



Increase in Energy Efficiency Programs Proposed by PUC Rule Change - Summary

The PUCT has proposed a new Energy Efficiency Rule¹ (amends Section 25.181 of the commission's substantive rules,² under Project 37623³), which is intended to increase the scale of the programs operated by the investor-owned utilities statewide, increase participation by retail electric providers in extending efficiency benefits to more customers, increase the recognized benefits, and increase incentives to the utilities. The new rule does not address demand response, and allows but does not require a 10% set-aside for distributed renewable resource technologies.

Background

Since 1999, investor-owned utilities, which are regulated under the Texas electric system were directed to acquire from Retail Electric Providers (REPs) and Energy Service Companies (ESCOs) the equivalent of 10% of the growth in demand within their service territories, through energy efficiency. In 2007, HB 3693 passed the Texas Legislature addressing the energy efficiency programs and required the utilities to achieve 20% of their growth in demand by 2009. The bill also included a requirement for the Public Utility Commission to study the feasibility of increasing the goal to 50% of demand growth.

This study was completed for the PUC by Itron⁴, a consulting firm, concluding that reducing load growth as much as 50% was feasible for most utilities, even using pre-recession historical growth rates. This conclusion was based on its evaluation of efficiency programs only, and did not factor in the potential of demand side renewable energy technologies (PV, solar water heating, geothermal heat pumps, small wind or biomass), or the demand reduction potential of

¹To download the proposed rule go to:

http://interchange.puc.state.tx.us/WebApp/Interchange/application/dbapps/filings/pgSearch_Results.asp?TXT_C NTR_NO=37623&TXT_ITEM_NO=5

² <http://www.puc.state.tx.us/rules/subrules/electric/25.181/25.181.pdf>

³ <http://www.puc.state.tx.us/rules/rulemake/33487/33487.cfm> (note that the PUC will soon publish the rule under the new Project Number)

⁴ http://www.puc.state.tx.us/electric/reports/misc/Electricity_Saving_2009-2018_122308.pdf

load management or demand response initiatives, all of which are also eligible measures for the utilities to achieve their goals.

The study by Itron also noted that founding the utility goals upon the rate of growth in demand left efficiency program budgets vulnerable to swings in growth. In fact, growth in electric demand approached negative numbers as the recession took hold, so the utility's goals did not increase as intended by the legislature. In addition, the report pointed out that the rate of growth varied by utilities, with the highest growth in areas of the very smallest utilities, creating some unintended inequities. Several bills were advanced during the 2009 legislative session to make new goals mandatory, but for a wide variety of reasons they failed to finally pass and become law.

On January 29, the PUC approved for publication, a staff proposal for public comments. Below is a summary of the proposal's key elements and impacts. Comments on the proposal will be due to the PUC 31 days, and reply comments 45 days after publication.

The New Goals for Demand Reduction

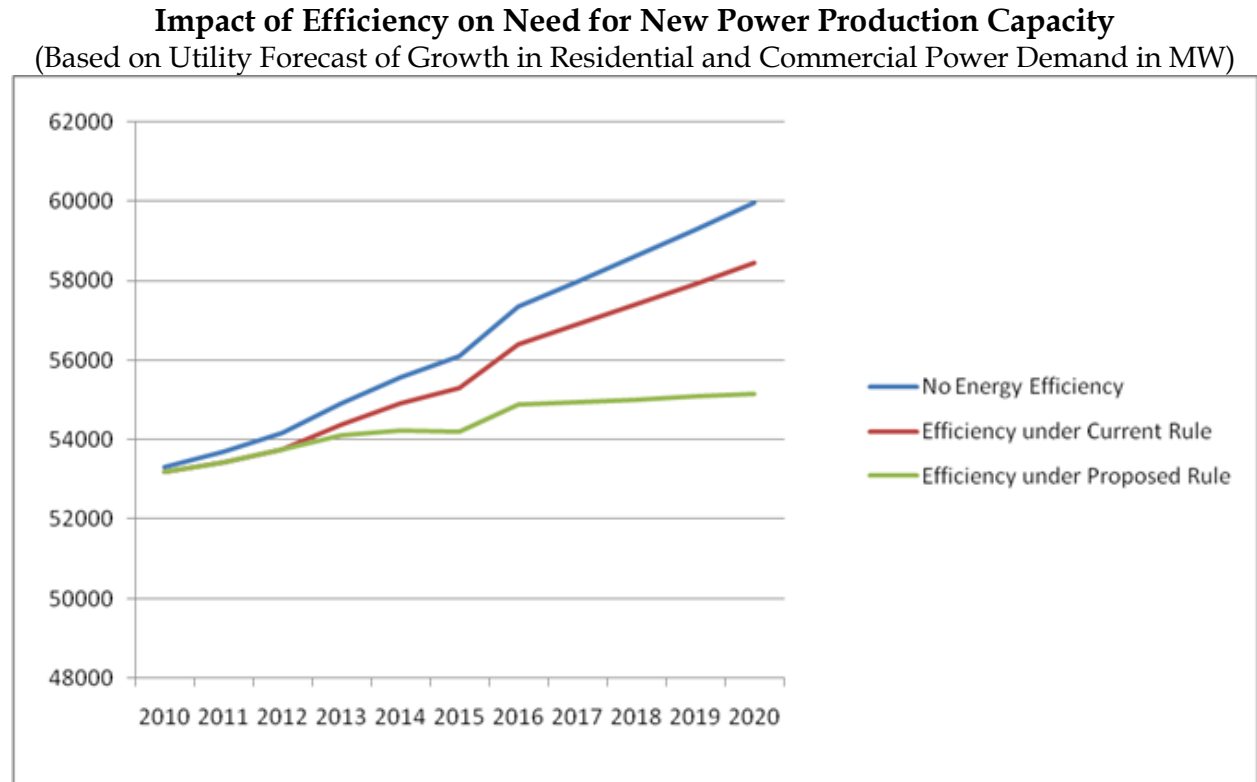
The current requirement is that the utilities acquire energy efficiency from REPs and ESCOs equivalent to 20% of the growth in demand within their service territories. The proposal would increase the goal in terms of a percentage of growth in demand, and later change the goal to a more stable baseline as recommended in the PUC's interim study to the total non-industrial load:

