Markets: LFL-15 and LFL-21

“Determine if or how LFLs, specifically those modeled as CLRs, should be considered in constraint competitiveness test and Resource mitigation processes”

And

“Evaluate what considerations LFLs, particularly those modeled as CLRs, should be given in constraint competitiveness and Resource mitigation processes.”

Team: Dave Maggio and Sai Moorty, ERCOT, and Clayton Greer, Morgan Stanley.

The current Constraint Competitiveness Test (CCT) processes are described in Protocol section 3.19. There are two distinct but related CCTs, a Long-Term CCT and a Security-Constrained Economic Dispatch (SCED) CCT. The Long-Term CCT evaluates whether there is sufficient competition in resolving transmission constraints for the purpose of providing a projection of constraints that are likely to be deemed non-competitive in the Real-Time Market (RTM). The SCED CCT similarly evaluates whether there is sufficient competition in resolving transmission constraints for the purpose of identifying constraints that should be classified as non-competitive for SCED, any Decision Making Entities (DMEs) that may have a concentration in power in resolving any identified non-competitive constraints, and specific Resources within the portfolio of any identified DMEs that should be flagged for mitigation as part of the two-step Security-Constrained Economic Dispatch (SCED) process. Within these current processes, only Generation Resources are considered when evaluating constraint competitiveness.

The high-level proposal from the team is to add Controllable Load Resources (CLR) to the set of Resources considered when evaluating DMEs. This would apply to both the calculation of the Element Competitiveness Index (ECI) on the import side of a constraint and calculation identifying if a DME is a pivotal player for resolving a given constraint. For a CLR, the available capacity for the Resource would be Seasonal net max sustainable rating (or Load Resource equivalent) for the Long-Term CCT and the telemetered Maximum Power Consumption (MPC) for the SCED CCT. This is equivalent to how Generation Resources that are not Intermittent Renewable Resources (IRR) are treated. This available capacity for the CLR would then be part of the DME’s managed capacity. The processes will need to focus on CLRs with positive shift factors to the applicable constraint, where a reduction in consumption by CLR improves the flow on the constrained element.

Although this proposal is to include CLRs as part of the CCT process in evaluating constraint competitiveness, we are not proposing at this time that CLRs be included in the set of Resources that may be flagged for mitigation as part of the SCED process.

The changes described above would only be applicable to Resources participating in SCED and, therefore, would not apply to large flexible load that are not CLRs.