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## UES Cost Tracking Report Smart Grid Pilot Program DE 09-137

# Appendix 1

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# **Request for Proposals**

## Turnkey Installation Contractor

Unitil's Residential Demand Response Pilot Program

February 19, 2010

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## 1. Invitation to Bid

## 1.1 Introduction and Background

The purpose of this proposal is to solicit competitive, sealed proposals to establish a contract with a qualified vendor for the turnkey installation services for Unitil's Residential Demand Response Smart Grid Pilot Program. The pilot program involves the installation of analysis and "smart grid" components and associated customer education at 228 residential customer sites throughout Unitil's New Hampshire and Massachusetts electric service territories.

The pilot program will evaluate the effectiveness of three distinct demand reduction strategies and will be initiated in June 2010. 76 customers will be recruited into each of the three separate and distinct program components discussed below.

- *Simple TOU Program* Enrolled customers will be set up on a time-of-use rate structure and will receive basic educational materials only with no additional enabling technology.
- *Enhanced Technology Program* Enrolled customers will be set up on a time-of-use rate structure and will receive the same educational materials, but will also receive an inhome wireless control system with a suite of energy management tools, a utility integration portal, and flexible control devices (smart thermostats and outlets). This package will allow for both utility and customer-automated load control and demand response. The Enhanced Technology Program will not include direct demand control by Unitil through the customer's thermostat.
- *Smart Thermostat Program* Enrolled customers will stay on the existing fixed rate billing structure. Unitil will provide a controllable thermostat that offers digital programming features and customer feedback. Unitil will have the ability to cycle the customer's heating and cooling load during critical peak periods, up to eight (8) times during the three-month pilot period. Thermostat cycling will be accompanied by local notification at the thermostat unit. Customers will be able to override the changed setting.

All 228 program participants will be provided with analysis meters that will record interval usage and load data. The analysis meters will replace the existing residential AMI meters and will also be used for billing purposes. Participants in the *Enhanced Technology Program* will additionally be provided with a home area network (HAN) residential energy management system requiring a two meter installation, one analysis meter and another radio frequency meter. Participants in the *Smart Thermostat Program* will be provided with a digital thermostat that allows for one way communication using a paging system. Equipment specifications are included in Section 2.3 of this RFP. The scope of work included in this RFP also includes on-site customer education of



equipment functions and capabilities as well as general information regarding the dynamic time of use rate structure. Scope of work is further detailed in Section 2.1.

Recipients of this RFP are invited to propose strategies which will meet the requirements as listed in this RFP. Throughout this RFP, references to the term "Bidder" refer to or provide instructions to parties submitting proposals; references to the term "Vendor" or "Contractor" refer to the successful Bidder.

#### 1.2 General Instructions

#### 1.2.1 Intention to Bid

Recipients of this RFP are asked to inform Unitil of their intention to bid. Recipients that express intention to bid will be included in all correspondence (if any) during the bidding process. Please provide full contact information and expression of intention within three business days of issuance of this RFP to the Unitil representative contact given below in Section 1.2.2.

#### 1.2.2 Questions during Submittal Phase

All questions on the RFP shall be submitted by email to Unitil's consultant representative Matthew Siska (<u>matt.siska@gdsassociates.com</u>). Unitil's response to all questions will be emailed out to all Bidders. Unitil reserves the right to hold one or more conference calls (if required) during the submittal phase for all Bidders to join. The primary purpose of the conference calls during the bid process would be to resolve open questions.

#### 1.2.3 Submission of Bids

Proposals responding to this RFP shall be submitted by 5:00 PM Eastern Standard Time on Friday, March 12<sup>th</sup>, 2010 (the due date) to:

Justin C. Eisfeller, P.E. Director of Energy Measurement and Control Unitil Service Corp. 325 West Road Portsmouth, NH 03801 Eisfeller@Unitil.com

Proposals may be delivered in electronic format (email), however three (3) hard copies are required, each complete with all supporting data, placed in the mail on the due date to be delivered one business day after the due date. All Proposals will remain the property of Unitil. Proposals received after the due date shall remain unopened and will not be considered for selection. Unitil does not currently plan to grant extensions of the proposal due date, but reserves the right to do so. In the unlikely case that an extension is granted, notice of such extension will be provided to all Bidders at least one week prior to due date.



#### 1.2.4 Modifications or Withdrawals of Bids

A Bidder may modify or withdraw its bid by written declaration, provided that the declaration is received by Unitil at the above address prior to the time specified for the submission of bids (the due date). Following withdrawal of its bid, a Bidder may submit a new bid, provided that such new bid also is received by Unitil prior to the due date.

Unitil may modify any provision of the Request for Proposal at any time prior to the due date. Such modifications may be made in the form of addenda, which will be issued simultaneously to all prospective bidders that have declared their intention to bid. No addenda will be issued within seven calendar days of the due date.

#### 1.2.5 Award or Rejection

Issuance of this RFP does not constitute a commitment by Unitil to award a winning bidder or purchase services offered in response to this RFP. Unitil reserves the right to reject any or all bids. Unitil will not reimburse Bidders' costs to respond to this RFP.

#### 1.2.6 Execution of the Order

If requested by Unitil, the successful Bidder must assist Unitil in preparing the Purchase Order, which shall be governed by the Terms and Conditions set out herein, or others as mutually agreed by the parties. The successful Bidder must duly execute the Purchase Order within ten (10) days after receipt and return it to Unitil. Failure of the successful Bidder to duly execute and return the Order, together with any other required documents will constitute a breach of contract by such Bidder and entitle Unitil to award the Order to any other Bidder, in addition to all other rights and remedies of Unitil.

#### 1.2.7 Complete Bid

Bidders are requested to submit bids that are complete and unambiguous without the need for additional explanation or information. Unitil reserves the right to make a final determination as to whether a bid is acceptable or unacceptable solely on the basis of the bid as submitted, and proceed with bid evaluation without requesting further information from any Bidder. If Unitil deems it desirable and in its best interest, Unitil may, in its sole discretion, request from any Bidder or Bidders additional information clarifying or supplementing any submitted bid.

#### 1.2.8 Post-Bid Meeting

Unitil reserves the right to invite any or all Bidders to make an in-person presentation on the proposed plan for Turnkey Installation of Unitil's Smart Grid Pilot Program. Unitil may request Bidder's assistance in arranging visits to other utilities where Bidder has performed similar services.

#### 1.2.9 Bid Inconsistencies

Any provisions in Bidder's proposal that are inconsistent with the provisions of this Request for Proposals, unless expressly described in the proposal as being exceptions or alternates, are



deemed waived by the Bidder. In the event the Order is awarded to Bidder, any claim of inconsistency between the proposal and this RFP will be resolved in favor of this RFP unless otherwise agreed to in writing by Unitil.

#### 1.2.10 Schedule of Events

The following represents key milestone dates:

EVENT	DATE
RFP Release Date	February 19, 2010
Deadline for Receipt of Written Inquiries	March 3, 2010
Written Response Distributed	March 5, 2010
Proposal Due Date	March 12, 2010, 1:00 PM EST
Installation Period	April 1, 2010 – May 14, 2010
Pilot Period	June 1, 2010 – August 31, 2010

#### 1.3 Form of Proposal

The following elements are required in Bidders' proposals:

- Executive Summary
- Project Schedule
- Commercial Proposal
- Management Proposal
- Exceptions to RFP
- List of Subcontractors and Suppliers
- Sample Documentation
- References

All proposals shall identify each of the requirements contained in this RFP, whether the requirement is included in the standard offering, and a price adder for all requirements that are not part of the standard offering.

#### 1.3.1 Executive Summary

Bidder shall provide an executive summary for the proposed services. This document should not be more than one page in length. Pricing data shall not be included in this summary. The executive summary should include but is not limited to a high level outline of the process for contacting and scheduling appointments with customers including identification of technical turndowns, the installation and data recording process, proposed timeline, and any other information the Bidder deems appropriate.



#### 1.3.2 Project Schedule

Bidder shall provide a preliminary project schedule indicating major completion milestone events and interdependencies between events, if any. Schedule shall show events that depend on assumed performance by Unitil. Bidder's note that these milestones will be utilized to develop payment schedule as detailed in Section 3.10 Payment.

## 1.3.3 Commercial Proposal

The Commercial Proposal shall contain all information related to proposed costs and contract terms and conditions, including related exceptions taken by Bidder to requirements stated in this RFP. A requirement of this RFP is that all project costs be tracked separately for activity in Massachusetts and New Hampshire. Proposed costs should be provided on a fixed fee basis by scope item and State as outlined in Attachment B. Bidders are encouraged to provide additional detail regarding time allotments and assumptions underlying the fixed fee proposals, as appropriate.

### 1.3.4 Management Proposal

Bidders shall provide a Management Proposal that addresses the following as a minimum:

- Organization chart showing organization structure, staffing plans, and key individuals that will be involved with the project.
- Key personnel resumes.
- History of the company's installation and project management experience, including previous engagements for similar services.

The Management Proposal may be a physically separate hard copy document

#### 1.3.4.1 Safety

In the electric utility industry, safety is a top priority. Each proponent must demonstrate their commitment to safety in their Management Proposal by providing as much detail regarding policies, procedures, personal protective equipment, and staff.

Each proponent's commitment to safety will be reviewed for compliance by Unitil's Safety Department and will become an integral part of the evaluation process. All material provided will be treated as confidential and used for the sole purpose of submission evaluation.

Although each proponent's safety policies, procedures, training, manuals and processes will be evaluated in detail through the evaluation process, Unitil reserves the right to discuss changes to these during the negotiation stages.

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#### 1.3.5 Subcontractors

If Bidder plans to enter into contracts with subcontractors in order to complete this project, a list identifying the subcontractors with a comprehensive description of their offerings shall be submitted with the bid. Further, Bidder shall describe the location of each subcontractor and the portion of the project for which said Subcontractor will be responsible.

Bidder shall remain entirely responsible for the quality, completeness and timeliness of its contractors and subcontractors. Bidder shall fully disclose existing legal relationships and/or litigation between its subcontractors and their clients, and between Bidder and its clients or customers.

#### 1.3.6 References

Bidders shall provide a list of utilities and/or clients for whom the same or similar services were provided. Bidders shall provide at least three recent references that may be contacted. Unitil reserves the right to contact any and all references listed.

#### 1.3.7 Proposal Options & Alternatives

This RFP is the basis for the initial screening of proposals by Unitil. Bidders are encouraged to submit a clear, complete and concise proposal for comprehensive installation services that complies with all the requirements set forth in this RFP.

Bidders may propose alternatives to RFP requirements with which Bidder is not in full compliance. If such alternatives are proposed, it is Bidder's obligation to explain in detail the proposed alternatives. Bidder must also explain how the proposed alternative will be a suitable working solution to the original RFP requirement.

#### 1.4 Procurement Terms & Conditions

Contractual terms and conditions of Unitil's Turnkey Installation Contractor procurement will be negotiated with the selected supplier(s) after initial selection. The text in Appendix 3 – Contract Terms & Conditions is provided with this RFP as an illustration of expected Unitil contract terms and conditions. Bidders should review terms and conditions and identify to Unitil in their proposals any exceptions that will be taken. Other terms and conditions may be included, as appropriate.

#### 1.5 Proposal Evaluation Criteria

The lowest price proposal will not necessarily be selected. Unitil will evaluate proposals using an internal scoring method that weights various parameters to give Unitil insight into the strengths of each proposal relative to Unitil's needs. Unitil's internal scoring method values the following proposal attributes (order of presentation does not reflect priority):

• Vendor qualifications



- Experience providing same or similar services
- o Perspectives expressed by reference utilities/clients
- Proposal attributes
  - Responsiveness to stated Unitil needs
  - o Organization and clarity
  - Proposed schedule within stated timeline
  - Project management and resource plans
  - Firm bid amount (Attachment B)

Vendors will be selected for further discussion based on Unitil's judgment, developed using the scoring method. Unitil reserves the rights to alter its internal scoring method and to exercise whatever judgment it deems in the best interests of Unitil in selecting the successful Bidder.

## 2. Project Details

#### 2.1 Scope of Work

Unitil seeks firm quotes for the turnkey installation of project components in the price proposal format presented in Appendix B. Unitil's goal is to initiate the installation on April 1, 2010 and complete installations by May 15, 2010. Unitil will procure all equipment from selected vendors and provide to the contractor prior to April 1, 2010. The scope of work in this RFP includes the following:

#### **Basic Services**

- Contact each customer and schedule a mutually agreeable time and date for on-site installation. Unitil will provide a list of pre-qualified customers who have registered for the program. While Unitil will make every effort to screen customers for eligibility, it is the ultimate responsibility of the Contractor to assess conditions that would merit technical turn downs.
- Attend training sessions on the time-of-use pricing design, installation and operation of Tendril Home Area Network (HAN), and on the installation and operation of Honeywell's UtilityPro Thermostat.
  - Unitil anticipates that the training will consist of two, eight (8) hour sessions that will be held in Unitil's Portsmouth NH office.
- Installation and pre-testing of equipment relevant to each program component:
  - Simple TOU Program: Analysis meters only



- Enhanced TOU Program: Analysis meters, RF meters and Tendril home area network (HAN) system
- Smart Thermostat Program: Analysis meters and Honeywell UtilityPro thermostats
- Educate customers on operation and capabilities of equipment, including setting thermostat schedules, and reviewing functions of the Tendril web-portal and associated devices (refer to Section 2.3 of this RFP for more information on device types and functionalities).
- Educate customers on the program design, including time-of-use rate structure and methods customers can use to shift load to off peak hours. Written educational materials will be provided by Unitil to be left with the customer. Contractor is responsible only for conveying the content of the material and answering questions that may arise.
- Collect basic on-site data including:
  - o Name, address, phone number and account number of customer
  - Signed agreement affirming participation in the program and acknowledgement of terms and conditions. Unitil will provide the agreement prior to the site visits.
  - Serial number of equipment installed
  - Quantity of equipment installed
  - Number, size (tonnage), and SEER (if available) of air conditioning units
- Service calls to address customer issues arising during the course of the project, including but not limited to:
  - o system operation issues (no heat, no cool, not functioning properly)
  - o damage claims
  - o removals
  - o all other support as needed
  - o internet access and password information or resets
  - o other technical support
  - o move in and move out customers

#### **Optional Services**

Unitil reserves the right to execute the optional services presented below upon review of the price for optional services. Pricing for optional services will be separate from pricing for basic services as outlined in Attachment B.



- At the conclusion of the pilot, schedule an appointment and visit the homes of the 76 participants in the Smart Thermostat program to collect run time and temperature data from the thermostat units via USB download. Return data to Unitil in electronic form.
- At the conclusion of the pilot, schedule an appointment and visit the homes of the 76 participants in the Enhanced Technology program to retrieve the equipment deployed during the original site visit. Contractor to return equipment to Unitil.

\* Note that all thermostats installed during the pilot, both in the Smart Thermostat and Enhanced Technology segments, will become the property of the customer and will NOT be removed at the conclusion of the pilot. Replacement of these units will be at the customer's expense and should not be included in price proposals for these optional services.

## 2.2 Number and Assumed Geographic Dispersion of Participants

Unitil (Fitchburg Gas and Electric Light Company) serves approximately 25,000 residential customers in Massachusetts in the communities of: Fitchburg, Townsend, Lunenburg, and Ashby; there are also a few customers in Ashburnham, Shirley and Leominster.

In New Hampshire, Unitil operates two distinct service territories providing electric service to an approximate 63,000 residential customers. Unitil's Seacoast service territory for electricity includes the town of Exeter and all or part of the 17 surrounding communities of Atkinson, Danville, East Kingston, Hampton, Hampton Falls, Kensington, Kingston, Newton, Plaistow, Seabrook, South Hampton and Stratham, and portions of the towns of Derry, Brentwood, Greenland, Hampstead and North Hampton. Unitil's Capital service territory for electricity includes the capital city of Concord, NH and major portions of the surrounding 12 communities including Bow, Boscawen, Canterbury, Chichester, Epsom, Salisbury and Webster, and limited areas in the towns of Allenstown, Dunbarton, Hopkinton, Loudon and Pembroke.

As indicated in the introduction, the pilot program will consist of 76 customers recruited into each of the three program segments. Members of the control group will be recruited from within the Company's existing load research sample and are specifically excluded from the scope of work contained within this RFP. The table below summarizes the distribution of pilot participants by program by state.

Sample Group	Massachusetts		New Hampshire	
Simple TOU	24	25.0%	52	25.0%
Enhanced Technology	24	25.0%	52	25.0%
Smart Thermostat	24	25.0%	52	25.0%
Control Group	24	25.0%	52	25.0%
Total Received	96	100.0%	208	100.0%



Pilot participants will be recruited randomly from each service territory; therefore bidders should assume that the on-site installations will be evenly dispersed across the service territories outlined above. <u>It should be noted that the control group metering will not be the</u> <u>responsibility of the bidder.</u> Installation services related to this RFP apply only to the participants in the Simple TOU, Enhanced technology, and Smart Thermostat groups.

## 2.3 Equipment Details

Note: All equipment will be purchased by Unitil and provided to the bidder upon award of the project contract.

#### 2.3.1 Analysis Meters

Analysis meters will be provided at each of the 228 participant sites to provide interval usage and demand data for the purpose of pilot evaluation. For the *Simple TOU* and *Smart Thermostat* program segments (152 installations total), installation of the analysis meters will consist of:

• Removing the existing customer meter and installing GE Model KV2c<sup>1</sup> electronic meters with Landis & Gyr (Hunt Technologies) TS2 endpoints. The TS2 modules will be installed by GE as part of the meter order and <u>not</u> by the installing contractor. Configuration of the endpoints will be coordinated with Unitil personnel.

For the *Enhanced Technology Program* segment (76 installations total), dual meters will be installed to facilitate communication with the home area network. For these sites, meter installation will consist of:

- First removing the existing customer meter and installing a dual meter socket adapter provided by Unitil. Note that the type of dual meter socket adapter will be either vertical or horizontal, ring or ringless style depending on style of meter base at the customer's site. Unitil will make this determination and provide the appropriate base prior to installation.
- Once the dual meter socket adapter has been installed, install both an GE Model KV2c electronic meter with Landis & Gyr (Hunt Technologies) TS2 endpoints, and an Itron Centron ERT meter. Configuration of meter endpoints will be coordinated with Unitil.

#### 2.3.2 Home Area Network (HAN) Solution

The *Enhanced Technology* program segment will utilize Tendril's Residential Energy Ecosystem (TREE) platform. The TREE platform is a unified energy management platform with an open, standards-based architecture. The TREE platform can be accessed by consumers in a variety of ways including, the Tendril Vantage consumer portal, mobile devices, smart thermostats, and

<sup>&</sup>lt;sup>1</sup> <u>http://www.gepower.com/prod\_serv/products/metering/en/utility\_revenue\_meters/kv2c\_encompass\_elec.htm</u>



smart in-home displays (including Tendril Insight). These devices provide access and information about the other devices in the Home Area Network (HAN) as well as details on their energy consumption and billing information.

A setup guide for the TREE system components is included as Attachment A to this RFP and is the primary reference for scope of installation. Specific system components that will be installed as part of Unitil's pilot program are outlined below:

- **Tendril Vantage** is a consumer-facing Web portal that displays information to help consumers better understand, manage, and control the energy consumption in their home. The Vantage is accessed through the consumer's home computer.
- **Tendril Insight** is a Zigbee-enabled in-home display that reads consumption information directly from the AMR meter via the Tendril Translate AMR meter bridge. Insight provides near real-time feedback on household consumption as well as proactive notification settings to alert consumers when key conditions occur, such as reaching a specified monthly bill amount or consumption level, or a change in effective pricing. In addition, Insight receives and displays messages from the utility with regard to demand response or other critical events. [1 per site]
- **Tendril Transport** gateway serves as the ZigBee to IP translator, providing the connectivity between the network of smart energy devices in the consumer's home and the TREE server, via the Internet. Transport connects to the home user's IP router (DSL or Cable modem), providing two-way connectivity between the participating customer and their energy partner. [1 per site]
- **Tendril Translate** is a meter bridge that allows consumers and utilities to leverage their existing AMR meter investments while delivering consumers and utilities the information and control typically associated with "Smart "Grid" implementations. Tendril Translate creates an AMR-to-ZigBee bridge, receiving the ERT signal from an AMR meter and translating it into ZigBee for presentation to the consumer and the utility via the home area network. [1 per site]
- **Tendril Volt** is a 110VAC 3-prong, ZigBee-enabled electrical outlet that can be plugged into a standard wall outlet to demonstrate load control and analyze consumer response to utility-generated demand response events. Volt supports user-overrides (opt-outs) and supports the future TREE functionality of disaggregated consumption information and control. [1 per site]
- **Tendril SetPoint** is the Tendril ZigBee Smart Energy compliant OEM Smart Energy Thermostat. The SetPoint is wired to a traditional HVAC unit providing consumers control over the largest energy consumer in the home. SetPoint provides a mechanism for demonstrating load control and analyzing consumer response to utility-generated demand



response events. SetPoint provides consumer control via demand response opt-outs and supports the future TREE functionality of customer remote control. [1 per site]

#### 2.3.3 Smart Thermostat

The *Smart Thermostat* program segment will utilize Honeywell's UtilityPRO<sup>TM</sup> thermostats. Further information available online at <u>https://buildingsolutions.honeywell.com/Cultures/en-US/Markets/Utilities/</u>

### 2.4 Unsafe Systems and Turn Downs

Safety to workers and contractors is essential, but also is the safety of our customers and their property. Under no circumstance is a Technician to attempt installation of a demand response device on a system that is in a good state of repair, or not compatible. Contractor must comply with provincial regulations and codes pertaining to the detection of unsafe customer systems. Proper procedures must be followed regarding notification and system tag out. Unitil shall be notified of all incidents of unsafe systems that violate code.

It is the sole responsibility of the contractor to determine the fitness of the customers system prior to attempting an installation. If it is determined that a demand response device cannot be installed on a system the contractor is to inform the customer of the reason for the "non-installation" and document the reason in their work order management system. Contractor must be capable of reporting details of turn downs in a weekly report. The contractor will not be compensated for "non-installations" and is to make provisions for these occurrences.

Under no circumstances is the contractor to make corrections to the systems which are not caused by their actions. Customers that want to address the reason(s) for "non-installation" are to be instructed by the contractor to use their own HVAC service provider. The contractor is not to solicit work from customers, or those customers that come to them by way of program efforts.

In the event that a contractor performs an installation on a system that encounters problems post installation, the contractor is to assume the responsibility of full investigation. The contractor must dispatch a competent technician or supervisor that is capable of addressing the issue and taking any steps necessary to address the situation. A full incident report must be created and tracked until resolution. Each proponent is to provide their documented incident investigation process as well as a copy of their report.

## 2.5 Field Deployment Work Hours:

Field deployment hours of operations will be business days between 8:00 AM to 6:00 PM Eastern Standard Time. Unitil may extend these hours to include Saturday or after 6:00 PM as needed to accommodate customer requests and production requirements. No additional payments will be made to compensate for extended hours of operation. Customers that have special needs that cannot be met under the current agreement of hours must be brought forward



to Unitil for review. The contractor shall not solicit customers outside of agreed upon times and beyond 8PM unless the customer is expecting the technician.

The contractor's field and warehouse operations must observe all holidays that are honored by Unitil.

## 2.6 Customer Contact and Education

Unitil sees certain program components as somewhat invasive in that they require one or more interactions and communications with our customer base, as well as being within the residence or building. For a program of this nature Unitil is not only interested in dealing with technical, quality vendors, but with those that have customer centric policies and procedures.

Unitil will assume responsibility for marketing efforts to provide leads of "qualified" interested customers to the contractor in the form of a Microsoft excel spreadsheet. The contractor is responsible for contacting each customer and must make a minimum of three (3) attempts at contact with the goal to secure an appointment. These attempts must be documented and at least one attempt must happen after 6PM, put prior to 9PM.

All customers that have secured an appointment must be contacted within 48 hours of the actual appointment time to verify date and time of appointment. This will help reduce the number of customer "no shows". In the event that these customers have not contacted the contractor within 24 hours, the contractor is to make two (2) documented attempts to re-secure the appointment.

Once on site the technician must explain the program and the work to be performed to the customer in detail prior to commencing any work. After checking the fitness of the system and determining compatibility the contractor is to install the devices as specified for each program component. The contractor is to provide the customer with educational materials (Provided by Unitil) and review and obtain customer's signature on a basic pilot participation agreement (Provided by Unitil). The contractor is to assume full responsibility for training and educating the customer on the operation of the selected technology.

The technician is to ensure that the customer is fully aware of the program as well as functionality of the device. The contractor is to assist the customer in programming the device to the customer's needs and preferences. The contractor is to complete an installation only if there is someone 18 years or older in the building.

#### 2.6.1 Customer Complaints

Customer satisfaction will be a very important component of this project as any negative experiences or publicity will jeopardize the project's success.

The contractor will investigate and report customer complaints and claims of damage. The contractor will complete an Investigation Report that summarizes the customer complaint/claim



and the result of the investigation. Each proponent is encouraged to submit their process for complaint and claim management.

Valid claims resulting from Contractor errors or omissions will be resolved immediately and Unitil will be notified of resolution progress. In the event that the contractor fails to promptly address situations that are known errors or omissions, Unitil reserves the right to rectify the problem and bill the contractor accordingly.

In an instance where the contractor denies a claim and the customer does not accept the denial, Unitil will review the claim with the contractor and , make payment to the customer and bill the contractor if there is sufficient information to lay blame on the contractor. If the information available supports that the contractor followed approved procedures, Unitil will assist the contractor in resolving the dispute with the customer.

The contractor will ensure that Unitil receives a copy of all claim reports within 24 hours and a written weekly report summarizing the complaints and claims with their resolution.

## 2.7 Reporting and Communication

Strong communication is essential to ensuring that any issue or concerns are addressed in a timely manner. The following is a basic guideline for weekly reports that may be adjusted by Unitil.

Installations to Date by Device	Weekly Installations by Device
Total Turn Downs by Reason	Weekly Turn Downs by reason
Total Appointments in Backlog by Day	Total Capacity by Day
Customer Removals and Reason	Safety Issues and Concerns
Service Calls	Inbound and Outbound Calls
Response Times	Dropped calls
Customer Service Metrics	Quality Metrics

Unitil and contractor will establish a weekly Progress Meeting to discuss as a minimum the data listed above and well as overall project progress. The contractor must have supporting reports prior to this meeting.

## 2.8 Agreements

The contractor will obtain a signed agreement from every customer who participates in the pilot and will ensure that they have a process to obtain an agreement. One copy will be left with the



customer and the original will be retained by the contractor and submitted to Unitil monthly. Unitil will produce the blank agreements.

## 2.9 Route Planning / Scheduling

The contractor will be responsible for planning and scheduling daily work for installers. Customers must be given installation appointment times that meet their schedules. It is preferred that customers be given installation times in no more than a 2 hour window. Only exception would be for those customers that provide a larger window due to their availability. In the event that a technician is running late the customer must be contacted by phone to inform the customer in advance of the appointment time. If the customer is not able to wait, they must be given another time that meets their schedule.

### 2.10 Sample Installation Process

The following process is a summary of the Technician's field activities to be performed, and does not exhaust all processes and duties that are required for the safe and accurate installation. Each proponent is encouraged to provide additional information for the evaluation of processes and procedures.

#### **Verify Location**

• Verify the address using route screen/sheet

#### **Preplanning and Special Instructions**

- Check route work orders for any special instructions (bad dogs, a possible medical situation, door knocking instructions, etc.)
- Plan the route out on the map
- Load your vehicle and complete the daily inventory reconciliation form

#### Awareness of Hazards

- Park vehicle in a designated parking spot
- When approaching a residence, check the house/business and yard for signs of animals, etc.
- Notify the Customer (knock, door bell), give ample time to answer
- Present identification, confirm appointment time
- Confirm someone over the age of 18 is present
- Apply safety shoe/boot cover (if required)

#### **Customer Education**

- Review full program details with customer and confirm their interest in program (~10 minutes)
- Review agreement with customer and inform them that their acceptance by way of signature is required (~10 minutes)
- Obtain signature from customer
- Provide customer with copy of agreement



- Review steps you will be taking to perform work
- Confirm interest in program
- Provide user manuals and educational materials for customer to review

#### Verify System Compatibility and functionality

- Interview customer regarding AC system functionality and history and discuss past maintenance history confirm eligibility
- View entire system and identify hazards confirm eligibility
- Verify system compatibility (compare against technician manual) confirm eligibility
- Perform a system check for heat, cool and fan confirm eligibility

#### **Meter Installations**

• Utilize industry standard practices and procedures to safely and adequately replace the customers meter with the meters identified in Section 2.3.1.

#### **Tendril TREE Installations (where appropriate)**

• Install and test functionality of TREE system as outlined in Appendix A. Utilize industry standard practices and procedures.

#### Remove the Old Thermostats and Install New (where appropriate)

- Eliminate power to the system and utilize "lock-out tag-out" procedures
- Verify power elimination (multi-meter)
- Place drop sheet on floor below stat
- Remove old stat and verify and mark wiring configuration
- Add any required material needed as per Technician's manual to ensure new stat functionality. Follow detailed manual instruction.
- Install new stat as per manual
- Verify stat functionality including communications
- Change contractor settings as per manual
- Verify system function and performance as per manual
- Place old stat in package and place in a safe place, inform customer

#### **Perform Data Collection**

- Record data on the number, size, condition and service area of air conditioning systems
- Record identifying information of the devices installed
- Record customer name, address, and account information
- Other basic data as requested by Unitil

#### **Customer Education**

- Review work performed
- Program thermostat stat features as per customer requirements
- For enhanced technology segment, review product functions and programming



- Instruct customer by way of demonstration and customer performed actions on stat functionality and stat programming (~10 minutes)
- Verify that customer capable of performing all customer functions
- Instruct customer on web access and review passwords and user ID information, demonstrate on customer computer if customer requests.
- Review program support numbers and actions in the event an issue arises
- Address any other customer questions

#### <u>Departure</u>

- Ensure tools and any debris are removed
- Verify you have all information required and left customer will all information and details
- Thank customer for participation

## 3. Appendix: Contract Terms & Conditions

The text in this appendix is taken from Unitil's customary contract language and exemplifies the terms and conditions Unitil expects in its contract with a Turnkey Installation Contractor for it's residential demand response pilot program. The final contract will be negotiated with the successful bidder(s).

#### 3.1 Commencement of Contract Time

The successful bidder shall acknowledge acceptance of the Purchase Order from Unitil within 10 days of its issue.

The Contract Time shall commence to run on the effective date indicated in the Purchase Order. Supplier shall start to perform the Work on the date when the Contract Time commences to run.

## 3.2 Vendor Claims

All claims of the Vendor and all questions relating to the interpretation of the Contract, including all questions as to the acceptable fulfillment of the Contract on the part of the Vendor and all questions as to compensation, shall be submitted in writing to the Unitil Project Manager for determination.

All such determinations and other instructions of Unitil will be final unless the Vendor shall file with Unitil a written protest, stating clearly, and in detail the basis thereof, within fifteen (15) calendar days after Unitil notifies the Vendor of any such determination or instruction. Unitil will issue a decision upon each such protest within fifteen (15) calendar days and its decision will be final. Work will not be undertaken until a written final decision is rendered.

