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| NPRR Number | [1092](http://www.ercot.com/mktrules/issues/NPRR1092) | NPRR Title | Reduce RUC Offer Floor and Remove RUC Opt-Out Provision |
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| Date | March 8, 2022 |
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| Market Segment | Independent Generator |

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| Comments |

Luminant submits these responsive comments to the March 1, 2022 comments submitted jointly by Office of Public Utility Counsel (OPUC), Texas Industrial Energy Consumers (TIEC), City of Eastland, City of Dallas, Residential Consumer, CPS Energy, and ERCOT Steel Mills (“Joint Commenters”).

It seems clear from the Joint Commenters’ submission that there are a number of fundamental disagreements or at least misunderstandings among stakeholders not just regarding the underlying policies proposed in Nodal Protocol Revision Request (NPRR) 1092, but also the factual context in which those policies should be considered. Luminant believes that Joint Commenters would agree that the subjective policy task of designing and modifying market mechanisms should flow from an agreed-upon set of objective facts and clearly defining the scope of underlying issues to be considered. A data-anchored discussion will be significantly more constructive than seeding the debate with misguided and unsubstantiated allegations of market power. Luminant provided a significant amount of data as an appendix to its February 17, 2022 comments to assuage any concerns that market power is being exercised to increase prices (with the exception of the overly prescriptive approach to Reliability Unit Commitment (RUC) being wielded by ERCOT). System Lambda at or above $1500/MWh rarely correlated with RUCs, and *never* did so from the onset of ERCOT’s increase in the use of RUCs in late June 2021 all the way through Winter Storm Landon. Luminant welcomes other data or analysis that stakeholders bring forward, but in the absence of refuting evidence, the only evidence put forth is that the pricing outcomes NPRR1092’s proponents are concerned about are illusory and have not actually materialized.

In addition to the fact that the data does not support the unfounded and irresponsible accusations, the Joint Commenters offer no real evidence of market abuse from any of the authorities tasked with enforcing market behavior. As Luminant mentioned in its previous comments, the ERCOT market has multiple organizations and tools to ensure competitive market outcomes, including the Independent Market Monitor (IMM) and Public Utility Commission of Texas (PUCT) enforcement. Every offer from every wholesale power Market Participant is open to scrutiny by these overseers. The Joint Commenters offer their unsubstantiated allegations simply to further suppress prices, which will jeopardize long-run reliability in exchange for short-term lower costs for Joint Commenters. NPRR1092 risks the longevity of dispatchable generation—precisely the facilities this market needs for reliability, especially during winter months.

Before addressing other responsive elements to Joint Commenters, Luminant wants to highlight that there actually appears to be substantial areas of agreement between the camps on NPRR1092, and to recognize the efforts in Joint Commenters’ submission highlighting areas where there may be room for compromise. Luminant looks forward to further exploring these channels for constructive discourse at, and following, the workshop, and includes some initial responses regarding alternatives towards the end of these comments.

Common Root Cause Concerns

Substantive agreement likely exists among stakeholders that the proposals at issue in NPRR1092 are symptomatic of a deeper underlying cause, which is the mismatch between an energy-only market structure and conservative grid operations. Joint Commenters state that “incentives for commitment are no longer aligned with market objectives,” and that “we hope that the Operating Reserve Demand Curve (ORDC) curve will provide sufficient commitment incentives so that RUC is not needed as frequently. However, RUC pricing *should never be part of a commitment decision; it only results in outcomes inconsistent with market objectives*” (emphasis in original). Luminant agrees, assuming that “market objectives” is meant to convey reliable operations (this seems to be the natural reading given that RUCs specifically bridge market outcomes and reliability requirements that are otherwise not met through the market). Luminant also shares the ideal that the ORDC should provide the necessary commitment incentives to avoid RUCs. And while Luminant notes that the existing RUC opt-out/clawback policies are ostensibly intended precisely to use “RUC pricing” to drive commitment decisions (by encouraging forward commitment through Day-Ahead Market (DAM) participation), Luminant agrees that a competitive generator should make its commitment decisions based on market price signals, which appears to also be Joint Commenters’ intent. Finally, Joint Commenters state that “for the market to function, Joint Consumers believe that RUCs must ultimately be reduced.” Luminant wholeheartedly agrees with this statement.

