



CAR – Prompt

Market Power and Mitigation Design for the Prompt Capacity Auction

Andrew Copland

ECONOMIST

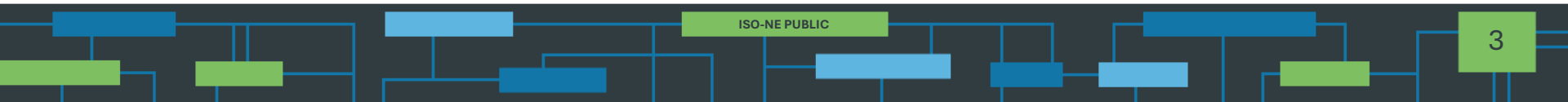


Earliest Target Effective Date: Q2-Q3 2026

- **Consistent with the scoping objectives** outlined at the [July 2024 MC](#), the **CAR-Prompt mitigation design conforms current market rules and processes for the prompt auction**
 - Some market mitigation rules must be updated to reflect mechanics of CAR-P design
 - For example, resources will no longer submit “de-list bids,” but rather offer capacity through **priced supply offers**
- Today, the ISO will be discussing proposed changes to seller-side market mitigation, highlighting how each element is expected to change
 - Additional details will be presented to the MC over the coming months
- The ISO expects to discuss conforming changes to buyer-side mitigation rules starting at the May MC

Seller-Side Mitigation Design in CAR-Prompt

- Today's presentation reflects the ISO's current thinking regarding seller-side mitigation in the prompt capacity market
- The ISO welcomes stakeholder feedback on today's discussion and proposed design



Competitive Capacity Market Supply Offers

- As discussed in previous ISO presentations, a competitive capacity market supply offer should reflect incremental (avoidable) costs a resource expects to incur as a result of receiving a Capacity Supply Obligation (CSO)
- Due to the uniform clearing price, competitive suppliers (i.e., those without market power) are not incentivized to offer capacity above their avoidable costs
 - See the ISO's [March MC Presentation](#) on price formation
- However, participants with market power may attempt to withhold capacity from the auction
 - Doing so could raise the capacity clearing price, potentially increasing total revenues the participant receives
 - This reduces social surplus by creating a deadweight loss and yields inefficient market outcomes

IMM Cost Review Process in the Forward Capacity Auction (FCA)

- In the FCA, the primary tool the ISO uses to promote competitive auction behavior from suppliers is the **IMM cost review and conduct test** process:
 - A resource seeking to “sell” capacity at or above a predetermined threshold price (i.e. the Dynamic De-List Bid Threshold (DDBT)) is required to submit a Static De-List Bid
 - Must attach a cost workbook explaining the basis for the de-list price chosen
 - Submitted to the IMM roughly 7.5 months before the FCA is conducted
 - The IMM works with the stakeholder to develop an estimate of the resource’s competitive offer price based on avoidable costs documented in the submission

IMM Cost Review Conduct Test in the FCA and Mitigation

- To perform the **conduct test**, the IMM compares their estimated competitive offer price (plus a 10% margin) to the de-list bid price submitted by the participant
 - If the resource's submitted de-list bid price does not exceed the IMM's estimate (plus 10%), it does not face additional seller-side market power review actions
 - If the resource's submitted de-list bid price exceeds this estimate (plus 10%), it is potential evidence of economic withholding and may be subject to mitigation
- Resources that **fail both the conduct test and the pivotal supplier test face a binding offer ceiling** at the IMM's estimated competitive offer price

Overview of Current ISO Design for CAR-Prompt Seller-Side Mitigation

- In the ISO's current design, most key components of seller-side market power mitigation framework will remain substantively unchanged, including:
 - a published minimum price for offers subject to IMM cost reviews:
 - This is the DDBT in the FCA;
 - This will become the **Capacity Cost Review Threshold** (CCRT) in CAR-P;
 - a consultation window for participants to collaboratively work with the IMM when developing their offers;
 - resources submit their minimum acceptable price for receiving a CSO, including cost workbook documentation if necessary, using:
 - de-list bids in the FCA;
 - priced **Capacity Supply Offers** in CAR-P;
 - the principles of competitive offer formulation used in cost reviews;
 - the application of a cost review-based conduct test and pivotal supplier test for identifying non-economic resource offers; and
 - the treatment of mitigated resources