## 3.3 Changes in the Work

Unitil, without invalidating the Contract, may direct the Supplier to perform extra work or make changes in the work, provided that all changes or additions form an inseparable part of the work



contracted for. The Supplier shall provide a written response outlining the project implications of that change order as well as a timeline and cost estimate for completion. Supplier shall make such changes or additions only after receipt of written instructions to do so from Unitil. If such changes or additions cause an increase or decrease in the cost of the Contract, or in the time required to complete the Contract, an equitable adjustment shall be made and the Contract shall be modified accordingly by a Change Order in writing.

When a change is ordered, a change order shall be executed by Unitil and the Supplier before any change order work is performed. Any increase or decrease in the contract price and the time required for the completion of the contract work due to a change order shall be specifically set out in the change order. All terms and conditions contained in the Contract Documents shall be applicable to change order work. The amount of any increase or decrease shall be added to or subtracted from the contract price as appropriate.

### 3.4 Delays & Extension of Time

If the Supplier is delayed at any time in the progress of the work by any act or neglect of Unitil, or any cause beyond the Supplier's reasonable control, he shall file with Unitil a notification that an extension of the Contract period is required.

The Unitil Project Manager shall review said notice and to the extent that the Supplier can reasonably demonstrate to Unitil Project Manager that it shall be delayed in its fulfillment of these terms and conditions and other obligations of this transaction due to a cause beyond its control, a reasonable extension period shall be granted.

## 3.5 Termination of Right to Proceed

Unitil may, in writing, terminate this Contract in whole or in part at any time, either for Unitil's convenience or for the default of the Supplier. Upon such termination, all data, plans, specifications, reports, estimates, summaries, completed work and work in process, and such other information and materials as may have been accumulated by the Supplier in performing this Contract shall, in the manner and to the extent determined by Unitil, become the property of Unitil. If the termination is for the convenience of Unitil, an equitable adjustment for the Supplier's direct costs and profit for work actually performed shall be made by mutual agreement between the Supplier and Unitil. No amount shall be allowed for anticipated profit on unperformed services.

Default occurs if the Supplier (1) abandons the Work called for hereunder, (2) files a voluntary petition in bankruptcy or fails to obtain dismissal of an involuntary petition in bankruptcy within sixty (60) days after the filing thereof or has a Receiver/Trustee appointed, (3) becomes insolvent, (4) assigns this Contract or sublets any part of the Work hereunder without prior written permission of Unitil, (5) repudiates the Contract, (6) allows liens to be filed against property of Unitil, (7) disregards laws, ordinances, rules and regulations related to the Contract and the Work or disregards instructions of Unitil. Any expense incurred because of cost of



completion by Unitil is chargeable to and shall be paid by the Supplier. The total liability to the Supplier shall be limited to the Contract value less the value of any equipment, material or completed services retained by Unitil.

## 3.6 Right to Operate Unsatisfactory Equipment

If the operation or use of the materials or equipment after delivery and/or installation does not reasonably comply with the technical requirements set out in the Contract Documents to Unitil, Unitil shall have the right to operate and use such materials or equipment until such deficiency can be reasonably corrected provided that the period of such operation or use pending correction shall not impede or delay the ability of the Supplier to perform corrections.

Such operation and use shall not constitute an acceptance of any part of the work, nor shall it relieve Supplier of any requirements of the Contract, nor shall it act as a waiver by Unitil of any requirement of the Contract.

## 3.7 Casualty Insurance

Before commencing work under this contract the Supplier at his own expense shall submit Certificates of Insurance, providing evidence acceptable to Unitil indicating that the Supplier has obtained and will maintain insurance for the duration of the contract. The following requirements apply to all Certificates of Insurance.

- The insurance shall be written by an insurer acceptable to the Company,
- The insurance shall be primary to any coverage carried by the Company.
- The Vendor further agrees to provide the Company with an executed Certificate of Insurance before commencement of work, and with written copies of the insurance policies at any time upon the written request of the Company.
- The Certificate of Insurance shall be an original copy signed by an authorized representative of the insurance carrier(s). (Note faxed copies may be accepted initially to be followed up by originals in a reasonable length of time.)
- The Certificate of Insurance shall provide that no less than 30 days advance notice will be given in writing to the Company prior to cancellation, termination or alteration of the insurance coverage.
- The Company shall be named as an additional insured on each General Liability Insurance Policy and any Excess Liability Policy or Umbrella Policy used to meet the required general liability limits.

The types of coverage and minimum limits are as follows:



GENERAL LIABILITY\* \$1,000,000 each occurrence \$2,000,000 general aggregate

AUTOMOBILE LIABILITY\*

Bodily injury	\$500,000 per person
\$500	0,000 per accident
Property damage	\$500,000
or	
Combined Single Limit	\$500,000

\* A blanket, umbrella, and/or excess liability policy(s) may be utilized to increase limits to the desired level(s).

WORKERS' COMPENSATION Statutory for Massachusetts and New Hampshire

EMPLOYER'S LIABILITY Basic

(generally this is listed as \$100,000 / \$500,000 / \$100,000 or \$500,000 / \$500,000 / \$500,000)

## 3.8 Supplier Superintendence & Employees

The Vendor shall act as an independent Supplier, maintaining complete control over his employees and all of their subcontractors. The Supplier shall perform the work in an orderly and work like manner, enforce strict discipline and order among his employees and require strict discipline and order of his subcontractors.

## 3.9 Subcontractors

Unitil reserves the right to refuse to permit any person or organization (subcontractor) to participate in the work covered by this Contract, such refusal shall not be unreasonably imposed. No subcontract shall relieve the Supplier of any liabilities or obligations under the Contract, and the Supplier agrees that Supplier is fully responsible to Unitil for the acts and omissions of Supplier's subcontractors and of persons employed by them. Supplier shall require every subcontractor to comply with the provisions of the Contract.

## 3.10 Payment

Payment shall be made based upon completion of the performance milestones itemized by Bidder in Section 1.4.2 Project Schedule. Bidder shall propose payment amounts in order to satisfy requirements of RFP. Payment for each identified milestone shall also be contingent on successful completion of the preceding milestones.

Unitil will make payment within thirty (30) days of receipt of a request for payment if above conditions are met.

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When the Bidder has completed all work in accord with the terms of the Contract Documents, the Supplier shall submit to Unitil a request for final payment. The request for final payment shall constitute a waiver of all claims by the Bidder except for claims specifically listed in the request.

Bidder's submission of its request for final payment shall constitute its warrant that the Bidder has to the best of its knowledge fully completed all work included in the Contract and has fully paid for labor, materials, equipment, services, taxes and all other costs and expenses resulting from this Contract.

## 3.11 Acceptance of Terms and Conditions

These terms and conditions become binding when accepted by the Vendor either by acceptance of the contract or commencement of performance. No modification hereof and no condition stated by Vendor in accepting or acknowledging this order, which is in conflict or inconsistent with, or in addition to the terms and conditions set forth herein, shall be binding upon Unitil unless accepted in writing.

## 3.12 Prices

Vendor agrees that prices are firm unless otherwise noted, and Vendor warrants that said prices do not exceed the prices allowed by any applicable Federal, State or Local regulation.

## 3.13 Compliance with Laws

Vendor warrants that in performing work under this order Vendor will comply with all applicable laws, rules and regulations of governmental authorities and agrees to indemnify and save Unitil harmless from and against any and all liabilities, claims, costs, losses, expenses, and judgments arising from or based on any actual or asserted violation by the Vendor of any such applicable laws, rules and regulations.

## 3.14 Patents

Vendor agrees to protect and save harmless Unitil from all costs, expenses or damages, arising out of any infringement of claim or infringement or Patents in Unitil's use of material or equipment furnished pursuant to this order.

## 3.15 Assignment

Vendor agrees that neither this order nor any interest herein shall be assigned or transferred by Vendor except with the prior written approval of Unitil.



#### 3.16 Nondiscrimination in Employment

By acceptance of this contract, Vendor agrees to comply with all applicable Federal, State and Local Anti-Discrimination Laws, including the Civil Rights Act of 1964 and Executive orders 11246 and 11375 and amendments thereto.

#### 3.17 Substitution

No substitution will be permitted under this order except on specific written authority of Unitil's Project Manager.

#### 3.18 Errors in Material

Material or equipment delivered in error, or in excess of the quantity called for, will be returned at the Vendor's expense.

### 3.19 Vendor's Agent or Employees

If Vendor in the performance of this contract furnishes the services of himself, his agent or employee as an Erecting Engineering, Superintendent, or otherwise in respect to the operation, adjustment, repair, installation, erection or dismantling of material and/or equipment furnished hereunder or as described herein, Vendor agrees to assume all liability with respect to the services of himself, his agent or employees while on the premises of Unitil and to indemnify and save Unitil harmless from all claims, suits, actions and proceedings whatsoever which may be brought on account of injuries or damages to Vendor, his agent or employees or to other persons or property which shall occur as a result of the performance of said services.

#### 3.20 Indemnity

The Vendor agrees to indemnify, hold harmless and defend Unitil Corp. (the Company), its parent, subsidiaries and affiliates and their respective employees, agents, officers, and directors, from and against any and all liability for loss, damages, fines, penalties, claims, actions, proceedings, expense, or cost, including but not limited to attorney's fees and litigation expenses which may be asserted against the Company or which the Company may incur or be held liable by reason of

a.) bodily injury, including death, sustained by or alleged to have been sustained by any person or persons, including but not limited to employees of the Company, employees of the Vendor, employees of any subcontractor or any other third parties, and without regard to whether the person or persons are working within the scope of their employment; and/or

b.) damage to property; and/or

c.) personal injury, including but not limited to, false arrest, false imprisonment, or violation of privacy rights; and/or



d.) any unlawful employment practice of the Vendor or any subcontractor, including without limitation, employment discrimination, wrongful discharge, termination of employment or violation or state or federal statutes or regulations relating to employment practices;

resulting from the acts and/or omissions of Vendor or subcontractor, its employees, agents, subcontractors or those under its or their control, and/or arising out of or in any manner connected with the performance of this Agreement or the operations to be performed under this Agreement to the extent such injury or damage is caused by or is attributable in whole or in part to any act or omission of the Vendor, its affiliates or its or their employees or agents or those under its or their control; provided, however, that the Vendor shall not be held responsible for damage to private property when such damage results from the Vendor's having carried out in a proper workmanlike manner instructions received from a duly authorized representative of the Company as to the use to be made of, or act to be performed on, such private property.

#### 3.21 Inspection

Materials and equipments ordered hereunder are subject to inspection and acceptance by Unitil. Such inspection and acceptance however, shall not be conclusive with regard to defects that could not have reasonably been discovered by such an inspection or latent defects, fraud or such gross mistakes as amount to fraud and shall not be deemed to alter or affect the obligation of Vendor or the Rights of Unitil under the Warranty clause above.

## 3.22 Unauthorized Rework

Under no circumstances is Vendor permitted to use substitute material to replace defective articles or to repair or rework them by welding or otherwise without Unitil's written permission.

#### 3.23 Premium Transportation

Any premium transportation costs incurred by Unitil and as a result of Vendor's failure to meet the delivery schedule shall be paid for by Vendor.

## 3.24 Governing Law

The rights of the parties hereto and the construction and effect of this contract shall be subject to and determined in accordance with the laws of the states of New Hampshire and Massachusetts.

## 3.25 Arbitration

Any controversy or claim arising out of or relating to this Contract, or the breach thereof, shall be settled by arbitration administered by the American Arbitration Association under its Commercial Arbitration Rules, and judgment on the award rendered by the arbitrator(s) may be entered in any court having jurisdiction thereof. The arbitration shall be conducted in New Hampshire. Residential Demand Response Pilot Program Turnkey Installation Contractor - Request for Proposals



#### 3.26 Severability

It is the desire and intent of the parties to this Contract that the provisions of this Contract shall be enforced to the fullest extent permissible under the laws and public policies applied in each jurisdiction in which enforcement is sought. Accordingly, if any particular provision of this Contract shall be adjudicated to be invalid or unenforceable, the provision shall be deemed amended to delete there from the portion adjudicated to be invalid or unenforceable, with the deletion to apply only with respect to the operation of the provision in the particular jurisdiction in which the adjudication is made.

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# **APPENDIX A**

**Tendril Installation Instructions** 

# **Get Ready**

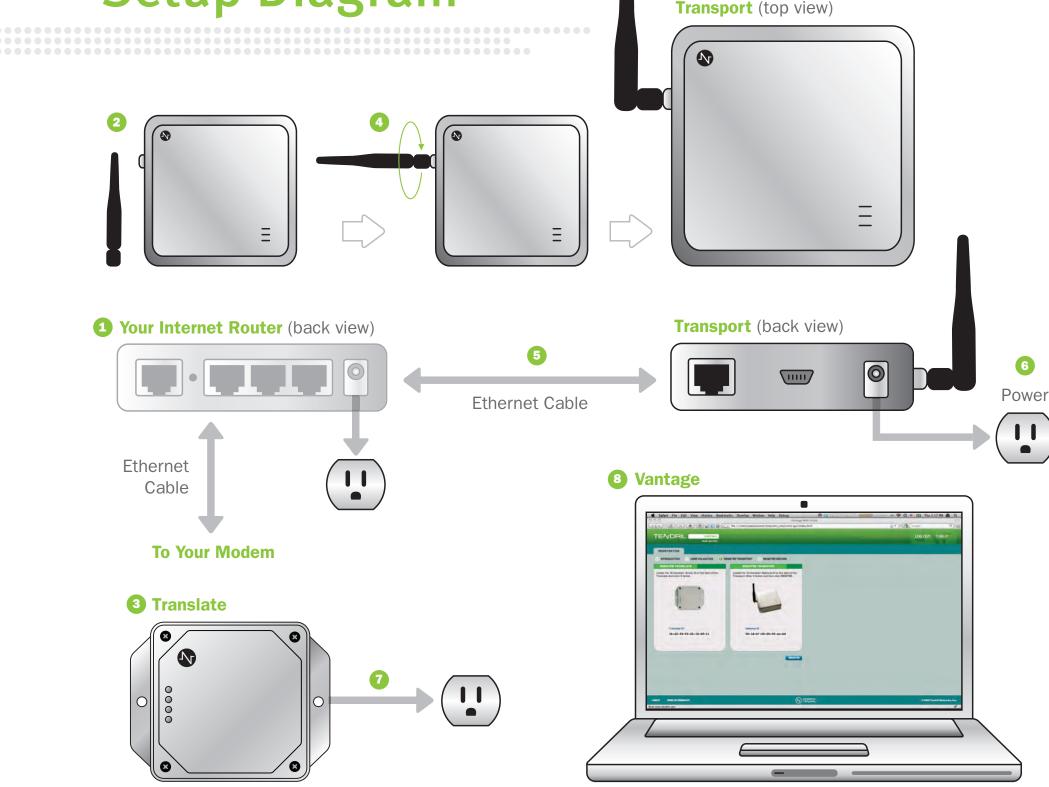
Tendril Home gives you the insight and control to make smart choices about energy usage. Complete these simple steps to get connected and start saving money and resources.

• Locate your Internet router and ensure there is an open port.

• Use your computer to open a browser and verify you can connect to the Internet.

# **Setup Diagram**

**GETTING STARTED GUIDE** 



**TENDRIL** 

HOME

# Unpack

- Unpack the Tendril Transport.
  - See the back of the Transport for its 16-character Gateway ID. Record it below:

\_:\_\_:\_:\_:\_:\_:

- Unpack the Tendril Translate. 3
  - See the back of the Translate for its 16-character Translate ID. Record it below:

Unpack the rest of the Transport box, which includes the following items:

\_\_:\_:\_\_:\_\_:\_\_:\_\_:\_\_:\_\_:\_\_

- Antenna
- Ethernet and Power cables

# **Initial Setup**

#### **4** Assemble

Attach the antenna to the Transport.

**5** Connect

Connect one end of the Ethernet cable to the port in the Transport, and connect the other end to an open port in your router.

#### Power Up

- Plug the Transport power cord into the back of the Transport, and then into an open outlet.
- Plug the power cord into the side of the Translate, and then into an open outlet near your meter.
  - Place the Translate near the meter's wall. However, do not place the Translate directly behind the meter, or within 3 feet of the meter. The meter blocks the signal directly behind the box, so placing the Translate too close will interfere with the signal.

#### Join and Register

- Wait for the Transport lights to turn from green to amber, and then back to green. This may take several minutes.
- 8 Log into the Tendril Vantage web portal with the web address ("URL"), username, and password provided by your utility.
  - Click **Continue** on the first screen. Fill out the user profile information on the second screen. This information is used to create graphs in the portal, comparing your usage to

#### similar consumers.

- Enter the Translate ID into the Translate field. Then enter the Transport's Gateway ID into the Gateway ID field, and click Register. A window will appear, showing your device network status. Click Continue.
- The Transport should now appear automatically as registered. If the Translate shows as Unregistered, click **Register Devices** to register the Translate.
- Once your Transport and Translate show as registered, click Finish Registration.

#### **Extras**

Set up any extra devices included in your kit. For instructions, see the back of this poster.

**GO!** Congratulations – You have completed the initial setup.

Reverse side: Instructions about the Tendril Insight, Set Point, Volt, and Vantage portal. Plus an FAQ and more tips...

# Please see reverse side first for initial setup instructions





#### If an Insight is included:

- Plug in your Insight.
- To adjust the screen contrast, press either the right or left button on the bottom row.
- The Insight automatically will find an available "channel" and joins your home network.
- In a browser, go to the Vantage web portal.
- Log in, click Home Network, then Device Setup.
- Click Find New Devices.
- Make sure there is a checkmark next to the Insight. If it appears as Unregistered, click Register Devices.
- If you have trouble seeing your device in the Vantage portal, refer to the FAQ about joining networks.



#### If a Set Point is included:

- Note: installation by a licensed electrician only.
- Once installed, press Join.
- Press Scan.
- The Set Point automatically will find an available "channel" and joins your home network.
- Press Join. The Set Point will join the network.
- In a browser, go to the Vantage web portal.
- Log in, click Home Network, then Device Setup.
- Click Find New Devices.
- Make sure there is a checkmark next to the Set Point. If it appears as Unregistered, click Register Devices.
- If you have trouble seeing your device in the Vantage portal, refer to the FAQ about joining networks.



#### If a Volt is included:

- Plug in your Volt.
- The Volt will automatically find your home network and join it.
- In a browser, go to the Vantage web portal.
- Log in, click Home Network, then Device Setup.
- Click Find New Devices.
- Make sure there is a checkmark next to the Volt. If it appears as Unregistered, click Register Devices.
- You can then plug an electrical device (such as a room fan) into the Volt, and turn the device on or off from the Vantage portal. If you have multiple Volts, write down the "EUI-64" number listed on each Volt's box or label. In the portal, for each registered Volt, the number corresponds to the Device Identifier. You can change the Name field to something more meaningful. For example, change the name "Volt" to "Volt for BR Fan".



# FAQs and Troubleshooting

#### Q: What if additional device(s) didn't join my Home Area Network (HAN)?

A: Look at your Translate label and write down its EPAN ID. On the Insight, press the upper-right button to scroll through available EPAN IDs. When the EPAN ID from your Translate label matches the EPAN ID on the Insight, you have joined your home network. Then in the Vantage web portal, click Find New Devices, then Register Devices.

On the Set Point, press Menu, then Smart Energy Setup, then ZigBee Network. Press Unjoin, then press Scan. Press the up-arrow button to scroll through available EPAN IDs. When the EPAN ID from your Translate label matches the ID on the Set Point, press Join. Then in the Vantage web portal, click Find New Devices, then **Register Devices.** 

#### **Q: Where should I place my Translate?**

**A:** The ideal location for your Translate is along the same wall as your meter, but at least 3 feet away from the meter.

#### Q: How do I resolve a "Gateway ID Not Found" error message?

#### **A:** Multiple things to check:

SET POINT

thermostat

• Check the numbers: Make sure the Gateway ID you entered into the portal matches the Gateway ID listed on the back of the Transport.

• Check your Internet connection: Are you able to access

#### Q: Why does my Translate have a red light flashing?

A: The Translate waits for an initial signal from your meter, after which it begins taking meter reads. If the Translate does not receive that initial signal in an hour after being installed, this red light will begin to flash. It usually takes anywhere from two to eight hours to receive the initial signal. The best idea is to leave your Translate in a particular location overnight, and see if the red light has been replaced with a green light. If not, try plugging the Translate in again, in a new location close to the meter.

#### Q: How do I adjust the screen contrast on my Insight?

#### The Vantage portal helps you manage your energy usage and includes:



- A specific web address that you access in your browser.
- A personalized login using the information provided by your utility.
- A personal view into your energy consumption, including current use, month-to-date, and historical data.
- Charts to help you visualize consumption and costs.
- Insights into ways that you can use electric devices when rates are lower.
- Messages about "load control" events from your utility.
- The flexibility to "Opt Out" of a load control event.

Also see the product documentation – click **Help** in the Tendril Vantage web portal.

For the Volt, write down the "EUI-64" number that is printed on its label. Plug in the Volt, and follow these steps:

- **1.** Wait for the green light to stay on for three seconds, indicating that it has joined a network. (The green light then turns off.)
- 2. Go to the Vantage web portal.
- 3. Click Find New Devices.
- **4.** If the Volt's EUI-64 number (from the label) matches the Volt's ID in the portal, the device has joined your home network. You can now click Register Devices.

If the EUI-64 and ID numbers are different, go back to the Volt device and press its center round button once. The Volt tries to join the next available network. For each joined network, repeat steps 1-4 until the ID number in the portal matches your Volt's EUI-64 number.

#### Q: How do I change my password?

A: Navigate to the User Profile tab. Click the Change Password button below your name and address, and enter the new password you would like to use. Write down the password in a secure location.

If you forget your password and cannot log in, please call Tendril Technical Support at 866-364-4526.

other websites? If not, reboot your router by unplugging the power cable and plugging it back in.

• Check the Transport lights: Are both lights on the front of the Transport green? If any lights are amber, the device is still checking for a firmware update from our servers, and the device cannot be registered. Wait for the lights to turn green.

• Check the Transport cables: Is the Transport plugged in, and is it connected to your router with an Ethernet cable?

• Check the browser: Try logging out and refreshing your browser before attempting to register again.

• Check the Transport's Internet connection: Check the back of the Transport, where the Ethernet cable plugs in. You should see a green light and a flashing amber light. If you do not see those lights, check your router. Make sure it is plugged in and connected to your modem. If you have an Internet connection, you should see the green and amber lights on your router, like those on the Transport. If you do not see any lights, unplug the power cable from your Transport, wait several seconds, and then plug it back in.

• Check your router: Make sure your router has the up-to-date firmware. Check your router documentation for instructions on how to find out what firmware is installed on your router, whether or not it is up-to-date, and how to install the latest version if necessary.

A: Before Registration: If the contrast on the screen of your Insight appears too light or too dark, adjust it by repeatedly pressing either the bottom left or the bottom right buttons on the Insight. Press the left button to lighten the display, and press the right button to darken the display.

After Registration: Access the contrast settings by pressing "Menu," "Settings," and "Contrast." Adjust using the two top right buttons on the Insight, and press "Save."

#### Q: Why doesn't energy consumption information show up in my Vantage web portal?

A: When you first set up your equipment, it may take up to eight hours before your Vantage web portal displays energy consumption data from the meter. Wait overnight and then log back into the Vantage portal to see the first set of readings.

Tendril Support: 866-364-4526 | techsupport@tendrilinc.com



Visit us at www.tendrilinc.com

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# **APPENDIX B**

**Commercial Pricing Proposal Template** 

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# ATTACHMENT B

## COMMERCIAL PROPOSAL PRICING SHEET

Scope of Work Item	<u>Massachusetts</u>	<u>New Hampshire</u>	
1.) Basic Services			
A. Administrative services, including but not limited to arrangement of site visits, attendance at training sessions, and progress reporting	\$	\$	
B. Site Visits to conduct installations of analysis meters for <i>Simple TOU Program</i> , including on-site data collection and customer education	\$	\$	
C. Site Visits to conduct installations of analysis meters, RF meters, and TREE systems for <i>Enhanced</i> <i>Technology Program</i> segment, including on-site data collection and customer education	\$	\$	
D. Site Visits to conduct installations of analysis meters and Thermostats for <i>Smart Thermostat</i> <i>Program</i> segment, including on-site data collection and customer education	\$	\$	
TOTAL	\$	\$	
2.) Optional Services (To be executed at Unitil's discretion)			
A. Schedule and conduct site visits with Smart Thermostat program participants to download logged data from the thermostats (via USB connection) after the conclusion of the pilot. Data is to be provided to Unitil for evaluation purposes	\$	\$	
B. Schedule and conduct site visits with Enhanced Technology program participants to collect all Tendril equipment except the thermostats, which are to remain. Equipment to be returned to Unitil.	\$	\$	

#### **Honeywell Utility Solutions**

Utility Services Agreement

Program Name:	Residential Demand Response Pilot Program		
Date:	November 22, 2010		

<u>Customer:</u>	
Unitil Service Corporation	
6 Liberty Lane West	
Hampton, NH 03842	

**Scope of Work:** HONEYWELL shall provide the following equipment and services ("the Work") in accordance with the attached work scope documents and terms and conditions, which form a part of this Agreement. Services HONEYWELL will provide under this Agreement specifically exclude inspection, investigation, discovery, identification, prevention or remodiation of Hazardous Substances (as defined in Section 21.1) or Mold (as defined in Section 21.2), conditions caused by Hazardous Substances or Mold, or conditions that might cause or promote the accumulation, concentration, growth or dispersion of Hazardous Substances or Mold.

**Period of Performance:** The Work shall commence on March 1, 2011 ("Effective Date") and shall be completed by August 31, 2011 ("Completion Date")

#### Additional Clarification and/or Exclusions:

None

#### Price: \$ 103,137.65 U.S. Dollars

**Payment:** Upon CUSTOMER acceptance of this proposal or contract execution, whichever occurs first, the CUSTOMER shall pay HONEYWELL \$17,500.00. Such payment shall be used for engineering, drafting, and other mobilization costs reasonably incurred prior to on-site installation.

Acceptance: This proposal and the pages attached shall become an Agreement in accordance with Article 13 of the General Terms and Conditions below and only upon signature below by an authorized representative of HONEYWELL and CUSTOMER, subject to credit approval by HONEYWELL.

	: LL UTILITY SOLUTIONS vision of Honeywell International Inc.	<b>CUSTOMER: Unitil Service Corporation</b>	
Signature:	12 AM	Signature:	
Name:	Kevin McDonough	Name:	
Title:	General Manager	Title:	
Date:	November 22, 2010	Date:	
	CONTRACTS:		

#### General Terms and Conditions

#### 1. WORKING HOURS

Unless otherwise stated, all labor and services under this Agreement will be performed during the hours of 8:00 a.m. - 4.30 p.m. local time Monday through Friday, excluding federal holidays. If for any reason CUSTOMER requests HONEYWELL to furnish any such labor or services outside of the hours of 8:00 a.m. - 4:30 p.m. local time Monday through Friday (or on federal holidays), the parties must include in this Agreement specific language that address such expectations, including additional compensation, if applicable.

CUSTOMER agrees to pay the amount of any new or increased taxes or governmental charges upon labor or the production, shipment, sale, installation, or use of equipment or software which become effective after the date of this Agreement. If CUSTOMER claims any such taxes do not apply to transactions covered by this Agreement, CUSTOMER shall provide HONEYWELL with a tax exemption certificate acceptable to the applicable taxing authorities.

#### 3. PROPRIETARY INFORMATION

3.1 All proprietary information (as defined herein) obtained by CUSTOMER from HONEYWELL in connection with this Agreement shall remain the property of HONEYWELL, and all proprietary information (as defined herein) obtained by HONEYWELL from CUSTOMER in connection with this Agreement shall remain the property of CUSTOMER, and both parties shall not divulge such information to any third party without prior written consent. As used herein, the term "proprietary information" shall mean written information (or oral information reduced to writing), or information in machine-readable form, including but not limited to software supplied to CUSTOMER hereunder which HONEYWELL deems proprietary or not immed to software supplied to CUSTOMER hereunder which HONEYWELL deems proprietary or confidential and characterizes as proprietary at the time of disclosure to CUSTOMER by marking or labeling the same "Proprietary, "Confidential", or "Sensitive". Both parties shall incur no obligations hereunder with respect to proprietary information which: (a) was in the their possession or was known prior to its receipt; (b) is independently developed by the CUSTOMER or HONEYWELL without the utilization of such confidential information; (c) is or becomes public knowledge through no fault of either party: **3.2** Both parties agree that either party may use nonproprietary information pertaining to the Agreement, and the work performed under the Agreement, for press releases, case studies, data analysis, promotional purposes, and other similar documents or statements to be publicly released, as long as either party submits to the other party sus such document for site among and the turnersonable.

submits to the other party any such document or statement for its approval, which shall not be unreasonably withheld.

#### 4. INSURANCE OBLIGATIONS

HONEYWELL shall, at its own expense, carry and maintain in force at all times from the effective date of the Contract through final completion of the work the following insurance. It is agreed, however, that HONEYWELL has the right to insure or self-insure any of the insurance coverages listed below

(a) Commercial General Liability Insurance to include contractual liability, products/completed operations liability with a combined single limit of USD \$5,000,000 per occurrence. Such policy will be written on an occurrence form basis:

(b) If automobiles are used in the execution of the Contract, Automobile Liability Insurance with a minimum combined single limit of USD \$5,000,000 per occurrence. Coverage will include all owned, leased, non-owned and hired vehicles

(c) Where applicable, "All Risk" Property Insurance, including Builder's Risk insurance, for physical damage

(d) Workers' Compensation Insurance Coverage A - Statutory limits and Coverage B-Employer's Liability Insurance with limits of USD \$1.000,000 for bodily injury each accident or disease.

Prior to the commencement of the Contract, HONEYWELL will furnish evidence of said 4.2 insurance coverage in the form of a Memorandum of Insurance which is accessible at: http://places.honevwell.com/moi. All insurance required in this Article will be written by companies with a rating of no less than "A-, XII" by A.M. Best or equivalent rating agency. HONEYWELL will endeavor to provide a thirty (30) day notice of cancellation or non-renewal to the Customer. In the event that a self-insured program is implemented, HONEYWELL will provide adequate proof of financial responsibility

#### 5. HAZARDOUS SUBSTANCES, MOLD AND UNSAFE WORKING CONDITIONS

CUSTOMER has not observed or received notice from any source (formal or informal) of (a) S.1 CUSTOMER has not observed or received notice from any source (formal or informal) of (a) Hazardous Substances or Mold, either airborne or on or within the valls, floors, ceilings, heating, ventilation and air conditioning systems, plumbing systems, structure, and other components of the Site, or within furniture, fixtures, equipment, containers or pipelines in a Site; or (b) conditions that, to CUSTOMER'S knowledge, might cause or promote accumulation, concentration, growth or dispersion of Hazardous Substances or Mold on or within such locations.

5.2 HONEYWELL is not responsible for determining whether the Covered Equipment or the temperature, humidity and ventilation settings used by CUSTOMER, are appropriate for CUSTOMER and the Site except as specifically provided in an attached Work Scope Document.

