field, our program supervisors use a quality control inspection checklist to capture the findings at each inspected site and reward, coach, train and correct as required. Any installer needing improvement will be provided additional coaching and training, and 100% of this installer's installations will be audited throughout this period. Any installer who fails to meet our high performance standards is removed from the field and provided refresher training; if the situation persists, their employment by Honeywell is terminated for cause. This assures the quality and reliability of the staff and the installations.

And finally, Honeywell employees are driven by our Six Sigma quality management philosophy, we view quality control as an all-encompassing process that must be built directly into the framework of the program management. Six Sigma is a highly disciplined quality assurance process used by Honeywell that helps us focus on developing and delivering the best possible products and services. There are three key elements of quality: customer, process



and employee. Everything we do to remain a world-class quality company focuses on these three essential elements. By using our customer requirements to define quality in new projects, we consistently evaluate and improve our processes, and have achieved a high rate of repeat business and contract extensions from major clients.

We will conduct a comprehensive audit process to ensure the highest installation success rate possible. Through our years of experience, we have optimized the quality audit process to assure that each staff member performs up to expectations and in full accordance with the program's guidelines. Our program supervisors also use a quality control inspection checklist to capture the findings at each inspection site and reward, coach, train and correct as required.

An agreed upon level of installations will be randomly field inspected. Although rare due to our stringent hiring and training processes, any installer needing improvement will be provided additional coaching and training, and 100% of this installer's installations will be audited throughout this period. Any installer who consistently fails to meet our high performance standards will be removed from the program. This assures the quality and reliability of the staff and the installations.

#### **4.0 PROCUREMENT AS RELATED TO BGS**

Honeywell believes that the DR programs should be conducted separately from the BGS auctions. The results of the DR programs will decrease the resources needed in the auction. DR programs should be considered as deducts demand thereby decreasing the need for additional resources at the auction.

#### **5.0 DR PROGRAM RESOURCES**

Honeywell anticipates that no one resource will be able to reach the goals that the NJBPU has ambitiously set across the multiple market segments that it intends to reach. As such, we think that it will be important for the NJBPU to acquire multiple vendors to delivering on these key goals. Of considerable importance is the NJBPU's consideration to creating an overall program that promotes harmony within the marketplace and manifests a coordinated approach thus providing customers with easy to understand, well thought out options that eliminate confusion within the marketplace.

#### **6.0 PROGRAM GEOGRAPHY**

Honeywell believes that a DR program of this sort be open to all customers in all customer classes within the State Of New Jersey. That said, we believe it maybe beneficial to operate different types of programs for different customer types. This may include offering a

program type (say a residential customer) through an EDC which may require the program to stay within a certain service territory. This does not mean that an adjacent EDC couldn't offer the same program parameters to its' customer base. Honeywell will be happy to work with the NJBPU and other stakeholders/participants (i.e. EDC's) in the program to arrive at a program design that promotes efficiency, cost effectiveness and marketplace certainty.

## **7.0 TARGETED CUSTOMER CLASSES**

Honeywell believes that all customer classes within the State of New Jersey be eligible to participate within any DR programs.

## **8.0 PJM DR – ANCILLARY PROGRAM PARTICIPATION**

It is preferable that all DR programs be part of the PJM Program Suite (for cost sharing and reliability reasons) but not required for the NJ program's success. At this time there are PJM programs available for most commercial DR applications and movement towards offering more Residential DR programs

## **9.0 PROGRAM TERM**

Honeywell believes that a performance based program be given the term necessary for a participating vendor to recover its investment, earn a profit and ensure system reliability through the provision of a developed maintenance plan/schedule. It is our experience that such a term should be set between 7 and 10 years.

## **10.0 TIMELINE FOR ACTION**

Depending on final program design, Honeywell will work with NJBPU to develop a timeline for action that will allow for goal obtainment. By way of example, the following table provides the NJBPU with a program timeline for a current Honeywell customer. This production timeline will have start up activities added at the tables front end as well as maintenance activities follow up after deployment.

