Long-term Load Forecast for 2025

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Load Forecasting and Analysis

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Overview

- Forecast Components
  - Base Economic Forecast
  - Economic Growth Outlook
  - Electric Vehicle Forecast
  - Crypto Forecast
  - Roof-top Solar Forecast
- Waterfall Methodology
- Annual Energy and Summer Peak Relationship
- Winter Scenarios
- New Methodologies
  - TSP Provided Forecast
  - ERCOT Adjusted Forecast

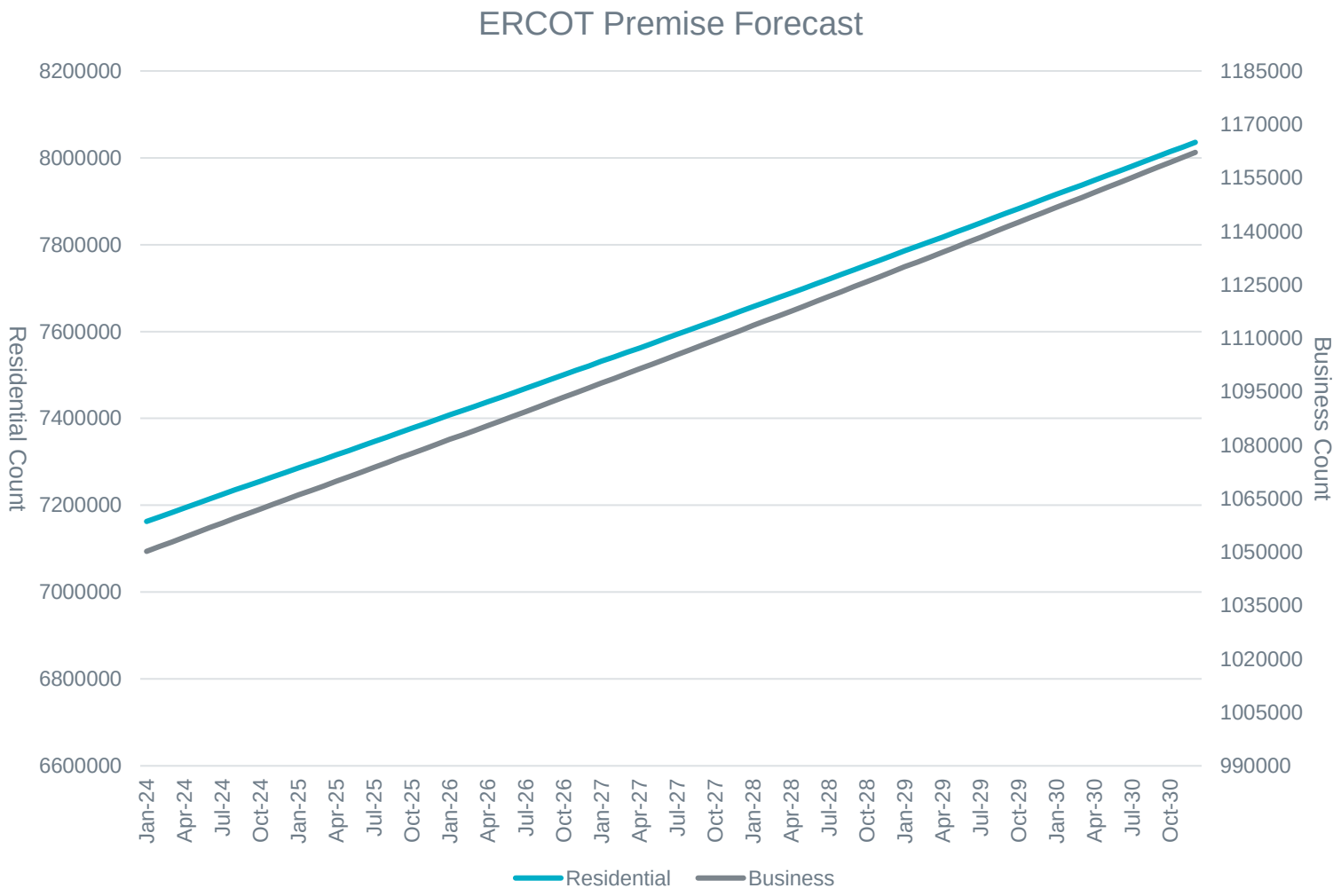
Base Economic Forecast

- **Model Variables**
  - Calendar
  - Weather
  - Economic variables dependent on zonal demographics (main driver)
  - Native load (reconstituted for PV and Winter Storm Uri)