If any such materials, situations or conditions, whether disclosed or not, are in fact discovered That you find that the state of the second second the second seco

5.4 CUSTOMER represents that CUSTOMER has not retained HONEYWELL to discover, inspect, investigate, identify, prevent or remediate Hazardous Substances or Mold or conditions caused by Hazardous Substances or Mold.

5.5 TO THE FULLEST EXTENT ALLOWED BY LAW, CUSTOMER SHALL INDEMNIFY AND HOLD HONEYWELL HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS AND COSTS OF WHATEVER NATURE, INCLUDING BUT NOT LIMITED TO, CONSULTANTS' AND ATTORNEYS' FEES, DAMAGES FOR BODILY INJURY AND PROPERTY DAMAGE, FINES, PENALTIES, CLEANUP COSTS AND COSTS ASSOCIATED WITH DELAY OR WORK STOPPAGE, THAT IN ANY WAY RESULTS FROM OR ARISES UNDER THE BREACH OF THE REPRESENTATIONS AND WARRANTIES IN THIS SECTION, THE EXISTENCE OF MOLD OR A HAZARDOUS SUBSTANCE AT A SITE, OR THE OCCURRENCE OR EXISTENCE OF THE SITUATIONS OR CONDITIONS DESCRIBED IN THIS SECTION, WHETHER OR NOT CUSTOMER PROVIDES HONEYWELL ADVANCE NOTICE OF THE EXISTENCE OR OCCURRENCE AND REGARDLESS OF WHEN THE HAZARDOUS SUBSTANCE OR OCCURRENCE AND REGARDLESS OF WHEN THE HAZARDOUS SUBSTANCE OR OCCURRENCE IS DISCOVERED OR OCCURS. THIS INDEMNIFICATION SHALL SURVIVE TERMINATION OF THIS AGREEMENT FOR WHATEVER REASON. TERMINATION OF THIS AGREEMENT FOR WHATEVER REASON.

#### 6. WARRANTY AND LIMITATION OF LIABILITY

Honeywell Building Systems Agreement (Rev. 07/05)

6.1 HONEYWELL will replace or repair any product HONEYWELL provides under this Agreement and/or shall correct any defective service performed by HONEYWLL that fails within the warranty Agreement and of shall correct any detective service performed by HONEY WILL may hars within the warranty period of (one) 1 year from the date of installation or the service performed because of defective workmanship or materials, except to the extent the failure results from CUSTOMER negligence, or from fire, lightning, water damage, or any other cause beyond the control of HONEYWELL. This warranty applies to all products HONEYWELL provides under this Agreement, whether or not manufactured by HONEYWELL. The warranty is effective as of the date of installation.

6.2 THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE, AND HONEYWELL EXPRESSLY DISCLAIMS AND CUSTOMER EXPRESSLY WAIVES ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF WORKMANSHIP, CONSTRUCTION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES, EQUIPMENT. AND MATERIALS PROVIDED HEREUNDER. HONEYWELL SHALL NOT BE LIABLE FOR ANY PROPERTY DAMAGE, PERSONAL INJURY, LOSS OF INCOME, EMOTIONAL DISTRESS, DEATH, LOSS OF USE, LOSS OF VALUE, ADVERSE HEALTH EFFECT OR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE, OR EXEMPLARY DAMAGES, ARISING FROM, OR RELATING TO, THIS LIMITED WARRANTY OR ITS BREACH. ITS BREACH.

6.3 HONEYWELL makes no representation or warranty, express, implied or otherwise, regarding Hazardous Substances or Mold. HONEYWELL shall have no duty, obligation or liability, all of which CUSTOMER expressly waives, for any damage or claim, whether known or unknown, including but not limited to property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services, in whole or in part due to or arising from any investigation, testing, analysis, monitoring, cleaning, removal, disposal, abatement, remediation, decontamination, repair, replacement, relocation, loss of use of building, or equipment and systems, or personal injury, death or disease in any way associated with Hazardous Substances or Mold.

#### 7. INDEMNITY

Honeywell agrees to indemnify, hold harmless and defend the Customer, its parent, subsidiaries and affiliates and their respective employees, agents, officers, and directors, from and against any and all liability for loss, damages, fines, penalties, claims, actions, proceedings, expense, or cost, including but not limited to attorney's fees and litigation expenses which may be asserted against the Customer or which the Customer may incur or be held liable by reason of

> a.) bodily injury, including death, sustained by or alleged to have been sustained by any person or persons, including but not limited to employees of the Customer, employees of Honeywell, employees of any subcontractor or any other third parties, and without regard to whether the person or persons are working within the scope of their employment; and/or

b.) damage to property; and/or

c.) personal injury, including but not limited to, false arrest, false imprisonment, or violation of privacy rights; and/or

any unlawful employment practice of Honeywell or d.) any subcontractor, including without limitation, employment discrimination, wrongful discharge, termination of employment or violation or state or federal statutes or regulations relating to employment practices;

resulting from and to the extent of the Contractor's negligent acts and/or omissions, as well as their subcontractor, its employees, agents, subcontractors or those under its or their control, and/or arising out of or in any manner connected with the Contractor's performance of this Agreement or the Contractor's operations to be performed under this Agreement to the extent such injury or damage is caused by or is attributable to any act or omission of Honeywell, its affiliates or its or their employees or agents or those under its or their control; a duly authorized representative of the Customer as to the use to be made of, or act to be performed on, such a duiy autorized representative of the Customer as to the use to be made of, or act to be performed on source private property. Such indemnity obligation is valid only to the extent (i) CUSTOMER gives HONEYWELL immediate notice in writing of any such claims and permits HONEYWELL, through counsel of its choice and HONEYWELL'S sole cost and expense, to answer the claims and defend any related suit and (ii) CUSTOMER gives HONEYWELL all needed information, assistance and authority, at HONEYWELL'S expense, to enable HONEYWELL to defend such such HONEYWELL shall not be responsible for any settlement without its information of the such and the such as t HORE I WELL to derend such suit. HORE I WELL shall not be responsible for any settlement without its written consent HORE YWELL shall not be liable for loss or damage caused by the negligence of CUSTOMER, or any other party or such party's employees or agents. This obligation shall survive termination of this Agreement. Notwithstanding the foregoing, CUSTOMER agrees that HONEYWELL will not be responsible for any damages caused by Mold or any other fungus or biological material or agent, including but not limited to property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services.

#### 8. LIMITATION OF LIABILITY

IN NO EVENT SHALL HONEYWELL OR THE CUSTOMER BE LIABLE FOR ANY 5.1 IN NO EVENT SHALL HOREY WELL OK THE LUSTOMEK BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, WHETHER ARISING OUT OF OR AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, MOLD, MOISTURE, INDOOR AIR QUALITY, OR OTHERWISE, ARISING FROM, RELATING TO, OR CONNECTED WITH THE SERVICES, EQUIPMENT, MATERIALS, OR ANY GOODS PROVIDED HEREUNDER.

NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN. HONEYWELL'S TOTAL LIABILITY OR THE CUSTOMER'S TOTAL LIABILITY ARISING OUT OF OR AS A RESULT OF ITS PERFORMANCE UNDER THIS AGREEMENT SHALL NOT EXCEED THE AMOUNT OF THIS AGREEMENT.

9. EXCUSABLE DELAYS

HONEYWELL shall not be liable for damages caused by delay or interruption in Services due to fire, flood, corrosive substances in the air, strike, lockout, dispute with workmen, inability to obtain material or services, commotion, war, acts of God, the presence of Hazardous Substances or Mold, or any other cause beyond commotion, war, acts or dod, the presence or mazardous substances or storig, or any other cause beyond HONEYWELL'S reasonable control. Should any part of the system or any Equipment be damaged by fire, water, lightning, acts of God, the presence of Hazardous Substances or Mold, third parties, or any other cause beyond the control of HONEYWELL, any repairs or replacement shall be paid for by CUSTOMER. In the event of any such delay, date of shipment or performance shall be extended by a period equal to the time lost by reason of such delay, and HONEYWELL shall be entitled to recover from CUSTOMER its reasonable costs, overhead, and profit arising from such delay.

#### **10. PATENT INDEMNITY**

10.1 HONEYWELL shall, at its expense, defend or, at its option, settle any suit that may be instituted against CUSTOMER for helped infringement of any United States patents related to the hardware or software manufactured and provided by HONEYWELL under this Agreement ("the equipment"), provided that a) such manufactured and provided by NOVETWELL under this Agreement (the equipment), provided that a) such alleged infringement consists only in the use of such equipment by itself and not as part of, or in combination with, any other devices, parts or software not provided by HONEYWELL hereunder, b) CUSTOMER gives HONEYWELL immediate notice in writing of any such suit and permits HONEYWELL brough counsel of its choice, to answer the charge of infringement and defend such suit, and o (CUSTOMER gives HONEYWELL all needed information, assistance and authority, at HONEYWELL'S expense, to enable HONEYWELL to defend such suit.

If such a suit has occurred, or in HONEYWELL'S opinion is likely to occur, HONEYWELL 10.2 may, at its election and expense: a) obtain for CUSTOMER the right to continue using such equipment; b) replace, correct or modify it so that it is not infringing; or c) remove such equipment and grant CUSTOMER a credit therefore, as depreciated.

In the case of a final award of damages in any such suit, HONEYWELL will pay such award. HONEYWELL shall not, however, be responsible for any settlement made without its written

THIS ARTICLE STATES HONEYWELL'S TOTAL LIABILITY AND CUSTOMER'S SOLE REMEDY FOR ANY ACTUAL OR ALLEGED INFRINGEMENT OF ANY PATENT BY THE HARDWARE MANUFACTURED AND PROVIDED BY HONEYWELL HEREUNDER.

#### SOFTWARE LICENSE

All software provided in connection with this Agreement shall be licensed and not sold. The end user of the All software provided in connection with this Agreement shall be incensed and not sold. The end user of the software will be required to sign a license agreement with provisions limiting use of the software to the equipment provided under these specifications, limiting copying, preserving confidentiality, and prohibiting transfer to a third party. Licenses of this type are standard for computer-based equipment of the type covered by this Agreement. CUSTOMER shall be expected to grant HONEYWELL access to the end user for purposes of obtaining the necessary software license.

#### 12. DISPUTE RESOLUTION

With the exception of any controversy or claim arising out of or related to the installation, monitoring, and/or maintenance of fire and/or security systems, the Parties agree that any controversy or claim between HONEYWELL and CUSTOMER arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration in a neutral venue, conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. Any award rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. Any controversy or claim arising out of or related to the installation, monitoring, and/or maintenance of systems associated with security and/or the detection of, and/or reduction of risk of loss associated with fire shall be resolved in a court of competent jurisdiction.

#### ACCEPTANCE OF THE CONTRACT

This proposal and the pages attached shall become an Agreement upon signature above by HONEYWELL and CUSTOMER. The terms and conditions are expressly limited to the provisions hereof, including Honeywell's General Terms and Conditions attached hereto, notwithstanding receipt of, or acknowledgment by, HONEYWELL of any purchase order, specification, or other document issued by CUSTOMER. Any additional or different terms set forth or referenced in CUSTOMER'S purchase order are hereby objected to by HONEYWELL and shall be deemed a material alteration of these terms and shall not be a part of any resulting order

#### 14. MISCELLANEOUS

This Agreement represents the entire Agreement between CUSTOMER and HONEYWELL for the Work described herein and supersedes all prior negotiations, representations or Agreements between the Parties related to the work described herein.

14.2 None of the provisions of this Agreement shall be modified, altered, changed or voided by any subsequent Purchase Order or other document unilaterally issued by CUSTOMER that relates to the subject matter of this Agreement. This Agreement may be amended only by written instrument signed by both Parties.

14.3 This Agreement shall be governed by the law of the State where the work is to be performed

14.4 Any provision or part of this Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon HONEYWELL and CUSTOMER, who agree that this Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

14.5 CUSTOMER may not assign its rights or delegate its obligations under this Agreement, in whole or in part, without the prior written consent of HONEYWELL. HONEYWELL may assign its right to receive payment to a third party.

#### 15. TERMS OF PAYMENT

Subject to HONEYWELL'S approval of CUSTOMER'S credit, payment terms are as follows: Subject to FIONE 1 WELL'S approval of COSTOMER'S creat, payment terms are as follows: Progress Paymengs - HOREYWELL will invoice at least monthly for all installation, labor, and services performed, both on and off the job site. CUSTOMER agrees to pay the full amounts invoiced upon receipt of the invoice at the address specified by the CUSTOMER. Invoices not paid within thirty (30) days of the invoice date are past due and accruse interest from the invoice date to the date of payment at the rate of one percent (1%) per month, compounded monthly, or the highest legal rate then allowed. In the event of a disputed invoice, the per monin, compounded moniny, or the inglies legal fact their allowed, in the event of a disputed involved, ince CUSTOMER shall immediately notify HONEYWELL with a detailed description of the dispute. Undisputed portions of the invoice shall be paid in accordance with the terms herein. <u>Suspension of work</u> - If HONEYWELL, having performed work per Agreement requirements, does not receive payment within thirty (30) days after submission of a HONEYWELL invoice, HONEYWELL may suspend work until CUSTOMER provides remedy.

#### 16. WORK BY OTHERS

Honeywell Building Systems Agreement (Rev.07/05)

16.1 Services HONEYWELL will provide under this Agreement specifically exclude professional services which constitute the practice of architecture or engineering unless specifically set forth in the Scope of Work. CUSTOMER or Owner will specify all performance and design criteria that HONEYWELL will follow in performing Work under this Agreement. If professional design services or certifications by a design professional related to systems, materials, or equipment is required, such services and certifications are the responsibility of others. To the fullest extent permitted by law, CUSTOMER shall indemnify and hold harmless HONEYWELL and its agents and employees from and against any and all claims, damages, losses and expresses inducing but not built to induce the in any way result from are used to prose on from the stress of the second secon repenses, including but not limited to attorneys? fees, that in any way result from or arise under breach of the representations in this Section 16. This indemnification shall survive termination of this Agreement for whatever reason. Nothing in this Section 16 shall be construed to require that CUSTOMER indemnify and hold harmless HONEYWELL from claims and costs resulting from HONEYWELL'S negligent actions or willful misconduct.

#### 17. DAMAGE OR LOSS

HONEYWELL shall not be liable for damage to or loss of equipment and software after delivery to destination determined by this Agreement or any applicable prime contract unless damaged by HONEYWELL. If thereafter, and prior to payment in full to HONEYWELL by CUSTOMER, any such equipment or software it damaged or destroyed by any cause whatsoever, other than by the fault of HONEYWELL, the CUSTOMER agrees promptly to pay or reimburse HONEYWELL for such loss.

#### **18. TERMINATION**

By Customer. CUSTOMER may terminate this Agreement for cause if HONEYWELL defaults in the performance of any material term of this Agreement, or fails or neglects to carry forward the Work in accordance with this Agreement, after giving HONEYWELL written notice of its intent to terminate. If HONEYWELL has not, within seven (7) business days after receipt of such notice, acted to remedy and make good such deficiencies, CUSTOMER may terminate this Agreement and take possession of the site together with all materials thereon, and move to complete the Work itself expediently. Upon request of HONEYWEI CUSTOMER will furnish to HONEYWELL a detailed accounting of the costs incurred by CUSTOMER in finishing the Work. If the unpaid balance of the contract price exceeds the expense of finishing the Work, the excess shall be paid to HONEYWELL, but if the expense exceeds the unpaid balance, HONEYWELL shall pay the difference to CUSTOMER.

18.2 <u>By Honeywell</u> HONEYWELL may terminate this Agreement for cause (including, but not limited to, CUSTOMER'S failure to make payments as agreed herein) after giving CUSTOMER written notice of its intent to terminate. If, within seven (7) days following receipt of such notice, CUSTOMER fails to make the payments then due, or otherwise fails to cure or perform its obligations, HONEYWELL may, by written notice to CUSTOMER, terminate this Agreement and recover from CUSTOMER payment for Work executed and for losses sustained for materials, tools, construction equipment and machinery, including but not limited to extend by our bard on graft and employed and one of the second bard. to, reasonable overhead, profit and applicable damages.

#### 19. CHANGES IN THE WORK

19.1 A Change Order is a written order signed by CUSTOMER and HONEYWELL authorizing a change in the Work or adjustment in the price or a change to the schedule.

19.2 CUSTOMER may request HONEYWELL to submit proposals for changes in the Work, subject to acceptance by HONEYWELL. If CUSTOMER chooses to proceed, such changes in the Work will be authorized by a Change Order. Unless otherwise specifically agreed to in writing by both parties, if HONEYWELL submits a proposal pursuant to such request but CUSTOMER chooses not to proceed, CUSTOMER shall issue a Change Order to reimburse HONEYWELL for any and all costs incurred in preparing the proposal.

19.3 HONEYWELL may make a written request to CUSTOMER to modify this Agreement based on the receipt of, or the discovery of, information that that HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. HONEYWELL will submit its request to CUSTOMER within a reasonable time after receipt of, or the discovery of, information that HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. This request shall be submitted by HONEYWELL before proceeding to execute the Work, except in an emergency endangering life or property, in which case HONEYWELL shall have the authority to act, in its discretion, to prevent threatened damage, injury or loss. HONEYWELL's request will include information necessary to substantiate the effect of the change and any impacts to the Work, including any change in schedule or constact price. If HONEYWELL'S request is acceptable to CUSTOMER, CUSTOMER will issue a Change Order consistent therewith. If CUSTOMER and HONEYWELL cannot agree on the amount of the adiustment in the Price, or the Schedule, it shall be determined pursuant to the Dispute Resolution amount of the adjustment in the Price, or the Schedule, it shall be determined pursuant to the Dispute Resolution article of this Agreement. Any change in the Price or the Schedule resulting from such claim shall be authorized by Change Order.

#### 20. ACCEPTANCE OF THE WORK

Upon receipt of notice by HONEYWELL that the Work is ready for final inspection and acceptance, Upon receipt of notice by FORET wELL that the work is ready for than inspection and acceptance, will be in a form provided by HONEYWELL, stating that to the best of CUSTOMER'S knowledge, information and belief, and on the basis of CUSTOMER'S on-site visits and inspections, the Work has been fully completed in accordance with the terms and conditions of this Agreement, which non-compliance with a material element of this Agreement, which non-compliance is due solely to the fault of HONEYWELL, CUSTOMER will notify HONEYWELL in writing within the three (3) believe the operation of the context of the co solely to the fault of HONEYWELL, CUSTOMER will notify HONEYWELL in writing within the three (3) business days setting forth the specific reasons for non-acceptance. CUSTOMER agrees that failure to inspect and/or failure to issue proper notice of non-acceptance within three (3) business days shall constitute final acceptance of the Work under this Agreement. CUSTOMER further agrees that partial or beneficial use of the Work by CUSTOMER or Owner prior to final inspection and acceptance will constitute acceptance of the Work by CUSTOMER or Owner prior to final inspection and acceptance will constitute acceptance of the Work wunder this Agreement. To the fullest extent permitted by law, CUSTOMER shall indemnify and hold harmless HONEYWELL and its agents and employees from and against any and all claims, damages, losses and expenses, including but not limited to attorneys' fees, that in any way result from or anse under breach of the representations in this Section 21. This indemnification shall survive termination of this Agreement for ubarrow reson. Nothing in this Section 21. chills excentioned for acceptance to file indemnify and hold intervention. whatever reason. Nothing in this Section 21 shall be construed to require that CUSTOMER indemnify and hold harmless HONEYWELL from claims and costs resulting from HONEYWELL'S negligent actions or omissions or willful misconduct

- 21. Honeywell shall insure the payment of compensation to its employees in accordance with Workers' Compensation Statutory Coverage with Basic Employers' Liability Coverage
- 27 Honeywell agrees to comply fully with the requirements of the Occupational Safety and Health Act of 1970, as well as any applicable state and municipal safety standards. In addition, Honeywell agrees to require and be directly responsible for compliance therewith on the part of its agents or subcontractors, and Honeywell shall directly receive and be responsible for all citations, assessments, fines or penalties which may be incurred by its failure or the failure of its agents or subcontractors to so comply

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- 23. Honeywell further agrees to be responsible for meeting and complying with all federal, state and municipal laws and regulations pertaining to any work to be performed under this Agreement.
- 24. It is expressly understood that in the performance of any work under this Agreement Honeywell shall act as an independent contractor and not as an agent or employee of the Customer and nothing contained in this Agreement shall be construed in any way to modify its rights and obligations as an independent contractor hereunder.
- 25. It is further expressly understood and agreed that this Agreement gives Honeywell no exclusive right to do all or any of the Customer's work and that the Customer may contract with others or do such work with its own employees.
- 26. Honeywell, with respect to performance by it under this agreement, may be subject to the provisions of: 41CFR Section 60-14: 41CFR Section 60-250.4; and Section 60-741.4 with respect to affirmative action program and plan requirements. Honeywell will not discriminate against any individual on the basis of race, color, marital status, religion, genetic, age, sexual orientation, national origin, citizenship status, disability-handicap, genetic profile, pregnancy, military service, or status as a disabiled veteran or veteran of the Vietnam era, neither in its employment practices nor in the selection and retention of subcontractors, including procurement of materials and leases of equipment.
- 27. All of the terms and provisions of this Agreement shall be binding upon and inure to the benefit of the parties to this Agreement and their respective successors and assigns. This agreement is for the sole benefit of the parties to this Agreement and not for the benefit of any third party.
- 28. No modification, amendment or waiver of any provision of, or consent required by, this Agreement, nor any consent to any departure from the terms of this Agreement, shall be effective unless it is in writing and signed by the parties to this Agreement. Any modification, amendment, waiver or consent shall be effective only in the specific instance and for the purpose for which it is given.
- 29. This Agreement may be executed in counterparts, each of which shall be deemed an original, but both of which together shall constitute one and the same instrument. Any counterpart or other signature delivered by facsimile shall be deemed for all purposes as being good and valid execution and delivery of this Agreement by that party.

#### 30. DEFINITIONS

30.1 "Hazardous substance" includes all of the following, and any by-product of or from any of the following, whether naturally occurring or manufactured, in quantities, conditions or concentrations that have, are alleged to have, or are believed to have an adverse effect on human heath, habitability of a Site, or the environment: (a) any dangerous, hazardous or toxic pollutant, contaminant, chemical, material or substance defined as hazardous or toxic or as a pollutant or contaminant under state or federal law, and (b) any petroleum product, nuclear fuel or material, crinogen, asbestos, urea formaldehyde, foamed-in-place insulation, polychlorimated biphenyl (PCBs), and (c) any other chemical or biological material or organism, that has, is alleged to have, or is believed to have an adverse effect on human health, habitability of a Site, or the environment.

30.2 "Mold" means any type or form of fungus or biological material or agent, including mold, mildew, moisture, yeast and mushrooms, and any mycotoxins, spores, scents, or by-producets produced or released by any of the foregoing. This includes any related or any such conditions caused by third parties.

30.3 "Covered Equipment" means the equipment covered by the Services to be performed by HONEYWELL under this Agreement, and is limited to the equipment included in the respective work scope attachments.

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## Residental Demand Response Pilot Program

## Honeywell



HONEYWELL UTILITY SOLUTIONS

Proposal to: Unitil Service Corporation March 30, 2010

Submitted by: Honeywell Utility Solutions 199 Rosewood Drive, Suite 300 Danvers, MA 01923

Contact: Robert McGrath (603) 670-8440

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1.	Honeywell Resumes
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- 2. Honeywell Insurance Certificate
- 3. Honeywell Standard Contract Agreement
- 4. PSEG Reference Letter

## **1. EXECUTIVE SUMMARY**

#### 1.1 Summary of Proposed Services

Honeywell Utility Solutions (Honeywell) is pleased to submit our proposal to provide installation services

for the Residential Demand Response Pilot Program. Honeywell will provide the following services:

- Customer eligibility screening and appointment scheduling;
- Complete installation services;
- Customer instruction, equipment demonstration, and education while on-site;
- Complete call center support;
- Quality assurance and safety performance of all aspects of our work;
- Ongoing reporting to Unitil of program activity.

Given that Unitil's DR Pilot Program represents a paradigm shift in the way customers are used to purchasing energy (including new technology, new billing practices, and changing energy-use behaviors), Honeywell believes customer education and customer care will be critical to the ultimate success of the program. To that end, our plan also includes a full deployment of Honeywell's industry-leading customer services through our call center, field installation team, and web-based communications and interactive tools.

The DR program that Unitil is undertaking is uniquely important for its focus on behavioral change. Honeywell looks forward to supporting Unitil's program evaluation efforts and learnings from this innovative project. We would leverage our quality customer education and customer communications to maximize program results.

Another benefit we offer is unmatched program management and customer care. In a recent customer survey, over 97% of customers rated our CSR's as good / excellent, and over 98% rated technicians as good / excellent.

#### Introduction to Honeywell

With over 115 years of experience in home and building comfort products and services and established operations in more than 200 North American cities and over 100 countries, Honeywell is a global leader in the delivery of energy efficiency products and services. In fact, as we look across our business units – Aerospace, Specialty Materials, Transportation, and Automation and Controls – nearly 50 percent of our product portfolio company-wide is linked to energy efficiency. We estimate that the global economy could operate on 10-25% less energy just by using existing Honeywell technologies. Our Utility Solutions group is a key Honeywell business unit able to deliver on your requested energy efficiency

requirements. We are fully versed on the challenges facing Unitil with respect to implementing a residential pilot program.

Honeywell Utility Solutions is committed to delivering technology-driven programs that help utilities automate, conserve, and educate. Our commitment to energy management and automation impacts every aspect of our economy and environment. We use best-in-class practices for on-site diagnostics, health and safety testing, customer service and implementation of energy efficiency measures. We are one of the leading providers of energy conservation management services to electric, gas, and water utilities. We were early pioneers in delivering turnkey residential energy efficiency audits and installations, and partnering with local contractors, an array of services we've continually improved upon.

Honeywell has designed, marketed, implemented, and managed some of the most innovative and successful energy programs ever delivered. We have helped energy utilities issue millions of rebates for efficient measures. We have deployed some of the most inclusive program operations, partnering with local contractors and retailers to maximize market penetration, energy efficiency outcomes, and customer satisfaction. Unitil and its customers will reap the benefits of our years of experience in the development and implementation of home audits and contractor–coordinated energy efficiency services.

#### **1.2 Scheduling Customer Appointments**

Honeywell understands, as the implementation contractor, we will be required to screen Unitil customers for the demand response pilot program before beginning any installation. We also understand Unitil will provide a list of pre-qualified customers who have registered for the pilot program. However, we understand that although Unitil has made every effort to screen the customers for eligibility, it is Honeywell's responsibility to access all pre-screened customers to ensure they are qualified for the program. We also understand it is our responsibility as the implementation contractor to suggest customer turn downs, when necessary, to Unitil.

Installation appointments will be made by our administrative staff for normal working hours Monday through Saturday. Customers will be asked for a convenient appointment time and will be notified that a typical installation takes from 30 to 60 minutes, depending on which group they are in. Once the appointment has been finalized, we send the time and location to the installer via their cell phone.

#### **1.3 On-Site Services**

At the time of the appointment, Honeywell's installer will arrive in uniform at the customer's premise properly equipped with the professional tools and materials required for the job. If the customer is available, we will present the customer with a Unitil picture ID and proper program identification.

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Our Field Technician will educate customers on the program design, including the time-of-use rate structure and methods customers can use to shift load to off-peak hours. The installer will conduct a brief interview of the customer to ensure that the customer fully understands the function of the thermostat or IHD and the relatively minor effect it will have on his / her lifestyle while in a control period. The installer will explain the scope of the installation work, the operation of the device, and will answer all the customer's questions. The customer will then be asked to sign the customer participation agreement form.

The installer will then, as applicable, visually inspect the control wiring, the HVAC equipment, and field-qualify the appliance and installation conditions. If a site does not qualify, the reasons are carefully and clearly explained to the customer. If the conditions can be repaired to meet the qualifications, the customer can easily be rescheduled for installation at a later time.

<u>UtilityPRO Installations.</u> Once the installer completes their assessment of the equipment and wiring, the next important step in qualifying the customer is testing for signal to assure that the device will be able to both send and receive data from the customer's location. This test is performed by placing a STU (Signal Test Unit) at the proposed device location. If the test passes, the device can be mounted at this location. In those cases where the test fails, the STU is relocated, and the test is performed again. If there is any signal failure, we immediately report this to the customer and inform them that that internet access is not available at this time. The customer may still have the option of participating in the program by having the thermostat installed. However, they will not have remote access to the thermostat via the internet. We will also assist the customer in programming a weekly cooling (and heating, if appropriate) schedule for their home.

<u>Trendril Insight Installations.</u> Our installer will follow all installation, set-up and commissioning guidelines for the in-home display, as presented in the RFP. We will instruct the customer in the information available via the Insight and how to display it. In addition, if the customer has internet access available, we will also offer to show them the Trendril Vantage website and how to navigate it to get the most actionable information from it.

Each Field Technician will be fully trained in the program through the two-day, Until-provided training in Portsmouth, NH. Each Technician will also have been fully trained in Honeywell's customer service and support policies, and in field safety.

The final step in the installation process is for the installer to review the program benefits and available information with the customer. Each customer's questions will be answered. He/she will be provided a user instruction booklet for each technology they've had installed, as well as written program customer support contact information for follow-up support, should they need it. After completing the workorder to capture the on-site data listed in the RFP, the installer will close out the visit.

If Unitil chooses, we can also affix stickers with the toll-free number on the inside of the thermostat housing and on the cabinet of the air-conditioning unit. This will alert the customer's HVAC service personnel of the presence of the thermostat, its function, and proper safety precautions. High-quality Honeywell installations will ensure the following:

- Installations meet or exceed all National Electric Code regulations;
- All material is UL-listed or recognized, and labeled for approved application;
- Installation will not inhibit the access panel when servicing of the unit is required;
- All existing connectors and terminals are re-torqued;
- All debris is removed from the site at time of installation.

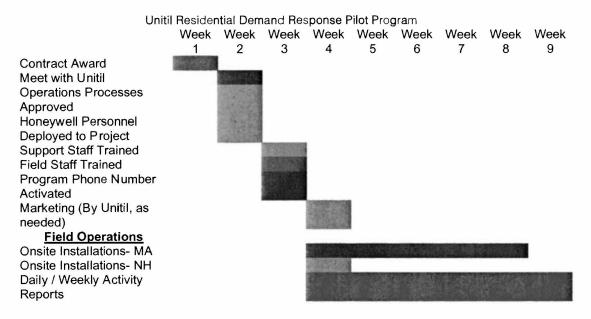
<u>AMI Meter Installations.</u> Honeywell understands if awarded the Residential Demand Response Pilot Program contract, we will install the AMI meters. We also understand the RF meters and the TS2 modules will be installed under a separate contract.

**Customer No-Show Procedure**. Honeywell understands the importance of excellent customer service for this project. As a means of maximizing appointment installation rates, all scheduled Unitil installation appointments receive a confirmation call between 24 and 48 hours prior to the appointment. In the event that a customer is not available when the installer arrives, the installer promptly contacts the customer service team who places a telephone call to the customer. If the customer is not available by telephone, our customer service representative leaves a message, if possible, and instructs the customer to contact our office for rescheduling. The installer notes the customer no-show on the corresponding work order, and it is entered into the tracking system, triggering a follow-up contact by Honeywell for rescheduling.