Example Timeline for Action

	Jan, 2008	Feb, 2008	Mar, 2008	Apr, 2008	May, 2008	Jun, 2008	Jul, 2008	Aug, 2008	Sep, 2008	Oct, 2008	Nov, 2008	Dec, 2008	Jan, 2009	Feb, 2009	Mar, 2009	Apr, 2009	May, 2009	Jun, 2009	Jul, 2009	Aug, 2009	Sep, 2009	Oct, 2009	Nov, 2009	Dec, 2009
<b>Phase I Production and Staffing</b>																								
<b>Production Schedule</b>																								
Estimated Production Schedule	0	2,573	5,146	7,719	10,292	10,292	11,321	11,321	11,321	11,321	11,321	11,321	11,321	11,321	12,350	12,350	12,350	12,350	12,350	12,350	11,835	11,835	11,321	11,321
Cumulative Total	0	2,573	7,719	15,438	25,729	36,021	47,342	58,663	69,983	81,304	92,625	103,946	115,267	126,588	138,938	151,288	163,638	175,988	188,338	200,688	212,523	224,358	235,679	247,000
<b>Field Staffing</b>																								
Installers	0	34	65	94	109	109	120	120	120	120	120	120	123	123	135	135	135	135	135	135	129	129	123	123
Supervisors	0	4	8	12	14	14	15	15	15	15	15	15	15	15	17	17	17	17	17	17	16	16	15	15
<b>Program Management and Administrative Support Staffing</b>																								
Program Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
IT Support	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5
Program Coordination / Administrative Support	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
Training / Safety Management	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
<b>Call Center Staffing</b>																								
Call Center Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Lead Customer Service Representative	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
Customer Service Representative / Scheduler	0	9	17	25	29	29	32	32	32	32	32	32	33	33	36	36	36	36	36	36	34	34	33	33
<b>Warehouse Staffing</b>																								
Inventory Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Warehouse Specialist	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4

	Jan, 2010	Feb, 2010	Mar, 2010	Apr, 2010	May, 2010	Jun, 2010	Jul, 2010	Aug, 2010	Sep, 2010	Oct, 2010	Nov, 2010	Dec, 2010	Jan, 2011	Feb, 2011	Mar, 2011	Apr, 2011	May, 2011	Jun, 2011	Jul, 2011	Aug, 2011	Sep, 2011	Oct, 2011	Nov, 2011	Dec, 2011
<b>Phase II Production and Staffing</b>																								
<b>Production Schedule</b>																								
Estimated Production Schedule	10,471	10,471	10,471	10,824	11,518	12,565	12,565	12,565	11,518	10,824	10,471	10,471	10,471	10,471	10,471	6,624	5,235							
Cumulative Total	257,471	267,941	278,412	289,235	300,753	313,318	325,882	338,447	349,965	360,788	371,259	381,729	392,200	402,671	413,141	419,765	425,000							
<b>Field Staffing</b>																								
Installers	99	99	99	109	109	119	119	119	109	109	99	99	102	102	102	51	51							
Supervisors	12	12	12	14	14	15	15	15	14	14	12	12	13	13	13	6	6							
<b>Program Management and Administrative Support Staffing</b>																								
Program Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
IT Support	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5	0.5							
Program Coordination / Administrative Support	5	5	5	5	5	5	5	5	5	5	5	3	3	3	3	3	3							
Training / Safety Management	2	2	2	2	2	2	2	2	2	2	2	1	1	1	1	1	1							
<b>Call Center Staffing</b>																								
Call Center Manager	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1							
Lead Customer Service Representative	3	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2							
Customer Service Representative / Scheduler	29	29	29	32	32	35	35	35	32	32	29	29	30	30	30	15	15							
<b>Warehouse Staffing</b>																								
Inventory Manager	1	1	1	1	1	1	1	1	1	1	1	0	0	0	0	0	0							
Warehouse Specialist	3	3	3	3	3	3	3	3	3	3	2	2	2	2	2	2	2							

## **11.0 CUSTOMER BENEFITS**

A DR program of this nature should provide its customers with a host of benefits. These benefits will be important to: ensure enrollment and that targets are achieved, create loyalty to the program thus retaining as many customers over time as possible, as well as achieve a high level of customer satisfaction that may cause customers to look to the other NJ CEP programs that can help meet the overall strategies of the EMP. Typical customer benefits associated with DR programs include: monetary sign up bonuses, technology (thermostat, EBI system) that will improve the operating characteristics of the facility, lower energy bills, access to real time data through reporting and internet access that can help the customer make informed decisions on their energy usage, special messaging features that allow constant communication with the customer, near real time two-way data (where AMI may be deployed) providing customer the potential capability to use energy on less expensive price plans, and more.