- 30% of growth in demand by 2012.
- 40% of growth in demand or .7% of peak demand by 2013, whichever is greater.
- 50% of growth in demand or 1% of peak demand by 2014, whichever is greater⁵.

This shift in metric in 2013, as proposed will ensure a certain minimum increase in energy efficiency programs will be reached by requiring the utilities to meet the greater of the two

⁵ An electric utility with less than 3000 megawatts will not be subject to the percentage of peak demand requirements. The percent of growth in demand required will be the same for the smaller utilities however (30% by 2012, 40% by 2013 and 50% by 2014), with a floor of 130% of each previous year's goal. This is based on a recommendation in the Itron report.

metrics specified. These new goals will have a significant impact on the projected growth of demand for power as demonstrated in the graph below.



Goals for Energy Savings

In 2008, the commission adopted a secondary goal for efficiency addressing the reduction in consumption of energy (kWh). The current rule sets the goal for energy savings based on a 20% capacity factor of the demand reduction goal, that is, assuming each kW of demand reduction should be accompanied by energy reductions at that level for 20% of the hours of the year (or $1\text{kW} \times 0.20 \times 8760 \text{ hrs}$). This assures that the utilities’ programs do more than manage or shift loads. For each kW of load reduction required by the rule today, in other words, each utility must achieve energy savings of 1752 kWh. The proposed rule changes increase the capacity factor from 20% to 25% in 2012. The programs currently achieve a capacity factor in or near this range.

Role of Load Management or Demand Response

Load management is an eligible energy efficiency measure, but neither load management nor the potential contribution of load management was addressed by the interim study by Itron.

There is no explicit goal for demand response, and no direction to utilities about its potential contribution or its appropriate role under the existing or proposed rules. Utility reliance on load management was initially restricted by rules, and little used. Under the current rule, the cost of load management to the utilities was greatly reduced. Experience shows that the utilities tend to meet their demand reduction goals by investing in energy efficiency measures through a variety of programs, which generally assures they also meet the goal for energy savings.

Acquisition of load management, or demand response, has been used by the utilities primarily to exceed the demand reduction goal sufficiently to meet the requirements for their maximum potential bonus. (Bonus and proposed changes to the bonus calculation are discussed below.) If no explicit load management or demand response goal is established by the commission, this relationship will be important to achieving any load management or demand response under the rule as proposed as well.

Goal for Demand-Side Renewables

The draft rule explicitly allows a utility to provide a set-aside of 10% of the utility's demand goal for "solar and other distributed renewable technologies," but does not require them to do so. It is not clear if the language is intended to encourage or limit the contribution of distributed renewables applications to 10% of the programs. Today some of the utilities have launched modest solar PV pilots under their regulated efficiency programs, but there is no special consideration for other demand-side renewables.⁶ One land fill gas project that we know of receives payments under the programs. Unless it is meant to limit the contribution of renewable technologies, this is not a substantive change, because technically the utilities have the ability to set aside funding for renewable technologies behind the meter under today's rule.