Overview of Proposed Changes to Seller Side Mitigation Review for Prompt Auction

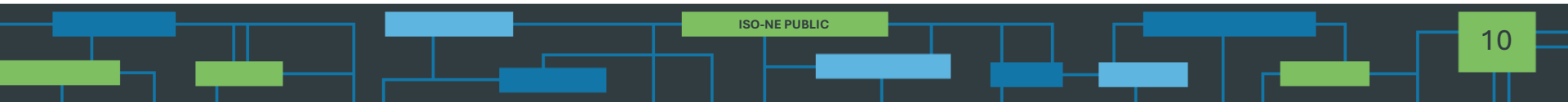
Supply Side Mitigation Component	FCA Rule	Proposed Change under CAR-P
Threshold for offers subjected to cost reviews	Offers above the DDBT reviewed by IMM	Name changed (CCRT)
Conduct test	Fail test if the submitted offer price is greater than the IMM's estimated competitive offer price (plus 10% margin)	No change
Pivotal supplier test	Fail test if resource is controlled by a pivotal supplier	No change
Actions applied to mitigated resources	If a resource fails both the conduct test and the pivotal supplier test, offers are subject to the IMM's competitive price estimate	No change

Expected Participation of Capacity Resources in the Forward and Prompt Auctions

- In the FCA, all “listed” (or “existing”) capacity resources receive a CSO, unless the resource is “delisted” (such as through a Static or Dynamic De-List Bid)
 - This includes non-commercial capacity that has previously received a CSO
- As noted at the March MC, non-commercial capacity will not participate in the prompt capacity auction
- Consistent with this change, current ISO thinking is that all commercially operating resources that are able to sell capacity will be required to participate in the prompt auction
- We will revisit this element in greater detail after reviewing the components of seller- side mitigation reviews

SELLER-SIDE MITIGATION FOR ECONOMIC WITHHOLDING

Discussion of Cost Review Process in FCA and CAR-Prompt



Core Components of Seller–Side Mitigation Review for Economic Withholding

Four key elements of economic withholding-related mitigation design rules in the Forward Capacity Market:

1. **The Dynamic De-List Bid Threshold:** Sets a boundary for offer prices subjected to IMM cost reviews
2. **Cost Review Process (Conduct Test):** Defines how the IMM evaluates capacity supply offer prices and calculates a resource's competitive offer price
3. **Mitigation Trigger (Pivotal Supplier Test):** Defines what conditions must be satisfied for a resource to be subject to mitigation
4. **Application of Mitigation:** Defines what actions a mitigated resource faces in the auction

This section will explain how each of these current core components is expected to carry forward to the prompt design

FCM Element (1): The Dynamic De-List Bid Threshold

- In the FCA, the Dynamic De-List Bid Threshold (DDBT) serves as the line of demarcation for determining which bids are subject to IMM cost reviews
 - Only capacity that is being offered at or above this threshold is subject to additional cost review by the IMM for potential exercise of seller-side market power
- The threshold is developed and published well in advance of the FCA

Refresher: Development and Application of the DDBT

- Currently, the DDBT is set using three inputs:
 1. The auction clearing price of the previous FCA,
 2. The total quantity of CSO awarded in the previous FCA, and
 3. The MRI Demand Curve for the upcoming FCA
- Mathematically, the DDBT is the average of two prices:
 1. the previous FCA's actual system-wide capacity clearing price; and
 2. the price at which the previous FCA's total cleared CSO quantity would intersect with upcoming FCA's MRI Demand Curve
- This average is then subject to maximum and minimum constraints, plus a small dynamic price adder to yield the “final DDBT”
 - See the [ISO's 2020 DDBT Update Filing](#) for more information

Equivalent Prompt Component: Capacity Cost Review Threshold (CCRT)

- The ISO intends to adopt the DDBT as the Capacity Cost Review Threshold
- For the prompt design, the ISO is not currently recommending any methodological changes to the calculation of the CCRT
 - The ISO will revisit the CCRT's calculation methodology as part of CAR-SA, given the additional auction design changes (new accreditation framework, seasonal capacity market)
- The CCRT will be used as the boundary for capacity supply offers subject to IMM cost review

FCM Element (2): IMM Review of De-List Bids

- In the FCA, resources seeking to offer capacity priced below the DDBT are not subject to a cost review
- Resources interested in offering capacity priced at or above the DDBT must explain the cost basis for their chosen price by submitting a cost workbook to the IMM in advance of the auction
- The IMM uses each resource's submitted workbook, attached documentation and models, and insights gained from pre-submission collaboration with the relevant market participant to develop the IMM's estimate of the resource's competitive offer price