## **12.0 COST CONSIDERATION**

Honeywell has delivered residential/commercial demand response programs in competitive environments across the US and Canada. Estimated industry prices for performance-based programs will range from \$100-\$200 per annual kW depending on final program design. Typical turn-key program elements include marketing / customer outreach and program enrollment, back office and scheduling management, communicating thermostats, building automation system upgrades, installation services, and ongoing system maintenance. Honeywell will work with the NJBPU team to clearly define a scope of work and which will then be the basis for a firm quote to deliver your demand response program.

## **13.0 RELEVANT EXPERIENCE & CUSTOMER REFERENCES**

Honeywell has installed almost 800,000 load management devices on an extensive variety of equipment, impacting more than 700MW. We've managed gateway pilots in fifty locations, and mass-market residential and small commercial programs impacting hundreds of thousands of customers. While these points of controllable load include pool pumps and water heaters, the majority are residential central air conditioning units.

We've worked on critical peak programs that integrate DR devices with AMI to manage new rate structures, to empower customer with a new level of control over their consumption and costs.



We are very experienced at the customer recruitment, scheduling, and data tracking and reporting processes that are critical to success. In many programs, we have ramped up marketing, scheduling, and installation volumes in the spring beyond client expectations to deliver maximum controllable load during the ensuing summer. Honeywell understands the seasonal factors that come in to play with residential central air conditioning DR programs.

We are currently operating numerous major DR programs across the nation, including, Baltimore Gas & Electric, City of San Antonio, Southern California Edison, Long Island Power Authority, Consolidated Edison, and Austin Energy. In Canada, we are starting up a pilot program with a target of 9,000 switches and thermostats for the Consortium of Large Distributors, the six largest retail electric companies in Ontario. We are performing marketing development and implementation, field operations, customer service, load management technology consulting, and activity tracking and reporting.

We have the capability to dramatically intensify program volume levels to meet aggressive goals and we have significant experience managing both internal and subcontracted installation technicians. At PacifiCorp/Utah Power, our quick start implementation enabled us to install over 22,000 devices in the first 11 months of deployment through May 2004 (exceeding client expectations) and for Southern California Edison, we installed some 18,000 devices in just the second half of 2005. At KeySpan/LIPA our implementation workforce has included up to 30 internal and subcontractor technicians installing over 7,000 two-way thermostats based CAC controls and one-way switch-based pool pump controls in one quarter.

We're experienced with every type of control device, communications technology, and customer interface, including one-way and two-way options, controllable thermostats, load control receivers, gateways, and fixed network.

Following are several project references:



**Client:** Southern California Edison  
**Program:** Residential Air Conditioning Control Program  
**Contact:** Mr. Mark Martinez, (626) 302-8643  
**Term:** 2004-Present

This program targets residential customers with central air conditioning. Since the start of the program, Honeywell has installed over 100,000 switches and load controlling thermostats. We provide appointment scheduling, installation services, customer service, quality assurance, and database tracking. Last year we were awarded a contract extension through 2009, for up to 60,000 additional DRI endpoints.



**Client:** Kansas City Power & Light  
**Program:** Energy Optimizer Program  
**Contact:** Doris Abernathy, Product Manager  
 (816) 556-2177  
**Term:** November, 2005 – present

Honeywell operates a turnkey DR program, *Energy Optimizer*, for Kansas City Power & Light (KCP&L) to deliver air-conditioning load control capacity. Honeywell was selected as the sole-source supplier for this three-year pilot program which calls for the installation of 14,000 devices. Honeywell certified technicians install programmable, load-controlling thermostats, free-of-charge, to KCP&L single-family, multi-family and small commercial customers. We perform marketing, lead intake and pre-qualification, installation and maintenance, quality assurance, database tracking and reporting, as well as customer service. In spite of a one-year program startup delay due to regulatory issues, Honeywell is currently a year and a half ahead of schedule, with over 12,600 installations completed to date.

**Customer and Field Operations**

Honeywell's Kansas-based customer care center is staffed by four full-time customer service representatives (CSRs) and an administrator. Honeywell also provides 24-hour answering service/emergency support. Honeywell's CSR's are fully trained on the operation of the ExpressStat. CSRs handle 85 percent of all service calls and questions immediately, thereby eliminating the expense of sending an installer to the site. In addition, CSRs assist customers with online programming of the thermostat, and can even program the thermostat for the customer through the Cannon web site.