#### **1.4 Project Schedule**

We see no problems with completing the specified work within the approximate seven-week time period specified by Unitil. Please see Section 2.0 for a detailed proposed timeline.

## 2. PROJECT SCHEDULE



NOTE: SCHEDULE ASSUMES ALL INSTALLATION EQUIPMENT WILL BE PROVIDED BY UNTIL NO LATER THAN THE END OF WEEK 2.

## **3. COMMERCIAL PROPOSAL**

## 3.1 Proposed Costs

Descr iption	Price Per Unit	Quantity	Extended
Mobilization Fee	\$17,500.00	1	\$17,500.0
Management Fee	\$15,000.00	3	\$45,000.0
UtilityPRO Installation	\$166.76	76	\$12,674.1
Tendril Installation	\$209.12	76	\$15,892.9
Meter Installation	\$52.94	228	\$12,070.5
Notes to Pricing         1.) Payment shall be made on net 30-day terms, billed sem         2.) Prices are valid for 90 days from date of submittal or as	2	384	\$103,137.6
3.) Labor shall be non-union and non-prevailing wage.			
<ul> <li>Labor start be non-union and non-prevaiing wage.</li> <li>Licenses and/or permits shall not be required to perform</li> <li>Pricing assumes that account data for installations will</li> </ul>			

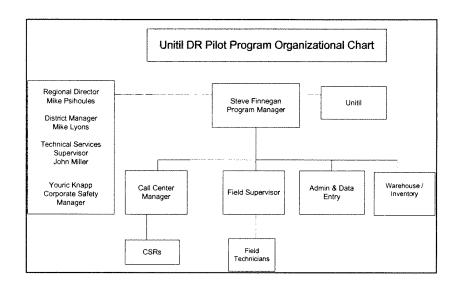
### **3.2 Contract Exceptions**

Honeywell submits its bid wholly contingent upon Unitil's acceptance of the attached standard Honeywell Agreement and shall replace all terms and conditions stated in the RFP or as otherwise may be agreed upon between the parties.

## 4. MANAGEMENT PROPOSAL

#### 4.1 Organizational Chart

Honeywell's organizational chart is shown in the following figure.



#### 4.2 Key Personnel

To deploy quickly and effectively, we will assign experienced management and installation staff. A snapshot of the start-up team and their qualifications follows.

**Steve Finnegan**, **Program Manager**. Steve has been employed with Honeywell since 1999 and was with Harris Energy Systems for 5 years prior to that. He has worked on numerous utility-sponsored commercial, residential and multifamily electric and gas programs. He has over 18 years of experience in the HVAC, controls, and energy efficiency arenas. In addition to his Bachelor's Degree, Steve has an Associates' Degree in HVAC Technologies and is a BPI-certified Building Analyst.

Field Supervisor. Our Field Supervisor will have direct responsibility for operating the program consistent with Unitil's goals and objectives. We will recruit and train experienced supervisors / technicians for these positions. Our Field Supervisors' day-to-day responsibilities will include the following:

- Receive scheduled appointment data and assign work orders to installers;
- Oversee / manage Honeywell's installation services;
- Monitor the performance of Honeywell's installation team and subcontracted support firms;
- Coordinate the routine testing / distribution of load management inventory;
- Monitor program tracking and reporting for safety, productivity, and quality;

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- Investigate trouble call occurrences, ensuring that all problems are promptly and correctly rectified;
- Perform program quality control inspections of installations.

Field Technicians. We will recruit locally for staff personnel to perform load management device installations. We target candidates with electrical / HVAC backgrounds via newspaper ads, trade school contacts, open house events, etc. Our installer candidates are screened for technical knowledge and hands-on mechanical skills as well as effective customer service skills. Honeywell conducts in-house, program-specific training that concludes with certification prior to each installer commencing field activity. All installers will be equipped with the appropriate professional tools to install load management controls. Regular meetings with the staff installers help us to monitor their progress and review any issues as a group. The installers will report to the Field Supervisors.

**Call Center Team.** The Call Center team, led by the Call Center Manager, will work to schedule appointments, answer questions, and resolve program-related inquires from customers calling in. They will be thoroughly trained in program policies and technical matters, to best help customers understand and participate in the program.

Youric Knapp, Corporate Health and Safety Manager. Having worked for over 15 years in the health and safety field, with particular emphasis on prevention, Youric plays a valuable role in establishing and regularly overseeing health and safety practices for all of our programs. Youric coordinates his efforts with our Regional Safety Coordinator.

The Administrative Team. From our local program office / warehouse facility, Honeywell's administrative staff for this program will perform a range of critical program support functions. These include: data systems operations, maintenance and reporting; data processing and quality control; invoicing, accounting and record keeping; subcontractor management, and more. We will recruit and train local area staff for these positions. We have excellent process development, documentation tools, and training routines for administrative staff that will ensure that we launch the program on an excellent foundation.

**Bob McGrath, Account Manager.** Bob will facilitate start-up discussions and act as primary account manager for the initial program period. Bob's experience in understanding and delivering on customer needs and expectations will ensure that all of Unitil's requirements are met during the critical start-up phase.

**Mike Psihoules, Regional Director.** Mike will contribute to program contract review and approval. A veteran of many utility programs, Mike brings considerable expertise and knowledge to the program. He will also allocate regional resources to facilitate effective program operations, and draw together corporate resources as needed.

**Mike Lyons, District Manager**. Mike will hold overall responsibility for the success of the program. Mike has 20 years experience in administration, management, and policy development relevant to residential and commercial energy program delivery. He is actively engaged in New York regulatory matters regarding the Energy Efficiency Portfolio Standard (EEPS) and understands the key role that CHG&E will play in meeting these goals.

John Miller, Technical Operations Manager. A licensed Master Electrician, John has 15 years of Honeywell experience in load management program implementation. He has provided operational and technical guidance to our load control programs throughout the country. He is skilled in all areas of project design, start-up, and implementation. He will serve as our Program Manager for the Start-up Phase, directing his team to perform the initial installations and O&M services, and will assist Unitil's Program Manager and the local team throughout the Phase 2 Unitil deployment. For the program startup, John will lead our team in the following activities:

- Recruiting, screening, interviewing, and hiring qualified installation staff and subcontractors;
- Establishing program specific implementation processes for installation, work flow, quality assurance, customer service, complaint resolution, data processing, and reporting;
- Training all installation personnel in:
  - Load management control installations;
  - Control removals and maintenance / repair;
  - Conscientious inspection protocols;
  - Job site safety;
- Ensuring exact code compliance;
- Activating our equipment receipt, testing, return, and load management distribution procedures;
- Provide other as-needed support.

#### 4.3 History of Company's Installation and Project Management Experience

Honeywell brings Unitil a partnership with 30 years of experience in successfully managing and delivering DLC and Energy Efficiency programs as well as the ability to integrate with Sensus' FlexNet AMI. Emerging technologies may have you concerned about what is the right choice for you. The UtilityPRO is a scalable solution which allows for migration to developing AMI communications media. Sensus is currently engaged with Honeywell Utility Solutions with the collective goal of integrating the UtilityPRO thermostat, and forthcoming IHD, into the FlexNet solution, utilizing the FlexNet radio protocol. We are also working with GE in the implementation of over four million AMI meters for Florida Power & Light. We stand behind our ability to deliver your programs on time and within budget across your service territory with constancy. We offer proven constancy across program management, safety,

delivery, systems, customer care, and technology that is forward-compatible with Unitil's strategic plan to provide customer choice on how and when they use energy.

#### **Demand Response**

Honeywell offers clients diverse and intriguing options for peak load management, helping electric utilities manage their supply and demand fluctuations, and rising energy prices. As the clear leader in demand response, we have installed over 1.2 million points of control to date.

#### **Meter Services**

Honeywell is a leader in meter services. We have implemented major projects for such clients as Progress Energy (1,200,000 electric meters), the Jacksonville Electric Authority (over 550,000 electric and water meters), and Florida Power & Light (4,000,000 electric meters).

#### **Energy Management**

Through Energy Affordability Programs, Contractor Network Initiatives, ENERGY STAR® Market Transformation Initiatives, Residential New Construction, and Commercial Programs, Honeywell works closely with clients to promote energy efficiency by helping your customers better manage their energy use. We were early pioneers in delivering residential energy efficiency audits and installations, and partnering with local contractors, an array of services we've continually improved over the last 25 years. We have designed, implemented, and managed some of the most innovative and successful energy and water conservation programs ever delivered. We have helped energy and water utilities issue millions of rebates for efficient products. We've deployed some of the largest energy audit and AMR meter installation projects in the country. And we have installed 1,000,000 load management points, allowing energy providers to safeguard capacity while helping to protect the environment. Please see the following table for some of Honeywell's current and past clients across our service lines.

- ➤ BGE
- City Public Service, San Antonio
- > CPS
- ➢ Wisconsin Electric
- Virginia Power
- > NSTAR
- ≻ IPL
- > PGW
- > FPL
- Reliant Energy / HL&P
- > Consumers Energy
- > Allegheny Power
- > Xcel Energy

- > Pepco
- Louisville Gas & Electric
- Public Service Electric & Gas
- Progress Energy
- > AEP
- > GPU
- > NYSERDA
- KeySpan Energy
- Conectiv
- > Austin Energy
- Entergy Louisiana
- PG&E
- Los Angeles Dept. of Water and Power

We have built upon our years of energy audit experience, and successfully transferred our knowledge to each new utility client. We are very well-versed in all the latest approaches to DR-AMI integration.

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Page II

We use industry best-in-class practices for on-site diagnostics, health and safety testing, and implementation of energy efficiency measures. Every job begins with an evaluation of the energy consumption history and the development of a prioritized work plan. All DR installations are confirmed for participation efficacy, signal propagation, customer understanding / education, and aesthetic acceptance by the customer.

#### 4.3.1 DR Installation and Critical Peak Power Program Experience

Honeywell has installed 1,200,000 load management devices on an extensive variety of equipment, impacting more than 1.400MW. We've managed gateway pilots in 50 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 and to empower customers with a new level of control over their consumption and costs, including the myPower Program at PSE&G.

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 demand response programs.

We are currently operating numerous major demand response programs across the nation, including Baltimore Gas & Electric, City of San Antonio, Southern California Edison, Long Island Power Authority, and Consolidated Edison. In Canada, we are implementing DR programs with over 28,000 switches and thermostats deployed 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.

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## **Devices Installed**

Quite simply, we are a world-class load management solution company. In the last four years alone, Honeywell has installed over 100,000 devices (thermostats, switches, and gateways). We have worked with the technologies listed in the following table.

Manufacturer	Model
Cannon	ExpressStat
Cannon	LCR
Comverge	SuperStat
Comverge	LCR
White Rodgers	Model 1F88-275
Carrier	Comfort Choice
Corporate Systems	LCR
Invensys System	Model EMSG-100-CR
Invensys System	Model EMSL-100
Invensys System	Model EMST-100

#### 4.4 Safety

We will comply with Unitil's Safety Requirements. Moreover, we will activate project-specific safety plans that comply with applicable Federal and State regulatory requirements. Honeywell is committed to managing health, safety, and environment as a core business value to ensure compliance with all applicable government standards and regulations. We integrate health, safety, and environment into all aspects of our businesses as a competitive advantage in achieving profitable growth and accelerated productivity.

While we will have a qualified Safety Representative assigned to the DR project, all Honeywell personnel are charged with the responsibility of preventing incidents or hazardous conditions. The success of our safety program depends on the involvement of each individual and management. Employees must accept their responsibility to prevent injuries to themselves and their fellow employees by following all safety requirements. It is extremely important that all employees understand how each task is to be performed in a safe manner.

Honeywell has implemented a Safety Program centered on a Safety Playbook, which defines the monthly elements for safety program implementation. Each month the local management is also required to review performance of personnel in the field with a Field Safety Observation and Coaching checklist that

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provides guidance and documentation of practices in the field. Each month a compliance-training topic is mandatory for all personnel. Part of the compliance training includes a review of applicable policies and procedures that support the awareness level training that is completed. These elements support the Field Safety Manual that includes the following programs. Please see the following page for our safety training matrix. Please see the Attachments section of this proposal response for a copy of our Health and Safety Overview document.

Detecting, reporting, and addressing unsafe conditions are of the utmost importance to us. Honeywell maintains an unparalleled commitment to the safety of all its employees and the customers who receive services from Honeywell. Our staff is taught from the start that we encourage and support employees who work safely and avoid potentially dangerous situations.

Safety is a prominent portion of our training program and our company mission statement. We have a high-ranking company Safety Leader who heads up our company Safety Department, stressing knowledge, awareness, and prevention as the cornerstones of company policy. As a result, Honeywell has an industry-leading safety record, including exceeding OSHA requirements. Moreover, under a major project in Jacksonville, Florida, we achieved perfect –100% – scores on two consecutive major safety assessments by the client. Each employee is equipped with personal protective equipment (PPE), trained in its use, and required to use it.

Regarding our policies for investigating safety incidents, including personal injuries and vehicles, Honeywell has a centralized, in-house Health, Safety, and Environmental (HSE) team that investigates and processes safety incidents and vehicles involving employees who are driving as part of their work duties. This includes:

- Any employee involved in a reportable safety incident is provided the toll-free phone number for reporting the matter to the HSE.
- The HSE team investigates the matter and completes any necessary documentation, and also
  processes the related Worker's Compensation and insurance claims, if applicable. They also
  record the incident for Honeywell record-keeping and OSHA reporting, if applicable.
- If a vehicle is involved, the employee is provided the address and schedule for the nearest Honeywell third-party drug and alcohol testing facility. The employee must submit to this testing within 24 hours.
- Preventive measures include safety training as a part of every training program we provide, and an additional safety training each month that focuses in-depth on a particular on-the-job health and safety topic.
- Another preventive measure is the mandatory use of applicable personal protective equipment (PPE) by our field staff.

Health and Safety. Honeywell places a high priority on customer and employee safety in all aspects of program operations. We strongly believe that maintaining strict safety policies and procedures not only

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protects both employees and customers, but also enhances the cost-effectiveness of overall operations. Reducing the incidence of even minor injuries clearly has a beneficial impact on health and insurance costs, while reduced installer down-time equates to fewer missed appointments and increased productivity.

Introduction and review of the Employee Safety Program is a required component of all our staff orientation and training. All Honeywell installation procedures have been subjected to a comprehensive safety audit to ensure compliance with applicable OSHA regulations and guidelines. Our DR installation safety procedures include the following components:

- Supply and use of personal safety equipment (protective glasses, gloves, etc.);
- Use of cordless tools only no "cheater cords";
- Vehicles supplied with first aid kits and basic emergency equipment;
- Use of Honeywell-supplied cell phones.

In addition to the technical aspects of the program, safety in the field begins with our respect for customer security concerns. Our representatives present themselves professionally in both dress and manner. Adherence to a uniform dress code is required by all field personnel, creating a consistent and professional program image. The picture ID badge identifying the representative as a Honeywell technician and a Unitil contractor is displayed at all times. We are aware that the issue of positive identification of utility field personnel at the homeowner's door is an important and sensitive one in the eyes of customers. Our established ID verification procedures are designed to both respect customer privacy and address their security concerns appropriately.

Quality Assurance. 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. By focusing on using our customer requirements to define quality in new projects, we consistently evaluate and improve our processes. Honeywell will conduct a minimum of 5% field review of all newly installed Unitil sites. Through our experience in demand response programs, we have optimized the quality audit process to the point where we assure each staff member performs up to expectations and in full accordance with the program's guidelines. Every field assessment includes a quality control inspection checklist for each field review.

Any installer found needing improvement will be provided refresher training, and this installer's installations will be 100% inspected throughout the re-training period. Any installer who is provided refresher training and then does not quickly improve to our high standards will be removed from the program. In this way, we assure the quality and reliability of the installations. Honeywell will provide

quality assurance reports to Unitil. We employ the same high quality standards for all aspects of our program operations, including data integrity and administrative functions.

Post-Installation Procedures. 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.

#### 4.5 Staffing and Training

Honeywell will fully train all staff and require them to pass the comprehensive Honeywell certification test prior to assignment to the program. If required, we will also make our team available for certification by Unitil, at no additional expense to Unitil. We also understand that training our team in accordance with all industry and regulatory standards is our responsibility. We will provide copies of all licenses and certifications of our personnel to Unitil. We have trained hundreds of DR staff to competently and safely perform field work. Our training programs are advanced and comprehensive. As mentioned above, we will also retain a Unitil-licensed HAVC contractor.

#### 4.5.1 Employee Technical Training

Honeywell regards effective and comprehensive training as essential to meeting all program customer service, productivity, and operational goals. Honeywell routinely administers initial orientation (for new

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employees) and ongoing 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 Unitil 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, coordinated, as needed, by Unitil. 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. The following matrix of Honeywell safety training programs provides an overview of our safety resources.

Unitil Residential Demand Response Pilot Program March 30, 2010 Page 17

## Honeywell

ACS Building S	olutio	n - T	RAIN	IING	MAT	RIX										
Legend: 1= Mandatory (Legal Requirement/Honeywell Standard) 2 = As needed based on job analysis																
3 = As needed based on customer requirements V = Volunteer																
A = Annual Training B = Every 2 years C = Eve	ry 3 year	s D⊧	Oneti	me only	(											
Training Requirement / Functional Area	Regional Managers	Regional Staff Personnel	Field Service Leaders	Project Managers, Engineers, Estimator	Salos Managers & Rope	Office Staff Members	Service Techniciens	Pipe Fitters	Storekøepers		Util. Solns. "Managing Supervisors" of Field Personnel	Uttl. Solins, Field Employees / Meter Services	Utti Soins, Fiald Employaas / Energy Conservation	Utt. Solna, Field Employees / Demand Response	UHB, Sotins, Fleid Employees / Water Services	Utill. Solins, / Field Warehouse Employees
Asbestos Awareness			1C	1C			1A	1A			1 <b>A</b>	1A	1 <b>A</b>	1A		
BloodBorne Pathogens	_		1C	1C			2A	2A			2A	2A	2A	2A	2A	2A
Chemical Handling / Spill Response							2C	2C	2C		2D					2C
Chemical Hazard Communication	1D	10	1D	1D	1D	1D	1D	1D	1D		1D	1D	1D	1D	1D	1D
Compressed Gas Safety							2B	2B	2B			10				
Confined Spaces Training			1D	1D			1B	1B			1D	1D	1D	1D	1D	
CPR / First Aid **	V	V	V	V	٧	۷	V	V	۷		V	V	٧	V	V	V
Crane & Slings Safety ***							2C	2C	2C							1
Driver Safety	10	1C	1C	10	1C		10	1C			1C	1C	1C	1C	1C	1C
Electrical Safety General Awareness		-	10	1C	Sec. 14		1C	1C			1C	1C	1C	1C	1C	1D
Emergency Preparedness Plan	1D	1D	1D	1D	1D	1D	1D	1D	1D		1D	1D	1D	1D	1D	1D
Fall Protection			10	1C			1A	1A			1D	2A	2A	2A	2A	2A
Field Safety Checklist			1D	2D			2D	2D								
Fire Extinguisher usage	V	V	٧	V	٧	V	1A	1A	V		1D	V	٧	V	V	1D
Hand Tool Safety							1D	1D	2D		2D	1D	1D	1D	1D	
Hearing Conservation	-			2A			2A	2A					1111			
Hot Work ***	1		2D	2D			2D	2D					8			
Incident Investigation	1		1D	1D	2D						1D					100 0000
Laser Safety							2C	2C								
Lead Safety Awareness	1			2D			2A	2A			1A	1A	1A	1A	1A	
Line Breaking ***	1		10	1C			10	10								
Lockout/Tagout	1		10	10			10	10			2A	2A	2A	2A	2A	
Manual Material Handling/Back Safety	1		10	10			10	10	1C		10	10	10	10	10	1C
Office Ergonomics Awareness	10	1C	10	10	1C	1C	2C	2C	10		10					
OSHA 10 Hour Training **	1.2		*	*	17	<u> </u>	<u> </u>				·····					
Personal Protective Equipment	1		10	1C		-	1C	1C			1A	1A	1A	1A	1A	1A
Powered Industrial Trucks	1		<u> </u>	· •			2A	2A	2A		20					2A
Refrigerant Compliance Training	1		2D				2D	2D								275
Respiratory Protection	1						2A	2A			2A		2A			******
Safety Awareness / Orientation	1D	1D	1D	1D	1D	1D	1D	1D	1D		1D	1D	1D	1D	1D	1D
Site Safety Analysis	+	1.0	10	10			1C	10		-					,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Supervisory Training	1D	2D	1D	2D	2D		1.0				1D					
US DOT Training	+ "	10	10	10	20		1C	1C	2C							
oo oo aaaaaa		1	10	1.10			1.10	10	40							~ ~

#### 4.6 Tools and Equipment

Honeywell will provide the necessary tools and equipment to perform the installations. It is expected that Unitil or the manufacturer will provide any required specialty tools such as hardware-specific testers. As tools are distributed, each installer is trained on the proper use, safety issues, and purpose of each tool. Periodic testing and assessment is performed to ensure that tools remain in good working order and that all issued equipment is maintained and readily available in each installer's vehicle.

#### 4.7 Uniforms and Identification



In addition to the technical proficiency, safety in the field begins with our respect for customer security concerns. Our representatives present themselves professionally in both dress and manner. Adherence to a uniform dress code is required by all field personnel, creating a consistent and professional program image. We understand that Unitil will

Unitil Residential Demand Response Pilot Program

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provide the ID badges for the workers under this program, identifying them as program representatives. These badges will be carried and displayed at all times when field work is being conducted. In addition, Honeywell is ready to create and supply matching program magnetic vehicle signs consistent with program marketing materials.

We are aware that the issue of positive identification of utility field personnel at the homeowner's door is an important and sensitive one in the eyes of customers. Our established ID verification procedures are designed to both respect customer privacy and address their security concerns appropriately.

#### 4.8 Quality Assurance / Quality Control ("QA/QC") Regarding Customer Contact

Steps we take to ensure high quality in every single customer interaction include:

- In the field, the field supervisor is always available to assist an installer with a problem or to help answer any questions the customer may have that the installer cannot answer, although in our experience this is a very uncommon occurrence.
- All field personnel must complete training, which includes a module on customer service, prior to assignment to the field. Any deficiencies in interactions with customers are immediately addressed with the installer. We also are quick to provide recognition, in front of all our team members, of those installers who go "above and beyond" what is minimally expected of them in dealing with customers.
- Quality control audits are performed by the field supervisor on 4% to 5% of each installer's sites, including ride-alongs, in-process reviews, and post-installation reviews. Any installer not meeting program quality and customer service guidelines is removed from active service and provided refresher training.
- In our call center, all interactions with the customer are recorded and available for review and reporting purposes. This allows Honeywell to assure the best possible quality is achieved by our CSR's.
- Honeywell performs 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 (metrics such as abandoned calls and escalated calls). Any CSR not meeting program quality and customer service guidelines is removed from active service and provided refresher training.
- Honeywell provides incentives for our field staff on many of our DR projects. Each incentive
  program is structured in accordance with the particular project scope and volumes. Criteria
  include productivity levels and thresholds for (lack of) customer complaints.

#### Service Calls and Customer Claims

Honeywell recognizes that customer service represents a significant component of program operations. We will provide consistent and responsive customer support to all program participants at all times. Our call center team will speak courteously with each customer to understand the urgency or sensitivity of the issue. Any such customer issues are logged and tracked to resolution. We can provide daily reports to Unitil on any open or closed issue, and we maintain full documentation of all actions and conversations. We have the ability to do telephone diagnostics over the phone with the customer, and in most of our DR programs, well over 80% of the calls are resolved in this manner, with no need for a site visit by a technician.

#### 4.9 Licenses & Permits

Honeywell will retain an individual with an active Unitil electrical license. At this time, we have not finalized who this individual will be, but before an agreement is executed, we will inform Unitil of this person's name, background, and their identifying license information, for pre-approval by Unitil. We see this person serving as a key member of our team, participating in safety, quality, and other technical areas. Regarding installation permits, based on our experience and our understanding of Unitil's approach in the pilot, we do not believe that permitting is required for these installations. (No costs for permitting are included in our pricing.) We recommend that Unitil look into securing a blanket permitting waiver for this project. Please note that Honeywell uses insurance companies with a rating of; "A-,XII" by A.M. Best or equivalent rating agency.

## **5. CONTRACT EXCEPTIONS**

Honeywell submits its bid wholly contingent upon Unitil's acceptance of the attached Honeywell Agreement and shall replace all terms and conditions stated in the RFP or as otherwise may be agreed upon between the parties.

## 6. LIST OF SUBCONTRACTORS AND SUPPLIERS

At this time, Honeywell does not have any subcontractors identified for work with us on this project.

However, we have a well-defined subcontractor selection process in place. Honeywell aggressively works to train, teach, develop, and refine the skill sets of our subcontractors to provide the high level of technical proficiency and quality that Unitil requires. Many of our subcontractors have developed unique and advanced service skills through their partnership with Honeywell. We continually monitor our subcontractors' performance with ongoing trainings, site inspections, and quality control.

Honeywell will recruit subcontractors from the community of existing, independent professional contractors throughout Unitil's territory. Subcontractors will be required to maintain all professional and business requirements of their respective states and jurisdictions. Honeywell will verify these requirements are met during the signup process. We will also conduct periodic updates to ensure these requirements are maintained.

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## 7. SAMPLE DOCUMENTATION

Honeywell has reviewed and understands the attachments to the RFP (hardware specifications and installations procedures, etc). We have no sample documentation to provide at this time. During the project planning phase, we can provide start up plans etc, as needed by Unitil.

## 8. REFERENCES

Honeywell has deployed many Direct Load Control solutions. Cumulatively, we have managed the installation of 1,400,000 load management devices for leading energy providers.

We have benefited from many lessons learned, and we believe in pursuing continuous improvement in all of our operations. We are able to use this experience to initiate fast-track program start-ups and overdrive the production goals when clients request it. For our BGE program, for example, we went from 0 to over 60 field technicians in just two months.

# Client:Baltimore Gas & ElectricProgram:PeakRewardsSM ProgramContact:David Greenberg, Project Lead, (410) 470-1335Term:March 2008 – present

In 2008, Honeywell was awarded one of the largest programs of its kind ever undertaken by a utility. We are targeting over 450,000 BGE customers for air-conditioning load control, installing the Honeywell UtilityPRO PCT. We perform marketing and publicity with both in-house staff and a team of specialty marketing firms that we manage. Our marketing services include: program website development; print, outdoor, radio, and TV advertising; community events and awareness campaigns; market research and customer base segmentation; targeted direct mail; and 24 / 7 dedicated program call center support.

Honeywell-certified technicians install programmable, load-controlling thermostats or switches in BGE residential single-family, multi-family customers. In addition to marketing, we perform lead intake and pre-qualification, installation and maintenance, quality assurance, and database tracking and reporting as well as customer service. We have over 203,000 installations completed as of this writing. Field installations began June 2, 2008, and in just two months, we went from 0 to over 45 technicians who are trained, certified, and performing field installation work. We now have approximately 70 technicians working in the field on this project.

All marketing efforts driven by Honeywell are coded, and responses are carefully tracked via Honeywell's customer service /call center and BBCS software. Honeywell continually refines messaging and outreach strategies based on the intelligence gained through response tracking.

Honeywell's customer care center is staffed by 30 full-time customer service representatives (CSR's) dedicated to the program, and a leadership team providing oversight and ongoing skill development. Our call center is a fully equipped facility with data and telephony systems to provide world-class

customer support. It is staffed with live, program-trained CSR support 24 hours per day, 365 days per year. We employ call center performance metrics and reporting to ensure optimal service.

Client:	Baltimore Gas & Electric
Program Name:	Smart Energy Pricing Pilot Program
Contact:	Neel Gulhar, Program Manager
	(410) 470-1336
	Neel Gulhar@constellation.com
Program Term:	January 2008 – Present

The BG&E Smart Energy Pricing Pilot Program is a demand response program that targets residential and small commercial customers. The program incorporates dynamic pricing along with various enabling technologies. The dynamic pricing offered includes a mix of Time of Use (TOU) pricing and Critical Peak Pricing (CPP).

This pilot program is a spinoff of the full-scale PeakRewards<sup>SM</sup> program that Honeywell is currently implementing on behalf of BG&E. The purpose of this pilot program is to assist BG&E with addressing capacity constraints and to assess customers' acceptance and satisfaction with a variety of technology-enabled dynamic pricing programs. To date, the pilot program has successfully shed load, has very satisfied customers, and has saved individual customers an average of \$113.00 per year.

Each year of the Smart Energy Pricing pilot program has had a slightly different number of participants and hardware:

- In 2008, we targeted 1,150 residential customers and separated them into three major groups: demand response with dynamic pricing and load control switches; dynamic pricing with in-home displays; and dynamic pricing with no enabling technology;
- In 2009, we targeted 1,425 customers 1,000 residential and 425 small commercial in addition to the customers that had already been enrolled the previous year. We also added the Honeywell UtilityPRO smart thermostat to our program offerings;
- In 2010, we will be targeting a total of 1583 residential customers, most of whom will be participants from the previous year. We will continue to use load control switches and Honeywell's UtilityPRO smart thermostats, and we will also add a new in-home display and a portal solution to the technology mix.

In order to qualify and enroll customers, Honeywell's team fields inbound enrollment calls and places outbound recruitment calls. We also schedule installation appointments when necessary. Honeywell employs Field Technicians who install the various program devices and provide customer education

during the installation process. Honeywell also provides additional energy conservation support to participating customers through our customer support call center.

# Client:Kansas City Power & LightProgram:Energy Optimizer ProgramContact:Glenn A. DiFalco, Product Manager (816) 457-1218Term:November 2005 – present

Honeywell operates a turnkey demand response program, Energy Optimizer, for KCP&L to deliver airconditioning load control capacity. Honeywell-certified technicians install programmable, loadcontrolling 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, and database tracking and reporting as well as customer service. In spite of a oneyear program start-up delay due to regulatory issues, Honeywell is currently ahead of schedule, with over 41,000 installations completed as of this writing, for an estimated **controllable load of over 49 MW**. 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:	Central Air Conditioning (CAC) Program
Contact:	Andre Wellington, Program Manager, (212) 460-2227
Term:	2001 - Present

Con Edison's CAC Program is a demand response program aimed at residential and commercial customers with central air conditioning. Honeywell has installed approximately 8,400 points of commercial control, and 21,400 points of residential control, capturing more than 35 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 we have played a lead role in establishing and refining effective in-field techniques for signal testing, equipment installation, and diagnostics.

# Client:Long Island Power AuthorityProgram:LIPAedgeContact:Pat Dorsch, Program Manager (631) 755-5331Term:2001 – Present

LIPAedge is a demand response 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 over 34,000 points of control, capturing more than 37 MW of controlled load. We have been the implementer of this project since its inception, and have played a lead role in

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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. We perform service call/troubleshooting to maintain a steady level of controllable load for LIPA. Honeywell was recently awarded a new five-year contract extension for the program.

