FFSS Questions submitted to ERCOT

1. How will ERCOT determine if there is evidence of an impending or actual fuel supply disruption affecting the FFSSR?
	1. Please explain the process and the relevant considerations ERCOT will evaluate.

ERCOT Response: It depends on the weather forecasts, potential capacity risks, and information ERCOT is receiving from third parties, including the QSE representing the FFSSR and the gas companies. Non-dispositive considerations will include the above and whether ERCOT has issued a Watch for winter weather.

* 1. Please explain if market participants will have input into that determination.

ERCOT Response: Market Participants will be providing information to ERCOT and may have input on the determination. Please note that under ERCOT Nodal Protocols Section 3.14.5, a QSE representing an FFSSR must notify ERCOT as soon as practicable if the QSE anticipates, or in the event of, a natural gas curtailment or other fuel supply disruption to the FFSSR.

* 1. Please explain how, or if, market participants will be informed of ERCOT’s determination regarding an impending or actual fuel supply disruption.

ERCOT Response: It is dependent on the situation. If ERCOT determines there is an impending or active fuel supply disruption, ERCOT may discuss this determination with the QSE representing an FFSSR. ERCOT will send an FFSS Verbal Dispatch Instruction (VDI) if ERCOT deploys an FFSSR.

1. When we get a VDI do we have burn oil on the relevant unit, even if we still have sufficient gas and do not believe there is an impending fuel supply disruption at the resource?  If so, is there a process to challenge ERCOT’s determination, so that we are not unnecessarily wasting oil?

ERCOT Response: The VDI is an Operating Instruction and must be followed unless there is a safety or operational issue that makes the FFSSR unable to comply with the instruction.

1. What is ERCOT’s procedure for issuing a VDI to units that can start without gas under this program before there’s an impending or actual fuel supply disruption?

ERCOT Response: It depends on System Conditions although it is up to the QSE to manage how they will follow the VDI instructions and be online at the start time as instructed.

1. What is ERCOT’s procedure for issuing a VDI to units that cannot start without gas under this program before there’s an impending or actual fuel supply disruption?

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1. How will dispatch above LSL work with FFSSRs?
	1. For example, will basepoints be set from SCED utilizing EOCs, constraints, etc., or will basepoints be determined by the ERCOT Operator?

ERCOT Response: BPs will be from SCED based on Energy Offer Curves (EOCs); although in extreme cases Operators may use HDL override.

* 1. How will FFSSR providing FFSS be added to price formation?

ERCOT Response: The FFSS Resource HSL will be excluded from the Real-Time Online Capacity (RTOLCAP) when calculating the ORDC price adder (similar to ONRUC units).

c. Will the FFSSR receive the ORDC price adder per the output or the HSL?

ERCOT Response: The FFSSR will not get any special treatment in AS Imbalance which means the HSL will contribute to the RTOLCAP once the FFSSR is online and output is at least 95% of LSL.

1. Are there any limitations on resources awarded FFSS providing AS or participating in the DAM?

ERCOT Response: No.

* 1. How are Energy and AS DAM awards handled if the resource is deployed for FFSS? ERCOT Response: It is up to the QSE to manage how they will meet the Energy and AS awards while burning the alternate fuel as instructed.
	2. Does the FFSSR have to move “up” AS to a different unit if dispatched on FFSS?

ERCOT Response: No, The FFSSR does not have to move AS to another Resource during dispatch.

1. Are resources permitted to add additional time to the Hot and Cold start times to accurately reflect staffing needs?
	1. Relatedly, does ERCOT’s process recognize that additional staffing typically won’t be in place unless there is an impending weather emergency (e.g., a situation in which ERCOT has issued a Watch for winter weather)?  Such staffing might not be in place if no such impending weather emergency exists.

ERCOT Response: Under ERCOT Nodal Protocols Section 3.14.5(4)(a), the QSE should begin preparation to switch fuels when ERCOT issues a Winter Weather Watch. This preparation should include bringing in additional personnel as necessary and being ready to receive a VDI.

