Executive Summary

Honeywell appreciates the opportunity to participate in the Living Pilot process to help identify potential solutions to replace the capacity loss due of the San Onofre Nuclear Generating Station (SONGS).

Honeywell's proposal involves leveraging technology and channels that are in use today and scaling them to reach the geographic areas most impacted by SONGS. They include:

- Leveraging a proven platform that is Open Automated Demand Response (OpenADR) compatible
- Targeting load geographically and specifically targeting the areas affected by SONGS
- Approaching multiple customer segments ranging in size from residential to large industrial
- Bringing additional load cost-effectively through utility direct, retail and trade channels
- Demonstrating that this approach can be used in a wide range of programs including day-ahead peak shaving to real-time ancillary services markets with the CAISO

Background on Honeywell's Leadership in Smart Grid

Honeywell has over 100 years of experience in providing energy management solutions. Honeywell systems are currently in more than 150 million homes, five million buildings, 24 of the top 25 refineries, and nearly 5,000 industrial sites around the world. Nearly 50% of our product portfolio delivers energy efficiency benefits.

In addition, 2 million homeowners across North America are using Honeywell thermostats, along with load-control switches we've installed, to help more than 100 utilities reduce the potential for outages and decrease the need for new power plants. As a result of our technology and services, utilities now have the combined ability to temporarily trim the demand for energy by 2.1GW, the same amount of electricity it takes almost 30 small power plants to generate.

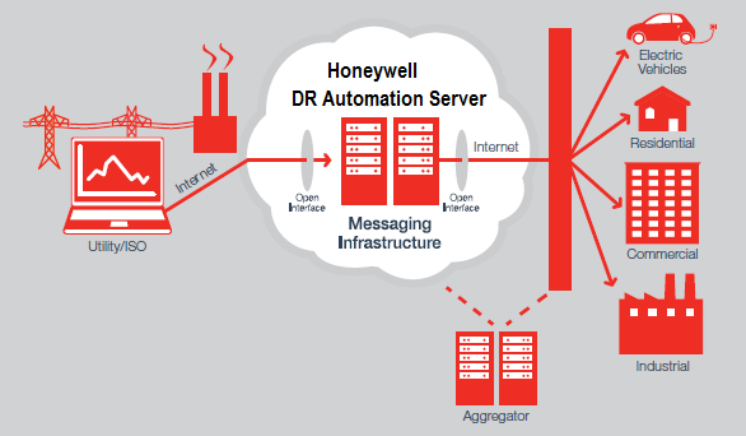
Honeywell is a founding member of the Open Automated Demand Response (OpenADR) Alliance whose OpenADR protocol exists to standardize the communication of Automated Demand Response signals. OpenADR has since been endorsed by the National Institute of Standards and Technology (NIST) and the Federal Energy Regulatory Commission (FERC) as a key smart grid standard because it allows almost any facility to participate in demand response without fear of being locked into a proprietary technology or stranding investments.

By leveraging the OpenADR standard, Honeywell helps utilities and grid operators deliver an open, secure and reliable means for utilities to communicate with their customers.

Honeywell's Demand Response Automation Server (DRAS)

The Honeywell Demand Response Automation Server is a software platform that allows utility managers/grid operators to manage multiple customer classes with different sets of needs.

Figure 1:



There are many different applications for leveraging the DRAS platform. These applications include:

- Bringing online and managing OpenADR enabled commercial and industrial loads by communicating with a facility side gateway device that connects to a building management system
- Communicating with OpenADR enabled residential and small commercial devices, such as smart thermostats, that communicate via a homeowner or business Wi-Fi connection
- Grid balancing efforts to address intermittency caused by renewable energy
- Integration of loads such as Plug-in Hybrid Electric Vehicles
- Integration of a utility load into the CALISO

