Updated Proposal: A Registry to Track New Load & Supply Commitments

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A Registry is a Practical Next Step for RBP and Connect & Manage

Tracking Bring-Your-Own obligations and cost responsibility for RBP and Connect & Manage is a major logistical challenge for both PJM and States. Requiring each State and/or Utility to develop separate processes is slow, inefficient, and likely to introduce error. A Registry:

- Creates a single source of truth for tracking new loads and new capacity resources and facilitates identification of duplicative load requests.
- Can be easily incorporated into State requirements or utility tariffs, providing an accelerated implementation schedule.
- Resolves jurisdictional complexity associated with whether large loads are PJM members by allowing tracking independent of PJM membership.
- Facilitates tradeable “New Entry Token” (“NET”) Credits for tracking new resources that qualify for Bring-Your-Own and Connect & Manage obligations, whether imposed at the PJM, utility, or state level.
- **Optional:** NET Credits facilitate cost allocation that is compliant with the Ratepayer Protection Pledge and Governors/NEDC Joint Principles.

“New Entry Token” Credit Mechanics:

1. New capacity suppliers mint a “New Entry Token” or “NET Credit” in the Registry, on a MW-for-MW basis (in UCAP), when they reach COD.

   - A qualified supplier can sell NET Credits at any point, allowing for merchant or contracted development, as well as the opportunity to market “newness” independent from COD.

2. New large loads buy and then retire NET Credits from new capacity suppliers or other large loads to demonstrate compliance with BYO-type obligations.

3. NET Credits would track year of new capacity entry, allowing a large load to value its own speed-to-power by purchasing Credits associated with its target operation date.

4. New large loads could buy, sell or remarket NET Credits until such time as the NET Credits are retired, allowing for effective risk management.

5. A new large load would “retire” the appropriate number of NET Credits to extinguish its Connect & Manage obligation .

Role of NET Credits in the Administration of the Reliability Backstop Procurement

Goal:

Create a mechanism by which individual large loads can take on the financial responsibility for new supply, independent of whether they are PJM members, consistent with the Ratepayer Protection Pledge and Governor/NEDC Joint Principles.

Step #1: PJM conducts centralized procurement as proposed, with costs of the RPB procurement are initially allocated to zones and subsequently to LSEs/EDC, as proposed by PJM.

Step #2: PJM "stocks" the Registry with NETs Credits for each MW of procured capacity (UCAP), available for retirement when the capacity reaches COD.

Step #3: Large loads purchase NET Credits out of the Registry by financially "stepping into the shoes" of the LSE/EDC and assume financial responsibility for the new supply under rates/terms/conditions established by the relevant State.

Optional Step #4: State may require Large Loads to remain in Connect & Manage status until they purchase and retire the appropriate number of NET Credits to ensure that new Large Loads comply with Governors/NEDC Proposal.

Step #5: States allocate costs of un-purchased NET Credits, as proposed by PJM. States may elect to make unsold NET Credits available for purchase or to support economic development goals.

Role of NET Credits in Proposed Connect & Manage Rules

- Registry allows all parties to track BYO-commitments and whether Connect & Manage status applies under a variety of policy outcomes.

- Example: Large Loads that connect to the grid before their BYO is online are subject to Connect & Manage until their supply is online. NET Credits provide a transparent mechanism to track how much of the load is subject to C&M.

- Example: NET Credits can be retired when the Load and qualifying Supply are both online.