The problem is that ERCOT is seeking very conservative target reserves using significantly expanded Ancillary Service procurements and conservative forecasts. Specifically, ERCOT’s use of frequently unrealistically high Load forecasts and frequently unrealistically low wind and solar forecasts will not align with Market Participant expectations for supply or demand. When this happens, market price signals will not support ERCOT’s conservative target reserves. At the March 7, 2022, ERCOT Board of Directors Meeting, the IMM relayed her concerns with these forecasts. Procuring additional Ancillary Services drives down ORDC pricing and, in the case of Non-Spinning Reserve (Non-Spin), creates a soft price ceiling around $75/MWh. This soft ceiling punitively reduces the possibility of higher prices, both through System Lambda / Locational Marginal Price (LMPs) and the ORDC, and disincentivizes loads from hedging their position in DAM or otherwise. In the meantime, ERCOT is forced to make up the difference by committing thousands of MWs using the RUC process. That is, *the market price signal for commitments is breaking down under ERCOT’s conservative grid operations*. In sum, the market is calling ERCOT’s bluff about tight system conditions when none are likely to exist.

While ERCOT’s focus must be on reliable operations, an energy-only market cannot be expected to be overly cautious and risk-averse simply because that is ERCOT’s preferred posture. By design, markets tend to coalesce around the most likely outcome. To underscore this fact, consider the Joint Commenters’ statement that “if generators self-commit sufficient capacity to serve the forecasted Load, no undercutting [of competitive offers by RUCs if a low RUC offer floor is adopted] should occur.” This statement assumes that generators make commitment decisions in an economic vacuum, completely ignoring the critical role that buyers (i.e., Loads) have in generator forward commitment decisions. Markets rely on both supply *and* demand. Generators will not make uneconomic, irrational commitment decisions.

The solution could simply be that if Loads want more generation to self-commit and fewer RUCs, then Loads should buy sufficient generation in the DAM to cover whatever Load and wind forecasts ERCOT produces, regardless of how realistic the forecasts are (plus an additional buffer for times when ERCOT wants to carry even more reserves). However, assuming that Loads are also economically rational and disagree with intentionally losing money, they will likely only want to secure the supply they actually expect to need. Therefore, the gap between ERCOT’s extreme risk scenarios and actual demand will remain.

ERCOT’s decision to operate more conservatively is the only “exercise of market power” at issue. Stakeholders should be clear-eyed that operating conservatively is not congruent with an energy-only market’s incentive structures, and the concerns raised by stakeholders on both sides of NPRR1092 are firmly rooted in this dynamic. Without alignment between ERCOT operations and the fundamental design of the market, stakeholders will always be at odds.

Factual Context

Returning to the factual background for NPRR1092 that the data appendix to Luminant’s February 17, 2022 comments provides, while the data only shows correlation and not causation, it demonstrates that *the $1500/MWh RUC offer floor was not setting prices*. Luminant repeats this observation in response to Joint Commenters’ specific statements that “the RUC offer floor should be at a price where most units would self-commit,” and that it should not be “at a price that creates a penalty for the market when RUC units are deployed or unnecessarily withholds available capacity.” The simple fact is that RUCs have not resulted in prices set by the RUC offer floor, as *there was not a single incidence of System Lambda going above $1500/MWh coincident with a RUC during the entire study period following the onset of ERCOT’s conservative grid operations included in Luminant’s data presentation (and they were exceedingly rare even before then as well)*.

Accordingly, Joint Commenters’ characterization that the $1500/MWh RUC offer floor is a “penalty for the market” is incorrect for two reasons. First, Loads were simply not paying that price as just noted above (and, it should be noted, the vast majority of Loads do not pay Real-Time energy prices at retail). Second, the statement assumes that loads alone are “the market,” ignoring that generators are also equal stakeholders in market outcomes. Luminant respects that Joint Commenters are concerned about the *possibility* of prices at the RUC offer floor, but Luminant’s initial comments demonstrate that that outcome is a very rare exception, while the analysis presented to the Technical Advisory Committee (TAC) by London Economics International highlights how a lower RUC offer floor will have a much more frequent and meaningful suppressive impact on market prices. Therefore, when discussing “penalties to the market,” the actual market data shows that NPRR1092 attempts to justify a *real* penalty to generation and other Resources by claiming an *illusory* penalty to Loads.

