

ERCOT releases benefits analysis of marginal losses

At the request of the Public Utility Commission of Texas (PUC), ERCOT has completed its assessments of the costs and benefits associated with incorporating marginal transmission system losses into its market dispatch and pricing mechanisms.

Currently, ERCOT pays generators for the amount of energy produced, regardless of how much of that energy is actually delivered to the end user. The existing ERCOT market design does not account for energy losses on the transmission system when dispatching one generator versus another. It only considers the relative costs to the generators and any constraints on the transmission system. With the implementation of marginal losses, ERCOT would include the relative cost of those losses when determining which generators to use to serve consumer demand.

In June 2018, ERCOT released its [benefits analysis](#) of marginal losses, which considers cost savings to consumers and generators. ERCOT's analysis was performed using the same model and economic criteria used to assess future transmission projects in the 2017 Regional Transmission Plan. However, the model was updated to reflect recent plant retirements in the ERCOT region and also used a revised natural gas forecast for 2020.

Key findings from benefits analysis of marginal losses

ERCOT's analysis shows there are system-wide efficiencies associated with implementing marginal losses, but the cost savings vary among market participants.

The analysis shows that including marginal losses would lower production costs for electricity, which would be an indicator of increased overall efficiency of the ERCOT system. It also shows there would be a decrease in overall revenues for generators and lower electricity costs for consumers system-wide.

However, the analysis also reflects a disparity in generator revenue and consumer benefits based on location within the ERCOT region. Specifically, consumers in the Houston zone would not see the same financial benefits as those in the other parts of ERCOT. The Houston zone consumers could potentially see an increase in payments to generators under a low natural gas price scenario. Additionally, the analysis shows an increase in the number of generator unit starts and/or an increase in the number of resources with higher start-up costs in all scenarios.

Cost savings

According to the benefits analysis, annual production cost savings were estimated between \$11.4 and \$13.4 million when gas prices were low, but there were no significant savings when gas prices were higher. In each scenario studied, consumers saw annual cost savings ranging from \$168 million to \$225 million.

Cost and time estimates

Estimates show it would cost around \$10 million and take 18 to 24 months to incorporate marginal losses in the ERCOT market.

Next steps

The PUC will review these findings and is expected to report back on next steps.