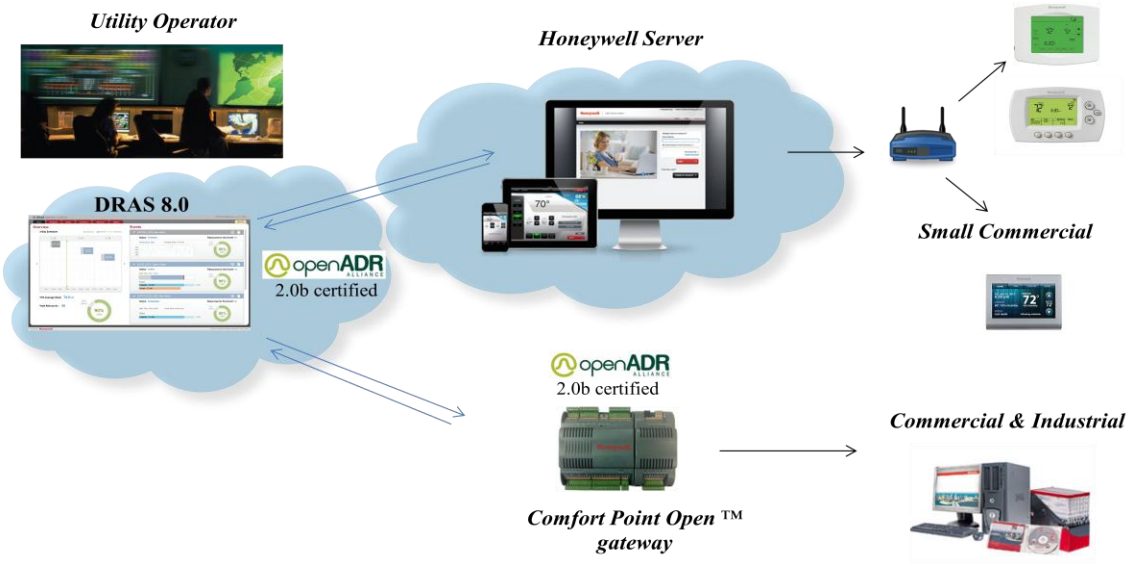
The Honeywell DRAS is currently the central communication platform used by Southern California Edison to manage DR program participation, understand device communication status, and initiate and manage automated demand response (Auto DR) curtailment events. Upon initiation of DR events, OpenADR signals are communicated to each participant facility's building management system which automatically initiating shed strategies predefined and implemented in collaboration with the customer.

<u>Honeywell's Living Pilot Proposal</u>

In response to the needs outlined in the Living Pilot, this proposal would use the DRAS platform to bring significant amounts of load while further enabling SCE to manage and geographically target South Orange County and the affected substations. Since the Honeywell DRAS is already used to manage the SCE DR portfolio of programs, the focus would be on enabling the customer side to bring incremental load.

These customers will include all classes: residential, small through large commercial and industrial while leveraging existing delivery channels to ensure cost competitiveness.

Figure 2:



There is a different strategy proposed for each market to ensure a comprehensive approach. It is important to note that the enabling technologies described below are able to be utilized in 2014.

- Residential market – Leverage existing HVAC contractors and retailers that are already selling connected thermostats. Offer rebates, either point-of-purchase or through contractors, to enroll customers in demand response programs. Enable customers to access notifications, opt-out capabilities and program information through a free app. Send remote software upgrades to these devices and control the load via OpenADR signal through the Honeywell DRAS.
- Small commercial market – The small commercial market is often underserved and difficult to reach so this market would require additional marketing, awareness campaigns and educational programs. The HVAC contractor and retailer channels are still viable. Enable customers to access notifications, opt-out capabilities and program information through a free app. Send remote software upgrades to these devices and control the load via OpenADR signal through the Honeywell DRAS.
- Large commercial & industrial market – This segment requires higher upfront costs for enrollment and facility side enablement but also offers significant amounts of shed. The OpenADR signal goes direct to the facility side gateway that speaks to the building management system. Once again, the load is controlled through the Honeywell DRAS.

Honeywell recognizes that there are various equipment manufacturers on the market and recommends that any technology provider meet the OpenADR standards for certification and secure communication.