Similarly, Luminant takes issue with the claim that the $1500/MWh RUC offer floor “unnecessarily withholds available capacity.” *RUC units would not be On-Line but for ERCOT out-of-market actions,* *even when ERCOT is using RUC to backstop conservative operating criteria*. RUC-committed capacity is not withheld; it is by definition still available to the market, simply placed behind competitively-available capacity for Dispatch priority – very much a necessity in order to limit the market distortions stemming from out-of-market actions.

Luminant also wants to offer some unique context for stakeholders to consider regarding the interplay of commitment incentives with the proposals in NPRR1092. While ERCOT RUC activity has touched many units across the broader ERCOT fleet, Luminant has borne a disproportionate share of RUCs over recent months and the clear majority of RUCs from Luminant’s fleet have been for units that are impacted by an ongoing dispute with their natural gas supplier, which is the subject of a complaint currently pending at the Railroad Commission of Texas.[[1]](#footnote-1) Because that complaint is publicly available, anyone can see that Luminant’s gas supplier is charging a minimum of $15/MMBtu for day-ahead gas and $25/MMBtu for no-notice gas. During periods of high demand, the gas supplier has charged up to $90/MMBtu—even though index gas prices have only been a fraction of this. Furthermore, these gas prices are wholly outside of Luminant’s control.

On top of these unjustified high gas prices, ERCOT Protocols currently add significant market risk on Luminant to participate in the DAM. Section 4.4.9.2.1, Startup Offer and Minimum-Energy Offer Criteria, makes it impossible for Luminant to fully reflect these costs in a DAM offer because the Protocols limit the startup and minimum energy components of a three-part offer to 200% of the generic or Resource-specific approved verifiable costs. In this instance, the generic verifiable costs are the reference point,[[2]](#footnote-2) which relies on the generic Katy gas Fuel Index Price (FIP) plus $0.50/MMBtu. Even in a ~$5/MMBtu gas market price environment, Luminant’s actual gas pricing for these units exceeds 200% of the Protocol-mandated offer cap. Therefore, Luminant wears significant risk of financial loss when offering these units in the DAM.[[3]](#footnote-3) Furthermore, with ERCOT’s conservative grid operations generally depressing market prices, there is no market signal in Real-Time or bilaterally on the ICE Bal Day market to drive self-commitment outside of the DAM, either. While Luminant has no obligation to provide this explanation to other Market Participants, since Joint Commenters have inserted misunderstandings about this dynamic into the NPRR1092 discussion, Luminant wants to be clear: it is the combined effects of a third-party’s fuel prices and ERCOT’s conservative grid operations that make these plants uneconomic to self-commit. In addition, while some Market Participants have made sweeping statements about RUC units being made whole to their costs, at this time Luminant has received some indications that ERCOT may not make us whole for all of our RUCs.

Addressing Market Power and Voluntary Mitigation Plan (“VMP”) Comments

Luminant offers the information above because it provides a clear-cut example of Resources whose commitment decisions are not impacted by the RUC opt-out but are unambiguously harmed by RUC and the RUC clawback. Additionally, it should help to clarify a frustratingly inaccurate picture painted by Joint Commenters’ remarks about alleged market power abuse by way of RUC:

“The frequency of RUCs allows a Market Participant to determine if there is a benefit to being RUC’ed and being “forced” to offer at a high offer price without violating any VMPs. A Market Participant may be able to anticipate a RUC instruction, using the expected instruction to its advantage. This opportunity is exacerbated by the RUC “opt-out” process.”

This assertion is misplaced at best; even if a Market Participant can “anticipate a RUC,” that neither indicates that market signals should have driven self-commitment, nor does it represent knowledge unavailable to other Market Participants. For instance, Loads could similarly anticipate this dynamic and take long positions against it, in turn driving up forward prices, potentially resulting in actual market commitment signals that would obviate ERCOT’s need to use RUC. The “exacerbat[ion] by the RUC ‘opt-out’ process” does not make sense, though; if a unit opts out of RUC then the RUC offer floor is irrelevant because the unit is not RUC committed (even though it must remain self-committed for the entire RUC period). So, to the extent the RUC offer floor is a concern, the RUC opt-out should actually mitigate that concern. To argue both sides is circular logic.

