

PROJECT NO. 37623

**RULEMAKING PROCEEDING TO
AMEND ENERGY EFFICIENCY
RULES**

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**BEFORE THE
PUBLIC UTILITY COMMISSION
OF TEXAS**

**COMMENTS OF TEXAS PUBLIC POLICY FOUNDATION IN RESPONSE TO RULEMAKING
PROCEEDING TO AMEND ENERGY EFFICIENCY RULES**

INTRODUCTION

The history of the world is the history of increased energy use, of increased energy efficiency, and of increased wealth and good health. All of these factors are closely correlated.

The U.S. Energy Information Administration (EIA) shows total worldwide energy use has increased from 286 quadrillion Btu in 1980 to a projected 508 quadrillion Btu this year.¹ The global gross domestic product (GDP) increased from \$28.4 trillion in 1980 to about \$60 trillion in 2008 (2008 dollars).² The Competitive Enterprise Institute’s Ian Murray says, “Energy use is a vital contributor to economic growth. The link is so strong that one can predict quite accurately the effects of a reduction in energy use, or a growth in the expense of energy, on an economy.” In other words, increased energy use has always led to increased economic growth.

Yet, according to the Texas Public Utility Commission (PUC), “the public benefit anticipated as a result of enforcing the amendment will be ... a decrease in overall energy consumption” brought about by “an increase in energy efficiency services available to Texas customers.” (Proposal for Publication, p. 2) The rulemaking points to a growing misperception

about energy efficiency and the problem with most government-mandated energy efficiency programs.

Energy efficiency has greatly benefitted society and has been a key part of our economic growth. Energy intensity, the amount of energy it takes to produce a unit of output—or a unit GDP, has been decreasing steadily. Since at least the Industrial Revolution, the world has been increasingly energy efficient. Yet, at the same time, the world has used more energy.

Ultimately, energy efficiency makes energy less expensive so we can use more energy. The public benefit of energy efficiency is that we are able to use more energy that produces more economic growth that makes society wealthier and healthier.

As seen in this rulemaking, however, government-mandated energy efficiency programs today are designed to *decrease* energy use. And, as described below, they generally do this by *increasing* the cost of energy. If adopted, the end result of this rulemaking—designed to increase the state’s energy efficiency goals and thus decrease the use of energy—will be a subsequent decrease in the economic growth Texas would have experienced in its absence.

The Foundation understands that this rulemaking is not about whether Texas should have an energy efficiency program, however inefficient it may be. The Texas Legislature has mandated the current energy efficiency program that calls for “each electric utility [to] provide ... incentives sufficient for retail electric providers and competitive energy service providers to acquire additional cost-effective energy efficiency for residential and commercial customers equivalent to at least ... 20 percent of the electric utility's annual growth in demand of

residential and commercial customers by December 31, 2009.” However, there is a valid question relating to this rulemaking as to whether the PUC should increase the goal to 30 percent in 2010, and to higher targets in the future. These comments will address this question from both the public policy and the legal perspectives.

TEXAS’ ENERGY EFFICIENCY PROGRAM IS NOT COST EFFICIENT

There are frequent claims that existing efficiency programs as administered under Title 16, Sec. 25.181 of the Texas Administrative Code (TAC) are cost-effective. Their presumed success from 2001-2009 is used to provide justification for new rules that will increase efficiency and benefit the public. In reality, available data provide no such justification. While data that would allow such a determination may be available, it is not currently collected, and what data is available is insufficient for drawing any useful conclusions. Even if such data were available, the methods chosen by the PUC to evaluate the benefits of its efficiency programs are such that any conclusions made using them would be of little value for policy purposes.

I. The Commission currently uses a cost-benefit method that does not accurately measure the program.

There are a number of generally accepted methods that regulatory agencies use to evaluate the outcomes of their demand-side management (DSM) and efficiency programs. The so-called Total Resource Cost (TRC) test is probably the closest in principle to a correct balance of costs and benefits, because it ideally measures both sides of that equation. Its disregard of transfers as incidental to rates may be economically ideal, but it can disregard the

political realities of how the burden of providing efficiency is to be allocated. Hence other tests such as the Ratepayer Impact Measure (RIM) evaluate such programs favorably to the extent that there are no losers who will suffer higher bills as a result of the policy. The RIM test has less economic logic than the TRC test, and measures that pass the latter often do not pass the former. In nearly all states, however, TRC or RIM is the policy test of choice.