  - 1 MW UCAP BYONC + reserve margin % cover 1 MW of new large loads

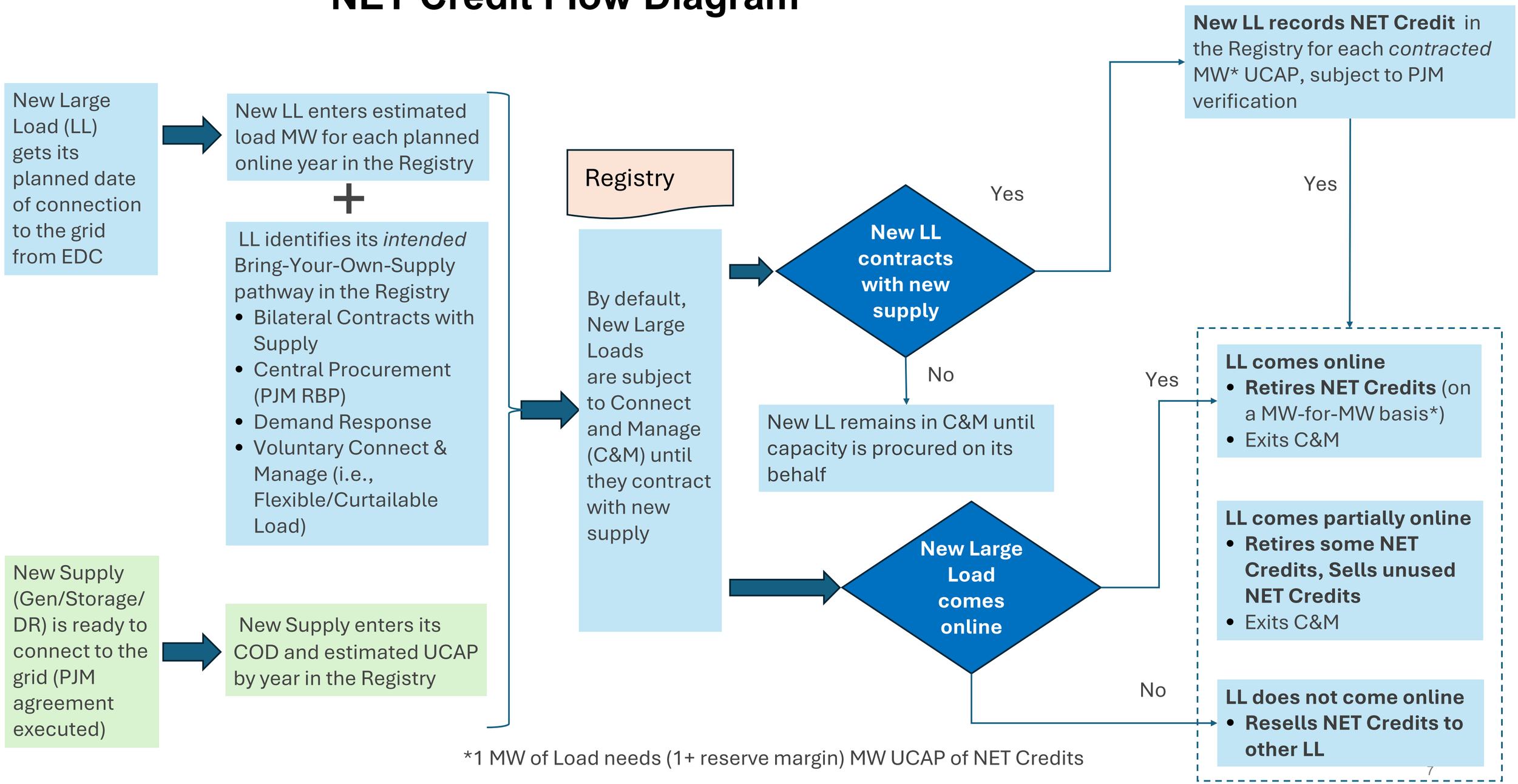
  - If operational BYONC (except DR) fails to materialize during a C&M event, the load is still exempt

- Large Loads and BYONC may be in the same LDA or outside the LDA. If the LDA is import constrained, the Large Load would be subject to C&M for the portion that is not deliverable, considering CETO/CETL and nested zone rules.

