Key Principle 1.5 – Process for Deploying Ancillary Services

The processes for deploying Ancillary Services (AS) will be modified, as needed, to accommodate the awarding of AS in Real-Time and the use of AS Demand Curves (ASDCs).

# Principle Concepts

# *Approved Principle Concepts*

None

#  *Principle Concepts for Voting*

1. The AS Manager will perform the same set of primary functions but will be modified to source the Resource-specific AS responsibility/award information as an output from the RTM, as opposed to using telemetry from Qualified Scheduling Entities.
2. Current design for immediate Dispatch from SCED will remain in place. Similarly, RTC awards and Dispatch will be immediate as applicable to the services.
3. Regulation instruction from ERCOT will remain at QSE portfolio level (keep Participation Factors) [for portfolios having storage resources]. Note: Regulation deployments from ERCOT are proportional and not economic. QSEs can optimize the deployment within their portfolios for economics and to manage storage levels between various storage resources or between CLR and GR sides of CAES projects. Maintaining the Participation Factors does not in any way change the RTC SCED award of Regulation or any of the considerations that go into making that award. Keeping the Participation Factors actually increases the efficiency of Regulation deployment.
4. Upon receipt of new Base Points and AS awards from RTC, LFC will reset the Regulation instruction to zero.
5. Updated Desired Base Points (UDBP) will be replaced by “Updated Desired Set Point” (UDSP). UDSP is the sum of two components, Base Ramp and Resource-specific Regulation instruction. Base Ramp is a four minute ramp similar to UDBP, except that the starting point of the ramp is the expected output of the Resource considering previous base point and the last Resource specific Regulation instruction from LFC before new Base Points were input to LFC. LFC, in its calculations, determines the Resource specific instruction and then adds it to the Base Ramp and sends UDSP every 4 seconds till the next RTC results are available.
6. The system level regulation requirement will be distributed to Resource specific Regulation instructions proportionate to their Regulation awards taking into Participation Factors, respecting Resource limits (HSL,LSL, ramp rates) by considering both UDSP and previous Resource specific Regulation instructions. Undeployed system level regulation will be distributed to Resources with regulation awards that still have undeployed regulation award capacity.

Note: For non-consensus items, opposing key principle or principle concept language would be provided in this form to TAC for their review.

# *Future Decision Points and Issues for Developing Principle Concepts*

Functionality and Process Concepts

1. Details on telemetry changes necessary to accommodate the LFC and AS Manager changes
2. Impact of ASDCs and removal of the existing process for QSEs to update telemetered AS schedules following manual deployment (specifically for Generation Resource and CLRs)
3. Elimination of Non-Spin Offer Floor
4. Continued ability of the Real-Time optimization (i.e., RTC) to be executed off-cycle, between regularly scheduled 5-minute executions.

# Applicable Protocol Sections

*Placeholder*