Client:	Public Service Electric & Gas Company
Program:	myPower Pilot Demand Response Program
Contact:	Ms. Susanna Chiu, PSE&G Utility Marketing (973-430-5719)
	Susanna.Chiu@pseg.com
Term:	2005 – 2006

In New Jersey, Honeywell was instrumental in the success of the myPower DR Dynamic Pricing Pilot Program implemented by Public Service Electric and Gas (PSE&G). Honeywell is a longtime demand response partner of PSE&G through the 15-year old Cool Customer DR Program, which we implemented and continue to support today. The New Jersey Board of Public Utilities (BPU) established an objective to reduce energy consumption by 20% and supply 20% of the state's electricity needs with renewable resources by the year 2020. The myPower pilot program was designed to test the impact of dynamic pricing and advanced DR thermostats in achieving energy efficiency and peak load management. Please see the Attachment section of this proposal response for a copy of a PSEG reference letter.

The pilot targeted approximately 100 residential and 100 commercial customers in areas of the service territory where summer peak demand is the sharpest and was 18 months long (two summers), starting in Spring 2005. There were three key objectives:

- Help PSE&G understand how price signals can influence consumers' energy usage patterns.
- The pilot will test consumers' reaction to the opportunity to conserve when power is in peak demand and costs are high.
- Technology will allow consumers to become savvy energy consumers.

Honeywell's role included:

- Customer intake and scheduling services, including a toll-free 800 number, with our customer care center operating 12 hours per day and covered by a live answering service outside of those hours;
- Customer recruitment telemarketing / follow-up calls;
- Pre-screening of interested customers to assure eligibility and answer any customer questions;
- Thermostat installation services, including customer education and instruction in the thermostat functionality and programming;

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 Customer support and complaint resolution, including emergency service on call 24 hours per day, 7 days per week.

Customer survey results regarding the installation and education portions (Honeywell role) of the program included:

 With ratings that averaged 9.2 on a scale of 1 – 10, both residential and small commercial participants were highly satisfied with their overall installation experience.

- With ratings that ranged from the high 8's to the high 9's on a scale of 1 10, both residential and small commercial participants were highly satisfied with all aspects of the services performed by the Honeywell installer.
- Both residential and small commercial participants reported that their program knowledge increased considerably from the time they signed up to after the installation of the thermostat.
   PSEG concluded that this increase in knowledge was due to the installers' educational support for customers while on site.

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## Honeywell

## Attachments

Unitil Residential Demand Response Pilot Program

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## **Michael Psihoules**

## **PROFESSIONAL EXPERIENCE**

## Honeywell

#### 1981 - Present Regional Director

- Responsible for oversight of Honeywell's East regional organization, comprised of eight district and field offices.
- Supervise delivery of services to multiple utility clients through administration of demand side management contracts.
- Responsible for supervision of district managers, coordination of regional resources to support new program start-ups and ongoing operations.
- Work closely with existing clients to evaluate and promote smooth operations.

#### Project Manager

- Managed program operations, monitored all contract changes and approvals, and coordinated all phases of vendor operations (i.e., recruiting, hiring, training, scheduling, and supervising) while maintaining a professional relationship with various levels of utility personnel.
- Also responsible for invoicing, payroll, and personnel evaluations.

#### Energy Consultant

- Major responsibility included providing clients with advice and guidance regarding better residential energy conservation.
- Duties included on-site inspection and evaluation of premises, data collection and analysis, as well as providing customers with a detailed cost/benefit analysis of suggested conservation measures.

## SKILLS & QUALIFICATIONS

Six Sigma Green Belt Certified, February 2001 Columbia Leaders Training, February 1999 Holden Sales Training, April 2003

## EDUCATION

Stockton State College, B.S., 1981, Major: Environmental Science

## Michael C. Lyons

PROFESSIONAL EXPERIENCE Honeywell 1988 - Present District Manager

Oversees Massachusetts & New England Program Operations

NYSERDA – Outreach and Project Consulting and Technical Assistance Services to Support Commercial/Industrial New York Energy \$mart<sup>®M</sup> Programs – Program Manager, New York Energy \$mart<sup>®M</sup> Premium Motors Program – Program Manager, Small Commercial Lighting Program — Program Manager, New York Energy \$mart<sup>®M</sup> Energy Star Homes — Program Coordinator

- Oversee the EmPower New York project.
- Oversee the implementation of activities related to market transformation projects. Prepare proposals and project budgets.
- Oversee the program operations in conjunction with technical assistance providers in support of 6 programs in Zone 3 (Broome, Cayuga, Chenango, Cortland, Jefferson, Lewis, Madison, Oneida, Onondaga, Oswego, and St. Lawrence counties.)

#### Municipal Electric Utilities Association – New York State Commercial Energy Efficiency Program Project Manager

Act as primary liaison to 29 municipal utility clients throughout New York State. Design and implement marketing strategies. Establish and maintain a network of over 100 local electrical contractors and trade allies. Establish program guidelines to ensure a productive and cost effective program. Develop a strong internal infrastructure to support a statewide effort. Oversee the successful implementation of \$7,000,000 of energy retrofits resulting in 1,400 projects being completed. Provide final impact reporting.

Niagara Mohawk Power Corporation — Saving Power and Utility Low Income Programs – Project Manager

New York State Electric and Gas Electric — Space Heat Program

New York Power Authority --- Watt Buster Program

New York State E-STAR — Residential New Construction Program.

#### **SKILLS & QUALIFICATIONS**

- New York Energy Efficiency Council Board Member
- Advisory Board for the Onondaga, Cortland, and Madison County BOCES Adult Education Building Science Program
   Ensure the successful completion of the goals of the Advisory Board
   Assist and

Ensure the successful completion of the goals of the Advisory Board. Assist and guide BOCES in developing training curriculums targeted at developing qualified building science technicians for New York State.

 Honeywell
 Total Quality Management Program Graduate, Commercial and Industrial Investment Grade Auditing Certification

#### EDUCATION

SUNY @ Delhi, A.A.S., Energy Systems Technology; SUNY Utica Institute of Technology, B.A. Candidate

## Steven G. Finnegan

#### PROFESSIONAL EXPERIENCE Honeywell 1999-Present

#### Profile

Over 10 years of successful Program Management delivering high quality products and services in the energy arena.

#### Senior Program Manager, Bay State Gas RCS

Responsible for implementing initiatives to increase the installation of efficient technologies. Managed the installation of thousands of Thermostats. Oversees field staff and independent contractors for quality, safety and customer service performance.

#### Senior Program Manager, Cape Light Compact

Serves client account, data management and Quality Control processes. On-going responsibilities include acting as a liaison to CLC, and monitoring and adjusting our program and administrative services as needed. Performs Quality Control Inspections of C&I Installations.

#### Senior Program Manager, WMECO RCS Program

Serves client account and field services manager. On-going responsibilities include acting as a liaison to WMECO, and monitoring and adjusting our Residential Conservation and DSM piggybacked Services delivery for maximum effectiveness. Supervises the training of staff and coordination of all field activities, monitor compliance with goal achievement and backlog maintenance, provide technical assistance to customer and field staff, and coordinate training activities with WMECO.

#### Program Manager

#### Massachusetts COOL SMART with Energy Star

Responsible for achieving Rebate Goals for a statewide Utilities Program. Rebate goal was exceeded by 30 % each of three years. Managed internal and external planning and reporting. Assisted in Program development and implementation. Developed excellent contractor and distributor relationships. Coordinated training for 200 HVAC technicians representing 61 companies in Quality Installation Verification. Responsible for Quality Control efforts and field supervision of personnel. Support marketing and outreach activities.

#### Harris Energy Systems - A Division of Frederic R. Harris

#### 1993-1999

Many years of experience in Utility sponsored Efficiency and Retrofit Programs. Involved in all aspects programs including: Energy auditing, energy analysis, field data collection, computer modeling, energy savings calculations, recommendations of energy savings measures, and construction management and installation. Performed hundreds of Commercial and Industrial and Multi-Family energy audits for businesses, institutions and municipalities. Consistently achieved goals.

Programs include: KeySpan Efficiency Experts Boston Gas C&I Program Colonial Gas Partners in Energy Efficiency National Grid/Mass Electric C&I Retrofit Program

#### Eastern Edison C&I Retrofit Program

### SKILLS & QUALIFICATIONS

Six Sigma *Plus* Greenbelt Certified Building Performance Institute – Building Analyst Technical Academic Excellence Award – HVAC – Massasoit Community College NYSERDA – High Efficiency Motors Certificate NEEP Industrial Collaborative –Optimizing Chiller Efficiency Certificate NEEP – Compressed Air Systems Certificate

## EDUCATION

1991 – 1993 1975-1979 A.S. HVAC B.A. Liberal Arts Massasoit Community College Brandeis University

## Honeywell

# John Miller

## **PROFESSIONAL EXPERIENCE**

### Honeywell

1991 - Present Technical Operations Manager/Program Manager

- Expertise in home control and automation technologies including demand response (DR), automated meter reading (AMR), and home automation and security applications.
- Provide start-up support for new projects and pilots
- Provide ongoing training for development and installation staff.
- Liaison to manufacturers during development and implementation of DR, AMR and home automation projects.
- Develop training, installation and operation manuals.

#### Load Control Product Manager

- Responsible for providing specific technical expertise and support for a range of load control and communications projects.
- Researches relevant technologies and new control devices.
- Served as technical liaison with OEMs.
- Supported DR programs with device configuration, mounting and troubleshooting issues.

#### Project Manager

- Responsible for the day to day operation of the Jersey Central Power and Light Company's Appliance Cycling Program.
- Specific duties included contractual compliance; office and field staff management; quality
  assurance; program tracking & reporting oversight; overall inventory management; and
  maintaining a professional channel of communication with key client personnel.

#### Technical Services Supervisor

- Direct field/technical supervision of multiple utility-sponsored direct load control programs.
- Responsibilities included recruiting, training and supervising regional installation crews.
- Assured programs' compliance with the National Electric Code.
- Procured and directed supervision of subcontractors.
- Development of installation manuals, as well as classroom and field training.
- Formulation of permit processing, quality assurance inspection, as well as safety policies and procedures.

### **Miller Electric**

- 1988 1991 Owner
- Managed sole proprietorship electrical firm as licensed electrician.
- Extensive client contact.
- Managed all phases of project from proposal and contract, to job completion.

### EDUCATION

National Electrical Contractors Association Estimating Course, 1988. National Electric Code courses & various other trade-related courses; 1985-1987. Ocean County Voc-Tech School, 1978. Residential, Industrial, & Commercial Wiring N.J. State Certified Energy Auditor, 1993

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Public Service Electric and Gas Company 80 Park Plaza, Newark, NJ 07102-4194 MAILING ADDRESS/ P.O. Box 570, Newark NJ 07101 Tel. 973.430.7000



April 20, 2007

RE: Honeywell Utility Solutions Support of Pubic Service Electric & Gas (PSE&G) Company's myPower Pilot Program

To Whom It May Concern:

Honeywell Utility Solutions (Honeywell) is under contract to PSE&G to provide program support services for the myPower pilot program (myPower). The pilot was 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 number of services to support the program including:

- 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 and PSE&G. 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.

PSE&G has been extremely satisfied with the quality and thoroughness of the work performed by Honeywell. They provide requested data on time and accurately on a regular basis. Their staff is well trained and highly competent and we have received no customer service complaints from program participants related to Honeywell's performance.

Sincerely,

Susanna W. Chiu

Susanna W. Chiu Director Utility Marketing

## **Honeywell Utility Solutions**

**Utility Services Agreement** 

Program Name: Date:

**Provider: Honeywell Utility Solutions** 199 Rosewood Drive, Suite 300 Danvers, MA 01923 Customer: (Customer's Name) (Customer's Address) (Customer's Address)

**Scope of Work:** HONEYWELL shall provide the following equipment and services ("the Work") in accordance with the attached work scope documents and terms and conditions, which form a part of this Agreement. Services HONEYWELL will provide under this Agreement specifically exclude inspection, investigation, discovery, identification, prevention or remediation of Hazardous Substances (as defined in Section 21.1) or Mold (as defined in Section 21.2), conditions caused by Hazardous Substances or Mold, or conditions that might cause or promote the accumulation, concentration, growth or dispersion of Hazardous Substances or Mold.

**Period of Performance:** The Work shall commence on ("Completion Date")

("Effective Date") and shall be completed by

**Additional Clarification and/or Exclusions:** 

Price: \$ U.S. Dollars

**Payment:** Upon CUSTOMER acceptance of this proposal or contract execution, whichever occurs first, the CUSTOMER shall pay HONEYWELL or percent % of the Price. Such payment shall be used for engineering, drafting, and other mobilization costs reasonably incurred prior to on-site installation.

Acceptance: This proposal and the pages attached shall become an Agreement in accordance with Article 13 of the General Terms and Conditions below and only upon signature below by an authorized representative of HONEYWELL and CUSTOMER, subject to credit approval by HONEYWELL.

Accepted by: HONEYWELL UTILITY SOLUT A business division of Honeywell Inter		)
Signature:	Signature:	
Name:	Name:	
Title:	Title:	
Date:	Date:	

#### General Terms and Conditions

#### WORKING HOURS

Unless otherwise stated, all labor and services under this Agreement will be performed during the hours of 8:00 a.m. -4:30 p.m. local time Monday through Friday, excluding federal holidays. If for any reason CUSTOMER requests HONEYWELL to furnish any such labor or services outside of the hours of 8:00 a.m. -4:30 p.m. local time Monday through Friday (or on federal holidays), the parties must include in this Agreement specific language that address such expectations, including additional compensation, if applicable.

CUSTOMER agrees to pay the amount of any new or increased taxes or governmental charges upon labor or Corrolling agrees on particle and the any new or interface of government of agrees upon the con-the production, shipment, sale, installation, or use of equipment or software which become effective after the date of this Agreement. If CUSTOMER claims any such taxes do not apply to transactions covered by this Agreement, CUSTOMER shall provide HONEYWELL with a tax exemption certificate acceptable to the ended the software acceptable to the software which becomes acceptable to the Agreement, CUSTOMER sh applicable taxing authorities.

#### 3. PROPRIETARY INFORMATION

All proprietary information (as defined herein) obtained by CUSTOMER from HONEYWELL in connection with this Agreement shall remain the property of HONEYWELL, and all proprietary information (as defined herein) obtained by HONEYWELL from CUSTOMER in connection with this Agreement shall remain the property of CUSTOMER, and both parties shall not divulge such information to any third party without prior written consent. As used herein, the term "proprietary information shall mean written information in correction with the vorting), or information in Anchine-readable form, including but not limited to software supplied to CUSTOMER known which HONEYWELL deems proprietary or confidential and characterizes as proprietary at the time of disclosure to CUSTOMER working or labeling the same "Proprietary, "Confidential", or "Sensitive". Both parties shall incur no obligations hereunder with respect to proprietary information which (a) was in the their possession or was known prior to its receipt; (b) is independently developed by the CUSTOMER or HONEYWELL without the utilization of such confidential information. (c) is or becomes public knowledge through no fault of either party.
 3.3 Both parties agree that either party may use nonproprietary information gas either party may usen document or statements to be publicly released, as long as either party submits to the other party any such document or statements to be publicly released, as long as either party submits to the other party any such document or statements to be publicly released, as long as either party submits to the other party and use of the function of the shall not be unreasonably withheld.

#### 4. INSURANCE OBLIGATIONS

4.1 HONEYWELL shall, at its own expense, carry and maintain in force at all times from the effective date of the Contract through final completion of the work the following insurance. It is agreed, however, that HONEYWELL has the right to insure or self-insure any of the insurance coverages listed below:

(a) Commercial General Liability Insurance to include contractual liability, products/completed operations liability with a combined single limit of USD \$5,000,000 per occurrence. Such policy will be written on a occurrence form basis:

to be flat unsolities are used in the execution of the Contract, Automobile Liability Insurance with a minimum combined single limit of USD \$5,000,000 per occurrence. Coverage will include all owned, leased, non-owned and hired vehicles.

(c) Where applicable, "All Risk" Property Insurance, including Builder's Risk insurance, for physical damage

(c) Where applicable, All RASE Trippery insulation informing burnet is reasonable to property which is assumed in the Contract.
(d) Workers' Compensation Insurance Coverage A - Statutory limits and Coverage B-Employer's Liability Insurance with limits of USD \$1,000,000 for bodily injury each accident or disease.

4.2 Prior to the commencement of the Contract, HONEYWELL will furnish evidence of said

instrance coverage in the form of a Memorandum of Insurance which is accessible at: http://places.lonetwell.com/moi. All insurance required in this Article will be written by companies with a rating of no less than "A-XII" by A.M. Best or equivalent rating agency. HONEYWELL will endeavor to provide a hirty (30) day notice of cancellation or non-renewal to the Customer. In the event that a self-insured program is implemented, HONEYWELL will provide adequate proof of financial responsibility.

#### 5. HAZARDOUS SUBSTANCES, MOLD AND UNSAFE WORKING CONDITIONS

CUSTOMER has not observed or received notice from any source (formal or informal) of (a) 5.1 CUSTOMER has not observed or received notice from any source (formal or informal) of (a) Hazardous Substances of Mold, either airbome or on or within the walls, floors, ceilings, heating, ventilation and air conditioning systems, structure, and other components of the Site, or within furniture, fixtures, equipment, containers or pipelines in a Site; or (b) conditions that, to CUSTOMER'S knowledge, might cause or promote accumulation, concentration, growth or dispersion of Hazardous Substances or Mold on or within such locations.

5.2 HONEYWELL is not responsible for determining whether the Covered Equipment or the temperature, humidity and ventilation settings used by CUSTOMER, are appropriate for CUSTOMER and the Site except as specifically provided in an attached Work Scope Document

If any such materials, situations or conditions, whether disclosed or not, are in fact discovered 5.3 If any such materials, situations or containeds, whether discusses or not, are in rate in associated by HONEYWELL or others and provide an unsafe condition for the performance of the work or Services, the discovery of the condition shall constitute a cause beyond HONEYWELL'S reasonable control and HONEYWELL shall have the right to caese the work or Services until the area has been made safe by CUSTOMER or CUSTOMER'S representative, at CUSTOMER'S expense.

CUSTOMER represents that CUSTOMER has not retained HONEYWELL to discover inspect, investigate, identify, prevent or remediate Hazardous Substances or Mold or conditions caused by Hazardous Substances or Mold.

5.5 TO THE FULLEST EXTENT ALLOWED BY LAW, CUSTOMER SHALL INDEMNIFY AND HOLD HONEYWELL HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS AND COSTS OF WHATEVER NATURE, INCLUDING BUT NOT LIMITED TO, CONSULTANTS' AND ATTORNEYS' FEES, DAMAGES FOR BOILY NAURY AND PROPERTY DAMAGE, FINES, PENALTIES, CLEANUP COSTS AND COSTS ASSOCIATED WITH DELAY OR WORK STOPPAGE, THAT IN ANY WAY RESULTS FROM OR ARISES UNDER THE BREACH OF THE REPRESENTATIONS AND WARRANTIES IN THIS SECTION, THE EXISTENCE OF MOLD OR A HAZARDOUS SUBSTANCE AT A SITE, OR THE OCCURRENCE OR EXISTENCE OF THE SITUATIONS OR CONDITIONS DESCRIBED IN THIS SECTION, WHETHER OR NOT CUSTOMER PROVIDES HONEYWELL ADVANCE NOTICE OF THE EXISTENCE OR OCCURRENCE IS DISCOVERED OR OCCURS. THIS INDEMNIFICATION SHALL SURVIVE TERMINATION OF THIS AGREEMENT FOR WHATEVER REASON.

6. WARRANTY AND LIMITATION OF LIABILITY

HONEYWELL will replace or repair any product HONEYWELL provides under this 6.1 FORET WELL will replace of repair any product HONET WELL provides under this warranty period of (one) I year from the date of installation or the service performed by HONETWULL that fails within the warranty period of (one) I year from the date of installation or the service performed because of defective workmanship or materials, except to the extent the failure results from CUSTOMER negligence, or from fire, lighting, water damage, or any other cause beyond the control of HONEYWELL. This warranty applies to all products HONEYWELL provides under this Agreement, whether or not manufactured by HONEYWELL. The warranty applies to all products the period. is effective as of the date of installation

6.2 THE WARRANTIES SET FORTH HEREIN ARE EXCLUSIVE, AND HONEYWELL EXPRESSLY DISCLAIMS AND CUSTOMER EXPRESSLY WAIVES ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF WORKMANSHIP, CONSTRUCTION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES, EQUIPMENT, AND MATERIALS PROVIDED HEREINDER. HONEYWELL SHALL NOT BE LIABLE FOR ANY PROPERTY DAMAGE, PERSONAL INJURY, LOSS OF INCOME, EMOTIONAL DISTRESS, DEATH, LOSS OF USE, LOSS OF VALUE, ADVERSE HEALTH EFFECT OR ANY SPECIAL, INCIDENTAL, DVIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE, OR EXEMPLARY DAMAGES, ARISING FROM, OR RELATING TO, THIS LIMITED WARRANTY OR ITS BREACH. ITS BREACH.

6.3 HONEYWELL makes no representation or warranty, express, implied or otherwise, regarding Hazardous Substances or Mold. HONEYWELL shall have no duty, obligation or liability, all of which CUSTOMER expressly waives, for any dama face to the star have to only, congutino to maturity, and which to property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services, in whole or in part due to or arising from any investigation, testing, analysis, monitoring, cleaning, removal, disposal, abatement, remediation, decontamination, repair, replacement, relocation, loss of use of building, or equipment and systems, or personal injury, death or disease in any way associated with Hazardous Substances or Mold.

#### 7. INDEMNITY

HONEYWELL agrees to indemnify and hold CUSTOMER and its agents and employees harmless from all claims for bodily injury and property damages to the extent such claims result from or arise under HONEYWELL'S negligent actions or willful misconduct in its performance of the Work required under this Agreement, provided that such indemnity obligation is valid only to the extent (i) CUSTOMER gives HONEYWELL'S negligent actions or willful misconduct in its performance of the Work required under this Agreement, provided that such indemnity obligation is valid only to the extent (i) CUSTOMER gives CUSTOMER gives HONEYWELL and each information, assistance and authority, at HONEYWELL'S expense, to enable HONEYWELL to defend such suit. HONEYWELL shall not be responsible for any settlement without its written consent. HONEYWELL shall not be liable for loss or damage caused by the negligence of CUSTOMER or any other party or such party's employees or agents. This obligation shall survive termination of this Agreement. Notwithstanding the foregoing, CUSTOMER agrees that HONEYWELL will not be responsible for any damages caused by Mold or any other fungus or biological material or agent, including but not limited to property damage, personal injury, loss of income, emotional distress, death, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services.

#### 8. LIMITATION OF LIABILITY

8.1 IN NO EVENT SHALL HONEYWELL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, WHETHER ARISING OUT OF OR AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, MOLD, MOISTURE, INDOOR AIR QUALITY, OR OTHERWISE, ARISING FROM, RELATING TO, OR CONNECTED WITH THE SERVICES, EQUIPMENT, MATERIALS, OR ANY GOODS PROVIDED UPDETANGED HERFUNDER.

8.2 NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, HONEYWELL'S TOTAL LIABILITY ARISING OUT OF OR AS A RESULT OF ITS PERFORMANCE UNDER THIS AGREEMENT SHALL NOT EXCEED THE AMOUNT OF THIS AGREEMENT.

#### 9. EXCUSABLE DELAYS

HONEYWELL shall not be liable for damages caused by delay or interruption in Services due to fire, flood, HONEYWELL shall not be liable for damages caused by delay or interruption in Services due to fire, flood, corrosive substances in the air, strike, lockout, dispute with workmen, inability to obtain material or services, commotion, war, acts of God, the presence of Hazardous Substances or Mold, or any other cause beyond HONEYWELL'S reasonable control. Should any part of the system or any Equipment be damaged by fire, water, lightming, acts of God, the presence of Hazardous Substances or Mold, third particles, or any other cause beyond the control of HONEYWELL, any repairs or replacement shall be paid for by CUSTOMER. In the event of any such delay, date of shipment or performance shall be extended by a period equal to the time lost by reason of such delay, and HONEYWELL hall be entitled to recover from CUSTOMER is reasonable costs, overhead, and profit arising from such delay.

#### 10. PATENT INDEMNITY

HONEYWELL shall, at its expense, defend or, at its option, settle any suit that may be instituted 10.1 10.1 HONEYWELL shall, at its expense, defend or, at its option, settle any suit that may be instituted against CUSTOMER for alleged infringement of any United States patents related to the hardware or software manufactured and provided by HONEYWELL under this Agreement ("the equipment"), provided that a) such alleged infringement consists only in the use of such equipment by itself and not as part of, or in combination with, any other devices, parts or software not provided by HONEYWELL hereunder, b) CUSTOMER gives HONEYWELL Immediate notice in writing of any such suit and permits HONEYWELL, through coursel of infringement and defend such suit, and c: CUSTOMER gives HONEYWELL all needed information, assistance and authority, at HONEYWELL'S expense, to enable HONEYWELL to defend such suit. defend such suit.

10.2 If such a suit has occurred, or in HONEYWELL'S opinion is likely to occur, HONEYWELL may, at its election and expense: a) obtain for CUSTOMER the right to continue using such equipment; b) replace, correct or modify it so that it is not infringing, or c) remove such equipment and grant CUSTOMER a credit therefore, as depreciated.

10.3 In the case of a final award of damages in any such suit, HONEYWELL will pay such award. HONEYWELL shall not, however, be responsible for any settlement made without its written consent.

THIS ARTICLE STATES HONEYWELL'S TOTAL LIABILITY AND CUSTOMER'S HAS ANTICLES TATES BORE TWEELS TO TALE LABILITY AND CONTOURS AS SOLE REMEDY FOR ANY ACTUAL OR ALLEGED INFRINCEMENT OF ANY PATENT BY THE HARDWARE MANUFACTURED AND PROVIDED BY HONEYWELL HEREUNDER.

#### 11. SOFTWARE LICENSE

Honeywell Building Systems Agreement (Rev. 07/05)

All software provided in connection with this Agreement shall be licensed and not sold. The end user of the software will be required to sign a license agreement with provisions limiting use of the software to the equipment provided under these specifications, limiting copying, preserving confidentiality, and prohibiting transfer to a http://aster.eses of this type are standard for computer-based equipment of the type covered by this Agreement. CUSTOMER shall be expected to grant HONEYWELL access to the end user for purposes of obtaining the necessary software license.

#### **12. DISPUTE RESOLUTION**

With the exception of any controversy or claim arising out of or related to the installation, monitoring, and/or maintenance of fire and/or security systems, the Parties agree that any controversy or claim between HONEYWELL and CUSTOMER arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration in a neutral venue, conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. Any award rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. Any controversy or claim arising out of or related to the installation, monitoring, and/or maintenance of systems associated with security and/or the detection of, and/or reduction of risk of loss associated with fire shall be resolued in a court of computer turing information. resolved in a court of competent jurisdiction.

#### 13. ACCEPTANCE OF THE CONTRACT

This proposal and the pages attached shall become an Agreement upon signature above by HONEYWELL and CUSTOMER. The terms and conditions are expressly limited to the provisions hereof, including Honeywell's General Terms and Conditions attached hereto, notwithstanding receipt of, or acknowledgment by, HONEYWELL of any purchase order, specification, or other document issued by CUSTOMER. Any additional or different terms set forth or referenced in CUSTOMER's purchase order are hereby objected to by HONEYWELL and shall be deemed a material alteration of these terms and shall not be a part of any resulting

#### 14. MISCELLANEOUS

14.1 This Agreement represents the entire Agreement between CUSTOMER and HONEYWELL for the Work described herein and supersedes all prior negotiations, representations or Agreements between the Parties related to the work described herein.

14.2 None of the provisions of this Agreement shall be modified, altered, changed or voided by any subsequent Purchase Order or other document unilaterally issued by CUSTOMER that relates to the subject matter of this Agreement. This Agreement may be amended only by written instrument signed by both Parties.

14.3 reement shall be governed by the law of the State where the work is to be performed

14.4 Any provision or part of this Agreement held to be void or unenforceable under any laws or Here the provision of the regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon HONEYWELL and CUSTOMER, who agree that this Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

14.5 CUSTOMER may not assign its rights or delegate its obligations under this Agreement, in whole or in part, without the prior written consent of HONEYWELL. HONEYWELL may assign its right to receive payment to a third party.

#### 15. TERMS OF PAYMENT

Subject to HONEYWELL'S approval of CUSTOMER'S credit, payment terms are as follows: <u>Prorress Payments</u> - HONEYWELL will invoice at least monthly for all installation, labor, and services performed, both on and off the job site. CUSTOMER agrees to pay the full amounts invoiced upon receipt of the invoice at the address specified by the CUSTOMER. Invoices not paid within thirty (30) days of the invoice date are past due and accrue interest from the invoice date to the date of payment at the rate of one percent (1%) per month, compounded monthly, or the highest legal rate then allowed. In the event of a disputed invoice, the CUSTOMER shall immediately notify HONEYWELL with a detailed description of the dispute. Undisputed portions of the invoice shall be paid in accordance with the terms herein. <u>Suspension of work - IFHONEYWELL</u>, having performed work per Agreement requirements, does not receive payment within thirty (30) days after submission of a HONEYWELL invoice, HONEYWELL may suspend work until CUSTOMER provides remedy.

#### 16. WORK BY OTHERS

Services HONEYWELL will provide under this Agreement specifically exclude professional 16.1 16.1 Services HONEYWELL will provide under this Agreement specifically exclude professional services which constitute the practice of architecture or engineering unless specifically set forth in the Scope of Work. CUSTOMER or Owner will specify all performance and design criteria that HONEYWELL will follow in performing Work under this Agreement. If professional design services or certifications by a design professional related to systems, materials, or equipment is required, such services and certifications are the responsibility of others. To the fullest extent permitted by law, CUSTOMER shall indemnify and hold harmless HONEYWELL and its ageness from and against any and all claims, damages, losses and expenses, including but not limited to attorneys' fees, that in any way result from or arise under breach of the representations in this Section 16 shall be construed to require that CUSTOMER indemnify and hold harmless HONEYWELL from claims and costs resulting from HONEYWELL'S negligent actions or wilfful misconduct.

#### 17. DAMAGE OR LOSS

HONEYWELL shall not be liable for damage to or loss of equipment and software after delivery to destination determined by this Agreement or any applicable prime contract. If thereafter, and prior to payment in full to HONEYWELL by CUSTOMER, any such equipment or software is damaged or destroyed by any cause whatsoever, other than by the fault of HONEYWELL, the CUSTOMER agrees promptly to pay or reimburse HONEYWELL for such loss.

#### 18. TERMINATION

18.1 By Customer. CUSTOMER may terminate this Agreement for cause if HONEYWELL defaults in the performance of any material term of this Agreement, or fails or neglects to carry forward the Work in accordance with this Agreement, after giving HONEYWELL written notice of its intent to terminate. If HONEYWELL has not, within seven (7) business days after receipt of such notice, acted to remedy and make good such deficiencies, CUSTOMER may terminate this Agreement and take possession of the site together with all materials thereon, and move to complete the Work itself expediently. Upon request of HONEYWELL, CUSTOMER will furnish to HONEYWELL a detailed accounting of the costs incurred by CUSTOMER in finishing the Work. (the upaid balance of the contract rule expense of finishing the Work, the excess shall be paid to HONEYWELL, but if the expense exceeds the unpaid balance, HONEYWELL shall pay the difference to CUSTOMER.