Developing Competitive Offer Prices Based on Participant Submissions

- As discussed in previous MC presentations, a resource's competitive offer price depends on the costs it expects to incur as a result of receiving a Capacity Supply Obligation
- Participant offers can include:
 - Any going forward costs that a resource only expects to face if it receives a CSO
 - If the resource expects to operate differently depending on whether it receives a CSO or not, it may include identifiable incremental operating costs (less any incremental energy or ancillary service market revenue)
 - Amortized portions of investments that will only be made if the resource receives a CSO in the upcoming capacity auction
 - Pay for Performance-related costs, including associated risks and the opportunity cost of foregone performance payments

Guiding Principles Behind the Conduct Test

- The goal of the cost review process is to differentiate resources offering capacity at a high price due to high avoidable, CSO-induced costs from resources potentially seeking to economically withhold capacity from the market
- The conduct test compares the resource's submitted offer price against a threshold based on the IMM's calculated competitive offer price
 - If the resource's submitted offer price is less than or equal to the IMM-developed competitive offer price (plus a 10% margin), the resource passes the conduct test
 - If the resource's submitted offer price exceeds the IMM-developed competitive offer price (plus 10%), the resource fails the conduct test

Equivalent Prompt Component: IMM Review of Priced Offers

- The ISO is intending to keep the cost review process largely unchanged in the prompt auction
 - Only resources seeking to offer capacity at or above the CCRT will be required to submit cost documentation in advance to the IMM for review
 - Consistent with the underlying economics, the IMM will continue to calculate the competitive capacity offer price for each resource based on their demonstrated CSO-induced avoidable costs
 - The IMM will develop its own estimate of a resource's competitive offer, based on collaborative discussions with the relevant participant and documented avoidable costs
- The conduct test will compare the IMM's estimated competitive offer price against the participant-submitted offer price
- The ISO intends to keep the same conduct test threshold
 - A resource's offer will fail the conduct test if its submitted capacity supply offer price is greater than the IMM's estimate (plus 10%)

Results of the Cost Review Process

- In the FCA, the IMM notifies resources of the results of the conduct test and the IMM-calculated competitive offer price
- A resource may continue offering at its initial submitted price, or lower its bid price (including withdrawing their Static De-List Bid entirely) during the Static De-List Bid Finalization Window
- The ISO intends to keep this feature in CAR-P
 - Once notified of the IMM's cost review determination, a resource will be able to keep its initial offer price or reduce its offer price

FCM Element (3): Pivotal Supplier Test

- The pivotal supplier test is a structural test of market power in the capacity market
- A supplier is considered pivotal if its capacity is needed to satisfy system or zonal level requirements
- At a high level, pivotal suppliers can exert market power by removing capacity at prices above competitive levels in order to raise the market clearing price
 - Gain a “portfolio benefit” by uneconomically withholding capacity from the market
- When calculating a supplier’s portfolio, all resources that are under the supplier’s control are counted
 - Note: Market Participants are obligated to inform (and update) the ISO of relevant corporate relationships with other ISO-NE Participants

Equivalent Prompt Component: Continued Use of the Pivotal Supplier Test

- The ISO is intending to keep the pivotal supplier test and its application with minimal revisions
- All resources seeking to submit a priced supply offer above the CCRT will be required to submit cost workbook documentation
- In order to face binding mitigation, a resource must:
 - Submit a capacity offer priced above the CCRT;
 - Fail the conduct test; and
 - Be controlled by a pivotal supplier

FCM Element (4): What Happens to Mitigated Resources

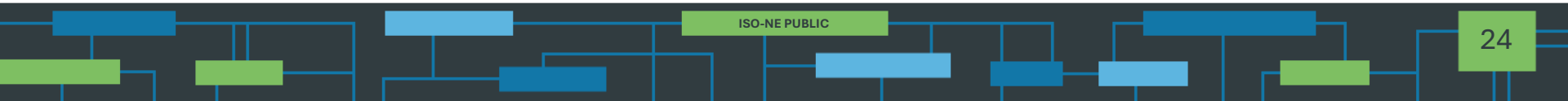
- In the FCA, only resources owned or controlled by a pivotal supplier and that sought to delist capacity at a price above the conduct test threshold face binding mitigation
- A mitigated resource's de-list bid price is set at the minimum of: (i) the resource's finalized de-list bid price, and (ii) the IMM's competitive offer price
 - Resources are not mitigated to prices below the DDBT
 - Using the IMM's competitive offer price ensures these resources are not able to raise the capacity clearing price above competitive levels