Field installations are conducted by 13 trained installation technicians. All new technicians have 100% of their installation work quality inspected until they meet and exceed all standards. In addition, monthly inspections are conducted on 5% of all installations on an ongoing basis.

Strict safety standards are enforced at all times and a Safety Champion manages the safety training and requirements. All KCP&L installers attend monthly safety meetings and training to reinforce the Honeywell policy of "Safety First". In addition, safety observations are conducted regularly on every installer to insure they are following all procedures.

Our state of the art data communication and collection process allows for installer schedules to be sent directly to their phones. Completed work is immediately transmitted back to our BBCS database completing a closed loop workorder installation process and accurate data tracking.

Cannon Technologies is the single point of contact for all technical support for the Yukon load management center. A continuous, online history is shared among the Cannon engineers to facilitate a quick response in addressing customer software questions or problems.

**Client:** Consolidated Edison  
**Program:** Cool Program  
**Contact:** Eileen Egan Annechino, Program Manager  
 (212) 460-6504  
**Term:** 2001 – March 2008



Future of Cool - a DR program aimed at residential and small commercial customers with central air conditioning. Utilizing Carrier's ComfortChoice thermostats, Honeywell has installed approximately 22,400 points of control, capturing more than 25 MW of controlled load throughout the five boroughs of NYC and Westchester County.

This program is one of the country's first deployments of two-way communicating thermostats for load control, and it includes both residential and small commercial participants. We have operated this project since its inception, and have played a lead role in establishing and refining effective in-field techniques for signal testing, equipment installation and diagnostics. Our role also includes marketing support services, inventory management, database tracking and reporting, and ongoing O&M and customer support services.



**Client:** Long Island Power Authority  
**Program:** LIPAE edge  
**Contact:** Carla Ann Hamilton, Program Manager, (631) 755-5326  
**Term:** 2001 – December, 2009

LIPAE edge - a DR program targeted towards residential and small commercial customers with central air conditioning or in ground pool pumps. Since the inception of this program, Honeywell has installed approximately 32,000 points of control, capturing more than 32 MW of controlled load.

This program is the country's largest deployment of two-way communicating thermostats for load control, and it includes both residential and small commercial participants. We have been

the implementer of this project since its inception, and have played a lead role in establishing and refining effective in-field techniques for signal testing, equipment installation and diagnostics. Additionally, our role includes marketing support services, inventory management, subcontractor management, incentive processing, database tracking and reporting, and ongoing O&M and customer support services. During a single three-month period, Honeywell managed internal and subcontracted technicians to complete over 7,000 device installations for the LIPA Edge program.



**Client:** First Energy / Jersey Central Power & Light  
**Program:** POWERPLUS SAVERS' Program  
**Contact:** Mr. Christopher Siebens  
Manager of Demand Side Management  
(610)-921-6694  
**Term:** 1991 - Present

The goal of this load management program is to prevent capacity problems on the transmission system serving the rapidly-developing southern New Jersey portion of JCP&L's service territory. From 1991 through 1999, Honeywell installed more than 107,000 points of control (~80,000 switches; ~28,000 thermostats), including capturing two megawatts of commercial load. In 1997, the load-controlling SuperStat™ programmable thermostat was phased in, and the external RF relay phased out.

Honeywell planned and managed the operations, including request intake, pre-qualification and scheduling, and permit acquisition. We managed the in-house and subcontracted technicians who performed hardware installations and service. Honeywell performed marketing campaigns, including telemarketing. Complete data tracking and reporting, and quality assurance inspections of 10% of installations, were provided. We also performed inventory tracking, testing, and bar-coding of load control devices, and 24-hour customer service and support.



**Client:** Public Service Electric & Gas Company  
**Program:** Cool Customer Appliance Cycling Program  
**Contact:** Mr. William Reed, Product Manager  
(973) 430-7471  
**Term:** 1991 - Present

This is Honeywell's largest-volume load management program. Since contract award in 1991, we have been the prime contractor and have secured more than 175,000 points of control, significantly exceeding the goal of capturing 107 MW of controllable load by 2000. In 1998 PSE&G had us begin offering a load cycling programmable thermostat as an alternative to the standard DCU-based RF relays. Today, both products are maintained and serviced by Honeywell.

Since the completion of the program's construction phase, we have been charged with providing customer support, technical oversight and database management of the program in its Operations and Maintenance mode.