Additional Benefits of a Registry Approach

- Easy tracking on a multi-jurisdictional basis to demonstrate compliance with BYO-type obligations (*for states that want to utilize it)*.
  - If states or utilities adopt different BYO requirements, that could be accommodated as is the case for different type of REC products today.
- Enables retail shopping by allowing a Large Load to transfer rights and obligations to a new EDC or LSE as it switches competitive suppliers.
  - Otherwise, we risk locking Large Loads into a supplier relationship with the EDC or a specific LSE, which harms retail choice structures.
- Facilitates risk management for new Large Loads with uncertain in-service dates by allowing transfers (or shrinks/expands operations)
- Allows financing counterparties to easily evaluate the status of the facility.
- **Optional:** The Registry could include a “non-emitting” or “clean” flag to facilitate purchases and/or sales of clean capacity.

NET Credit Flow Diagram



*1 MW of Load needs (1+ reserve margin) MW UCAP of NET Credits

Registry Examples

Example:

- States or utilities could incorporate the requirement that a new LLA have new entry tokens (NET) Credits from the Registry as a transparent means of enforcing BYO-type requirements.

  - Example #1 - State Driven: State A passes a law requiring new LLAs to meet a certain percentage of their load from new capacity. State A could require the LLA to provide NET Credits from the Registry.

  - Example #2 – Utility Driven: Utility X establishes a new large load tariff requiring LLAs to meet a certain percentage of their load from new capacity. Utility X could require the LLA to provide NET Credits from the Registry as a condition of receiving retail service.

  - Example #3 - PJM Driven: PJM adopts a “Connect & Manage” requirement for new LLAs that don’t bring new capacity to market. PJM could require the LLA to provide NET Credits from the Registry as a condition of receiving retail service.

  - Example #4 – Customer Driven Bilateral: Big Tech 1, a large new data center, enters a bilateral contract arrangement with a new generation resource. The new resource registers with PJM and assigns NET Credits to Big Tech 1, demonstrating compliance with PJM’s Connect & Manage requirement and enabling finance.

  - Example #5 – Customer Driven RBP: Advanced Manufacturer 1, a new large load agrees to purchase NET Credits under contract to the EDC/LSE it is connecting to. EDC/LSE transfers the NET Credits to Advanced Manufacturer 1 upon execution of an appropriate agreement.

Questions & Risks

- Who manages NET Credits valuation and ELCC risk?

Proposal: ELCC is locked at the time of the delivery year in which the supply resources reaches COD. While this does not entirely address risk, it reasonably balances commercial needs of new large loads and ratepayer protection.

- What happens when the market is long?

Proposal: All new LLAs should be automatically placed into Connect & Manage status until they secure NET Credits equal to their load, grossed up for reserve margin, with the caveat that if the supply-demand balance exceeds Point B on the VRR curve (i.e., there is sufficient capacity being built and offering into the auction to produce competitive prices), then LLAs will be included in the capacity auction without requiring them to demonstrate NET Credits.

- How are locational requirements enforced?

Proposal: NET Credits would include a zonal attribute. Buyers of the NET Credits would hold any deliverability risk pursuant to today's rules.

- Does this require a pro forma agreement to make projects transactable?

Proposal: A pro forma governing minimum terms for entry to the Registry is not necessary, as non-performance risk is handled through standard PJM market rules.

GATS Case Study:

The creation of PJM's Generator Attribute Tracker (GATS) provides a useful model for tracking both PJM-jurisdictional and non-jurisdictional transactions in a single, region-wide program, that was incorporated by reference into State regulatory programs.

GATS was specifically designed to simplify efforts to track *retail* energy sales – which is what we need here!