The frequent rhetorical use of market power fears is not helpful in evaluating the need and merits of the policies in NPRR1092. As the data previously provided by Luminant showed, prices have on balance been *suppressed* by conservative grid operations, so *if* any Entity besides ERCOT has attempted to exercise market power they have resoundingly failed.

That said, Luminant does recognize and share other stakeholders’ desire to understand the market outcomes from February 24, 2022. However, the breadth of evidence of price suppression from conservative grid operations in the preceding months suggests that unique circumstances of February 24 do not invalidate the broader trend. But in the context of NPRR1092, it is important to note that in the 1,154 SCED runs between February 23 and February 26, 2022, there were only 14 that experienced a total price point between $1500 and $2000/MWh, and *none* of those SCED runs reflected a System Lambda above $907/MWh. That is, the $1500/MWh RUC offer floor still was not setting prices during the February 24 pricing event.

Finally, Luminant strongly disagrees with the criticisms lodged by Joint Commenters on the topic of voluntary mitigation plans (“VMPs”). The accusations by Joint Commenters are not supported by publicly available 60-day data. Furthermore, the following limited counterpoints are noteworthy:

* Nothing in any VMP requires a generator to self-commit its capacity against its own economic self-interest;
* Nothing in any VMP prevents a generator from offering its capacity at prices above its VMP limits – it simply no longer affords the generator an absolute defense against market power abuse allegations if the generator does so;
* Luminant’s VMP is not “outdated” or ignorant of the ORDC – it was approved by the PUCT in December 2019, five years after the “advent” of the ORDC and RDPA, and contains an automatic termination after 7 years or Real-Time Co-optimization (RTC) implementation (whichever occurs first);
* The PUCT Executive Director can revoke any of the current VMPs, including Luminant’s, with three Business Days’ notice, if the VMP is determined to no longer serve the public interest – thus the PUCT has ample power to determine and act if it determines that a VMP becomes “outdated”; and
* ERCOT, not Market Participants, initiated the increase in RUC activity and revoking or modifying a VMP would not change this outcome.

Alternatives

An overarching problem of NPRR1092 is that is seeks to change a perceived symptom of ERCOT’s conservative operations rather than go after the root cause. There are several solutions that would look to solve the root cause issue of minimizing RUCs; unfortunately, many in this market would likely obstruct them. These include a Demand curve in the DAM reflecting ERCOT’s forecasted Load, a requirement for Loads to participate in the DAM, an ORDC that fully covers ERCOT’s desired headroom and accounts for the day’s Non-Spin procurements, or a *compensated* must-offer requirement (e.g., associated with an LSE Reliability Obligation).

Finally, Luminant offers the following initial feedback regarding compromises indicated by Joint Commenters, as well as other potential alternative approaches:

