## **KP1.5 Process for Deploying Ancillary Services**

**Impacts to telemetered AS schedules following manual deployment (specifically for Generation Resource and Controllable Load Resources)**

Currently, Ancillary Services (AS) are awarded in Day Ahead Market and in Real Time, Resources telemeter a responsibility and schedule for every Ancillary Service. Resource Limit Calculator uses this telemetry to compute a High & Low Ancillary Service Limit (HASL/LASL) for every Resource, thus pre-reserving a portion of their capacity to provide AS.

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| For Generation Resources, LASL is calculated as follows:LASL = LSLTELEM + RDSTELEM

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| Variable | Description |
| LASL | Low Ancillary Service Limit. |
| LSLTELEM | Low Sustained Limit provided via telemetry. |
| RDSTELEM | Reg-Down Ancillary Service Resource Responsibility designation provided by telemetry. |

For Generation Resources, HASL is calculated as follows:HASL = Max (LASL, (HSLTELEM – (RRSTELEM + RUSTELEM + NSRSTELEM +NFRCTELEM)))

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| Variable | Description |
| HASL | High Ancillary Service Limit. |
| HSLTELEM | High Sustained Limit provided via telemetry – per Section 6.5.5.2.  |
| LASL | Low Ancillary Service Limit. |
| RRSTELEM | RRS Ancillary Service Schedule provided by telemetry.  |
| RUSTELEM | Reg-Up Ancillary Service Resource Responsibility designation provided by telemetry. |
| NSRSTELEM | Non-Spin Ancillary Service Schedule provided via telemetry. |
| NFRCTELEM | NFRC currently available (unloaded) and included in the HSL of the Generation Resource with non-zero RRS Ancillary Service Schedule telemetry. |

For Load Resources, LASL is calculated as follows:LASL = Min (HASL, (LPCTELEM + (RRSTELEM + RUSTELEM + NSRSTELEM)))

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| Variable | Description |
| LASL | Low Ancillary Service Limit. |
| HASL | High Ancillary Service Limit. |
| LPCTELEM | Low Power Consumption provided via telemetry. |
| RRSTELEM | RRS Ancillary Service Schedule provided by telemetry. |
| RUSTELEM | Reg-Up Ancillary Service Resource Responsibility designation provided by telemetry. |
| NSRSTELEM | Non-Spin Ancillary Service Schedule provided via telemetry. |

For Load Resources, HASL is calculated as follows:HASL = Max (LPCTELEM, (MPCTELEM – RDSTELEM))

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| Variable | Description |
| HASL | High Ancillary Service Limit. |
| LPCTELEM | Low Power Consumption provided via telemetry.  |
| MPCTELEM | Maximum Power Consumption provided via telemetry.  |
| RDSTELEM | Reg-Down Ancillary Service Resource Responsibility designation provided by telemetry. |

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Currently, in Real Time when Responsive Reserve Service (RRS) is released (manually or automatically based on frequency trigger), Qualified Scheduling Entities (QSEs) are required to change/reduce the telemetered Responsive Reserve AS Schedule on Generation Resources and Controllable Load Resources (CLR) carrying RRS. This in turn changes/raises HASL for these resources, thus making additional capacity available for Security Constrained Economic Dispatch (SCED). Similar logic is applicable for Generation Resources carrying Non Spin Reserves (Non-Spin).

In RTC, for Generation Resources and CLR that are being economically dispatched by ERCOT, the current practice of pre-reserving portions of their capacity to provide AS through telemetry from the Resource’s QSE will be discontinued. AS awards will be an output of RTC. Any Deployment for RRS and Non-Spin for Generation Resources and CLR will either be automatic (based on frequency for RRS) or based on associated AS Demand Curves.

**As a result the existing process for QSEs to update telemetered AS schedules following deployment is no longer needed.**