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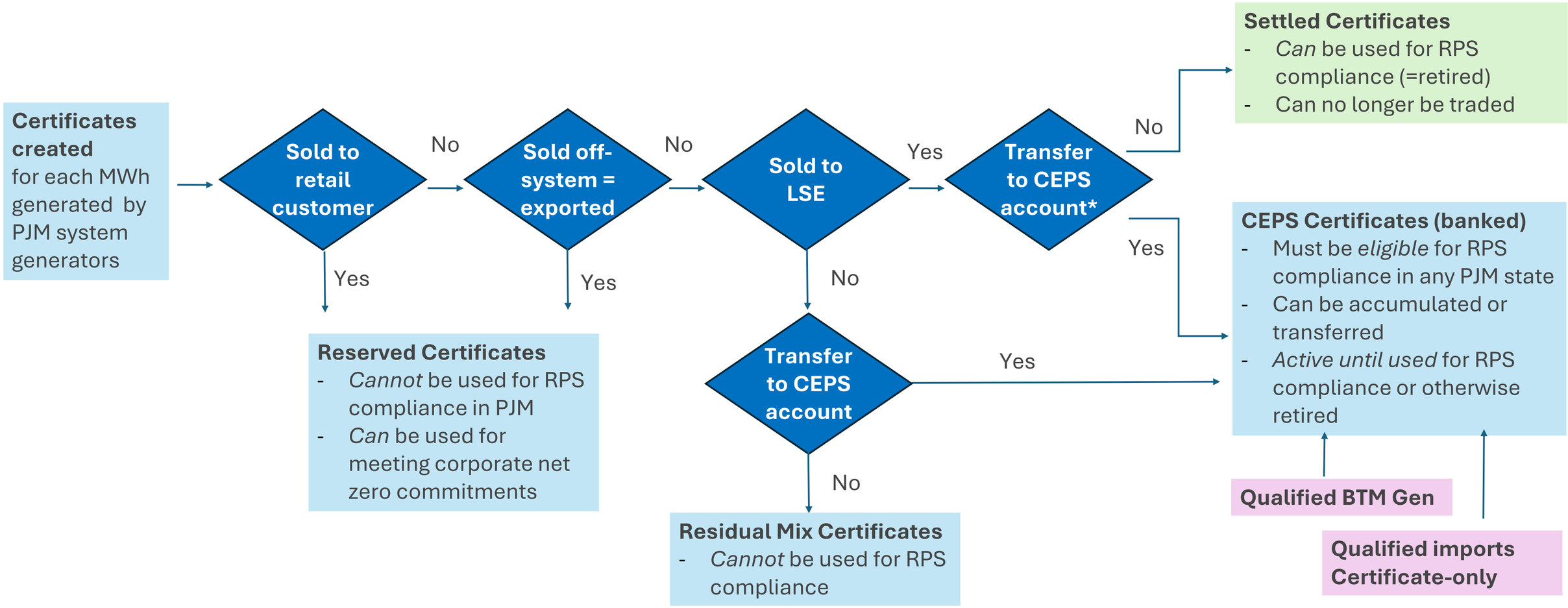
"PJM has consistently stated that it is working to develop a tracking system, provided that the funding and design details could be resolved, that could be used by entities that serve retail load to satisfy various state regulatory requirements imposed on such entities. PJM is uniquely positioned to provide such a tracking system given its role as administrator of the regional wholesale energy market, and there are efficiencies to be gained by having a single system that could be used by entities that serve load in multiple states within the PJM market."

-- PJM Comments to the PA PUC in 2004 in Docket No. M-00051865

Potential Registry Model: GATS

- The GATS database was established to provide PJM members with an administratively simple, cost-effective means of demonstrating compliance with existing and evolving state policies and regulations, such as RPS and fuel mix and emissions disclosures.
- PJM initiated the GATS in response to inquiries from state commissions, including New Jersey, Maryland, Delaware, Illinois, Ohio, Virginia, Illinois and the District of Columbia.
- The GATS database maintains a one-for-one match between energy produced and energy consumed in PJM, as well as imports and exports and "…will also support clean/green energy products offered for retail sale."
- The GATS was launched by a Special Purpose Entity - PJM Environmental Information Services - and became operational on April 15, 2005.

GATS Certificates flow from the 2005 Concept Paper



GATS was developed to meet a need to track new renewable supply that meets state goals.
The NET Credit Registry would serve a very similar purpose of tracking new supply that mitigates need for C&M for LLs.

*A **Clean Energy Portfolio Standard (CEPS)** account holds unsold, unused, CEPS-Eligible Certificates. It enables banking the Certificates beyond the Trading Period. States determine CEPS eligibility.