Equivalent Prompt Component: Mitigation in the Prompt Auction

- The ISO intends to keep the current treatment of mitigated resources in the prompt auction
 - Offers that are mitigated by the IMM will be subject to an offer cap at the IMM's calculated competitive offer price
 - Resources will not be mitigated below the CCRT

SELLER-SIDE MITIGATION FOR PHYSICAL WITHHOLDING

Discussion of Participation Requirements in the FCA and CAR-P Designs



Supplier Participation Rules in the FCA

- In the FCA, all existing capacity resources are administratively entered into the next FCA
 - If an existing resource takes no action, it is entered into the subsequent auction as a price taker
 - To avoid being a price taker, the resource must de-list from the FCA
- Effectively, this structure creates a *capacity offer requirement* for existing resources
 - This group of resources includes some non-commercial resources that cleared in a previous auction

Current Thinking Regarding the Participation Requirements for the Prompt Auction

- The ISO is proposing to formalize participation rules for the prompt auction through a capacity offer requirement that would include all resources that:
 - are commercially operational on or before the relevant cutoff date for the upcoming prompt auction;
 - are capable of providing capacity; and
 - have not previously submitted a deactivation request for the relevant CCP
- At a high level, any resource subject to the requirement will need to ensure the total MW quantity offered equals the resource's capacity value for the auction
 - Capacity that is not included in a resource's aggregate priced supply offer will be included in the auction as a price taker

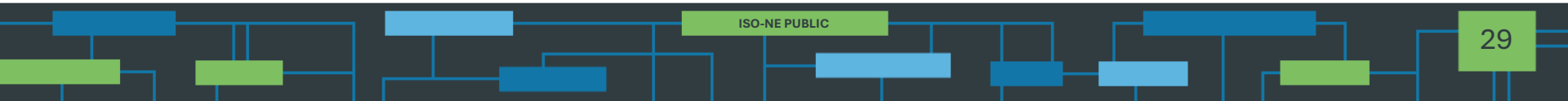
Simplified Example Demonstrating the Capacity Offer Requirement

- Consider a commercially-operational generator with QC equal to 100 MW
- This resource would be expected to offer a total of 100 MWs into the prompt auction, for example:
 - Offering all 100 MWs at \$1.29/kW-mo; or
 - Offering 30 MWs at \$1.00/kW-mo, and 70 MWs at \$3.00/kW-mo
- If the resource faced very high costs for some of its QC MWs should those MWs receive a CSO, that could be reflected in its offer, for example:
 - Offering 90 MWs at \$2.00/kW-mo, and 10 MWs at \$9.50/kW-mo
- Keeping in mind, any MWs offered above the CCRT would face IMM cost review

Conforming Offer Requirements for a Prompt Auction

- There are several reasons why conforming the capacity offer requirement to apply to all resources is consistent with the prompt capacity auction design
- Ensures all commercial resources are treated similarly in terms of both expected capacity market participation and seller-side market power mitigation
- Given the limited nature of available Capacity Network Rights (CNR), before costly transmission upgrades are required for resources seeking to interconnect, a resource holding CNR inherently creates a partial barrier to new entry
- In line with other elements of the CAR-P design, the revised requirement simplifies how resources participate in the capacity market

CONCLUSIONS AND ROADMAP



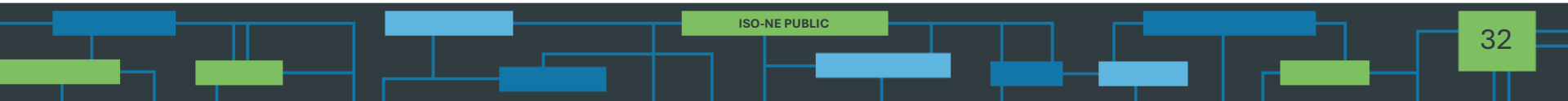
High Level Takeaways for Seller-Side Mitigation in CAR-Prompt

- Much of the seller-side market power mitigation framework from the FCA will be retained in the CAR-P design
- Resources seeking to offer capacity above a threshold price will be required to undergo a cost-workbook review from the IMM
- Capacity offered by a pivotal supplier that fails the IMM's cost review will face binding mitigation
- Moving to a prompt auction requires updating participation rules for supply resources
 - In the prompt auction, all commercial resources capable of providing capacity will be required to offer it into the auction
 - Resources with high costs will be able to reflect those costs in their priced supply offers

