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ADER Transition from Pilot to Protocols

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Key Takeaways

ERCOT is advancing the ADER Pilot toward Protocols and is engaging DSWG on design, operational, and implementation items

Current ADER Pilot Baseline and Direction

Current Pilot Baseline

Energy participation limit

500 MW

Ancillary Services limit (Non-Spin and ECRS)

100 MW

Per-QSE participation limit

90%

ERCOT Direction

- ERCOT plans to stay in the ADER Pilot this year while targeted improvements continue.
- ERCOT is working toward a NPRR package rather than rushing a filing that simply recreates today's Pilot.
- The focus this year is on resolving the key design, operations, and implementation questions that will shape a sustainable Protocol-based program.

Key message: ERCOT is using the Pilot to mature the program before locking in Protocol design.

Rationale for the Pilot

- **Growth has accelerated.** Recent ADER growth is larger than what was originally envisioned in the Pilot and is driving new design questions.
- **Key questions still need to be worked through.** Resource type, modeling, dispatch, settlement, telemetry, registration, and DSP impacts all need more definition before Protocol language is drafted.
- **Operations alignment matters.** Future participation limits will continue to depend on what ERCOT Operations and affected DSPs are comfortable supporting under a sustainable design.

What needs to be clearer before drafting the Protocols

- Long-term resource construct
- Modeling and geographic footprint rules
- Operational envelope, reliability constraints, and limit framework
- DSP role, system impacts, and registration workflow.

ADER Pilot Work Plan

Phase 1

Continue the Pilot (Now – Q2 2026)

- Keep the Pilot baseline in place
- Make targeted process/admin improvements
- Track performance, qualification results, and operational issues
- Continue stakeholder discussions in dedicated working sessions, with DSP participation.

Phase 2

Work through design questions (Q2 – Q3 2026)

- Narrow options for resource design, modeling, and telemetry
- Work through limits, footprint, settlements, and DSP system questions
- Continue analysis of zonal vs nodal concepts
- Identify minimum process/system changes needed

Phase 3

Build the NPRR package (Q4 2026)

- Draft and socialize a NPRR package
- Pull together justification, impacts, and transition approach
- Refine Protocol language once the key design items are clearer
- Prepare for broader stakeholder review

Work continues inside the Pilot while ERCOT and stakeholders define the design that should ultimately move into Protocols.

Key Work Areas

1 Registration workflow

Define a cleaner RE, QSE, DSP and ERCOT submission, approval, and update process that can scale beyond spreadsheet/email handoffs.

2 Operational envelope

Work with Operations on sustainable participation limits, reliability constraints, performance checks, and guardrails as ADER growth continues.

3 Resource design and modelling

Clarify the long-term resource construct, technology attributes, and how aggregation footprint should be handled over time.

4 Dispatch and settlement

Keep assessing both zonal and nodal models to inform any future design changes.

5 Performance metrics

Continue monitoring qualification and operational results so they can be factored into upcoming design decisions.

Examples of issues being worked through with stakeholders

Work Area	Issue Raised	Near-term ERCOT Focus
Registration workflow	How ADER registrations and DOTA updates are submitted, reviewed, and approved	Improve the workflow, timing rules, and approval/version controls while evaluating a more scalable registration process.
Registration workflow	How to add new devices as aggregation growth outpaces current registration timelines	Assess whether limited headroom and clearer update rules can reduce repeated filings while protecting operational awareness.
Registration workflow	Whether a NOIE can use a third-party aggregator/QSE that is not the serving LSE	Clarify the authorization, accountability, and customer protection requirements for any delegated or third-party participation model.
Resource design and modelling	How mixed-resource aggregations (e.g., solar + storage) should be registered and represented	Clarify how mixed resources should be listed in DOTA, represented in the aggregation, and validated for participation.
Resource design and modelling	What metering configurations qualify today, including premise-level and front-of-meter arrangements	Define what fits within the current metering and validation boundary and what would require additional design or rule changes.
Dispatch and settlement	Whether ADER should stay under current zonal treatment or move toward nodal / quasi-nodal design	Continue analysis of nodal/quasi-nodal concepts, including node count, thresholds, and operational impacts, before proposing a design change.

Examples above reflect issues raised by stakeholders as ERCOT works through the Pilot-to-Protocols transition.

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Update: CIM Load Rating — Governing Document Change

Description of the Issue

- **GD cap on ADER registration.** The Governing Document requires total ADER response capability at any CIM Load be capped at 100% of the CIM Load rating.
- **How CIM Load ratings are defined.** The rating of a CIM Load is defined as the value estimated by the ERCOT State Estimator for that CIM Load at the time of the ERCOT historic coincident peak Demand, which occurred in 2023. Several of the substations included in current ADERs have grown significantly since 2023.
- **No operational or modeling concerns.** ADER MW values are used for markets and settlements only. Network Applications do not use CLR telemetry. CIM Load Min/Max limits are reasonability thresholds for the State Estimator, not actual transformer or feeder capacity.

Decision and Path Forward

- **CIM Load rating cap being removed.** No changes to existing ADERs are required and no splitting of ADERs is needed. The cap language will be removed from the Governing Document.
- **Thorough document review.** Since the document is being opened, we will be reviewing it thoroughly to identify any other areas that may need to be updated.
- **Engaging with TAC and the Board.** The updated Governing Document will go to the TAC meeting in May and the Board meeting in June for approval.

Removing this cap simplifies the registration process and eliminates complexity for participants.

Updates: DOTA Form Template and Registration Automation

DOTA Form Template Update

- **Enhanced DOTA form.** Developed in collaboration with DSPs and stakeholders to address pain points in the prior form.
- **Streamlined for DSP review.** Clearer field labels and instructions for QSE submitters. Streamlined review sections for DSP validation.
- **Posted on the ADER site on April 15.** Goal is to reduce back-and-forth and improve data quality at submission.

Registration Automation Exploration

- **Collecting business requirements.** Gathering internal requirements and exploring options for automation of the ADER registration process.
- **Exploring automation options.** Evaluating tools and approaches that can scale the registration workflow beyond manual spreadsheet and email handoffs.
- **Details coming in upcoming sessions.** ERCOT plans to share more details with DSWG in the upcoming sessions. Feedback on desired features and operational constraints from the DSPS perspective will be sought.

These updates will be tracked alongside the broader design issues, with progress shared at upcoming DSWG meetings.

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