Item 7: Phase 2 Market Redesign – Bridging Solution Options

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Overview

- **Purpose**
  - This presentation intends to share with the R&M Committee staff's initial thoughts on bridge solutions and the process by which ERCOT staff plans to bring proposals forward in April

- **Voting Items / Requests**
  - No action is requested of the R&M Committee or Board; for discussion only

- **Key Takeaways**
  - ERCOT staff is sharing with the R&M Committee a set of initial bridge solutions as a prelude to a vote in April.
  - As discussed previously, but also raised at the PUCT and Legislature, the proposed long-term solution will take an estimated 3 years to deliver. The purpose is to incorporate incentives to build dispatchable, quick responding resources as soon as possible.
  - Bridge solutions were chosen based on their ability to be delivered rapidly (within 12 months). Consequently, they generally represent compromise against an ideal design. The proposals discussed all represent a reduction in functionality and in some cases may make other aspects of the market work against the long term intended direction.

Process

- ERCOT has been tasked with providing bridge solutions to cover: 1) retaining existing generation and 2) attracting the construction of new generation. The bridge would be in effect while the PUCT's final market design is being developed.

- The current recommendations are intended to:
  - Advance our market to meet the PUCT's long term goals with minimal distortions and adverse consequences.
  - Have quick implementation timelines that don't interfere with a long-term solution.

- The current slate of options fall within 3 broad categories:
  1. Solutions that address new investment and maintaining existing resources.
  2. Solutions that address existing resources.
  3. Solutions that address new investment.

- ERCOT staff intends to incorporate stakeholder feedback in its final recommendations in April.

Solutions that Address Both New Investment and Maintaining Existing Resources: Implement a Basic settlement component of PCM manually

ERCOT creates a basic manually settled Performance Credit Mechanism (PCM) that pays generators for their performance. This payment would be funded by a load ratio share allocation to all Load Serving Entities (LSEs).

Pros:

- Has a medium implementation timeline (late 2023 early 2024).
- Gets a payment to generators that is based on performance.
- Has mechanisms to preserve both existing generation and new entry.
- Partially begins the PUCT recommended market design change.
- Gives stakeholders and markets experience with the proposed future state.

Cons:

- Does not create an obligation for LSEs to contract.
- There would not be a forward market. The value of a PC is determined exclusively by ERCOT.

Solutions that Address Both New Investment and Maintaining Existing Resources: Procure Additional Ancillary Services

ERCOT would procure more Ancillary Services and thereby pay an Ancillary Service payment to more market resources.

Pros:

- Can be implemented quickly.
- Utilizes existing market design.

Cons:

- Ancillary service markets appear to be relatively illiquid, especially Non-Spinning Reserve Service (Non-Spin). Prolonged price increases could precede an investment response.
- Increased procurement of Ancillary Services has not resolved the reliance on Reliability Unit Commitment (RUC).
- Only rewards a subset of the resources serving the grid.

Solutions that Address Both New Investment and Maintaining Existing Resources: Enhance the Operating Reserve Demand Curve (ORDC)

ORDC would be modified to achieve a 1 in 10 LOLE in 2026. This would involve changing parameters of the curve. Except for Value of Lost Load (VOLL)/offer cap decoupling and minimum ORDC adder (which require system changes), all other parameters can be changed by PUCT instruction and Board approval.

Pros:

- Can be implemented quickly.
- Enhancement to the energy-only market.

Cons:

- Relies on mechanisms of the energy-only market for revenue (requires scarcity conditions).

Solutions that Address Both New Investment and Maintaining Existing Resources: Backstop Reserve Service (BRS)

ERCOT procures a preset capacity amount based on bids. Rules are then established to dispatch these resources only when scarcity conditions are met.

Pros:

- Has a medium implementation timeline (Deliverable late 2023 early 2024).
- Has mechanisms to preserve both existing generation and new entry.

Cons:

- For most of the market resources, BRS relies on mechanisms of the energy-only market for revenue (requires scarcity conditions). Only a subset of the resources serving the grid receive the payment.
- Must require that the resource can be mitigated and used for local issues. Otherwise, cannot serve as a bridge.
- Implementation of BRS creates delays to implementation of PCM.
- Creates a regulated group of resources that receive a capacity payment.
- Capacity payment could be utilized to provide a competitive advantage over non-BRS resources if BRS resources are allowed to return to the market.

Solution that Address Existing Resources: Contracts for Capacity

In the case of a retirement or an identified need for additional capacity, ERCOT would contract to cover fixed and operational costs plus a profit adder. Retiring power plants and retired power plants that could be returned to service would be eligible.

Pro:

- Can be implemented quickly and relies on an existing practice.

Con:

- Only a partial solution because it only covers retiring or mothballed generation.

Solution that Address New Resources: Publish Indicative PCM Values

ERCOT would use the filed design assumptions to simply start publishing what PCM revenues and costs would look like starting for 2022. No revenue would be collected, or payments made. This would help markets price the value and costs of the service and may initiate investment discussion earlier than the case where the value is not published.

Pro:

- Provides indicative pricing to the market to help understand risk management and investment decisions.

Cons:

- No financial compensation or binding requirement.
- No benefit for existing resources.

Next Steps

- The current process envisions the Board making a recommendation at its scheduled April meeting.

- During March ERCOT staff will schedule workshops with stakeholders to solicit feedback and alternatives. This will result in an improved product and may result in modifications to what is presented today.