Tracking for New Large Loads/Supply is Similar to Tracking Renewable Energy Credits

Parameter	GATS	Registry
Account Holders (among others)	- Generators - LSEs	- Generators - LSEs - Large Loads
Information collected	- All generation resources, - All MWh and kWh produced, - All load served within the PJM Control Area	- New supply resources (generation, storage, DR) - All new large loads within the PJM Control Area - BYONC contracts (new LLA – supply)
Purpose	- Confirmation of RPS compliance by LSEs - Tracking system emissions	- Confirmation of BYONC by LLAs/LSEs - Tracking C&M exposure by LLA/LSE
Functionality	- Creating, tracking ownership of, and retiring RECs - Providing RPS compliance and energy mix data to states and LSEs	- Tying new supply resources to new large loads for BYONC and C&M tracking - Providing BYONC compliance data to PJM, states, LSEs, and large loads
Jurisdiction	- PJM facilitates tracking of non-jurisdictional REC sales	- PJM facilitates tracking non-jurisdictional purchases by non-members

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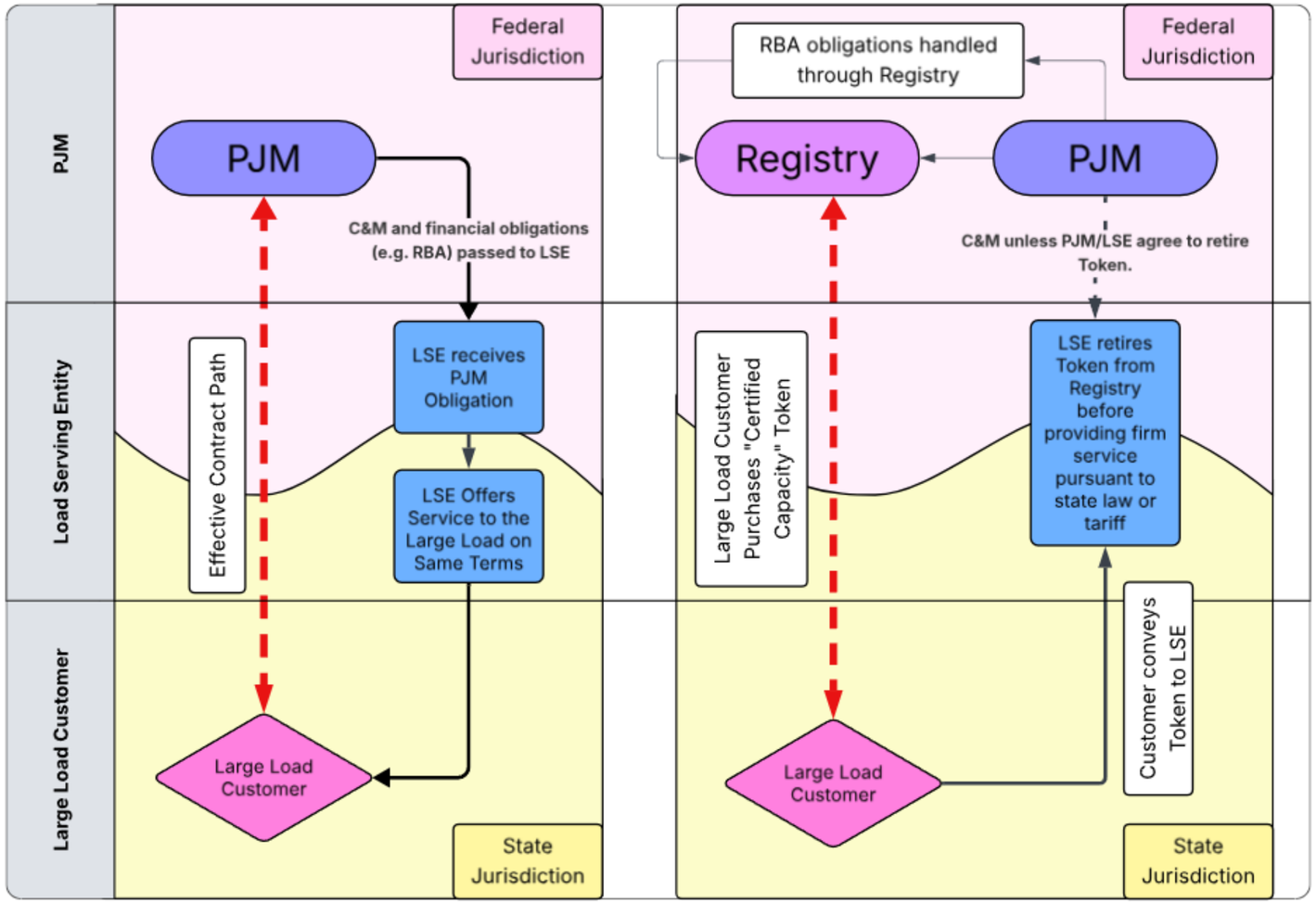
Jurisdictional Framework for New Entry Tokens (NET) Credits