* 1. Does ERCOT anticipate calling on FFSSRs in the absence of such weather situations?

ERCOT Response: Yes, there may be situations when a large gas outage occurs that impacts generation capacity that could lead to or contribute to a capacity shortage and in those types of situations ERCOT should be able to deploy FFSS to keep from shedding load.

1. How would a unit in OFFQS respond to FFSS VDI? Does OFFQS count as on, or does the unit need to go to LSL?

ERCOT Response: When the FFSSR receives a VDI, they should be ON and at the LSL within the limits of the declared HOT/COLD start up time per the FFSS Offer.

* 1. Can ERCOT give any examples of times this service would have been dispatched in the past 5 years other than winter storm Uri?

ERCOT Response: ERCOT is presently unable to answer this question.

For example, would FFSS have been used during winter storm Landon?

ERCOT Response**:** ERCOT committed capacity on oil during the Watch for extreme cold weather during winter storm Landon.

* 1. Can ERCOT give any examples of times ERCOT determined that there was evidence of an impending or actual fuel supply disruption affecting generation?

ERCOT Response: Because this is a new service, ERCOT has never made such a determination.

1. In terms of bidding, to confirm, if a participant submits 3 bids per unit, can only 1 be selected?  Stated differently, can a participant offer different segments of the unit’s output at different prices? Or, said another way, does Offer 2 need to incorporate the MWs in Offer 1?

ERCOT Response: Each offer should reflect the full capability of the Resource to provide FFSS.

1. Additionally, we had a question regarding the availability factor. Since we can now submit alternative resources in addition to the primary, there are multiple resources that can provide the service should the primary become unavailable. In the event the primary is out but an alternate resource is available, how will the availability factor be impacted?

ERCOT Response: Each alternate FFSSR will be required to submit an availability plan each day. If the primary Unit became unavailable and the QSE wanted to switch to an alternate, the QSE must communicate with ERCOT that the QSE will switch to the alternate on X Operating Day and return to primary on Y Operating Day. ERCOT would then perform a manual switch by setting the standby price equal to zero for the primary Resource and set the alternate Resource’s standby price to the value from the contract, starting at 00:00 on the applicable Operating Day. The alternate Resource’s historical availability would determine the standby payment for that Resource when it becomes the primary. Once the QSE makes the switch back from the alternate back to the primary Resource, the availability will then return to the primary. This means that if the primary Resource had an outage it would count against the settlement unless it falls within the 90% availability cushion. [Please note: a future enhancement could be considered to makes this more dynamic, if requested.]

1. Can multiple alternate resources be used to replace a primary resource?

ERCOT Response: Even though multiple alternate Resources can be provided in the FFSS offer, only one alternate resource can be used to replace a primary resource at any given time. Providing multiple alternate resources on the offer provides the QSE with options to use as a replacement for the primary FFSSR.

1. Should the FFSS offer price be $/MW/hr or $/MW?

ERCOT Response: To be consistent with other ERCOT services, the offer price should be in $/MW/hr. The Commission has set the offer cap for this service at $18,000 per MW. To ensure the offer cap is not exceeded any offer price above $6.25/MW/hr will be rejected.

1. Can a Resource be offered as primary and alternate at the same time?

ERCOT Response: Yes, but if the Resource is awarded as a primary FFSR to provide FFSS, it may not be used as an alternate for another awarded FFSSR.

1. How does the partial award work?  For example, if a QSE offers 10MW for Offer1 and allows partial award, does it mean ERCOT can procure any level of MW between 0MW and 10MW?

ERCOT Response: A partial award would not be less than the LSL when operating on reserve fuel as noted on the FFSS Offer Submission form.

1. Is the “Minimum Ambient Operation Temperature” the design temperature provided on the RARF or the minimum temperature the unit can operate at for a 48-hour period using the alternate fuel?

ERCOT Response: It is the minimum temperature the unit can operate at for a 48-hour period using the alternate fuel.