18.2 <u>By Honeywell</u> HONEYWELL may terminate this Agreement for cause (including, but not limited to, CUSTOMER'S failure to make payments as agreed herein) after giving CUSTOMER written notice of its intent to terminate. If, within seven (7) days following receipt of such notice, CUSTOMER fails to make the payments then due, or otherwise fails to crue or perform its obligations, HONEYWELL may, by written notice to CUSTOMER terminate this Agreement and recover from CUSTOMER payment for Work executed and for losses sustained for materials, tools, construction equipment and machinery, including but not limited to, reasonable overhead, profit and applicable damages

#### **19. CHANGES IN THE WORK**

19.1 A Change Order is a written order signed by CUSTOMER and HONEYWELL authorizing a change in the Work or adjustment in the price or a change to the schedule.

CUSTOMER may request HONEYWELL to submit proposals for changes in the Work, subject 19.2 to acceptance by HONEYWELL If CUSTOMER chooses to proceed, such changes in the Work will be authorized by a Change Order. Unless otherwise specifically agreed to in writing by both parties, if HONEYWELL submits a proposal pursuant to such request but CUSTOMER chooses not to proceed. CUSTOMER shall issue a Change Order to reimburse HONEYWELL for any and all costs incurred in preparing the proposal.

19.3 HONEYWELL may make a written request to CUSTOMER to modify this Agreement based on the receipt of or the discovery of, information that that HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. HONEYWELL will within a reasonable time after receipt of, or the discovery of, information that HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. This request shall be submitted by HONEYWELL before proceeding to execute the Work, except in a mergency endangering life or property, in which case HONEYWELL'S request will include information necessary to substantiate the effect of the change and any impacts to the Work, including any change in schedule or contract price. If HONEYWELL'S request is acceptable to CUSTOMER, CUSTOMER, will issue a Change Order consistent therewith. If CUSTOMER and HONEYWELL cannot agree on the annount of the adjustment in the Price, or the Schedule, it hall be determined pursuant to the Dispute Resolution article of this Agreement. Any change in the Price or the Schedule resulting from such claim shall be authorized by Change Order.

#### 20. ACCEPTANCE OF THE WORK

**59.** ACCETIONCE OF THE WORK Upon receipt of notice by HONEYWELL that the Work is ready for final inspection and acceptance, CUSTOMER will make such final inspection and issue acceptance within three (3) business days. Acceptance will be in a form provided by HONEYWELL, stating that to the best of CUSTOMER'S knowledge, information and belief, and on the basis of CUSTOMER'S on-site visits and inspections, the Work has been fully completed in accordance with the terms and conditions of this Agreement. If CUSTOMER finds the Work unacceptable due to non-compliance with a material element of this Agreement, which non-compliance is due solely to the fault of HONEYWELL, CUSTOMER will notify HONEYWELL in writing within the three (3) business days setting forth the specific reasons for non-acceptance. CUSTOMER agrees that failure to inspect and/or failure to issue proper notice of non-acceptance. CUSTOMER agrees that failure to inspect and/or failure to issue proper notice of non-acceptance. CUSTOMER further agrees that partial or beneficial use of the Work by CUSTOMER or Owner prior to final inspection and acceptance will constitute final acceptance of the Work under this Agreement. To the fullest extent permitted by law, CUSTOMER shall indemnify and hold harmless HONEYWELL and its agents and employees from and against any and all claims, damages, losses and expenses, including but not limited to attomeys' fees, that in any way result from or arise under breach of the representations in this Section 21. This indemnification shall survive termination of this Agreement for whatever rescon. Nothing in this Section 21 shall be construed to require that CUSTOMER indemnify and hold hardless HONEYWELL from claims and costs resulting from HONEYWELL'S negligent actions or willfui misconduct.

#### 21. DEFINITIONS

"Hazardous substance" includes all of the following, and any by-product of or from any of the 21.1 "Hazardous substance" includes all of the following, and any by-product of or from any ot the following, whether naturally occurring or manufactured, in quantities, conditions or concentrations that have, are alleged to have, or are believed to have an adverse effect on human health, habitability of a Site, or the environment: (a) any dangerous, hazardous or toxic pollutant, contaminant, chemical, material or substance defined as hazardous or toxic or as a pollutant or contaminant under state or federal law, and (b) any petroleum product, nuclear fuel or material, carcinogen, absetos, urea formaldehyde, foamed-in-place insulation, polychlorinated biphenyl (PCB), and (c) any other chemical or biological material or organism, that has, is alleged to have, or is helieved to have an adverse effect on human health, habitability of a Site, or the environment.

"Mold" means any type or form of fungus or biological material or agent, including mold, 21.2 mildew, moisture, yeast and mushrooms, and any mycotoxins, spores, scents, or by-products produced or released by any of the foregoing. This includes any related or any such conditions caused by third parties.

Covered Equipment" means the equipment covered by the Services to be performed by HONEYWELL under this Agreement, and is limited to the equipment included in the respective work scope attachments

#### MEMORANDUM OF INSURANCE Date: 04/01/09 This memorandum is issued as a matter of information only to authorized viewers for their internal use only and confers no rights upon any viewer of this Memorandum. This Memorandum does not amend, extend or alter the coverage described below. This Memorandum may only be copied, printed and distributed within an authorized viewer and may only be used and viewed by an authorized viewer for its internal use. Any other use, duplication or distribution of this Memorandum without the consent of Wells Fargo Insurance Services Northwest, Inc. is prohibited. "Authorized Viewer" shall mean an entity or person which is authorized by the insured named herein to access this Memorandum via http://www51.honeyweil.com/moi/. The information contained herein is as of the date referred to above. Wells Fargo Insurance Services Northwest, Inc. shall be under no obligation to update such information. Producer Wells Fargo Insurance Services Northwest, Inc. Questions please contact: honeywellmoi@wellsfargois.com Insured: INSURERS AFFORDING COVERAGE HONEYWELL INTERNATIONAL INC. Insurer A ACE American Insurance Company В P. O. BOX 1219 Indemnity Insurance Company of North America insurer C 101 COLUMBIA ROAD insurer MORRISTOWN, NJ 07962 D insurer Coverages THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTHWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS MEMORANDUM MAY BE ISSUED OR MAY PERTAIN. THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED BELOW IS SUBJECT TO ALL THE TERMS, CONDITIONS AND EXCLUSIONS OF SUCH POLICIES, AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS Policy Policy co Effective Expiration Type of Insurance **Policy Number** LTR Date Date Limits CGOG2375021-1 4/1/2009 4/1/2010 Each Occurrence 5,000,000 General Liability \$ Damage to Rented Premises 5,000,000 Commercial General Liability S Med Exp (Any one person) 50,000 Claims Made S Occur. \$ Personal & Adv Injury 5,000,000 \$ Gen'l Aggregate Limit Applies Per General Aggregate 5,000,000 \$ Policy Project Loc Products - Comp/Op. Ś 5,000,000 Automobile Liability SCA H0825329-8 4/1/2009 4/1/2010 Combined Single Limit \$ 5,000,000 X Any Auto All Owned Autos Bodily Injury (Per Person) Ś Scheduled Autos X Hired Autos Bodily Injury (Per Accident) \$ X Non-Owned Autos Property Damage \$ Each Occurrence Excess/Umbrella Liability \$ C Occurrence Reported Claims Made Occur \$ Aggregate Deductible C Retention \$ Workers' Compensation WLR C4436785-3 4/1/2009 4/1/2010 Statutory Limits B XX WLR C4436789-0 and Employers' Liability E L. Each Accident 5 5,000,000 ٨ (Insured States) B RSC C4436793-2 E.L. Disease - Each Employee \$ 5.000,000 E.L. Disease - Policy Limit 5.000.000 \$ Δ Excess Workers' WCU C4436801-8 4/1/2009 4/1/2010 Excess Workers' Compensation statutory limits А (AZ, OH, WA) excess of \$1,000,000. Compensation and Employers' Liability Self-insured States only WCU C4436797-A 4/1/2009 4/1/2010 Employers' Liability: \$5 million for each accident or AZ.WA.OH.NM) each employee for disease

This Memorandum of Insurance serves solely to list insurance policies, limits and dates of coverage. Any modifications hereto are not authorized. Any party with which the named insured is contractually required to include special status is automatically granted such status. However, coverage under the policy only applies to the extent of the coverage required by such contractual requirement and for the limits of liability specified in such contractual requirement, but in no event for insurance not afforded by the policy nor for limits of liability in excess of the applicable limits of liability of the policy. Any questions on this form may be referred via email to the Wells Fargo Insurance Services email address noted above.

### HONEYWELL UTILITY SOLUTIONS Submitted On: 3/29/2010

#### Unitil DR

	Price		
Description	Per Unit	Quantity	Extended
Mobilization Fee	\$17,500.00	1	\$17,500.00
Management Fee	\$15,000.00	3	\$45,000.00
UtilityPRO Installation	\$166.76	76	\$12,674.12
Tendril Installation	\$209.12	76	\$15,892.94
Meter Installation	\$52.94	228	\$12,070.59

Total	\$268.59	384	\$103,137.65
Total	\$268.59	384	\$103,137.65

### Notes to Pricing

1.) Payment shall be made on net 30-day terms, billed semi-monthly.

2.) Prices are valid for 90 days from date of submittal or as stated in the RFP.

3.) Labor shall be non-union and non-prevailing wage.
4.) Licenses and/or permits shall not be required to perform the work.

5.) Pricing assumes that account data for installations will be provided at contract inception.

6.) Taxes are not included and will be billed separately

## **Honeywell Utility Solutions**

## **Utility Services Agreement**

Program Name:	UtilityPro Thermostat Pilot
Date:	February 23, 2010

**Provider: Honeywell Utility Solutions** 199 Rosewood Drive, Suite 300 Danvers, MA 01923 Customer: Unitil Corporation 6 Liberty Lane West Hampton, NH 03842

**Scope of Work:** HONEYWELL shall provide the following equipment and services ("the Work") in accordance with the attached work scope documents and terms and conditions, which form a part of this Agreement. Services HONEYWELL will provide under this Agreement specifically exclude inspection, investigation, discovery, identification, prevention or remediation of Hazardous Substances (as defined in Section 21.1) or Mold (as defined in Section 21.2), conditions caused by Hazardous Substances or Mold, or conditions that might cause or promote the accumulation, concentration, growth or dispersion of Hazardous Substances or Mold.

**Period of Performance:** The Work shall commence on the last date this Agreement is signed ("Effective Date") and shall be completed by August 1, 2010 ("Completion Date")

### Work:

The initial scope of work is for HONEYWELL to provide eighty four (84) UtilityPro thermostats. Lead time is approximately six (6) weeks from the Effective Date of this Agreement. Pricing will be consistent with the attached price page, submitted January 8, 2010. This Agreement also provides CUSTOMER with the optional services outlined in the attached price page and as supported by this Agreement. Such optional services will only commence upon CUSTOMER's written authorization to HONEYWELL, the timing and logistics of which shall be mutually agreed upon between the parties.

Acceptance: This proposal and the pages attached shall become an Agreement in accordance with Article 13 of the General Terms and Conditions below and only upon signature below by an authorized representative of HONEYWELL and CUSTOMER, subject to credit approval by HONEYWELL.

Accepted by: Honeywell Utility Solutions A business division of Honeywell Inter	CUSTOMER: Unitil Corporation national Inc.	
Signature:	Signature:	
Name:	Name:	
Title:	Title:	
Date:	Date:	

#### **General Terms and Conditions**

### 1. WORKING HOURS

Unless otherwise stated, all labor and services under this Agreement will be performed during the hours of 8:00 a.m. - 4:30 p.m. local time Monday through Friday, excluding federal holidays. If for any reason CUSTOMER requests HONEYWELL to furnish any such labor or services outside of the hours of 8:00 a.m. - 4:30 p.m. local time Monday through Friday (or on federal holidays), the parties must include in this Agreement specific language that address such expectations, including additional compensation, if applicable.

## 2. TAXES

CUSTOMER agrees to pay the amount of any new or increased taxes or governmental charges upon labor or the production, shipment, sale, installation, or use of equipment or software which become effective after the date of this Agreement. If CUSTOMER claims any such taxes do not apply to transactions covered by this Agreement, CUSTOMER shall provide HONEYWELL with a tax exemption certificate acceptable to the applicable taxing authorities.

### **3. PROPRIETARY INFORMATION**

3.1 All proprietary information (as defined herein) obtained by CUSTOMER from HONEYWELL in connection with this Agreement shall remain the property of HONEYWELL, and all proprietary information (as defined herein) obtained by HONEYWELL from CUSTOMER in connection with this Agreement shall remain the property of CUSTOMER, and both parties shall not divulge such information to any third party without prior written consent. As used herein, the term "proprietary information" shall mean written information (or oral information reduced to writing), or information in machine-readable form, including but not limited to software supplied to CUSTOMER hereunder which HONEYWELL deems proprietary or confidential and characterizes as proprietary at the time of disclosure to CUSTOMER by marking or labeling the same "Proprietary, "Confidential", or "Sensitive". Both parties shall incur no obligations hereunder with respect to proprietary information which: (a) was in the their possession or was known prior to its receipt; (b) is independently developed by the CUSTOMER or HONEYWELL without the utilization of such confidential information; (c) is or becomes public knowledge through no fault of either party; Both parties agree that either party may use nonproprietary 3.2 information pertaining to the Agreement, and the work performed under the Agreement, for press releases, case studies, data analysis, promotional purposes, and other similar documents or statements to be publicly released, as long as either party submits to the other party any such document or statement for its approval, which shall not be unreasonably withheld.

#### 4. INSURANCE OBLIGATIONS

**4.1** HONEYWELL shall, at its own expense, carry and maintain in force at all times from the effective date of the Contract through final completion of the work the following insurance. It is agreed, however, that HONEYWELL has the right to insure or self-insure any of the insurance coverages listed below:

(a) Commercial General Liability Insurance to include contractual liability, products/completed operations liability with a combined single limit of USD \$5,000,000 per occurrence. Such policy will be written on an occurrence form basis;

(b) If automobiles are used in the execution of the Contract, Automobile Liability Insurance with a minimum combined single limit of USD \$5,000,000 per occurrence. Coverage will include all owned, leased, non-owned and hired vehicles. (c) Where applicable, "All Risk" Property Insurance, including Builder's Risk insurance, for physical damage to property which is assumed in the Contract.

 (d) Workers' Compensation Insurance Coverage A - Statutory limits and Coverage B-Employer's Liability Insurance with limits of USD \$1,000,000 for bodily injury each accident or disease.

**4.2** Prior to the commencement of the Contract. HONEYWELL will furnish evidence of said insurance coverage in the form of a Memorandum of Insurance which is accessible at: <u>http://places.honeywell.com/moi</u>. All insurance required in this Article will be written by companies with a rating of no less than "A-, XII" by A.M. Best or equivalent rating agency. HONEYWELL will endeavor to provide a thirty (30) day notice of cancellation or non-renewal to the Customer. In the event that a self-insured program is implemented, HONEYWELL will provide adequate proof of financial responsibility.

#### 5. HAZARDOUS SUBSTANCES, MOLD AND UNSAFE WORKING CONDITIONS

**5.1** CUSTOMER has not observed or received notice from any source (formal or informal) of (a) Hazardous Substances or Mold. either airborne or on or within the walls, floors, ceilings, heating, ventilation and air conditioning systems, plumbing systems, structure, and other components of the Site, or within furniture, fixtures, equipment, containers or pipelines in a Site; or (b) conditions that, to CUSTOMER'S knowledge, might cause or promote accumulation, concentration, growth or dispersion of Hazardous Substances or Mold on or within such locations.

**5.2** HONEYWELL is not responsible for determining whether the Covered Equipment or the temperature, humidity and ventilation settings used by CUSTOMER, are appropriate for CUSTOMER and the Site except as specifically provided in an attached Work Scope Document.

**5.3** If any such materials, situations or conditions, whether disclosed or not, are in fact discovered by HONEYWELL or others and provide an unsafe condition for the performance of the work or Services, the discovery of the condition shall constitute a cause beyond HONEYWELL'S reasonable control and HONEYWELL shall have the right to cease the work or Services until the area has been made safe by CUSTOMER or CUSTOMER'S representative, at CUSTOMER'S expense.

**5.4** CUSTOMER represents that CUSTOMER has not retained HONEYWELL to discover, inspect, investigate, identify, prevent or remediate Hazardous Substances or Mold or conditions caused by Hazardous Substances or Mold.

TO THE FULLEST EXTENT ALLOWED BY LAW, 5.5 CUSTOMER SHALL INDEMNIFY AND HOLD HONEYWELL HARMLESS FROM AND AGAINST ANY AND ALL CLAIMS AND COSTS OF WHATEVER NATURE, INCLUDING BUT NOT LIMITED TO, CONSULTANTS' AND ATTORNEYS' FEES, DAMAGES FOR BODILY INJURY AND PROPERTY DAMAGE, FINES, PENALTIES, CLEANUP COSTS AND COSTS ASSOCIATED WITH DELAY OR WORK STOPPAGE, THAT IN ANY WAY RESULTS FROM OR ARISES UNDER THE BREACH OF THE REPRESENTATIONS AND WARRANTIES IN THIS SECTION, THE EXISTENCE OF MOLD OR A HAZARDOUS SUBSTANCE AT A SITE, OR THE OCCURRENCE OR THE SITUATIONS OR CONDITIONS EXISTENCE OF DESCRIBED IN THIS SECTION, WHETHER OR NOT CUSTOMER PROVIDES HONEYWELL ADVANCE NOTICE OF THE EXISTENCE OR OCCURRENCE AND REGARDLESS OF WHEN THE HAZARDOUS SUBSTANCE OR OCCURRENCE IS DISCOVERED OR OCCURS. THIS INDEMNIFICATION SHALL

# SURVIVE TERMINATION OF THIS AGREEMENT FOR WHATEVER REASON.

### 6. WARRANTY AND LIMITATION OF LIABILITY

**6.1** HONEYWELL will replace or repair any product HONEYWELL provides under this Agreement and/or shall correct any defective service performed by HONEYWLL that fails within the warranty period of (one) 1 year from the date of installation or the service performed because of defective workmanship or materials, except to the extent the failure results from CUSTOMER negligence, or from fire, lightning, water damage, or any other cause beyond the control of HONEYWELL. This warranty applies to all products HONEYWELL provides under this Agreement, whether or not manufactured by HONEYWELL. The warranty is effective as of the date of installation.

THE WARRANTIES SET FORTH HEREIN ARE 6.2 EXCLUSIVE, AND HONEYWELL EXPRESSLY DISCLAIMS AND CUSTOMER EXPRESSLY WAIVES ALL OTHER WARRANTIES, WHETHER WRITTEN OR ORAL, IMPLIED OR STATUTORY, INCLUDING BUT NOT LIMITED TO, ANY WARRANTY OF WORKMANSHIP, CONSTRUCTION, MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, WITH RESPECT TO THE SERVICES, EQUIPMENT, AND MATERIALS PROVIDED HEREUNDER. HONEYWELL SHALL NOT BE LIABLE FOR ANY PROPERTY DAMAGE, PERSONAL INJURY, LOSS OF INCOME, EMOTIONAL DISTRESS, DEATH, LOSS OF USE, LOSS OF VALUE, ADVERSE HEALTH EFFECT OR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE, OR EXEMPLARY DAMAGES, ARISING FROM, OR RELATING TO, THIS LIMITED WARRANTY OR ITS BREACH.

**6.3** HONEYWELL makes no representation or warranty, express, implied or otherwise, regarding Hazardous Substances or Mold. HONEYWELL shall have no duty, obligation or liability, all of which CUSTOMER expressly waives, for any damage or claim, whether known or unknown, including but not limited to property damage, personal injury, loss of income, emotional distress, death, loss of use, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services, in whole or in part due to or arising from any investigation, testing, analysis, monitoring, cleaning, removal, disposal, abatement, remediation, decontamination, repair, replacement, relocation, loss of use of building, or equipment and systems, or personal injury, death or disease in any way associated with Hazardous Substances or Mold.

#### 7. INDEMNITY

HONEYWELL agrees to indemnify and hold CUSTOMER and its agents and employees harmless from all claims for bodily injury and property damages to the extent such claims result from or arise under HONEYWELL'S negligent actions or willful misconduct in its performance of the Work required under this Agreement, provided that such indemnity obligation is valid only to the extent (i) CUSTOMER gives HONEYWELL immediate notice in writing of any such claims and permits HONEYWELL, through counsel of its choice and HONEYWELL'S sole cost and expense, to answer the claims and defend any related suit and (ii) CUSTOMER gives HONEYWELL all needed information, assistance and authority, at HONEYWELL'S expense, to enable HONEYWELL to defend such suit. HONEYWELL shall not be responsible for any settlement without its written consent. HONEYWELL shall not be liable for loss or damage caused by the negligence of CUSTOMER or any other party or such party's employees or agents. This obligation shall survive termination of this Agreement. Notwithstanding the foregoing, CUSTOMER agrees that HONEYWELL will not be responsible for any damages caused by Mold or any other fungus or biological material or agent, including but not limited to property damage,

personal injury, loss of income, emotional distress, death. loss of use, loss of value, adverse health effect or any special, consequential, punitive, exemplary or other damages, regardless of whether such damages may be caused by or otherwise associated with defects in the Services.

#### 8. LIMITATION OF LIABILITY

8.1 IN NO EVENT SHALL HONEYWELL BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, SPECULATIVE, REMOTE, CONSEQUENTIAL, PUNITIVE OR EXEMPLARY DAMAGES, WHETHER ARISING OUT OF OR AS A RESULT OF BREACH OF CONTRACT, WARRANTY, TORT (INCLUDING NEGLIGENCE), STRICT LIABILITY, MOLD, MOISTURE, INDOOR AIR QUALITY, OR OTHERWISE, ARISING FROM, RELATING TO, OR CONNECTED WITH THE SERVICES, EQUIPMENT, MATERIALS, OR ANY GOODS PROVIDED HEREUNDER.

8.2 NOTWITHSTANDING ANYTHING TO THE CONTRARY HEREIN, HONEYWELL'S TOTAL LIABILITY ARISING OUT OF OR AS A RESULT OF ITS PERFORMANCE UNDER THIS AGREEMENT SHALL NOT EXCEED THE AMOUNT OF THIS AGREEMENT.

#### 9. EXCUSABLE DELAYS

HONEYWELL shall not be liable for damages caused by delay or interruption in Services due to fire, flood, corrosive substances in the air, strike, lockout, dispute with workmen, inability to obtain material or services, commotion, war, acts of God, the presence of Hazardous Substances or Mold, or any other cause beyond HONEYWELL'S reasonable control. Should any part of the system or any Equipment be damaged by fire, water, lightning, acts of God, the presence of Hazardous Substances or Mold, third parties, or any other cause beyond the control of HONEYWELL, any repairs or replacement shall be paid for by CUSTOMER. In the event of any such delay, date of shipment or performance shall be extended by a period equal to the time lost by reason of such delay, and HONEYWELL shall be entitled to recover from CUSTOMER its reasonable costs, overhead, and profit arising from such delay.

#### **10. PATENT INDEMNITY**

**10.1** HONEYWELL shall, at its expense, defend or, at its option, settle any suit that may be instituted against CUSTOMER for alleged infringement of any United States patents related to the hardware or software manufactured and provided by HONEYWELL under this Agreement ("the equipment"), provided that a) such alleged infringement consists only in the use of such equipment by itself and not as part of, or in combination with, any other devices, parts or software not provided by HONEYWELL hercunder, b) CUSTOMER gives HONEYWELL immediate notice in writing of any such suit and permits HONEYWELL, through counsel of its choice, to answer the charge of infringement and defend such suit, and c) CUSTOMER gives HONEYWELL all needed information, assistance and authority, at HONEYWELL'S expense, to enable HONEYWELL to defend such suit.

**10.2** If such a suit has occurred, or in HONEYWELL'S opinion is likely to occur, HONEYWELL may, at its election and expense: a) obtain for CUSTOMER the right to continue using such equipment; b) replace, correct or modify it so that it is not infringing; or c) remove such equipment and grant CUSTOMER a credit therefore, as depreciated.

**10.3** In the case of a final award of damages in any such suit, HONEYWELL will pay such award. HONEYWELL shall not, however, be responsible for any settlement made without its written consent.

# 10.4 THIS ARTICLE STATES HONEYWELL'S TOTAL LIABILITY AND CUSTOMER'S SOLE REMEDY FOR ANY

#### ACTUAL OR ALLEGED INFRINGEMENT OF ANY PATENT BY THE HARDWARE MANUFACTURED AND PROVIDED BY HONEYWELL HEREUNDER.

### **11. SOFTWARE LICENSE**

All software provided in connection with this Agreement shall be licensed and not sold. The end user of the software will be required to sign a license agreement with provisions limiting use of the software to the equipment provided under these specifications, limiting copying, preserving confidentiality, and prohibiting transfer to a third party. Licenses of this type are standard for computer-based equipment of the type covered by this Agreement. CUSTOMER shall be expected to grant HONEYWELL access to the end user for purposes of obtaining the necessary software license.

#### **12. DISPUTE RESOLUTION**

With the exception of any controversy or claim arising out of or related to the installation, monitoring, and/or maintenance of fire and/or security systems, the Parties agree that any controversy or claim between HONEYWELL and CUSTOMER arising out of or relating to this Agreement, or the breach thereof, shall be settled by arbitration in a neutral venue, conducted in accordance with the Construction Industry Arbitration Rules of the American Arbitration Association. Any award rendered by the arbitrator shall be final, and judgment may be entered upon it in accordance with applicable law in any court having jurisdiction thereof. Any controversy or claim arising out of or related to the installation, monitoring, and/or maintenance of systems associated with security and/or the detection of, and/or reduction of risk of loss associated with fire shall be resolved in a court of competent jurisdiction.

#### **13. ACCEPTANCE OF THE CONTRACT**

This proposal and the pages attached shall become an Agreement upon signature above by HONEYWELL and CUSTOMER. The terms and conditions are expressly limited to the provisions hereof, including Honeywell's General Terms and Conditions attached hereto, notwithstanding receipt of, or acknowledgment by, HONEYWELL of any purchase order, specification, or other document issued by CUSTOMER. Any additional or different terms set forth or referenced in CUSTOMER'S purchase order are hereby objected to by HONEYWELL and shall be deemed a material alteration of these terms and shall not be a part of any resulting order.

#### **14. MISCELLANEOUS**

**14.1** This Agreement represents the entire Agreement between CUSTOMER and HONEYWELL for the Work described herein and supersedes all prior negotiations, representations or Agreements between the Parties related to the work described herein.

**14.2** None of the provisions of this Agreement shall be modified, altered, changed or voided by any subsequent Purchase Order or other document unilaterally issued by CUSTOMER that relates to the subject matter of this Agreement. This Agreement may be amended only by written instrument signed by both Parties.

**14.3** This Agreement shall be governed by the law of the State where the work is to be performed.

**14.4** Any provision or part of this Agreement held to be void or unenforceable under any laws or regulations shall be deemed stricken, and all remaining provisions shall continue to be valid and binding upon HONEYWELL and CUSTOMER, who agree that this Agreement shall be reformed to replace such stricken provision or part thereof with a valid and enforceable provision that comes as close as possible to expressing the intention of the stricken provision.

**14.5** CUSTOMER may not assign its rights or delegate its obligations under this Agreement, in whole or in part, without the prior written consent of HONEYWELL. HONEYWELL may assign its right to receive payment to a third party.

#### **15. TERMS OF PAYMENT**

Subject to HONEYWELL'S approval of CUSTOMER'S credit, payment terms are as follows:

<u>Progress Payments</u> - HONEYWELL will invoice at least monthly for all installation, labor, and services performed, both on and off the job site. CUSTOMER agrees to pay the full amounts invoiced upon receipt of the invoice at the address specified by the CUSTOMER. Invoices not paid within thirty (30) days of the invoice date are past due and accrue interest from the invoice date to the date of payment at the rate of one percent (1%) per month, compounded monthly, or the highest legal rate then allowed. In the event of a disputed invoice, the CUSTOMER shall immediately notify HONEYWELL with a detailed description of the dispute. Undisputed portions of the invoice shall be paid in accordance with the terms herein.

<u>Suspension of work</u> - If HONEYWELL, having performed work per Agreement requirements, does not receive payment within thirty (30) days after submission of a HONEYWELL invoice, HONEYWELL may suspend work until CUSTOMER provides remedy.

### 16. WORK BY OTHERS

Services HONEYWELL will provide under this Agreement 16.1 specifically exclude professional services which constitute the practice of architecture or engineering unless specifically set forth in the Scope of Work. CUSTOMER or Owner will specify all performance and design criteria that HONEYWELL will follow in performing Work under this Agreement. If professional design services or certifications by a design professional related to systems, materials, or equipment is required, such services and certifications are the responsibility of others. To the fullest extent permitted by law, CUSTOMER shall indemnify and hold harmless HONEYWELL and its agents and employees from and against any and all claims, damages, losses and expenses, including but not limited to attorneys' fees, that in any way result from or arise under breach of the representations in this Section 16. This indemnification shall survive termination of this Agreement for whatever reason. Nothing in this Section 16 shall be construed to require that CUSTOMER indemnify and hold harmless HONEYWELL from claims and costs resulting from HONEYWELL'S negligent actions or willful misconduct.

#### **17. DAMAGE OR LOSS**

HONEYWELL shall not be liable for damage to or loss of equipment and software after delivery to destination determined by this Agreement or any applicable prime contract. If thereafter, and prior to payment in full to HONEYWELL by CUSTOMER, any such equipment or software is damaged or destroyed by any cause whatsoever, other than by the fault of HONEYWELL, the CUSTOMER agrees promptly to pay or reimburse HONEYWELL for such loss.

### **18. TERMINATION**

**18.1** By Customer. CUSTOMER may terminate this Agreement for cause if HONEYWELL defaults in the performance of any material term of this Agreement, or fails or neglects to carry forward the Work in accordance with this Agreement, after giving HONEYWELL written notice of its intent to terminate. If HONEYWELL has not, within seven (7) business days after receipt of such notice, acted to remedy and make good such deficiencies, CUSTOMER may terminate this Agreement and take possession of the site together with all materials thereon, and move to complete the Work itself expediently. Upon request of HONEYWELL, CUSTOMER will furnish to HONEYWELL a detailed accounting of the costs incurred by CUSTOMER in finishing the Work. If the unpaid

balance of the contract price exceeds the expense of finishing the Work, the excess shall be paid to HONEYWELL, but if the expense exceeds the unpaid balance, HONEYWELL shall pay the difference to CUSTOMER.

**18.2** <u>By Honeywell</u>. HONEYWELL may terminate this Agreement for cause (including, but not limited to, CUSTOMER'S failure to make payments as agreed herein) after giving CUSTOMER written notice of its intent to terminate. If, within seven (7) days following receipt of such notice, CUSTOMER fails to make the payments then due, or otherwise fails to cure or perform its obligations, HONEYWELL may, by written notice to CUSTOMER, terminate this Agreement and recover from CUSTOMER payment for Work executed and for losses sustained for materials, tools, construction equipment and machinery, including but not limited to, reasonable overhead, profit and applicable damages.

#### **19. CHANGES IN THE WORK**

**19.1** A Change Order is a written order signed by CUSTOMER and HONEYWELL authorizing a change in the Work or adjustment in the price or a change to the schedule.

