## Generator Cost of New Entry (CONE)

The Gross Cost of New Entry (CONE) parameter reflects the annualized fixed costs of building and operating a new resource along with revenues earned in the ERCOT energy and ancillary services markets. Multiple CONE estimates for different technologies may be produced, but at a minimum, a CONE parameter for a natural gas-fired Combustion Turbine (CT, or peaker) must be produced. The RM study will use a CONE estimate for the reference resource technology that accounts for all capital costs, fixed costs, and the after-tax weighted-average cost of capital (ATWACC). The process for determining the CONE parameter is as follows.

### CONE Study

ERCOT will contract with a consultant to conduct a CONE study every four years, beginning in 2022. The consultant will be chosen on the basis of a competitive Request for Proposal process. The CONE study will consist of the following tasks:

* Screening and selection of the reference resource. ERCOT and Market Participants, through the Supply Analysis Working Group (SAWG), will work with the consultant to select the reference resource based on typical plant configurations for recently built and proposed dispatchable resources in the ERCOT Region. Reference resource selection, plant configuration, and county location will be informed by project information available from ERCOT’s Resource Integration and Ongoing Operations (RIOO) system.
* Develop detailed technical specifications for the reference resource. Based on the selected reference resource, the consultant will develop technical specification needed for cost analysis. Depending on the technologies selected, specifications will include, but not be limited to, power augmentation/supplemental firing (for gas-fired units), emissions control, cooling and interconnection assumptions.
* Develop bottom-up cost estimates. The consultant will develop capital and operations & maintenance cost estimates for the reference resource based on county location and other local considerations.
* Determine financial and cost escalation parameters. The consultant will determine all the parameters needed to calculate the annualized stream of costs and market revenues for the CONE value, as well as the assumed economic life of the reference resource. Such parameters include capital structure (debt to equity ratio), cost of equity, cost of debt, return on equity, tax rates, After-tax Weighted Average Cost of Capital (ATWACC), depreciation rate, and inflation rate.
* SAWG presentation of study input assumptions and parameters. The consultant will present at a SAWG meeting the CONE study assumptions and parameters for stakeholder review. After a 30-day comment period, the consultant will prepare a response report that addresses the SAWG participants’ comments.
* Calculate the base CONE value and a sensitivity range for Reserve Margin sensitivity analysis. The consultant will calculate the base CONE value in units of dollars per megawatt-year ($/MW-year), and will propose a CONE sensitivity range to be reviewed and approved by SAWG for RM study sensitivity analysis.
* Draft CONE study report and presentation. The consultant will prepare the draft report in an editable format that documents the reference resource, study input assumptions, CONE value estimation specifics, the base CONE value, and the CONE value sensitivity range. The consultant will provide a report overview presentation at a subsequent SAWG meeting.
* Final CONE study report. Based on ERCOT and SAWG meeting participant comments, the consultant will provide to ERCOT the final CONE study report along with a change-tracking version for posting to ercot.com.

An indicative CONE study timeline is provided below: