Comments on RT Co-optimization

1. A floor for On-line NSRS defeats the purpose of RT Co-op. DAM NSRS procurement simply ensures sufficient capacity is either committed and on-line or available in 30 minutes for added reliability. ERCOT Operators would like to know this additional reserve is there all the way prior to the SCED through AS Schedules. For load not to be short and potentially hit with RUC charges, QSEs must bring enough capacity to meet load not counting AS capacity. However, in SCED, this is simply energy available to SCED and dispatched with all other energy in the most economic manner. An offer curve for NSRS in SCED would mean that more efficient energy may be reserved as NSRS rather than deployed by SCED as energy. Thus, there should be no NSRS offer and no reserved NSRS capacity (using offer floor) in RT Co-op (i.e. SCED). No change needed to current RTM ORDC. No change to Off-line NSRS (no RT Co-op.).
2. Similarly DAM RRS procurement ensures sufficient capacity is committed and available in 10 minutes for required reliability. ERCOT Operators must ensure that this reserve is there all the way prior to the SCED through AS Schedules. However, in SCED, this is simply energy available to SCED and dispatched with all other energy in the most economic manner. An offer curve for RRS in SCED would mean that more efficient energy may be reserved as RRS rather than deployed by SCED as energy. Thus, there should be no RRS offer and no reserved RRS capacity in RT Co-op (i.e. SCED). No change needed to current RTM ORDC. For RRS not dispatched by SCED, those would be treated similar to current treatment.
3. RUS and RDS would have AS offers and be part of RT Co-op. since these are not deployed by SCED but by LFC and may have costs other than pure energy costs. RUS and RDS are what the system needs to regulate - procuring more or less in RTM has little impact on "capacity adequacy" related reliability. Thus, we likely don't need a separate curve for this but rather set is at VOLL for a fixed quantity.
4. AS demand curves make sense in the DAM. RUS and RDS should be fixed quantities at VOLL. RRS should start after RUS and go all the way down the ORDC. NSRS should start at a relatively low value on the ORDC and go all the way. Thus RRS could substitute for NSRS if total cost is lower (prevents unreasonable blowout of NSRS prices over RRS prices). Each hour or block of hours in DAM would have its own ORDC. For DAM ORDC: if NERC criteria-determined RRS quantity is deemed an absolute minimum, then RUS plus that RRS quantity may need to be at VOLL with a sharp drop off in the curve to match economic ORDC thereafter. Very strong incentive to offer AS into DAM. If still insufficient AS to meet NERC requirement, then use current procedure to procure more.