**19.2** CUSTOMER may request HONEYWELL to submit proposals for changes in the Work, subject to acceptance by HONEYWELL. If CUSTOMER chooses to proceed, such changes in the Work will be authorized by a Change Order. Unless otherwise specifically agreed to in writing by both parties, if HONEYWELL submits a proposal pursuant to such request but CUSTOMER chooses not to proceed, CUSTOMER shall issue a Change Order to reimburse HONEYWELL for any and all costs incurred in preparing the proposal.

19.3 HONEYWELL may make a written request to CUSTOMER to modify this Agreement based on the receipt of, or the discovery of, information that that HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. HONEYWELL will submit its request to CUSTOMER within a reasonable time after receipt of, or the discovery of, information that HONEYWELL believes will cause a change to the scope, price, schedule, level of performance, or other facet of the Agreement. This request shall be submitted by HONEYWELL before proceeding to execute the Work, except in an emergency endangering life or property, in which case HONEYWELL shall have the authority to act, in its discretion, to prevent threatened damage, injury or loss. HONEYWELL'S request will include information necessary to substantiate the effect of the change and any impacts to the Work, including any change in schedule or contract price. If HONEYWELL'S request is acceptable to CUSTOMER, CUSTOMER will issue a Change Order consistent therewith. If CUSTOMER and HONEYWELL cannot agree on the amount of the adjustment in the Price, or the Schedule, it shall be determined pursuant to the Dispute Resolution article of this Agreement. Any change in the Price or the Schedule resulting from such claim shall be authorized by Change Order.

### **20. ACCEPTANCE OF THE WORK**

Upon receipt of notice by HONEYWELL that the Work is ready for final inspection and acceptance, CUSTOMER will make such final inspection and issue acceptance within three (3) business days. Acceptance will be in a form provided by HONEYWELL, stating that to the best of CUSTOMER'S knowledge, information and belief, and on the basis of CUSTOMER'S on-site visits and inspections, the Work has been fully completed in accordance with the terms and conditions of this Agreement. If CUSTOMER finds the Work unacceptable due to non-compliance with a material element of this Agreement, which non-compliance is due solely to the fault of HONEYWELL, CUSTOMER will notify HONEYWELL in writing within the three (3) business days setting forth the specific reasons for non-acceptance. CUSTOMER agrees that failure to inspect and/or failure to issue proper notice of non-acceptance within three (3) business days shall constitute final acceptance of the Work under this Agreement. CUSTOMER further agrees that partial or beneficial use of the Work by CUSTOMER or Owner prior to final inspection and acceptance will

constitute acceptance of the Work under this Agreement. To the fullest extent permitted by law, CUSTOMER shall indemnify and hold harmless HONEYWELL and its agents and employees from and against any and all claims, damages, losses and expenses, including but not limited to attorneys' fees, that in any way result from or arise under breach of the representations in this Section 21. This indemnification shall survive termination of this Agreement for whatever reason. Nothing in this Section 21 shall be construed to require that CUSTOMER indemnify and hold harmless HONEYWELL from claims and costs resulting from HONEYWELL'S negligent actions or willful misconduct.

### **21. DEFINITIONS**

**21.1** "Hazardous substance" includes all of the following, and any by-product of or from any of the following, whether naturally occurring or manufactured, in quantities, conditions or concentrations that have, are alleged to have, or are believed to have an adverse effect on human health, habitability of a Site, or the environment: (a) any dangerous, hazardous or toxic pollutant, contaminant, chemical, material or substance defined as hazardous or toxic or as a pollutant or contaminant under state or federal law, and (b) any petroleum product, nuclear fuel or material. carcinogen, asbestos, urea formaldehyde, foamed-in-place insulation. polychlorinated biphenyl (PCBs), and (c) any other chemical or biological material or organism, that has, is alleged to have, or is believed to have an adverse effect on human health, habitability of a Site, or the environment.

**21.2** "Mold" means any type or form of fungus or biological material or agent, including mold, mildew, moisture, yeast and mushrooms, and any mycotoxins, spores, scents, or by-products produced or released by any of the foregoing. This includes any related or any such conditions caused by third parties.

**21.3** "Covered Equipment" means the equipment covered by the Services to be performed by HONEYWELL under this Agreement, and is limited to the equipment included in the respective work scope attachments.

## HONEYWELL UTILITY SOLUTIONS Submitted February 23, 2010

Unitil - UtilityPro Thermostat Pilot

	Price		
escription	Per Unit	Quantity	Extended
UtilityPro Thermostat - Materials (Per Device)	\$198.00	84	\$16,632.00
Add-a-Wire Module	\$12.00	84	\$1,008.00
UtilityPro Thermostat - Installation (per Device)	\$249.05	84	\$20,920.20
Cannon Paging Costs (per month)	\$1,000.00	2	\$2,000.00
Cannon Hosting Fees (per month)	N/C		
stal	\$482.86	84	\$40,560.20
ptional Services - available upon request			
Position	Hourly Rate		
Installation Technician	\$75.00		
Installation Supervisor	\$85.00		
Senior IT Analyst	\$150.00		
IT Analyst	\$125.00		

#### Notes to Pricing

Telemarketing

Customer Service Representative Administrative Assistant

1.) Pricing assumes that marketing and enrollment is complete. 150 leads will be required at contract inception, to account for technical turndowns.

2.) Installation labor is Non-Union, Non-Prevailing Wage.

3.) Pricing assumes that licensing and / or permits are not required to complete the scope of work. Should licensed technicians be required to complete the installations floneywell will revisit pricing.

\$45.00 \$49.00

\$45.00

4.) Payments are due on Net 30-day terms, using ACH processing.

5.) Pricing assumes that 100 units will be installed in a concentrated portion of the service territory over 1 month. Should the volume change or the period of performance extend beyond 1 month. Honeywell will revisit pricing.

6.) Applicable taxes will be billed separately.

#### PILOT SERVICE AGREEMENT

This Trial Service Agreement and all Exhibits annexed hereto (the "**Agreement**") is made and entered into as of this \_\_\_\_\_ day of February, 2010 ("**Effective Date**") by and between Tendril Networks, Inc., with its principal place of business at 5395 Pearl Parkway, Boulder CO, 80301 ("**Tendril**"), and Unitil Services Corporation with its principal place of business at 325 West Road Portsmouth, MA 03801 ( "**Customer**").

#### **1. DEFINITIONS.**

1.1 "Intellectual Property Rights" means any and all now known or hereafter existing (a) rights associated with works of authorship, including copyrights, mask work rights, and moral rights; (b) trademark or service mark rights (c) trade secret rights; (d) patents, patent rights, and industrial property rights; and (e) layout design rights, design rights, software, firmware and other proprietary rights of every kind and nature other than trademarks, service marks, trade dress, and similar rights.

1.2 **Products.** Tendril's products include documentation, all Intellectual Property Rights, Portal, Software, Service or Tendril Devices described in the appendices or on Tendril's website. Products may contain both new and used parts.

**2.** TRIAL USE OF THE SERVICE.

2.1 Access to the Products. Subject to the terms and conditions of this Agreement, Tendril will make the Products available to Customer and its users during the Term on a non-exclusive, non-transferable basis for the purpose of conducting a trial of the Products for the benefit of Customer. Customer and its users will be responsible for the selection and costs of telecommunications, internet access, and any other systems and services required to access the Products. Customer shall not (i) grant access to or use of the Products; (iii) interfere with, disrupt, alter, translate, or modify the Products or any part thereof, or create an undue burden on the Products or the networks or services connected to the Products; (iv) reverse engineer, decompile, disassemble, or otherwise derive or determine or attempt to derive or determine the source code.

2.2 **IP Ownership**. Customer acknowledges that Tendril has developed proprietary technology in its Products and all worldwide Intellectual Property Rights therein, are the exclusive property of Tendril.

2.3 **Title, protection and security.** Customer understands and agrees that other than Hardware products, no right, title, or interest in or to the Products provided by Tendril to Customer pursuant to this Agreement is transferred to Customer. Customer hereby irrevocably assigns to Tendril all of its right, title and interest in and to any and all feedback concerning the functionality and performance of the services provided by Tendril to Customer.

2.4 License to use. Customer is hereby granted a limited, personal, nonexclusive, non-transferable license, without the right to sub-license, to use the Product only for testing and evaluation, in confidence, during the Term. 2.5 Fees for testing products. Customer shall be entitled to use the Product pursuant to the terms and conditions of this Agreement for the amounts as set out in **Exhibit A**.

2.6 **Purchase Orders.** Any Products delivered under this Agreement are set out in **Exhibit A** and such orders are non-cancellable. Title and risk of loss for any products purchased by Customers occurs on shipment by Tendril. Customer understands that Tendril's Hardware lead times for large deployment quantities are 12 to 16 weeks.

**3. PAYMENT.** Customer will pay to Tendril the fees set forth in **Exhibit A**. All fees and other charges are due and payable to Tendril within thirty (30) days after receipt of Tendril's invoice. The fees are exclusive of all applicable sales, use, value-added, freight and other taxes, and all applicable duties, tariffs, assessments, export and import fees, or other similar charges, and Customer will be responsible for payment of all such amounts. Tendril shall bill the cost of reasonable travel and out-of-pocket expenses in accordance with Customers policies.

4. **USER CONTENT**. Customer shall ensure that its users shall not introduce any viruses, worms or other malicious computer programming codes able to damage the Products.

5. WARRANTY. Tendril's hardware and software warranties are set out on its website.

5.1 **Disclaimer**. Tendril Makes No Warranties, Representations, or Conditions, Whether Written, Oral, express, Implied or Statutory, Including, Without limitation, any Implied Warranties of Merchantability, title, Noninfringement, or fitness for a particular purpose, with respect to the use, MISUSE, or Inability to use the PRODUCTS. Tendril does not warrant that all ERRORS can be corrected, or that operation of the Service shall be UNINTERRUPTED or Error-Free.

5.2 **NOT FOR HAZARDOUS ENVIRONMENTS**. THE PRODUCTS ARE NOT FAULT-TOLERANT AND ARE NOT DESIGNED, MANUFACTURED, OR INTENDED FOR USE OR RESALE AS ON-LINE CONTROL FOR EQUIPMENT IN HAZARDOUS ENVIRONMENTS REQUIRING FAIL-SAFE PERFORMANCE IN WHICH THE FAILURE OF THE PRODUCTS COULD LEAD DIRECTLY TO DEATH, PERSONAL INJURY, OR SEVERE PHYSICAL OR ENVIRONMENTAL DAMAGE.

## 6. LIMITATION OF LIABILITY.

6.1 **Types of Damages.** IN NO EVENT SHALL TENDRIL, OR ITS SUPPLIERS BE LIABLE TO CUSTOMER FOR ANY SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING DAMAGES OR COSTS DUE TO LOSS OF PROFITS, DATA, USE OR GOODWILL, RESULTING FROM OR IN CONNECTION WITH TENDRIL'S PERFORMANCE HEREUNDER OR THE USE, MISUSE, OR INABILITY TO USE THE PRODUCTS, EVEN IF TENDRIL HAS BEEN NOTIFIED OF THE LIKELIHOOD OF SUCH DAMAGES.

6.2 **Amount of Damages**. THE MAXIMUM LIABILITY OF TENDRIL ARISING OUT OF OR IN ANY WAY CONNECTED TO THIS AGREEMENT SHALL NOT EXCEED THE FEES PAID BY CUSTOMER TO TENDRIL DURING THE SIX (6) MONTHS PRECEDING THE CLAIM.

## 7. INDEMNIFICATION.

7.1 **By Tendril**. Tendril will defend at its own expense any action against Customer brought by a third party to the extent that the action is based upon a claim that the Products directly infringe any U.S. patents or copyrights, or misappropriates any trade secrets recognized as such under the Uniform Trade Secret law, and Tendril will pay those costs and damages awarded against Customer in any such action that are attributable to such claim or those costs and damages agreed to in a monetary settlement of such action. If the Products become, or in Tendril's opinion is likely to become, the subject of an infringement claim, Tendril may, at its option and expense, (a) procure for Customer the right to continue using the Products, (b) replace or modify the Products so that it becomes non-infringing, or, provided none of the options under (a) and (b) above is commercially reasonable, (c) terminate this Agreement and give Customer a refund for any fees paid in advance to Tendril for any period commencing after the termination.

7.2 **Indemnity Procedures.** In the event of a claim for indemnity hereunder: (i) the party entitled to indemnity ("**Indemnitee**") shall promptly notify the other ("**Indemnitor**") in writing of any threatened or actual claim or suit; (ii) Indemnitor shall have sole control of the defense or settlement of any claim or suit; and (iii) Indemnitee shall cooperate with Indemnitor to facilitate the settlement or defense of any claim or suit.

#### 8. MISCELLANEOUS.

8.1 **Governing Law and Venue.** This Agreement and any action related thereto will be governed, controlled, interpreted, and defined by and under the laws of the State of Colorado.

8.2 **Force Majeure**. Any delay in the performance of any duties or obligations of either party will not be considered a breach of this Agreement if such delay is caused by a shortage of materials, fire, earthquake, flood, or any other event beyond the control of such party, provided that such party uses reasonable efforts, to notify the other party of the circumstances causing the delay and to resume performance as soon as possible.

8.3 **Entire Agreement**. This Agreement is the final and complete agreement of the parties with respect to the subject matters hereof and supersedes all prior discussions. No modification of or amendment to this Agreement will be effective unless in writing and signed by an authorized signatory of Customer and Tendril.

IN WITNESS WHEREOF, the parties hereto have caused this Agreement to be executed by their duly authorized representatives as of the Effective Date.

<b>Fendri</b>	L NETWORKS	, INC.
---------------	------------	--------

- By: \_\_\_\_\_
- Name:\_\_\_\_\_

Title:\_\_\_\_\_

### **TREE Order Form**

# Order for Tendril Networks, Inc. TREE Services, Software Products, Customer Support and Professional Services

(TREE	Pilot	System)
-------	-------	---------

	Customer Name and Ad	dress:
	Unitil	
	325 West Road	
	Portsmouth, MA 03801	
Quote # :	 Related Agreement # :	Tendril TREE Pilot Agreement

This ORDER FOR TENDRIL NETWORKS, INC. SOFTWARE/HARDWARE PRODUCTS, CUSTOMER SUPPORT AND PROFESSIONAL SERVICES (the "Order") is an offer by Tendril Networks, Inc., having its principal place of business at 5395 Pearl Parkway, Boulder, Colorado 80301 ("Tendril") to provide the software products, support, and professional services indicated on this Order to the customer ("Customer" or "You") subject to the additional terms and conditions attached as Exhibits to this Order, as well as any other provisions set forth in this Order: This offer is valid through August 2, 2009. If accepted, this Order will become incorporated with any of the following applicable Tendril Agreements: (i) Tendril TREE Pilot Agreement; and/or (ii) Tendril Professional Services Agreement.; and/or (iii) Tendril Statement of Work.

Part A: Software License and/or Hardware Product ordered hereunder:

Product #	Number of Installations	License F	ee
		Per Node	Extended
TREEP	76		\$30,000
GWY-8-003- 102	76	\$175.00	\$13,300
	76	<b>\$</b> 175.00	\$13,300
IHD-5-003- 102	76	\$150.00	\$11,400
TST-5-003- 100	76	\$130.00	\$9,880
OLT-7-002- 101	76	\$125.00	\$9,500
			\$87,380
	TREEP GWY-8-003- 102 IHD-5-003- 102 TST-5-003- 100 OLT-7-002-	Installations           TREEP         76           GWY-8-003-         76           102         76           IHD-5-003-         76           102         76           TST-5-003-         76           100         76           OLT-7-002-         76	Installations         Per Node           TREEP         76

Software License Support Plan Description:

"Standard Support" - "8X5" 2nd Line Help Desk Support	User Limitation	Incident Limitation	
7 am Mountain time to 4 pm Mountain time, 5 days/week, M-F, excluding holidays	76	None	
Part B: Professional Services ordered hereunder:			
Service Description	Applicable SOW	Fee	
PCT Installation w/ Gateway			
IHD Installation w/ Gateway			
Project Management		Included in Subscription	
Technical Support & Maintenance		Included in Subscription	
Installation and Training Services	Fixed Fee Services	\$27,660	

Software License, Hardware, Support and Professional Services Total (Parts A + B):

A + B):							-
Primary Custome	r Point of Contact			Secondary Cus	tomer Point of Conta	act	
Name:	Justin Eisfeller			Name:			
Phone/Cell:	603-503-9633			Phone/Cell:			
Email:	eisfeller@unitil.co	m		Email:	·		<b></b>
Estimated Shipme	ent Date:	Ship to:	325 West Road		Invoice to:		
SERVICE BROKE	R-Perp-PS-Pack4		- 1 of 3 -			-{Date}	

263447 v4/CO

TBD (dependent on # of HAN Installations)

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Physical Shipment? (or)

Portsmouth, MA 03801

Electronic Shipment? \*\*\*

\*\*\* If Electronic Shipment, please indicate the following:
a. The specific Wireless Network required:
b. The specific Software Environment required:

.

SERVICE BROKER-Perp-PS-Pack4 263447 v4/CO

- 2 of 3 -

 $-{Date}$ 

The parties have signed below indicating their acceptance of the terms of this Order, and the terms and conditions of the exhibits and attachments hereto.

CUSTOMER: Signature:	Unitil Services Corp.	TENDRIL NETWO	DRKS, INC.
Name:	George R. Granks	Name:	Mark Pougnet
Title:	Sono Vij Prej ht	Title:	CFO
Date:	2-10-2010	Date:	

СС 34<u>5</u> 5-а

-{Date}

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Proposal to

Unitil

In response to

Request for Proposals Demand Reduction Technology Evaluation Pilot Project – Phase I

**October 1, 2008** 

Prepared and Submitted by:



# **GDS Associates, Inc.**

**Engineers and Consultants** 

GDS Associates, Inc. • 1181 Elm Street • Suite 205 • Manchester, NH 03101 • www.gdsassociates.com Marietta, GA • Austin, TX • Auburn, AL • Manchester, NH • Madison, WI • Indianapolis, IN • Augusta, ME

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Attachment 1 – Bidder's Submission Statement

Appendix A – GDS Resumes

Appendix B – List of GDS Related Projects

Appendix C – Representative Example of Marketing and Educational Materials

# 1.0 Scope of Work

## Project Overview:

GDS plans to provide a program design with the intention of easy to follow full implementation steps, documents and actions for Phase II of this project.

GDS understands that the three targeted time of use rates (TOU) pilot programs will be offered in Unitil's service territories in both Massachusetts and New Hampshire. The pilot program is targeted toward residential and low-income customers. The technology to be utilized has been identified as a Zigbee unit with three levels of programs defined as *Simple TOU, Enhanced Technology and Smart Thermostat.* 

## Sampling

GDS has identified the sample size for each group at a minimum of 75 participants per program to exceed the desired 90% confidence with a 10% precision. This sample size would be required for each of the three programs and for each state (NH & MA), GDS proposes a common control group for each state. Should Unitil wish to narrow the sample size a potential approach might be to include participant from both states in an equal ratio as compared to the total residential and low income customers. Based on a recent study that GDS performed in this same region, over 400 residential customers were asked several questions; one relevant question asked was if central air conditioning was installed. Over 24% of the survey participants responded yes. This response gave GDS the confidence that a statically significant number of residential and low income customers have central A/C and allows them to be considered as part of the potential participant pool.

In order to achieve the desired number of completed surveys required 10 times the number of attempts in GDS's recent study. As a result GDS feels confident that the same threshold of attempts (10 times) would be required to achieve the desired results.

## Screening:

GDS plans to draft screening questions to help identify potential candidates to the three programs. GDS believes that one survey to cover all three programs would be sufficient. The technologies are similar enough and generally are tiered approaches and thus would be a good fit for escalating the question in the survey from the simple TOU up to the Smart Thermostat program.

The screening questions would have three topic areas:

- Participation eligibility e.g. Is there operational central A/C in the home, Are the residents home year round?
- Behaviors e.g. programmable thermostats, night time set back etc.
- Interest e.g. willingness to participate and as what level, describe all three programs etc.

The screening would be performed over the phone. GDS is capable of creating a web based self initiated survey that could be implemented at an additional cost. The data from this technology would be automatically entered into a data base and would be invaluable. This would be a new technique and for the first program group would need to be evaluated for effectiveness and should be used in conjunction with telephone surveys to ensure the number or responses needed are achieved. Once confidence is built then the web based solution could be the sole screening portal.

The screening results would also give insight into the price points and TOU rates as to the effectiveness and meaningfulness of these price points. GDS plans to work closely with Unitil staff to help relay timely information should changes need to be considered.

## Marketing

GDS recommends using a characterized marketing study not a survey based study. The characterized study would rely upon existing Unitil customer information, past study demographic and available state demographic published data. The marketing study is key to help prioritize and target potential customer segments to gear marketing and educational tools towards as these elements will be developed before and in conjunction with the recruitment process. This will increase the effectiveness of the material produced.

For the marketing study, material and recruitment effort, GDS plans to utilize a marketing and media firm that has first hand knowledge of the technical and price points to reach program participant on the most cost effective and broad reaching way. GDS will rely on Unitil to provide branding direction, program descriptions, newsletter lists, pricing scenarios, benefits from demand reduction efforts and specific project requirements.

## **Baseline Development**

For the baseline development, GDS plans to utilize Until provided electrical data and available gas and oil usage for heating. The heating and cooling baseline will be based on BIN Hour data method, eQuest<sup>©</sup> energy modeling software and ASHRAE standards for space heating and domestic water heating needs. eQuest is commercial and industrial building energy simulation software based off the DOE-2 engine. GDS utilized e-quest V 3.61 produced by James J. Hirsch & Associates in collaboration with Lawrence Berkeley National Laboratory

## Scope of Work Summary

GDS plans to perform and deliver the following bullet list of items to meet phase I of this project.

- Determine customer base and number of customers with air conditioning.
- Establish sampling size for each program and control group
- Perform character based marketing study
- Develop educational materials
- Marketing and recruitment approach (minimize non-response bias)
- Deliver turnkey approach to fully implement phase II (including public outreach seminars and contractor training for Smart thermostats).

# 2.0 Sample Work Plan

Kickoff Meeting: GDS plans to have the kick off meeting to identify goals request information and ensure deliverable meet Unitil's expectations and requirements. Planned for week of October 20th, 2008

**Task 1:** GDS plans for the *work plan* to take a combined effort of 45 hours. Task one would require a maximum of two weeks to submit a draft for acceptance. No later than November 3<sup>rd</sup>, 2008.

**Task 2:** The sampling shall include the exact number of participants needed (67) per group and the number used to ensure the sampling is statistical valid should a few participants drop out or any data failure etc. determined the actual number of samples (75) per group. Identify the groups (NH, MA, Control etc) the combined effort for this task is estimated at 25 hours. This task has an estimated completion date of November 7<sup>th</sup>.

**Task 3a:** The marketing study is planned to run concurrently with Task 2 and 3 with an estimated effort of 24 hours and a completion date of November 21<sup>st</sup>. The marketing study is planned to use available web based data for the city and towns in a majority of the Unitil territory. This information will be extremely helpful in determining a target marketing and educational material and recruitment process.

**Task 3:** GDS plans to use Unitil's branding and graphical images to develop targeted, well thought out educational and marketing materials. While not requested in this phase of the project GDS also highly recommends learning sessions, and contractor training to help further develop the TOU programs. GDS also plans to utilize a subcontractor to help identify different price points related to educational and marketing materials. GDS considered marketing to all of Unitil's Customers but was concerned with non-response bias and the impact on the recruitment process.

**Task 4:** The recruiting strategy will utilize the marketing study, marketing and educational materials. The full recruiting plan easy to be implemented is estimated to take 42 hours and a draft be completed on December 12<sup>th</sup>.

**Task 5:** GDS expects to have a working draft on January 23<sup>rd</sup> and also expects this effort to take 66 hours.

# 3.0 GDS Qualifications

GDS Associates is a 150-person engineering and management consulting firm with six offices across the country including Manchester New Hampshire, Marietta Georgia (GDS Headquarters), Madison Wisconsin, and Austin Texas. For each assigned staff member, the table below highlights any unique projects or relevant specialty areas of expertise and their associated responsibilities for future work. A more detailed overview of each individual's qualifications is presented immediately following the table, including identification of all professional certifications and memberships in energy, building and environmental related associations. Resumes for these staff members are included in Appendix A.

Key GDS Staff Member	Areas of Responsibility, Unique Projects and Specialties
Scott Albert Principal/Region Manager	<ul> <li>Project Lead, Demand Response and Energy Efficiency Technical Potential Research and Analyst Expert</li> <li>Responsible for administrative oversight and quality/timely completion of all energy efficiency program evaluation, technology evaluations and associated consulting support.</li> <li>Recently completed several large energy efficiency technical potential studies include large and complex surveys development, implementation and analysis throughout the region.</li> <li>Substantial demand reduction project management &amp; technical analysis experience</li> </ul>
Tim Clark, CEM Senior Project Manager	<ul> <li>Marketing and Educational Materials Lead</li> <li>Extensive experience in market research, data collection and data analysis projects</li> <li>Certified Energy Manager (CEM)</li> <li>Specializes in industrial process assessment and HVAC system analysis</li> </ul>
Bruce Bennett Senior Project Manager	<ul> <li>Technical Leadership Support, Site Visits/Audits and Analysis</li> <li>Substantial residential building science experience</li> <li>Manages Energy star homes home rating – performed over 1,000 rating in 2007</li> <li>Extensive experience in survey implementation and survey result analysis</li> </ul>
Keith McBrien, Al Project Manager	<ul> <li>Demand response and reduction expert</li> <li>Demand Response utility program development</li> <li>Recently completed dozens of curtailment plans for large industrial end uses and multifamily buildings</li> </ul>
<b>Ryan Capers, CEM</b> Project Analyst	<ul> <li>Additional Technical EEM Analysis Support</li> <li>Certified Energy Manager (CEM)</li> <li>Demand and energy reduction program development and evaluation expert.</li> <li>Electrical and gas supply model development expert.</li> <li>Leads GDS multi-family housing and hotel properties auditing projects</li> </ul>
Jennifer Ferrante, CEM Engineer	<ul> <li>Additional Technical EEM Analysis Support</li> <li>Certified Energy Manager (CEM)</li> <li>Experienced in technical EEM research and analysis</li> <li>Software modeling and data analysis expert</li> </ul>

Armand Gottlieb Project Analyst	<ul> <li>Additional Technical EEM Analysis Support</li> <li>Renewable and alternative power expert</li> <li>Extensive experience in program evaluation and analysts.</li> </ul>
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# 4.0 Qualifications of Key Personnel

**Scott Albert, Principal -** Scott Albert is a Principal of GDS Associates and manages the firm's Northeast region office, located here in Manchester. Scott has lived in New Hampshire since 1981 and has over twenty-five years of experience in the energy industry. Since joining GDS in 1999, he has worked on electric and gas energy efficiency and renewable and distributed generation projects for clients throughout the Northeast and across the country. Previously, Mr. Albert held supply and demand-side resource planning positions with Boston Edison and Public Service Company of New Hampshire.

Mr. Albert's work has included: renewable energy and energy efficiency technology and technical potential assessments, commercial, industrial, and residential energy usage and efficiency audits, program design and budget development; program theory and logic modeling, process and impact evaluations; market characterization and baseline analysis; cost-effectiveness model design and benefit/cost screening; utility and non-utility policy/strategy development; and regional collaboration. He has also been involved with innovative energy efficiency pilot programs and has worked on both residential and commercial on-site generation and energy assessment projects for customers throughout the Northeast and Midwest.

Scott earned his Masters Degree in Business Administration from New Hampshire College (now Southern NH University) and has a Bachelor of Science Degree in Civil/Environmental Engineering from Northeastern University.

**Timothy Clark (CEM), Senior Project Manager**– Mr. Clark has over 25 years energy efficiency program management, design, implementation and evaluation experience. In his capacity as Senior Project Manager for GDS Associates, Inc. he provides technical energy efficiency assistance to residential, commercial and industrial customers as well as trade allies in the states of Massachusetts, Maine, New Hampshire and Wisconsin. He has also completed numerous market research, data collection and data analysis projects for GDS clients. Prior to joining GDS Mr. Clark administered Central Maine Power's (CMP) Good Cents Home Program, water heater wrap program, and commercial audit program.

In his current capacity as the Field Staff Director for the Efficiency Maine Residential and Business programs, Mr. Clark acts as a liaison between the business community and program allies (the vendor community). He works with business owners to identify vendors that can meet their energy efficiency needs. Mr. Clark also recruits vendors who provide energy efficient equipment or services to the program participate. Mr. Clark provides technical advice and support to business owners who are looking to increase the efficiency of their business and need assistance identifying savings opportunities. He also promotes the Efficiency Maine Business Program to potential participants and equipment vendors at trade shows, through trade associations, local Chamber of Commerce, the Main Street Community Program and other local associations as well as trade shows.

Mr. Clark's education includes a BA and MBA in Business Administration from Thomas College. He has successfully completed the Association of Energy Engineers' Certified Energy Managers (CEM) and the Building Operators Certification (BOC) course. Mr. Clark is also a trained facilitator.

**Bruce Bennett, Senior Project Manager**: Mr. Bennett is a Project Manager with GDS Associates. Bruce oversees a staff of six energy efficiency specialists and energy raters. Bruce has over 15 years of experience in construction, real estate planning and development and energy efficiency consultation.

Bruce is a RESNET-accredited and certified home energy rater (HERS). As an energy rating provider, Bruce is an implementation contractor for Public Service of New Hampshire providing energy ratings for the New Hampshire ENERGY STAR Homes program; provides one-on-one code consulting with architects, developers, builders and homeowners constructing new buildings in New Hampshire, Maine and Massachusetts; and also provides energy audits for owners of existing buildings that are experiencing high heating costs, comfort and /or moisture issues.

Bruce joined GDS Associates in December 2000 and is based in the firm's New Hampshire office.

Prior to joining GDS, Bruce served as a Development Officer with New Hampshire Housing Finance Authority where he provided finance underwriting, loan disbursements and construction oversight for the completion of multi-family housing development projects. He holds a Bachelor of Science degree in Environmental Design and a Master of Regional Planning from the University of Massachusetts at Amherst.

Keith McBrien - Project Manager - Mr. McBrien has over 13 years of experience from key related industries. Keith has been involved with mechanical engineering and plumbing (HVACP) design for Merrimack County Nursing Home, Harvard University, Yale University, and Dartmouth College and Keene State College underground steam system analysis to name a few. At GDS Keith has been instrumental in the further development of the industrial and commercial audit actives since 2007. Prior to joining GDS Keith was employed by Water Energy Distributors working in the custom design division, designing geothermal systems for large residential, commercial and institutional facilities from Manhattan to Maine. Prior to that Mr. McBrien was an integral team member of New Hampshire Electric Cooperative as an account executive working with the company's largest accounts as their energy advisor. While at NHEC Keith developed and fostered relationships in the Key Account program and championed the highly successful demand response program. Keith also has extensive equipment design and facilities engineering experience with Saint-Gobain; a global leader in performance materials manufacturing. Work with facilities across New England and Ireland. Mostly recently Keith has conducted dozens of energy and water efficiency audits for large industrial process facilities. Keith has also been an integral part of the public housing energy audit team working from coast to coast on large public housing developments efficiency audits. Over the past year Keith has also lead several sustainable and renewable energy assessments from industrial plants utilizing waste heat for process heating and cooling to direct use geothermal for two large VA hospitals in the Serra Nevada region. Keith has had hands on experience of renewable energy and high efficiency heating and cooling systems since 2001. His experience has been specifically centered on industrial and commercial applications and has proven track record in providing timely and accurate expertise in the renewable and high efficiency systems.