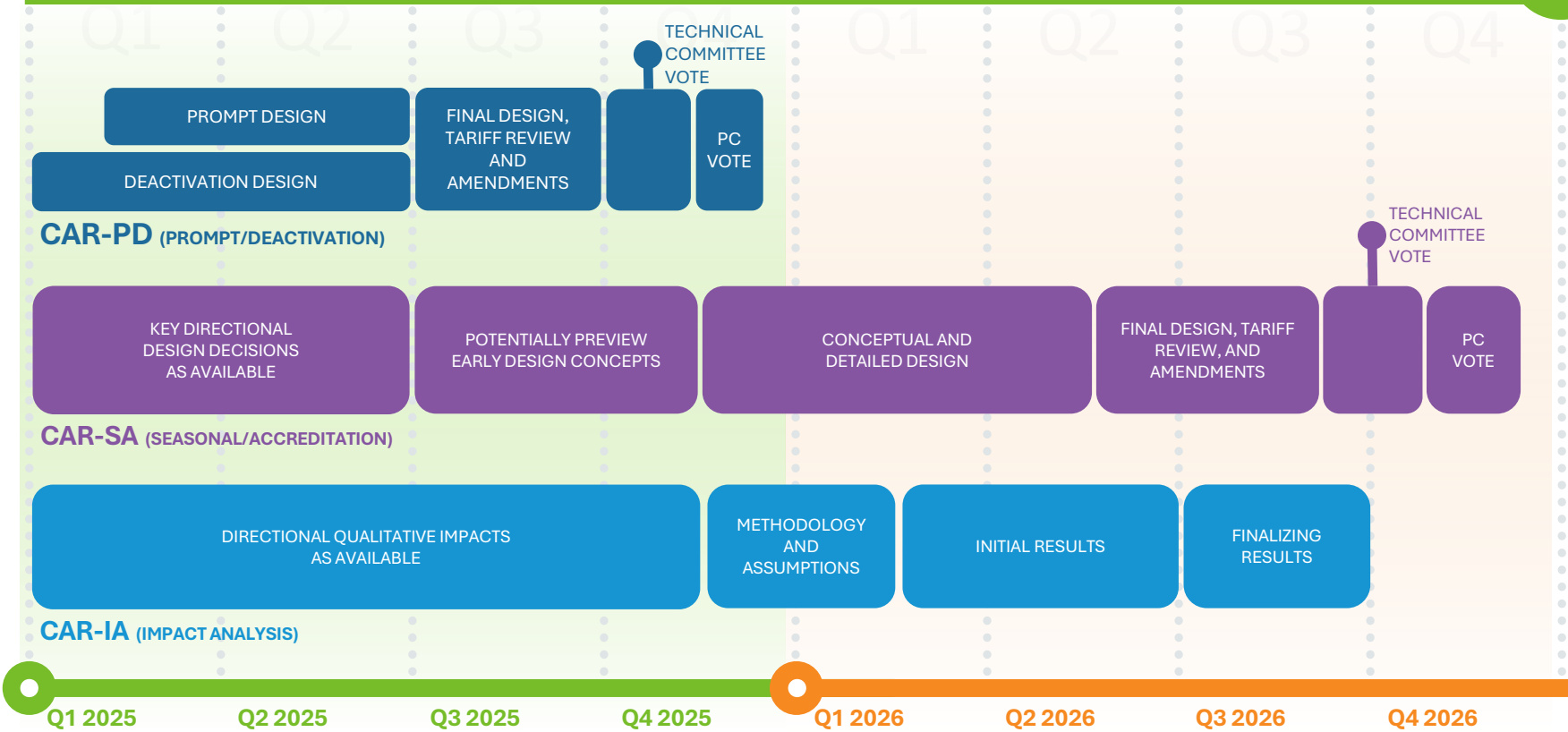
Questions

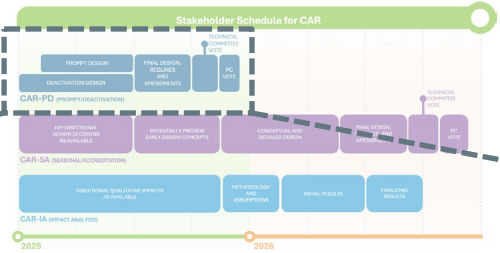


STAKEHOLDER SCHEDULE

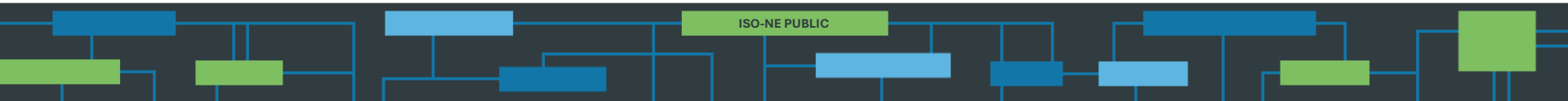
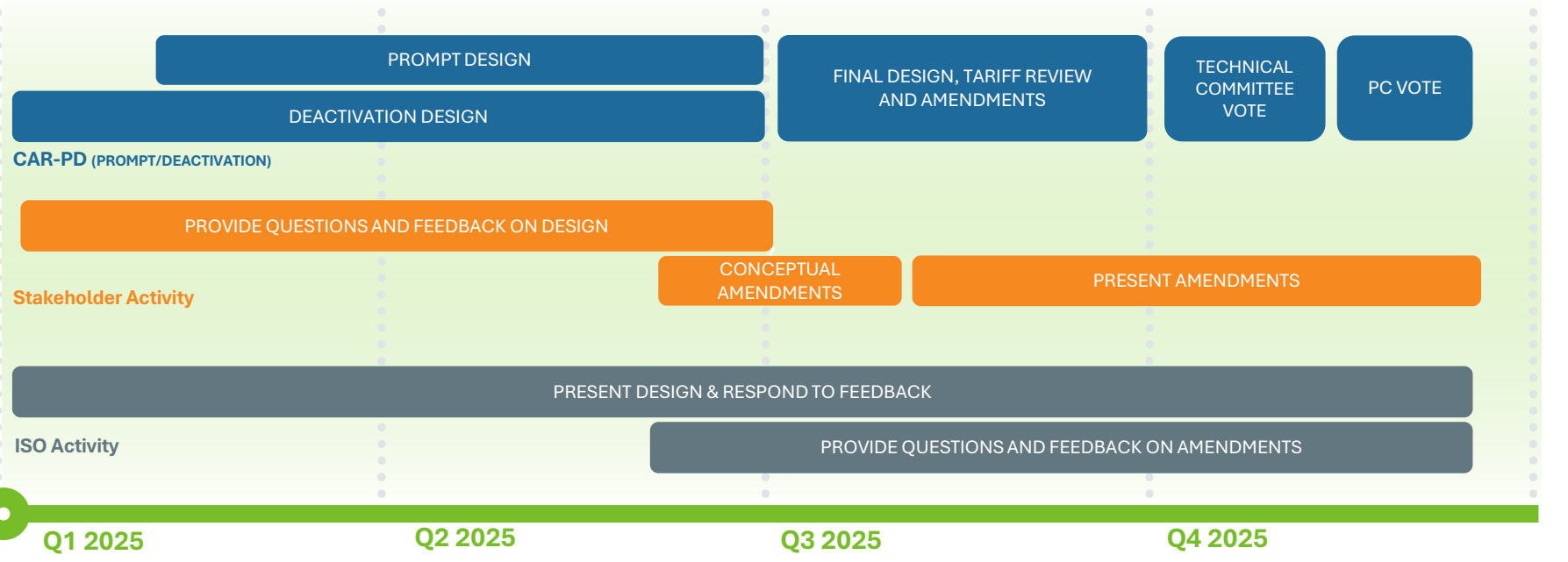


Stakeholder Schedule for CAR





Stakeholder Schedule for CAR



CAR-Prompt Topic Schedule

The list below provides a preliminary projection of when committee discussions will begin on the following CAR-Prompt topics:

Prompt Topic	Projected Start of Committee Discussions
Price Formation and Offer Formation	March 2025
Non-Commercial Participation	March 2025
Auction Design and Structure	March 2025
Activity Schedule Overview	March 2025
ICR Process	April 2025
Market Power and Mitigation	April 2025
Capacity Interconnection Service	May 2025
Resource Qualification Criteria & Process	May 2025
Activity Schedule Details	May 2025
Resource Auditing, Financial Assurance, Settlements, CSO Trading Activities	June 2025

CAR-Deactivation Topic Schedule

The list below provides a projection of when committee discussions will begin on topics related to the deactivation framework:

Deactivation Topic	Projected Start of Committee Discussions
Introduction and notification timeframe	January 2025
Additional design details on notifications and information release	February 2025
Reliability reviews	March 2025
Market power evaluation framework	March 2025
Market power evaluations detail	April 2025
Follow-ups and additional design details	May 2025
Introduce Tariff Changes	June 2025