In Texas this is otherwise. Texas is almost alone among the states in using a "Program Administrator Cost Test" (PACT) to evaluate its efficiency programs (here the program administrator is the utility itself). The California Standard Practice Manual, used as a reference in many other jurisdictions, sees essential flaws in the PACT.³ Benefits of a program or project under PACT are, as in Texas, the avoided supply costs of energy and capacity. Instead of being the total of opportunities that society foregoes, however, costs under PACT are only the administrative costs incurred by the administrator (again, the utility), incentives paid to the customers, and possible increased supply costs for periods in which load is increased.* The California Manual is explicit about the weakness of such a program: "By defining device costs exclusively in terms of costs incurred by the administrator, the [PACT] results reflect only a portion of the full costs of the resource."⁴

In short, Texas uses an incorrect test to evaluate its efficiency program, and its bias is entirely in one direction—toward acceptance of projects because their costs are uniformly understated. The full costs of a project are the sum of those for the utility's incentives and administration of the program, and those incurred by the customer who makes

* Texas gives little consideration to the latter. If an efficiency program leads some customer to use less electricity but switch to some other fuel for its energy needs, the latter is not considered as a cost of the program.

the subsidized efficiency investment. An investment that is made by the customer and incentivized by the utility may still fail to pass a cost-benefit test. For instance, an investment whose actual cost is \$110 might save future power costs of \$100, and allow the utility to give the user \$50 (the incentive percentage allowed for residential and small commercial customers). The user happily pays the remaining \$60 to save \$110 on its power costs. The utility reports that its \$50 investment has passed a PACT test by saving \$100 of power. Society, however, has spent \$110 in order to buy only \$100 of power savings.

Nowhere in utilities' annual reports to the PUC is it possible to estimate how frequently the real returns on the subsidized investments are negative, nor how often they are positive. To our knowledge, neither the PUC nor any utility has ever produced a survey of costs incurred by customers in making these investments. Without such data, any enthusiastic claims of energy efficiency, i.e., reducing the cost of energy use, are little more than conjectures. On the other side are customers who did not need a subsidy to induce them to make their investments in efficiency. Some would do so without the program, and others might strategically wait for subsidies that they in reality did not need. The best available results are probably those from the 2008 Itron survey, and they show over half of the efficiency investments that would have been made in a "base" incentives case would have occurred "naturally."⁵ The PUC has been at the forefront of state regulators who are trying to introduce competition and market choices into almost all aspects of electricity. Yet its efficiency program does not provide information about when interventions cease to be warranted and markets should be relied upon.

2. Absent information that has yet to be produced, the proposed amendment is without foundation.

The Proposal for Publication (p. 2) makes two assertions on efficiency and redistribution. In the first, the PUC's Energy Efficiency Program Manager is said to have determined that for the first five years of the amendment "the public benefit anticipated as a result of enforcing the amendment will be an increase in energy efficiency services available to Texas consumers and a decrease in overall energy consumption." As previously noted, there is insufficient supporting documentation for this claim. Additionally, it demonstrates a fundamental economic misunderstanding. An uncompensated decrease in a person's consumption of any economic good is a cost, not a benefit. The fact that the person has chosen not to purchase the "energy efficiency services" and chosen instead to consume electricity is an indication that a program to mandate this change makes her worse off, not better. And any numbers that might be derived from its PACT tests to support this claim are both conceptually and empirically useless for the purpose.

The second claim is that "[t]here is an anticipated economic cost to persons who are required to comply with the section as proposed, however the public benefit outweighs the anticipated costs." However, the PUC has collected no data from which one could even conjecture the "anticipated costs" of its program to any entities other than utilities, and the proposal does not attempt to identify "persons who are required to comply." Most likely the author means ratepayers who are not receiving subsidies, but the PACT test never mentions

them. Various aspects of TRC and RIM tests might help us to answer these questions, but the Commission has chosen not to use those tests in the context of this program.*