- PJM has jurisdiction over EDCs/LSEs who are parties to the Reliability Assurance Agreement (pink shading).
- States retain jurisdiction over the rates, terms and conditions of sales by those EDCs/LSE to end-use customers, including over cost allocation (yellow shading).
- PJM and the States share jurisdiction over the EDC/LSE (middle).

"New Entry Token Credits" would honor this jurisdictional framework, while minimizing risk for EDC/LSEs and captive customers of those EDCs/LSEs.

The Certified Capacity requirement could be imposed through a utility tariff filing or by other state legal requirement, minimizing changes to existing law.

No requirement that relevant state entity use the Registry – it could adopt a different framework!



States *could* mandate that:

(a) New loads must retire (or be on path to retire) NET Credits before entering into a TSA/ESA;

(b) New loads must retire NET Credits before receiving firm service.

A Variety of Market Design Preferences Can be Accommodated by a Registry

Establishing a registry accommodates a wide range of eventual market design decisions.

1. New large loads will be subject to mandatory Connect & Manage until they BYO.

2. Connect & Manage load will be excluded from the Base Residual Auction until it brings its own supply (UCAP grossed up for reserve margin) to avoid cost-shift and comply with the Ratepayer Protection Pledge and Governors/NEDC Joint Principles.

3. States should be allowed to opt-into RBP procurement for new large loads to ensure that these prospective loads have executed binding supply agreements and that PJM is not procuring orphan capacity that would ultimately be assigned to all LSEs in the zone.

4. Using the BRA to procure for legacy loads and RBP exclusively for new large loads will make cost allocation easier and more transparent.

5. PJM should take independent steps to minimize default risk stemming from the RBP commitments of EDCs/LSEs. States' cost allocation mechanisms are complementary to but not a replacement for guardrails available within PJM procurement processes to protect consumers by ring-fencing costs such that they fall on cost-causers.

Optional: Use Registry to Track Load Growth

- Baseline existing process: PJM load forecast incorporates load adjustments for data centers, all of which are presumed to require firm service. PJM load forecasts underpin target procurement volumes through RPM auctions. If capacity procured through RPM falls short of the need, PJM runs reliability backstop capacity procurement.

Proposed Option for Consideration:

- Unless and until new Large Loads demonstrate (via the Registry) that the Bring-Your-Own-type requirements are satisfied, they are considered Connect & Manage in the load forecast at the zonal level and not modeled in RPM. This will create three distinct types of large loads for planning purposes:

  1. Legacy Large Loads included in the 2026 PJM load forecast will continue to be eligible for firm capacity procured through RPM auctions and firm transmission service, unless they choose co-location and Non-Firm CDS or Interim NITS

  2. New Large Loads that have satisfied Bring-Your-Own-type requirement will also be eligible for firm service (i.e., exempt from Connect & Manage) and modeled in RPM

  3. New Connect & Manage loads will receive Non-Firm service. They will also be eligible for interruptible transmission rates.