

Questionnaire

Public Utility Commission
Electric Reliability Council of Texas
Office of Public Utility Counsel

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The U.S. Department of Energy Gulf Coast Clean Energy Applications Center (GCCEAC) is a program of the Houston Advanced Research Center (HARC), an independent 501(c)(3) non-profit organization involved in sustainable development and commercialization of environmentally-promising technologies. The GCCEAC program was launched in January 2005 with funding from the U.S. Department of Energy. The overall goal of the program is to facilitate greater deployment of clean energy technologies in Texas, Louisiana, and Oklahoma. For purposes of this program, clean energy technologies are defined by the U.S. DOE to include combined heat and power, district energy, waste heat recovery, and potentially other clean energy systems. The GCCEAC provides essential support to regional stakeholders, policy makers, and adopters to encourage transfer of these technologies by providing education and outreach, project support services, and policy development initiatives. In this capacity, GCCEAC works with the PUCT on a wide variety of regulatory initiatives affecting Texas electricity markets, including energy efficiency, renewable energy, and distributed generation.

Public Utility Commission

1. What changes should be made to the mission or functions of the Public Utility Commission (PUC), given today's more competitive telecommunications and electricity markets?

A.) Energy Efficiency Incentive Program (EEIP)

The Energy Efficiency Incentive Program (EEIP) is the primary vehicle promoting end-use energy efficiency in Texas electricity markets. Energy efficiency has been shown and is widely accepted to be the least cost, most clean, and quickest route to secure additional electricity resources. The EEIP program has demonstrated its effectiveness in promoting additional energy efficiency over a large number of years and it provides good value to ratepayers in the state.

Currently, PUCT rules allow EEIP participants to receive incentives for traditional passive demand-side management technologies (efficient lighting, air conditioning, insulation, etc.), small-scale on-site renewable technologies (solar photovoltaic, geothermal, etc.), and small-scale, on-site combined heat and power. At the current level of funding, existing incentives payments result in substantial unfulfilled demand for traditional passive demand-side management technologies. In addition, no funding through EEIP has been used for any incentive payments to consumers for on-site renewable or combined heat and power technologies.

GCCEAC believes that the EEIP is essential to enhance deployment of these

technologies, but that the program needs to be improved in the following ways:

1. The program is underfunded relative to the demand for all three types of energy efficiency and the PUCT should work to identify and secure additional sources of funding to allow the program to be expanded.
2. The program should have goals and tracking mechanisms for each of the three technology groups – traditional passive energy efficiency technologies, on-site renewable technologies, and combined heat and power technologies. These are distinct enough that separate tracking is necessary to ensure that goals are achieved in all three areas.
3. The PUCT should provide incentives for the transmission and distribution service providers (TDSPs), who administer the program on behalf of the PUCT, so that they exceed their energy efficiency goals and actively seek opportunities for on-site renewable energy and combined heat and power projects.
4. The PUCT should evaluate opportunities for TDSPs to adjust incentive levels by technology group, thereby matching incentive funding to that required to stimulate adoption.

The EEIP is an excellent tool to promote electrical system energy efficiency and the PUCT should continue to regulate and administer the program with a goal to expand it consistent with market needs.

B.) Dedicated Staff for Combined Heat and Power

Combined heat and power (CHP) is a type of distributed generation. Because of its proximity to end-users, both the electricity and the heat of combustion produced by CHP technologies can be captured and used productively. As a result, the technologies provide very high efficiency and low emissions. The CHP approach is widely used with the state and it represents an important resource to the state. As of November 2008, CHP is estimated to account for more than 17,300 MW or nearly 20% of Texas' installed electric capacity. Furthermore, the 2008 CHP report submitted to the PUCT by Summit Blue Consulting estimated that an additional 13,400 MW could be developed in Texas economically by 2023. By any measure, the existing and potential resource provided by CHP is significant to the state.

Much of the future CHP potential is small in scale (0.5 to 10 megawatts in size) and therefore merits attention that may not be necessary for large industrial cogeneration projects. Consequently, CHP merits more direct attention from the PUCT. As a comparison, the PUCT has provided a staff expert to track renewable distributed generation (DG) technologies, even though these technologies account for a mere 30 MW within the state. The PUCT has a vital role to track distributed generation technologies and promote a portfolio approach to ensure stability of electricity markets. As part of this effort, GCCEAC believes the PUCT should identify a staff expert on CHP technologies and actively monitor and promote the technology within its regulatory authority.

Keep in mind that in 1980 the amount of industrial cogeneration in the state was small. During the 1980's, several staff members of the PUCT focused on interconnection issues, power "wheeling" (prior to open-access transmission), avoided cost calculations (prior to a vibrant bilateral power market), standby rate design and related issues. That attention ensured that Texas would become a leader in world cogeneration

development. Industrial cogeneration – now called combined heat and power – has ensured that industrial customers could remain cost-competitive in world markets. A similar attention must be paid to moderate- to small-scale CHP. We do not lack the technological potential; we simply lack the focus and support of a new endeavor.

There is significant potential in both renewable distributed generation technologies and small-scale combined heat and power technologies for each of these to occupy a special place in PUCT staffing and goals.

2. How effectively does PUC carry out its enforcement and consumer protection functions? Are there changes that you would recommend?

No response.

3. How effectively does PUC discharge its regulatory responsibilities over telecommunications providers? Are there changes that you would recommend?

No response.

4. What improvements could be made to the telecommunications assistance and high cost programs in the Universal Service Fund and the energy assistance programs in the System Benefit Fund?

No response.

5. How effectively does PUC discharge its regulatory responsibilities over the electric industry? What changes are needed to ensure effective regulation?

No response.

6. How effectively does PUC monitor the wholesale electricity market?

No response.

7. What changes should be made in the ways that PUC oversees the Electric Reliability Council of Texas (ERCOT)?

No response.

8. Should PUC be continued for 12 years? Why or why not?

No response.

Electric Reliability Council of Texas

9. Should the structure of the ERCOT Board be modified? If so, how?

No response.

10. How effectively does ERCOT staff manage the budget and operations of the organization?

No response.

11. How well does ERCOT balance its role in managing the wholesale electricity market with its duty to ensure reliability? Would you change this balance and, if so, how?

No response.

Office of Public Utility Counsel

12. What changes should be made to the mission or functions of the Office of Public Utility Counsel, given today's more competitive telecommunications and electricity markets?

No response.

13. Should the Office of Public Utility Counsel be continued for 12 years? Why or why not?

No response.

Other

14. Please add any other comments or recommendations you may have on any of these three agencies. If you suggest any changes, please provide:

- background information on how the current system works and a description of what you would like to see changed,
- benefits of your recommendation, and
- any potential difficulties that may arise from implementing your recommendation.

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