

"Potential for Energy Efficiency, Demand Response, and Onsite Renewable Energy to Meet Texas's Growing Electricity Needs,"

Austin, Texas (March 6, 2007): A new study released today shows that a combination of energy efficiency and onsite renewable energy resources, coupled with expanded demand response programs, can meet Texas's growing electricity needs and save consumers money at the same time.

The study, **"Potential for Energy Efficiency, Demand Response, and Onsite Renewable Energy to Meet Texas's Growing Electricity Needs,"** was commissioned by Environmental Defense and conducted by researchers at the American Council for an Energy-Efficient Economy (ACEEE) in Washington, D.C., based on ACEEE research with support from Texas experts.

"Energy efficiency is the most affordable energy resource in Texas," said Dr. R. Neal Elliott, Industrial Program Director at ACEEE and lead author of the report. "While 18% efficiency savings may seem challenging, Texas is already finding energy efficiency resources at less than 4 cents per kilowatt-hour, compared to the expected cost of power from new plants of 5 to 10 cents. Texas can procure more of these low-cost resources to meet future energy needs, addressing the question of where the state will get power to meet its growing demand."

The study outlines nine policies to moderate electricity demand through energy efficiency and develop onsite renewable energy resources such as solar and biomass. The expanded efficiency policies would meet 17.5% of forecasted 2023 electricity demand, while the onsite renewable policies would displace future conventionally generated electricity by an additional 4.9% for a total reduction of 22.4%, meeting the projected increases in demand over the next 15 years.

"Our state continues to grow and that leads us to some pretty important decisions in determining what sources our energy is going to come from over the coming years," said Ramon Alvarez, an air quality scientist with Environmental Defense. "Our state legislature has an opportunity to adopt policies for our state that can reduce the amount of energy we need while protecting the environment and consumers."

Texas's peak electricity demand—which occurs, for example, when consumers crank up air conditioners during extreme heat—is growing faster than the state's population. State energy leaders are concerned about whether the state will have sufficient generation to meet peak demand by 2009.

"Cost-effective demand response programs could reduce Texas's peak electricity demand by over 1,000 megawatts in 2009, and over 3,000 megawatts in 2013," said Alison Silverstein, former Chief of Staff of the Federal Energy Regulatory Commission (FERC) and coauthor of the report. "Over the longer term, price-responsive demand could permanently change Texas's peak electricity requirements."

Combined with demand response and renewables, efficiency offers Texas a sustainable energy future that provides greater energy security, costs less, pollutes less, and supports economic growth better than the state's current course.

"Texas has become a leader in renewable wind energy, but has been slow to implement onsite renewable energy resources," said Mike Sloan of Virtus Energy Research, coauthor of the report. "An investment today in onsite solar and biomass will help create the future capability that will allow renewables to meet a growing share of the state's energy needs."

This report will be followed by a second study that will assess the economic impacts of these investments in energy efficiency and renewable energy resources. A previous analysis in Texas found that these types of investments typically produce twice the jobs and in-state economic growth that are produced from an equivalent investment in power plants.

"Energy efficiency is the first fuel in the race for affordable and clean energy, because it is the cheapest and fastest to deploy," said Elliott. "The recommendations we have outlined in this report can be adopted now, implemented now, and can immediately reduce the demand for energy."

The study recommends nine policies as building blocks for this new energy future:

1. Expand Texas's existing Energy Efficiency Improvement Program (EEIP) from the current 10% of load growth to 50% of load growth
2. Tighten building energy codes
3. Increase demand response programs that can reduce electricity demand during peak load periods
4. Set a target for expanded installation of combined heat and power (CHP) capacity in Texas
5. Provide incentives for expanded installation of onsite renewable energy
6. Set new state-level appliance and equipment standards
7. Develop advanced energy-efficient building program
8. Implement energy-efficient state and municipal buildings program
9. Implement short-term public education and rate incentives

The report, "Potential for Energy Efficiency, Demand Response, and Onsite Renewable Energy to Meet Texas's Growing Electricity Demands," is available for free download at <http://aceee.org/pubs/E073.htm> or a hard copy can be purchased for \$50 plus \$5 postage and handling from ACEEE Publications, 1001 Connecticut Avenue, N.W., Suite 801, Washington, D.C. 20036-5525, phone: 202-429-0063, fax: 202-429-0193, e-mail: aceee_publications@aceee.org.

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