3. Cost-effectiveness standard

The rulemaking proposes changes to the cost-effectiveness standards used to measure the programs; specifically, changes are proposed to both the avoided cost of capacity and the avoided cost of energy. However, as noted above, whatever the avoided costs are determined to be does not provide for an accurate picture of the cost effectiveness of the program. It is impossible to perform a cost-benefit study without data on all relevant costs. Even if we are willing to accept the Commission's somewhat arbitrary measure of avoided costs, it must provide itself with estimates of the full costs of its proposals.[†] At a minimum it will be necessary to collect survey data on costs that are borne by users who take advantage of the programs. Beyond that, the PUCT must produce reasonable estimates of the number of "natural" adopters of increased efficiency, and of free riders who choose to take advantage of the subsidies although they would have otherwise been natural adopters. These will require some substantial econometric and statistical research, but will be of value for both future PUC programs and for applications outside of Texas. With the results of such studies, and better

* There is also no data in the document that might validate a claim of "no adverse economic effect on small businesses."

[†] The measures of benefits are arbitrary because they are single point, rather than plausible ranges. In today's climate of uncertainty about fuel prices, climate policies etc. such reliance on single data points is untenable. It is particularly so in Texas, where active retail competition further adds to the uncertainties facing regulated utilities and their customers. There are many other difficulties with demand that we do not cover in detail. As one example there is little justification for calculating energy savings by applying a market-independent capacity factor to changes in demand induced by the program. There is also an odd asymmetry between demand and energy – capacity savings are valued at the cost of a new generator (and only a peaking unit) and energy savings are measured as ERCOT balancing prices.

characterizations of savings, the PUC will finally be able to determine whether a program whose expansion has been widely supported is genuinely worthy of that support.

ENERGY EFFICIENCY SHOULD BE ACHIEVED IN THE MARKET, AND NOT THROUGH INCREASING THE GOALS OF THIS PROGRAM

This rulemaking is similar to Senate Bill 546 (81-R). SB 546 also sought to increase the energy efficiency goals above the currently required level of at least “20 percent of the electric utility’s annual growth in demand of residential and commercial customers.” (Public Utility Regulatory Act, Texas Utility Code Annotated § 39.905 (a)(3)(C) (PURA)) Specifically, SB 546 (engrossed) would have set an energy efficiency goal of at least “the lower of 30 percent of the electric utility’s annual growth in demand or 0.3 percent of the total peak demand of residential and commercial customers by December 31, 2012,” and increased the goal to at least “the lower of 50 percent of the electric utility’s annual growth in demand or 0.7 percent of the total peak demand of residential and commercial customers by December 31, 2016.”

SB 546 would have accomplished this increase in the energy efficiency goals by adding the increases into statute in new subdivisions (D) and (E) in Sec. 39.905 (a)(3). As of December 31, 2012, these new goals would have replaced the existing statutory goal of 20 percent and become the standard by which the energy efficiency programs would have been measured. However, SB 546 failed to become law, with the Texas House of Representatives and the Texas Senate unable to agree to changes made to the bill in the House.

In proposing changes to the Texas Administrative Code that increase the state's energy efficiency goals, the Public Utility Commission is thus attempting to change in its rules what the Texas Legislature sought—and failed—to do in statute. Combined with the above analysis showing the lack of information available for judging this program and the demonstrated costs of mandating reductions in energy use, this raises significant policy and legal questions about whether the PUC should make the changes it has proposed regarding the energy efficiency goals.

First, the information collected under this program is insufficient to determine whether the program actually reduces energy use in a cost-effective manner. Second, the substantial costs of this program are at best a transfer of wealth from a large group of consumers, i.e., electricity customers, to a smaller subset of consumers, i.e., those who participate in the energy efficiency programs. Third, any program that mandates a reduction in energy use—especially by making energy more expensive—is by definition inefficient and will decrease economic growth. If this proposed rulemaking actually accomplishes its goal of decreasing energy use through the increase of the efficiency goals, the Texas economy—and Texans—will be worse off.

While little can be done administratively to reduce the negative impact of the current energy efficiency goals, the PUC should not increase the economic costs of this program by adopting this proposed increase in the goals.

