

Post Peaker Plants – The Future Is Now

It seems obvious that a growing population requires more energy to power businesses and residences. There are a number of ways to meet this demand, and the least desirable and perhaps most costly approach is to build a “peaker plant” and all the appurtenant facilities, including a new high pressure gas pipeline down Antonio Parkway.

We have been given no alternatives, but there are alternatives that are both more cost effective and environmentally sensitive.

California energy policy gives priority to meeting energy demand through energy efficiency measures and “Demand Response” (DR) programs, which can be done voluntarily. DR mechanisms include techniques such as automated methods to reduce use of air conditioners during peak or critical periods of energy demand, among numerous other elements. DR programs are available for all customer segments: industrial, large commercial, small commercial and residential. Demand Response is a cost-effective approach to reduce energy demand during critical periods. So when somebody tells me we need a peaker plant in Ladera Ranch, and aren’t there alternative sites for a power plant, I say, I suppose there are other sites for a peaker plant - but that is not the most important question.

The most important question is why didn’t the utility devise a plan to give South County residents an alternative to peaker plants? Certainly, San Diego Gas & Electric had time to do so. In 2006, the utility issued a request for offers to build peaker plants, including 99 MW adjacent to Ladera Ranch. If San Diego Gas & Electric would have engaged all of South County in a discussion of alternatives for meeting energy demand in 2006, then we might not be discussing this poorly planned and outdated peaker plant at all. We might be celebrating the savings we achieved through a coordinated effort among business, industrial and residential users to achieve and surpass energy requirements through improved efficiency and voluntary Demand Response programs. Instead, two years later, we find our community, indeed all of South County, given no choice – peaker plant, “take it or leave....” This approach has pitted neighbors against neighbors, businesses against residences, friends confronting friends, and then, quarrels.

This was counterproductive and unnecessary. All of this effort devoted to the single minded pursuit of a power plant could have been put to better use in a focused and combined energy efficiency and Demand Response campaign uniting people in a common cause to meet energy demand.

So where do we go from here?

We call upon San Diego Gas & Electric to immediately begin what is in the best interest of the public and consistent with the state’s energy policy: immediately develop a comprehensive program to meet energy demand through efficiency and Demand Response programs developed in cooperation with county government, business, industry and representatives of residential users, including Ladera Hope. Instead of offering our community a share in an already outdated and undesirable mode of energy

production, offer al of South County a model of progress and hopeful future through a model program that others will seek to emulate. It is our belief, supported by substantial evidence from the field of energy conservation and development, that developing 48 MW or more energy capacity can be achieved in a reasonable time. To accomplish this, we must join together and focus our attention on what needs to be done and we must start doing this right now.

It is in this spirit that we offer our support for the future development of energy. We reach out to San Diego Gas & electric and all others who are willing to join in meeting energy needs with imagination and productivity that are hallmarks of Orange County.

ACTION PLAN

EFFICIENCY

- Air conditioning is dominant contributor to peak power on the hottest days of summer – one-third of total demand
- SDG&E has no incentive program to motivate customers to replace worn units with state of the art efficiency units – an opportunity to reduce energy consumption approximately 30 percent while adding only 10 to 20 percent incremental cost
- Improve installation – nearly of new air conditioning units are improperly installed leading to more than 20-30 percent percent increase in peak energy needed
- Methodical air conditioner inspection and repair program could reduce peak air conditioning load in SDG&E service territory 300 to 450 MW. It is not unreasonable to assume a savings of 35MW to 40 MW just by implanting this program in South County or a portion of the SDG&E service area involving 40,000 residents
- PUC has a reserve requirement margin of 15%-17% above a specified peak demand forecast. For 2008, CEC projects Southern California will have a reserve margin of 21% - Margarita would represent only 0.2 percent of that total. But CEC did not count 40 MW Palomar station so with or without Margarita, there will be a more than adequate reserve margins. In later years a gap of 60 to 80 MW could be closed through energy efficiency and demand response initiatives.

DEMAND RESPONSE – SMART METERS

- Encourage all 500,000 or so residential customers to replace home thermostat controls capable of increasing the set-point room temperature automatically to reduce air conditioner load in peak periods. For example, cycling the set-point of users for 10-15 minute periods with set point from 72° F to 78° F would reduce load by 100s of megawatts during peak periods. All users could manually override the smart meter, and those with medical conditions could opt out of the program.

- Currently SDG&E has only 26,000 customers enrolled in air conditioning cycling program – 5%, achieving 18 MW savings – 1 percent of peak air conditioning load
- Contrast Sacramento Municipal Utility District, similar in size to SDG&E, has achieved 40% customer participation.
- Direct result of SDG&E strengthening its air conditioning cycling program would be a reduction in need for peaking gas turbine capacity in SDG&E territory
- FUTURE

SDG&E plans digital smart meters in all 1.4 million customer sites by 2011. Change in administrative forecasting could account for 60 to 80 MW. For example, assume that smart meters will reduce demand by 7 percent rather than 5 percent. But the California pilot program demonstrated a 15% reduction.

Another positive outcome from our experience with the proposed peaker plant is our discovery of a gap in state law that can be easily overcome through appropriate state legislation. Accordingly, we propose the introduction of “The Power Plant Siting Transparency Act of 2008” which will be explained in more detail later.