* *“The RUC design … encourages [generators] in Real-Time to accurately show their plans in the (Current Operating Plan) COP” and “The accuracy of submittals to the ERCOT COP has long been a major problem for ERCOT studies. COP accuracy is potentially a root cause of this windfall opportunity.”*
	+ Luminant has for many years raised concerns about the inaccuracy of COPs approaching real-time operations and the appearance of supply in real-time that was not transparent to the market even when market conditions clearly provided signals for all available generation to be On-Line during peak hours. Luminant would support enforcement of reasonable COP accuracy standards, which could have the dual benefits of providing other generators with better clarity about potential unmet needs for competitive commitment decisions (rather than having to guess) and for ERCOT when considering whether to issue a RUC instruction.
* *“We hope that the ORDC curve will provide sufficient commitment incentives so that RUC is not needed as frequently.”*
	+ Luminant agrees and advocated this position last fall. However, pricing outcomes thus far have failed to provide that commitment incentive in all hours, which Luminant suspects is due to a mismatch between ERCOT’s preferred level of reserves and those that the market expects. That is, if ERCOT targets 7500 MW of reserves during an extreme peak, but the ORDC parameters were evaluated based on 6000-6500 MW as the target reserves, the Ancillary Service additions will weigh down the energy market-driven commitments.
* *“[T]here should be a way to buy back/opt-out if ERCOT commits the RUC generator far in advance of its start-up time instead of deselecting it. Ultimately, deselection should occur more frequently and be required by* ***amending paragraph (3) of Section 5.5.2, Reliability Unit Commitment (RUC) Process,*** *to tighten the requirements allowing ERCOT to deselect a unit and* ***retaining portions of paragraph (14) of 5.5.2*** *to allow opt-out under much more limited circumstances.”*
	+ Luminant agrees that this scenario should be addressed, but suggests that “far in advance of its start-up time” should be clarified as 15-30 minutes in advance of its start-up timeframe.
* *“Joint Consumers are also open to the suggestion that an energy offer floor be indexed to the price of natural gas multiplied by a heat rate factor between 15 and 20 -- well over the heat rates of any likely generation units to be RUC’ed. To avoid gas market concerns raised by Commissioners, the gas price in this calculation could be a two-month rolling average. These proposals would result in amendments to paragraph (4)(e) of Section 6.5.7.3, Security Constrained Economic Dispatch.”*
	+ Luminant is open to discussing such an approach, but generally believes that this approach (as specified) would not come close to protecting competitive offers as it is more than an order of magnitude too low.[[4]](#footnote-4) As indicated in response to previous questions, the cost-benefit trade-off of implementing changes, assuming it supports economic commitment decisions and does not simply require generators to commit units uneconomically, is likely not compelling compared to status quo.
	+ If this path is pursued, then in scenarios where gas prices are climbing rapidly the competitive offers from gas units displaced by the RUC offer floor will also climb rapidly. 1-2 weeks would seem much more appropriate than 2 months.
* While Luminant believes that the status quo reflects an appropriate balance of stakeholder negotiations and compromises developed over many years, Luminant is also evaluating alternatives to the proposals in NPRR1092 that can help to address concerns (real or perceived) without harming Market Participants unnecessarily – particularly those that own and operate the dispatchable generation that is critical to ERCOT reliability. Luminant is open to discussing the following:
	+ Remove the RUC clawback with removal of RUC opt-out;
	+ Reduce RUC offer floor to $1200/MWh as this is actually behind the majority of competitive offers;
	+ Ensure that competitively committed units cannot be RUC committed post-snapshot;
	+ Ensure ERCOT only issues RUC instructions based on the most current startup timing; and
	+ In lieu of an offer floor, modify the RDPA to include all basepoints on RUC units (not just the Low Sustained Limit (LSL)).

Luminant looks forward to a constructive debate about how to properly incentivize commitment of economic power plants. However, if the debate continues to focus on unfounded market power allegations, or attempts to force generators to lose money, the result will be fewer power plants to RUC and a chilling effect on new investment in the ERCOT market.

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| Revised Cover Page Language |

None

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| Revised Proposed Protocol Language |

None

1. <https://rrctx.force.com/s/case/500t000000vY1mCAAS/detail> [↑](#footnote-ref-1)
2. Luminant does not have Resource-specific verifiable fuel adder costs for these units since ERCOT abruptly and unilaterally just before the onset of Winter Storm Uri rescinded fuel adders previously approved for Luminant in December 2019 and rejected updated fuel adders that Luminant submitted in October 2020. Luminant submitted a complaint and request for emergency relief to the Public Utility Commission in March 2021 (Docket No. 51883), which is still pending a decision. Furthermore, even if ERCOT had not taken this action, it is unclear that Luminant could reflect these actual costs, since paragraph (2) of Verifiable Cost Manual Section 3.4, Additional Rules for Submitting Fuel Costs, specifies that an actual fuel adder must be based on historical cost “for a rolling 12-month period,” so sudden changes in actually experienced fuel costs cannot be fully incorporated into a generator’s verifiable costs until they have been in place for a full year (and then must go through the slow process of seeking and receiving ERCOT approval.) [↑](#footnote-ref-2)
3. Luminant has also received volume-based fuel price tiering that the ERCOT Protocols do not accommodate, but the verifiable cost-linked offer cap is the first order limiting condition. [↑](#footnote-ref-3)
4. As noted in both Shell’s February 16 comments and Luminant’s February 17 comments, competitive quick start offers are often several hundred dollars per MWh in order to appropriately reflect their commitment and operating costs. [↑](#footnote-ref-4)