In its proposal for rulemaking, the PUC says, “The amendment is proposed under the Public Utility Regulatory Act, Texas Utilities Code Annotated §§14.001, 14.002, 36.204, and

39.905 (Vernon 2007 and Supplement 2009) (PURA).” (Proposal for Publication, p. 4). The following is the text of Secs. 14.001, 14.002, and 36.204:

Sec. 14.001. POWER TO REGULATE AND SUPERVISE. The commission has the general power to regulate and supervise the business of each public utility within its jurisdiction and to do anything specifically designated or implied by this title that is necessary and convenient to the exercise of that power and jurisdiction.

Sec. 14.002. RULES. The commission shall adopt and enforce rules reasonably required in the exercise of its powers and jurisdiction.

Sec. 36.204. COST RECOVERY AND INCENTIVES. In establishing rates for an electric utility, the commission may:

- (1) allow timely recovery of the reasonable costs of conservation, load management, and purchased power, notwithstanding Section 36.201; and
- (2) authorize additional incentives for conservation, load management, purchased power, and renewable resources.

Sec. 29.905 is the section of PURA that directly addresses the issue of energy efficiency.

Combined with the other statutes mentioned, the PUC certainly has significant authority to adopt rules to implement the program. However, caution should be exercised in extending that authority to the proposed increase in the efficiency goals.

The Texas 3rd Court of Appeals has said:

A validity challenge tests a rule on procedural and constitutional grounds. See [State Office of Pub. Util. Counsel v. Public Util. Comm'n, 131 S.W.3d 314, 327 \(Tex.App.-Austin 2004, pet. denied\)](#); [Eldercare Props., Inc. v. Texas Dep't of Human Servs., 63 S.W.3d 551, 558 \(Tex.App.-Austin 2001, pet. denied\)](#). This Court does not decide matters of policy; we are limited to evaluating whether the Commission acted contrary to the statute. [State Office of Pub. Util. Counsel, 131 S.W.3d at 321](#). We presume that an agency rule is valid, and the challenging party bears the burden to demonstrate its invalidity. [Id.](#) To establish the rule's facial invalidity, a challenger must show that the rule: (1) contravenes specific statutory language; (2) runs counter to the general objectives of the statute; or (3) imposes burdens, conditions, or restrictions in excess of or inconsistent with the relevant statutory provisions. [Id.](#)⁶

We question whether the PUC can adopt the increase in the goals without contravening specific statutory language or imposing burdens, conditions, or restrictions in excess of or inconsistent with the relevant statutory provisions.

Because of the nature of the energy efficiency program, increased gains in efficiency come at progressively higher costs. In other words, each unit of decreased electrical use comes at a higher monetary cost. The PUC's own rules state that "An energy efficiency program is deemed to be cost-effective if the cost of the program to the utility is less than or equal to the benefits of the program." Yet, as noted above, the agency cannot accurately determine at this point whether or not the programs under this rule are actually cost effective. As the goals are increased, it will be increasingly difficult for utilities to implement programs that are not burdensome and inconsistent with the statute.

This is particularly true when it comes to the reduced load served by the utilities as the result of the increased goals. While the utilities are mostly compensated for the expenses of these programs, they are necessarily reducing their overall demand, and thus their revenues. As regulated entities, they have no other means for increasing demand and the associated revenues except through the PUC. This certainly is a burden beyond the statutory provisions of the current 20 percent goal.

This is especially the case when one considers the language of SB 546, which set the new goal at "the lower of 30 percent of the electric utility's annual growth in demand or 0.3 percent of the total peak demand of residential and commercial customers by December 31, 2012." Recognizing the strain that increased goals might put on the utilities, it offered the lower

of two choices. It is doubtful that the current language of the statute allows the PUC to adopt goals beyond the specific statutory goal of 20 percent.

Respectfully Submitted

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¹ U.S. Energy Information Agency, [International Energy Outlook 2009](#), (May 2009)

² World Bank, [Data Finder](#).

³ California Energy Commission, [California Standard Practice Manual, Economic Analysis of Demand-Side Programs and Projects](#), Oct. 2001, Ch. 5.

⁴ California Energy Commission, p. 24.

⁵ Itron, Inc. *Assessment of the Feasible and Achievable Levels of Electricity Savings from Investor Owned Utilities in Texas: 2009-2018*, (Dec. 23, 2008), 8-8 and 8-10.

⁶ *Gulf Coast Coalition of Cities v. Public Utility Comm'n*, 161 S.W.3d 706, (Tex. App-Austin, 2005).