Goal for Low-Income Program Funding

The new rule would allow a utility to receive a further bonus, equal to 10% of its normal bonus, if it achieves at least 10% of its goal through low-income programs. This was previously allowed, but also dependent on reaching at least 120% of the utility's demand reduction goal. The utilities that achieve 120% or more of their goals today in order to optimize their

⁶ Oncor has both a solar PV and solar water heating program funded under a clean energy commitment related to its corporate takeover in 2007.

performance bonus would not be impacted by dropping this requirement as proposed. Because this extra performance bonus is calculated as a percentage of the normal performance bonus earned (discussed below), it would have little influence or impact on a utility which could not exceed its goal sufficiently to have a significant bonus.

Performance Bonus Payments for Utilities

Currently, utilities may earn an annual bonus—from net savings generated by their programs—up to 20% of their energy efficiency program costs by exceeding their energy efficiency goal. This limitation would remain in effect for 2010-11 and then increase to 30% for 2012-13 and 40% for 2014-15, as the goal for energy efficiency increases. Under the current modest goals, most utilities generate more than sufficient savings benefits for all ratepayers to receive the maximum allowed bonus. Under the new bonus proposal, assuming the utilities continue to generate sufficient cost-effective net savings, by 2014, for every dollar they spend on the programs they could receive \$1.40 through cost recovery and bonus mechanisms.

Other Changes

- An energy efficiency program is deemed to be cost effective if the costs of the program are less than or equal to the benefits of the program. The benefits of the program are calculated over the life of the program and include the value of the demand reductions and energy savings, which are quantified on the basis of avoided capacity costs and avoided energy costs.⁷ The avoided cost of capacity under the new rule proposed will remain at \$80/kW for the 2010 program year, but can be adjusted as high as \$120/kW if the cost of building power plants rises significantly. The draft rule raises the avoided cost of energy from \$0.055 to \$0.10/kWh for the 2011 program year. Both amounts can be adjusted by the Public Utility Commission going forward under specific guidelines. The total cost of programs, including administration, research and development, and incentives can not exceed avoided costs. Because the utilities today spend only a fraction of the current avoided cost, it is likely that this increase will largely serve to increase the reported net savings benefits of the programs. The primary impact will be to assure that all the utilities will be able to achieve the maximum allowed bonus.

⁷ Avoiding the cost of building a power plant and the fuel it would use, is the aim of the efficiency programs, and a measure of their value.

- Under the proposal, utilities will be allowed to increase administrative costs from the current 10% to 15%, although the combination of R&D and utility administration would not be allowed to rise above 20%. Administrative and R&D costs were each previously permitted to reach 10% of total program costs (not including bonuses), but all utilities did not take full advantage of the R&D allowance, and utilities will now be able to apply additional funds to program management costs. It may have a practical impact of limiting R&D for all utilities to 5% of program costs.
- The draft rule will allow utilities to conduct customer information and advertising campaigns. Currently, utilities must communicate primarily with energy service companies and retail electric providers, which were meant to have the customer relationship. This change is intended to give utilities additional tools to encourage customer participation in the programs and to help them meet the increased energy efficiency goals.
- The proposal caps total expenditures which may be recovered in rates:
 - For 2012, recovered expenditures can not exceed 175% of 2010 budget.
 - For 2013, recovered expenditures can not exceed 250% of 2010 budget.
 - For 2014, recovered expenditures can not exceed 300% of 2010 budget.

This capping mechanism reflects the caps placed on the program spending in earlier years by the legislature. Although the programs continue to demonstrate significant net savings, rapid increases in program spending have a rate impact in the short term, which the legislature wished to moderate.⁸ The commission specifically asks in the preamble to the rule whether caps are needed and whether they should be as proposed, or on a per-customer basis. Utility spending never approached similar caps imposed in HB 3693.

- Utilities are directed to work with retail electric providers in the delivery of efficiency and demand response programs to encourage and facilitate their participation by harmonizing programs across utilities, setting aside amounts for retail electric providers to use for programs, and working with retail electric providers to evaluate the demand reductions and energy savings resulting from “smart grid” services such as time-of-use pricing, home-area

⁸ Up-front expenditures for efficiency are included in each year’s current rates through a rate adjustment mechanism, while the benefits accrue to participating and non-participating customers alike over time.

network devices. Together with the significant increase in the program budgets that this rule would foster, this would allow efficiency initiatives to achieve new levels of market penetration, and give more customers access to services.