Ryan Capers - Project Consultant - Ryan is a project consultant and Certified Energy Manager with over 5 years of experience in managing and assisting with energy efficiency related projects in numerous states. Ryan has experience in designing, implementing, and evaluating energy efficiency programs throughout the United States. Ryan has been involved in both projects that were highly analytical such as developing and offering support for technical potential studies, as well as projects that required spending a great deal of time on site auditing commercial, residential, and multi-family facilities. Ryan has extensive field experience conducting audits and developing energy savings recommendations in public housing authority environments, as well as a great depth of experience, being someone who formerly worked directly for an ESCO, in working on ESCO performance contact projects as they relate to public housing. He has also been involved in conducting post-installation inspections of energy efficient lighting retrofit projects for Public Service of New Hampshire, which has provided a wealth of experience in lighting technologies and installation issues. In addition, Ryan was instrumental in the field data collection and utility bill analysis for all energy audit projects in the Rebuild NH Program, which included primarily school districts and municipalities. Ryan has also aided in the design and implementation of several in-depth interviews with key stakeholders with relation to attitudes towards the Cape Wind Project. Ryan has managed and administered the logistics behind orchestrating several years of highly successful utilitysponsored NH Energy Code workshops throughout the state of NH. Of local interest, Ryan also provided extensive field and analysis support for the energy audit performed at the Balsams Grand Resort & Hotel, nestled deep in the majestic white mountains of northern NH.

Ryan holds a Bachelor of Arts from the University of New Hampshire in Political Science, and is a current candidate for a Masters of the Arts in Political Philosophy (Fall 2008)

**Jennifer Ferrante - Engineer** – Ms. Ferrante is an Engineer with GDS Associates is a HERS certified Rater and has passed the Certified Energy Manager exam. Jennifer has done blueprint takeoffs, REM/*Rate* software modeling, and blower door testing for the ENERGY STAR Homes programs. She has provided benefit cost analysis for utility energy efficiency program evaluations. Jennifer has conducted research, data collection, ECM measures, field audits and analysis of electric, gas, and water utility data for PHA audits and VHA audits. She has calculated heating, cooling and domestic hot water load and miscellaneous electric load compilations for utility allowances. She has provided support and review of renewable energy resource eligibility applications for the RI PUC.

Ms. Ferrante earned a Bachelor of Science in Electrical Engineering from Clarkson University and a Master of Science in Electrical Engineering from Stevens Institute.

**Armand Gottlieb – Project Analyst:** Mr. Gottlieb is an Associate Analyst with GDS Associates. Armand has assisted in collecting data and analyzing energy conservation and efficiency programs throughout the northeast, including various projects for NYSERDA, Efficiency Vermont, and GasNetworks. He provided research and helped develop measure life, incremental cost, and gas savings values for GDS's most recent residential and commercial measures assumptions update for Gas Networks. Armand assists GDS project managers in providing residential energy auditing services in New Hampshire and Massachusetts, conducting blower door and duct blaster tests on new homes and creating energy usage models. He also reviews and tracks renewable energy resource applications for the Rhode Island PUC. Other recent experiences include researching the potential impacts of shutting down the Vermont Yankee nuclear power plant in 2012 for the Vermont Department of Public Service and assisting in walk through energy audits for Plymouth State University, assessing potential electric and gas savings measures for the college's dining services.

# 5.0 Summary of Study Costs

The estimated cost for this project is \$31,306. Please reference table below for detailed information.

## PROJECT COST ESTIMATION SHEET

			Kick O	ff Meeting		Task 1	-	Task 2	т	ask 3		IONAL Isk 3a	Tas	k 4	Та	ask 5		
				- Workplan		orkplan	Sampl	e Design	Educatio	evelop nal/Marketing aterials		g Study if eded	Develop R Strag		Report F	Preparation	Total	
<b>BERGO</b>		Hourly		0		0				0		0		Cost		0	Labor	Total
PERSO	TITLE	Billing Rate	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost	Hours	Cost
	Principal and Region Manager	\$195	2	\$390	1	\$195	1	\$195	1	\$195		\$0	2	\$390	2	\$390	9	\$1,755
	Senior Project Manager	\$170	2	\$340		\$0		\$0		\$1,360	8	\$1,360	8	\$1,360	8		34	\$5,780
	Senior Project Manager	\$170	2	\$340	4	\$680	4	\$680		\$0		\$0	4	\$680	8		22	\$3,740
	Project Engineer	\$124		\$0	8	\$992	4	\$496		\$0		\$0	4	\$496	8		24	\$2,976
	Project Analyst	\$124	2	\$248	16		8	\$992	8	\$992		\$0	8	\$992	16		58	\$7,192
Jennifer Ferrante	Engineer	\$103		\$0	16	\$1,648		\$0		\$0	1	\$0		\$0	8	\$824	24	\$2,472
Armand Gottlieb	Associate Analyst	\$82	2	\$164		\$0	8	\$656	8	\$656	8	\$656	8	\$656	16		50	\$4,100
															_			
Total Hours			10		45		25		25		16		34		66		221	
Total Labor Cost																		
Other Direct Costs																		
Telephone and Fax																		
Reproduction																		
Delilvery Service																		
Travel																		
GDS standard 5% for estimate labor	or																1490.75	\$1,491
Total Other Direct Costs																		
		L									l				I			
Subcontractor Costs		A																
Advertizing Works LLC		\$75							8	\$600	8	\$600	8	\$600			24	\$1,800
			<b></b>						I		<b></b>	L				L		
Total Subcontractor Costs																		
	1																	
Total Estimated Costs				\$1,482.00		\$5,499.00		\$3,019.00	33	\$3,803.00	24	\$2,616.00	42	\$5,174.00		\$8,222.00		\$31,306

Payment discount for early invoice payment (e.g. 2% 15, Net 30)?

\_\_\_\_No \_\_<u>X</u>\_\_Yes

BIDDER COMPANY: GDS Associates, Inc.

COMPLETED BY: Keith McBrien

SIGNATURE:

TITLE: Project Manager

\_\_\_\_\_

DATE:

# 6.0 Representative Example of Experience and Documentation Skills

GDS has developed and provided numerous marketing materials for the Efficiency Maine and Wisconsin's Focus On Energy Programs. Appendix C shows just two examples of the materials that were design and delivered in the Efficiency Maine program alone. More can be provided upon request.

# 7.0 References

Please reference appendix B for a comprehensive list of past projects and references.

# Attachment 1 Bidder's Submission Statement

Proposals must be accompanied by a signed **Bidder's Submission Statement** as included in **Attachment 1**.

# Appendix A GDS Resumes

# Appendix B List of GDS Related Projects

# Appendix C Representative Example of Marketing and Educational Materials

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# MEMORANDUM

**To:** Justin Eisfeller, P.E.

**Date:** January 18, 2010

From: Matthew Siska, P.E.

Cc: George Gantz, Scott Albert, Keith McBrien, Tom Palma

Subject: Unitil TOU/DR Pilot Program – GDS Scope of Work for Phase Two Implementation

GDS is pleased to submit this proposal to provide consulting services for the Implementation Phase (Phase 2) of Unitil's Time-of-Use Demand Response (TOU/DR) pilot program. This proposal outlines the proposed scope of work and estimated costs for implementing the pilot program in Unitil's Massachusetts and New Hampshire service territories.

## **Purpose:**

The TOU/DR pilot program has been developed to fulfill the requirements of the Commonwealth of Massachusetts Green Communities Act, Section 85. A filing that detailed the methodology for implementing the pilot program was submitted to the Massachusetts Department of Public Utilities on March 31, 2009. Phase 2 of the project involves the implementation of the pilot program, including but not limited to overall project management, contractor selection, program recruitment, equipment installation, customer education, data management, and preparation of a final report. GDS work in Phase 2 includes full support of the implementation of the pilot program in both Unitil's Massachusetts and New Hampshire service territories.

## Scope of Work:

GDS proposes the following scope of work to successfully manage Phase 2 implementation:

## Task 1: Overall Project Management

GDS (Matt Siska) will assume the role of overall project manager, including coordination with and support by Unitil staff to accomplish internal tasks such as website development and billing system updates. Support will be provided by Scott Albert (GDS Principal and NE Office Region Manager) and other NE office staff as necessary. To effectively manage internal Unitil tasks, it is contemplated that GDS will spend on average, one day per week in Unitil's Portsmouth office until the initiation of the pilot in June 2010. Additionally, GDS will organize weekly or biweekly status meetings to review outstanding issues, upcoming tasks, and adherence to the project schedule. GDS will serve as the point of contact for questions that may arise. This task also includes assisting in the preparation, circulation, and review of request for proposals to turnkey installation contractors. GDS has initiated work on a RFP for the installation phase and will work to finalize the RFP and submit to interested parties,

GDS estimates than on average, **12** hours per week will be dedicated to project management activities from January through the initiation of the pilot in June, 2010.

# Task 2: Develop Evaluation Plan

State regulators in both MA and NH have inquired about a detailed evaluation plan for the project, the development of which has been pledged in the settlement agreement. GDS will lead the effort to develop an evaluation plan in conjunction with NH PUC Staff, DPU Staff, the NH OCA, and the MA AG designed to ensure that study results provide "adequate and reliable conclusions and specific recommendations as to expansion of the pilot or broader scale implementation."

- **Task 2A**: Develop a draft evaluation plan based upon GDS experience and results from similar pilot programs. The plan will identify the specific information to be collection and approaches for analysis
- **Task 2B:** Participate in technical sessions with Regulators in both states to review and explain proposed evaluation plan.
- Task 2C: Revise draft evaluation plan to incorporate all comments.

# Task 3: Customer Service Training

Customers enrolled in the pilot program who call Unitil's Customer Service Department with questions relating to the pilot will be directed to Customer Service Representatives with specific knowledge of the program. Task 3 involves the training of the Customer Service Representative(s) who will be interacting with enrolled customers and will include a half-day presentation. The training presentation will be used to review the three programs, the time of use rate structure, anticipated issues and suggested steps to remediate issues, and will outline procedures for customers who wish to drop out of the program. The following sub-tasks are proposed:

- **Task 3A**: Develop a presentation and training materials for the half-day Customer Service training.
- Task 3B: Travel to and administer presentation for Customer Service training

# Task 4: Customer Recruitment and Introduction to Program

GDS will lead the recruitment effort using the marketing materials developed during Phase 1. The recruitment phase will involve final preparation and mailing of the recruitment flyers, administering the recruitment script to interested customers who qualify for the programs, and follow up direct calls to qualifying customers for recruitment into the three programs until the quotas have been reached.

It is currently contemplated that the recruiting effort will be managed internally by GDS, though GDS reserves the right to subcontract a portion of the recruitment effort based on staffing needs at the time. Should GDS subcontract a portion of the work to a third party, there will be no

additional cost incurred by Unitil. Expenses for this effort are estimated to be \$12,000 based on the estimate included in Appendix A of the March 2009 filing. GDS will incur the initial cost for reimbursable expenses and bill Unitil for the itemized expenses at the actual cost incurred.

- **Task 4A**: Prepare, print and mail final marketing materials.
- **Task 4B**: Receive direct phone calls from interested customers as stated on the recruitment brochure. Administer the recruitment script and "qualify" customers. Qualified customers will be placed into a general pool but will not initially be assigned into a specific program.
- **Task 4C**: Follow up with direct phone calls to customers and recruit qualified customers into the program until the quota is reached.
- **Task 4D:** Assign customers to each of the three programs. Organize and distribute educational materials to each program participant

# Task 5: Data Management and Analysis

A tremendous amount of demand and usage data will be generated from the hourly interval meters of the program participants. GDS will receive and manage all interval data received from Unitil in electronic format. GDS will analyze the data received on an on-going basis and will generate monthly status reports during the course of the pilot program. The monthly status reports will serve to assess kWh and peak load reduction impacts of the three programs and to allow modifications if needed and will further allow the techniques for data analysis to be refined during the program duration. Monthly reports will be submitted electronically to Unitil and up to two meetings will be help to review program status.

- Task 5A: Receive, sanitize, and manage interval data received from Unitil (12 weeks).
- Task 5B: Analyze peak and usage demand for program participants (12 weeks).
- **Task 5C**: Generate a total of three (3) monthly status reports illustrating measurable impacts of each program. Participate in up to two (2) meetings to present monthly results.

# Task 6: Administer Post Pilot Surveys

Following the completion of the pilot program, written surveys will be administered to each of the program participants to assess strengths and weaknesses of each program for the purpose of further informing development of a customer wide demand response program. The written surveys will be developed by GDS and submitted to customers via mail and via link to an online survey using the customers email address. It is contemplated that Unitil will develop the webpage survey link based upon the survey instrument produced by GDS. GDS will analyze the results and include relevant findings in the final report.

- **Task 6A**: Develop a post pilot program survey instrument. Monitor status of responses among program participants and follow up with phone surveys as necessary to reach target number of responses for statistical validity.
- **Task 6B**: Analyze and summarize results of the survey.

# Task 7: Report Preparation

GDS will prepare a final report summarizing the results of the pilot program. The report will summarize demand and usage reductions achieved for each program, price elasticities, customer

perception of the programs and reported behavior, and will make recommendations for development of a customer wide demand response program. GDS will present the final results and findings to Unitil at a meeting.

- **Task 7A**: Prepare a final report summarizing program results and recommendations for full program development.
- **Task 7B**: Attend meeting to present findings

## Task 8: Regulatory Support

GDS will be available to provide regulatory support on an as needed-basis and has budgeted 60 hours during this project phase for such support.

• **Task 8A**: Provide regulatory support as needed.

# **Timing:**

GDS will work diligently to complete all tasks as necessary to initiate the pilot program in June 2010.

# **Professional Fee and Billing Rates/Procedures:**

GDS estimates the cost of this effort to be **\$117,591** to provide the professional services outlined above, including \$12,000 for development and provision of required marketing and education materials. A detailed cost breakdown is included as Attachment 1 for reference. All work will be conducted in an expedited manner and billed on a time and expenses (travel, materials, etc.) basis, in accordance with the following hourly rates schedule. Documentation for all expenses will be included with each monthly invoice submitted. GDS will require a Purchase Order (PO) from Unitil, or written/email authorization to proceed prior to project initiation.

GDS Team Member	Title	Unitil Preferred Hourly Rate*
Scott Albert	Principal and Northeast Region Manager	\$173.25
John Hutts	Principal	\$173.25
Keith McBrien, Bruce Bennett	Project Manager	\$141.75
Matthew Siska, P.E.	Project Engineer	\$115.50
Jennifer Ferrante, Sam Alpert	Engineer	\$94.50
Armand Gottlieb, Meghan Tanguay	Technical Analyst	\$78.75
Vivian Thompson, Co-op Student	Administrative	\$42.00

Thanks for your consideration. We look forward to assisting Unitil with this important effort. Best Regards,

Prepared by:

Matthew Siska, P.E. GDS Associates, Inc.

Reviewed by:

Scott Albert, Principal and NE Region Manager GDS Associates, Inc,

# **Attachment 1 – Staffing and Labor Costs**

		Table 1	: Staffii	ng and I	Labor (	Costs	Dat	e: 1/18/2010
				Hours			Summ	nary
ACTIVITY/ TASK	DESCRIPTION	Scott Albert, Principal and NE Region Manager	Matthew Siska, Project Engineer	Megan Tanguay, Armand Gottlieb Analyst	John Hutts, Principal	Vivian Thompson, CO-OP, Admin.	Total hours	Labor Cos by Task
Task 1	Project Management	40	200	0	0	0	240	\$30,030
1-A	Overall Project Management	40.0	200.0				240	\$30,030
Task 2	Evaluation Plan	5	22	16	13	0	56	\$6,920
2-A	Draft Evaluation Plan	4.0	12.0	16.0	12.0		44	\$5,418
2-B	Technical Sessions		8.0				8	\$924
2-B	Final Plan preparation	1.0	2.0		1.0		4	\$578
Task 3	Customer Service Training	0	20	20	0	0	40	\$3,885
3-A	Develop training materials and presentation		12.0	12.0			24	\$2,331
3-B	Travel to and conduct training		8.0	8.0			16	\$1,554
Task 4	Customer Recruitment	0	24	80	0	144	248	\$15,120
4-A	Preparation and distribution of marketing materials		8.0	8.0		24.0	40	\$2,562
4-B	Administer recruitment script to interested customers		4.0	20.0		40.0	64	\$3,717
4-C	Direct follow up		4.0	40.0		40.0	84	\$5,292
4-D	Print and circulate Educational materials		8.0	12.0		40.0	60	\$3,549
Task 5	Data Management and Analysis	18	44	60	18	60	200	\$18,564
5-A	Receive, sanitize, manage interval data (12 weeks)			24.0		60.0	84	\$4,410
5-B	Analyze data for peak and usage reductions (12 weeks)	6.0	12.0	24.0	12.0		54	\$6,395
5-C	Prepare monthly status reports, present results	12.0	32.0	12.0	6.0		62	\$7,760
Task 6	Post Pilot Survey	6	10	32	0	80	128	\$8,075
6-A	Develop and send out post pilot survey. Follow up with phone surveys as necessary	4.0	8.0	16.0		80.0	108	\$6,237
6-B	Analyze and summarize results	2.0	2.0	16.0			20	\$1,838
Task 7	Report Preparation	16	48	20	12	0	96	\$11,970
7-A	Final report preparation	8.0	40.0	12.0	12.0		72	\$9,030
7-B	Attend meeting to present results	8.0	8.0	8.0			24	\$2,940
Task 8	Regulatory Support	20	40	0	4	0	64	\$8,778
8-A	General Support	20.0	40.0		4.0		64	\$8,778
	Hours	105	408	228	47	284	1,072	\$103,341
	Hourly Rate:	\$173.25	\$115.50	\$78.75	\$173.25	\$42.00	¢102.244	
	Total Costs:	\$18,191	\$47,124	\$17,955	\$8,143	\$11,928	\$103,341 Expenses <sup>1</sup> :	\$14.050
							Grand Total:	\$14,250 \$117,591

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# MEMORANDUM

**To:** George Gantz, Justin Eisfeller, P.E.

**From:** Matthew Siska, P.E.

Cc: Scott Albert, Tom Palma

Subject: Unitil TOU/DR Pilot Program – GDS Budget & Expenditures Summary Memorandum

GDS Associates was originally contracted by Unitil in January 2010 to provide services related to the implementation of a smart grid pilot program throughout Unitil's Massachusetts and New Hampshire territories. As discussed throughout the process and due to a number of circumstances detailed in this memorandum, we have exceeded the initial budget. This document contains a review of current budget status, a breakdown of overages and additional services performed, and an estimate of hours and costs necessary to complete the project. We look forward to reviewing these details with Unitil shortly to determine best steps for ensuring successful completion of all components of this important project within the revised budget.

# CURRENT STATUS OF BILLED FEES AND EXPENSES

Costs associated with the Residential TOU pilot are currently being captured in three unique job accounts. These accounts are summarized in the table below:

GDS Project Code	Description	Notes				
33805-017	Initial project code for Phase II implementation. Opened 1/2010	Original Budget of \$117,591 including expenses				
33805-020	MA Statewide Evaluation Collaborative Work	Additional service. All costs tracked separately. No defined budget				
33805-023	Phase II Re-Mobilization. Opened 11/2010	Additional costs incurred due to project length, stop/restart, installation management, customer service support				

Table 1:	Summary	of TOU Pilot	<b>Project Codes</b>
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GDS has been aware of, and has openly discussed potential budget overruns with Unitil since the project was put on hold in April 2010 and re-kicked off in November 2010. As such, we have made concerted efforts to minimize billing on this project which have included unbilled (but worked) hours, write offs and write downs (rates and hours). The table below summarizes only what has been BILLED on this project, and does not include these additional "courtesy"

**Date:** June 27, 2011

Unitil TOU Pilot – Budget Summary

discounts which are presented in Table 3. Table 2 below provides a snapshot of the current BILLED fees and expenses for each of the three TOU pilot project codes:

GDS Project Code	Billed Fees to Date		Billed Expenses to Date		May Billin	2011 ng	TOTAL		Origi	nal Budget
33805-017	\$	97,664	\$	8,651	\$	16,063	\$	122,378	\$	117,591
33805-020	\$	25,833	\$	4,540	\$	5,837	\$	36,210		-
33805-023	\$	15,735	\$	291	\$	295	\$	16,321		-

 Table 2: Summary of Billed Fees and Expenses to Date

Table 2 above summarizes BILLED fees and expenses relative to the project. These totals do not include hours worked that have either not been charged to the project, or which have been charged and have been written off and not billed. Write offs are specifically tracked and shown below. Unbilled hours are not able to be tracked but are estimated below to provide perspective on the level of effort that has been expended to date, and our efforts to control cost overruns.

GDS Project Code	ite – Offs Date	May 2011 Write-offs	Un-billed Fees to Date (estimated)	Unbilled Fees May 2011 (estimated)	Total
33805-017	\$	1		L.	
33805-020	\$				
33805-023	\$				

 Table 3: Summary of GDS Write-Offs and Un-Billed Time

GDS is not seeking recovery of write offs and unbilled time; this table is simple shown to demonstrate that considerable effort has been expended by GDS beyond the original work scope to successfully execute the project. These figures do not include discounts on hourly rates which equal more than for total billed fees to date. Mr. Siska has also been recently promoted to project manager – at a discounted hourly rate of formed – however mindful of budget constraints GDS has continued to bill Mr. Siska at his previously established rate of despite his current title.

# BREAKDOWN OF COST OVERRUNS

A number of factors have contributed to cost overruns to date on this project. These factors are discussed below and we have estimated the additional cost incurred as a result of each factor.

- A. **Project Duration:** The original proposal assumed a 6 month development period followed by a 3 month pilot and evaluation period. The delay from 2010 to 2011 caused the project to be put largely put on hold from April through November at which time previous momentum was lost and the project needed to be kicked off again. The sheer duration of the project has a profound impact on the number of hours spent supporting it.
- B. **Internal (Unitil) Project Management:** GDS has served as the project manager and point of contact for the project. This has included coordination with a number of internal Unitil departments including EM&C, Billing, I.T., Customer relations, Communications,

Unitil TOU Pilot – Budget Summary

and Customer Service. The amount of coordination needed to implement a pilot program was underestimated originally, and compounded by the duration of the project. GDS has held a significant number of meetings with key personnel to keep project on schedule and on target, and has been the point of contact for immediately resolving any questions that arose. These services are continuing beyond pilot initiation as was the initially contemplated end date.

- C. I.T. / Billing Project Support: Development of the MDM-p and web portal required significantly more effort than was originally anticipated. This involved coordination between I.T. and the AMI to fully understand the type of data that was being collected, how it can be stored and presented, how to graphically display the data, cost estimating techniques, etc. The end product is a web portal that could be rolled out to all customers at the end of the pilot; however significant GDS and internal Unitil effort went into the development of these tools. Coordination with the billing department also involved multiple meetings and conversations also peaking throughout the installation process.
- D. **Customer Recruitment:** The recruitment of customers was complicated by the in-home technologies being tested. The recruitment process had to be designed to check for system compatibility with the equipment. This increased the amount of time spent with customers on the phone. When leads were passed on to the installation contractor, we then found that a large number of customers were being turned down for a variety of technical reasons. This resulted in an urgent need for more participants entraining more resources and more time to complete. Recruitment is a major source of cost overrun and a major area where GDS time billed has been written off.
- E. **Tendril Management and Coordination**: During the early stages of the project in 2010, neither GDS nor Unitil understood the level of effort that was required to coordinate with Tendril. This coordination has included the development of XML files for users, pricing, CPP dispatch and other functions. There was time spent setting up and vetting the test home area networks (HAN's), and considerable project management time coordinating the pilot design and implementation strategy with Tendril. The level of coordination with Tendril increased exponentially during the installation phase and is continuing as of the date of this memorandum.
- F. **Installation/Database Management:** The original proposal did not include time or cost associated with managing the installation process. Considerable time was spent daily on coordinating customer lists, group assignments, database management, field issues, staffing issues, troubleshooting, equipment availability, Unitil work order processes, and other similar items. GDS served as the primary point of contact with Honeywell and Tendril. Internal Unitil staff<sup>1</sup> also spent considerable time coordinating the installation process.
- G. **Installation Field Work:** Time spent at customer homes can be broadly categorized into one of three categories; setting up the test Tendril systems, troubleshooting participant issues, and actually installing Tendril systems and Simple TOU customers. Field installs were not contemplated in the original scope of work, however GDS has made every

<sup>&</sup>lt;sup>1</sup> Mike Deschambeault in particular was an indispensable resource in the project. He was often provided with very little lead time in high stress situations and was tremendously helpful. The installation process would not have been even slightly successful without his engagement on the project.

effort to respond immediately to all needs to keep the project moving ahead successfully, and keeping Unitil customers pleased with service and responsiveness.

H. **Customer Service Support:** We originally anticipated handing over customer service support responsibilities to Unitil when the installations began. In actuality, GDS received and handled customer service calls throughout the entire installation period up through the middle of June. Even after the phones were transferred to Unitil around June 15, GDS continues to get daily questions from Unitil staff re: customer handling and process management. This "additional" service culminated with GDS receiving emergency after hour calls during the Memorial Day weekend which involved over the phone troubleshooting of thermostats and central air conditioning systems, and coordination with field technicians for service.

Retrospectively, GDS estimated the amount of additional hours and cost expended on the scope items discussed above. These estimations are presented in Table 4 below for information purposes only.

Cost Overrun Category	Estimated Additional Hours Incurred	Estimated Additional Cost Incurred		
Project duration	96	\$11,088		
Internal Project Management	48	\$5,544		
IT Project Support	48	\$5,544		
Customer Recruitment	256	\$15,456		
Tendril Management/Coordination	192	\$18,648		
Installation Management	148	\$13,419		
Installation Field Work	180	\$17,850		
Customer service support	100	\$10,080		
TOTALS	1068	\$97,629		

 Table 4: Estimated Magnitude of Cost Overruns

Additional costs associated with Statewide Evaluation Collaborative have been previously discussed as a recoverable additional service. These costs are tracked separately and are not discussed further in this document.

# ESTIMATED REMAINING TASKS / HOURS / BUDGET

As of the date of this memorandum, the installation phase has been largely completed. Troubleshooting of Tendril systems and customer service issues continue but are expected to slow in the next month. GDS' attention will now shift to analysis of survey and analytical results and preparation of a final report. Below is a breakdown of remaining tasks and initial estimates of time and cost to complete.

Unitil TOU Pilot – Budget Summary

June 27, 2011

# Task 1: Project Management

Matt Siska has served as the central point of contact for the project and has spent considerable time responding to various emails and voicemails of Unitil employees and customers with questions or concerns regarding the pilot. Mr. Siska continues to spend time daily with Tendril troubleshooting their systems and with the customer support team reviewing and assisting with responses to customers. Project management time also broadly covers on-going customer service support, Tendril coordination, coordination with internal Unitil departments (Billing, IT, EM&C, customer relations) and efforts associated with demobilization of pilot efforts in September. Based on efforts to date and considering the current status of pilot activities, we estimate on-going project management to be **12 hours per week** over a 4 month period (June-September).

# Task 2: Survey Development, Implementation & Analysis

The original estimate for development and deployment of the post pilot survey was 128 hours at a total cost of \$8,075. To date, some time has been spent on the development of the pre-pilot surveys (from 2010) and further refinement was done through the statewide process which also served to increase the total number of surveys. Specific tasks remaining relative to surveys include:

- ✓ Data entry for all paper pre-pilot surveys into electronic spreadsheet format. 228 surveys total need to be input.
- ✓ Develop and administer post pilot and CPP event surveys (role of Statewide Collaborative). Post pilot surveys are anticipated to be administered in electronic online format.
- ✓ Develop cross tabs for all participants in format that allows impact results to be sorted by socio demographic categories
- $\checkmark$  Analysis and write up of findings that can be integrated into the final evaluation report.

A breakdown of estimated hours and cost by sub task is included in Attachment 1.

# Task 3: Data Management and Analysis

The original estimate for data management and analysis was 200 hours at a total cost of \$18,564. Based on experience to date through the MA Statewide collaborative and in reviewing the data sources we will be receiving from Unitil, we are comfortable with the original estimated budget for this task. Specific remaining tasks include receipt, management and manipulation of interval data, specification and testing of regression equations, and quantification of results.

# Task 4: Final Report Preparation

The original estimate for preparation of a final evaluation report was 96 hours at a total cost of \$11,970. Although the scope of the report has grown as a result of the work with the MA Collaborative, we are comfortable with the original budget estimate for this task. This is an area where GDS' cost could be reduced if the responsibility for developing the final report were shared between GDS and Unitil.

Unitil TOU Pilot – Budget Summary

June 27, 2011

# Task 5: Regulatory Support / MA Statewide Collaborative

The original budget included 64 hours and \$8,400 in cost for regulatory support with the intent that the majority of time would be spent after the conclusion of the pilot in hearings and data requests regarding the findings and results. Work through the MA Collaborative is difficult to estimate because of the phase approach to cost-benefit analyses and the fact that time spent working with the collaborative has been intensive during certain periods with long breaks between. For the purpose of this memorandum we have left the original budget intact however we welcome an open dialogue with Unitil as to what the anticipated effort for regulatory support will be going forward.

# \* <u>SEE ATTACHMENT 1 FOR BREAKDOWN OF REMAINING TASKS, HOURS</u> <u>AND COSTS</u>

# ATTACHMENT 1 - Unitil TOU Pilot Remaining Tasks GDS Associates, Inc.

27-Jun-11

		Hours					Summary	
ACTIVITY/ TASK	DESCRIPTION	Principal	Project Engineer	Engineer	Analyst	CO-OP, Admin.	Total hours	Labor Cost by Task
Task 1	Project Management		192	0	0	0	192	\$22,176
Task 2	Survey Development, Analysis	3	18	0	36	77	134	\$8,668
2-A	Data input for pre-pilot surveys					65.0	65	\$2,730
2-B	Post Pilot and CPP surveys		12.0		12.0	12.0	36	\$2,835
2-C	Cross tab development	2.0	4.0		8.0		14	\$1,439
2-D	Analysis and Writeup	1.0	2.0		16.0		19	\$1,664
Task 3	Data Management and Analysis	42	50	0	38	60	190	\$18,564
3-A	Receive interval data from Unitil and sanitize/manipulate as needed. Quality checking, storage, maintenance	4.0				60.0	64	\$3,213
3-B	Analyze data for peak and usage reductions - testing and specificatoin of regresssion models	20.0	24.0		24.0		68	\$8,127
3-C	Mid term results, status updates. Final quantification of impacts following MA Collaborative table	18.0	26.0		14.0		58	\$7,224
Task 4	Report Preparation	20	60		20	0	100	\$11,970
Task 5	Regulatory Support	20	40	0	4	0	64	\$8,400
	Hours	85	360	0	98	137	680	\$69,778
	Hourly Rate:	\$173.25	\$115.50	\$103.50	\$78.75	\$42.00		
							Expenses:	\$1,200
							Grand Total:	\$70,978