Web-to-Wireless Program Manages Calif. Energy

Could save users $48 million this summer

News Story by Bob Brewin

COMPUTERWORLD - The California energy crisis has led to the growth of power-demand aggregators, which pride themselves on producing "mega-watts" - wholesale reductions in power usage. One of those organizations uses two-way radio pagers and a secure extranet to manage demand reduction on short notice. Gary Fabrizi, senior vice president of the Ancillary Services Coalition (ASC) in Laguna Nigel, Calif., said his organization has contracted with more than 250 heavy power users to shut off their power when an overload is expected to hit the state's electrical grid.

Fabrizi declined to identify the users but said total power consumption by those customers is about 1.2 megawatts, which is equivalent to the power required by 1.5 million homes.

To ensure that the ASC can quickly notify the user companies that they need to shut down their power, Fabrizi said, he selected a two-way notification system developed by Westlake Software Inc. in Calabasas, Calif. The system provides a point-and-click way to speedily notify hundreds of power users and quickly receive their responses.

Alan Gould, CEO of Westlake, said the ASC can log on to a secure extranet page, click on any number of users and send a short text message (100 characters or fewer) that alerts them of an upcoming power shutdown.

The Web page on the extranet maintains a list of users notified and records their responses as they come in. If power users don't respond to the page, the ASC follows up with a phone call, Gould said.

The software includes the Simple Mail Transfer Protocol address of each device, so once the ASC clicks to send a message, it appears on the server of a wireless company, which then transmits it via satellite or radio tower to the user.

Gould noted that his system is significantly less expensive than the telemetry-based approach recently adopted by Boise, Idaho-based Albertson's Inc. to automatically shut off the lights in 206 of its California grocery stores. "Why install a lot of expensive telemetry hardware when you can use existing wireless devices and handsets?" Gould said.

The ASC's partners stand to reap significant cash benefits from participating in the demand-reduction program, through rebates from the Fresno, Calif.-based Independent Systems Operator (ISO), which manages the state power grid. During the four-month program, Fabrizi said, power users could save $96,000

per month for each megawatt of power they take off-line. The total return to the user companies over the summer could hit $48 million, he said.

Fabrizi said the ISO offers the rebates because taking power off-line has the same effect on the power grid as importing extra power.