- 15 weather year forecasts created for each zone and ranked by year and month

- The 50/50 forecast is calculated by averaging across 15 weather years and mapping to a mild historical year (2008)

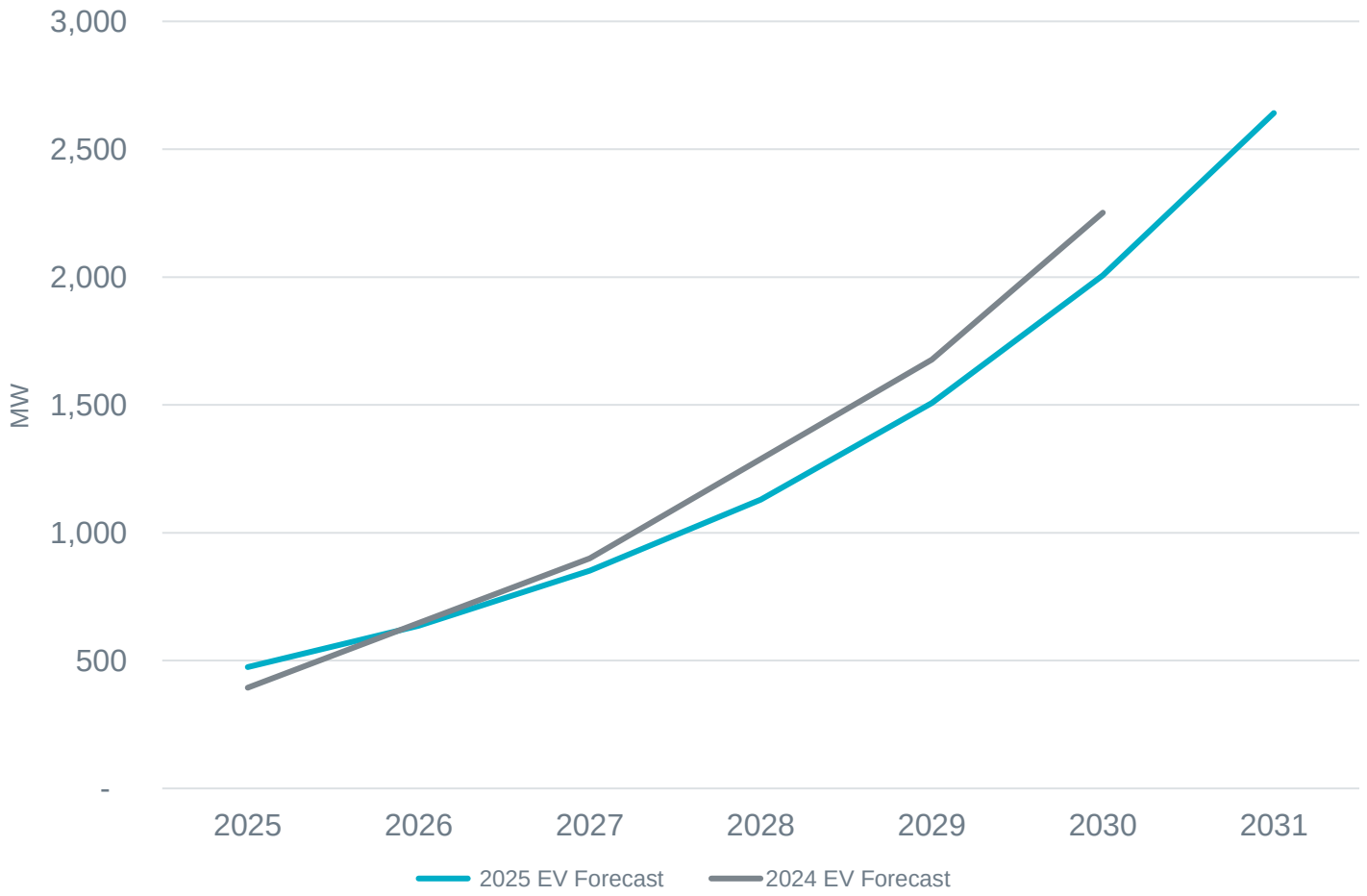
Base Economic Outlook



- Base economics shows steady growth in both residential and commercial sectors

Year	Base Growth Rate
2026	1.2%
2027	1.3%
2028	1.2%
2029	1.2%
2030	1.2%
2031	1.1%

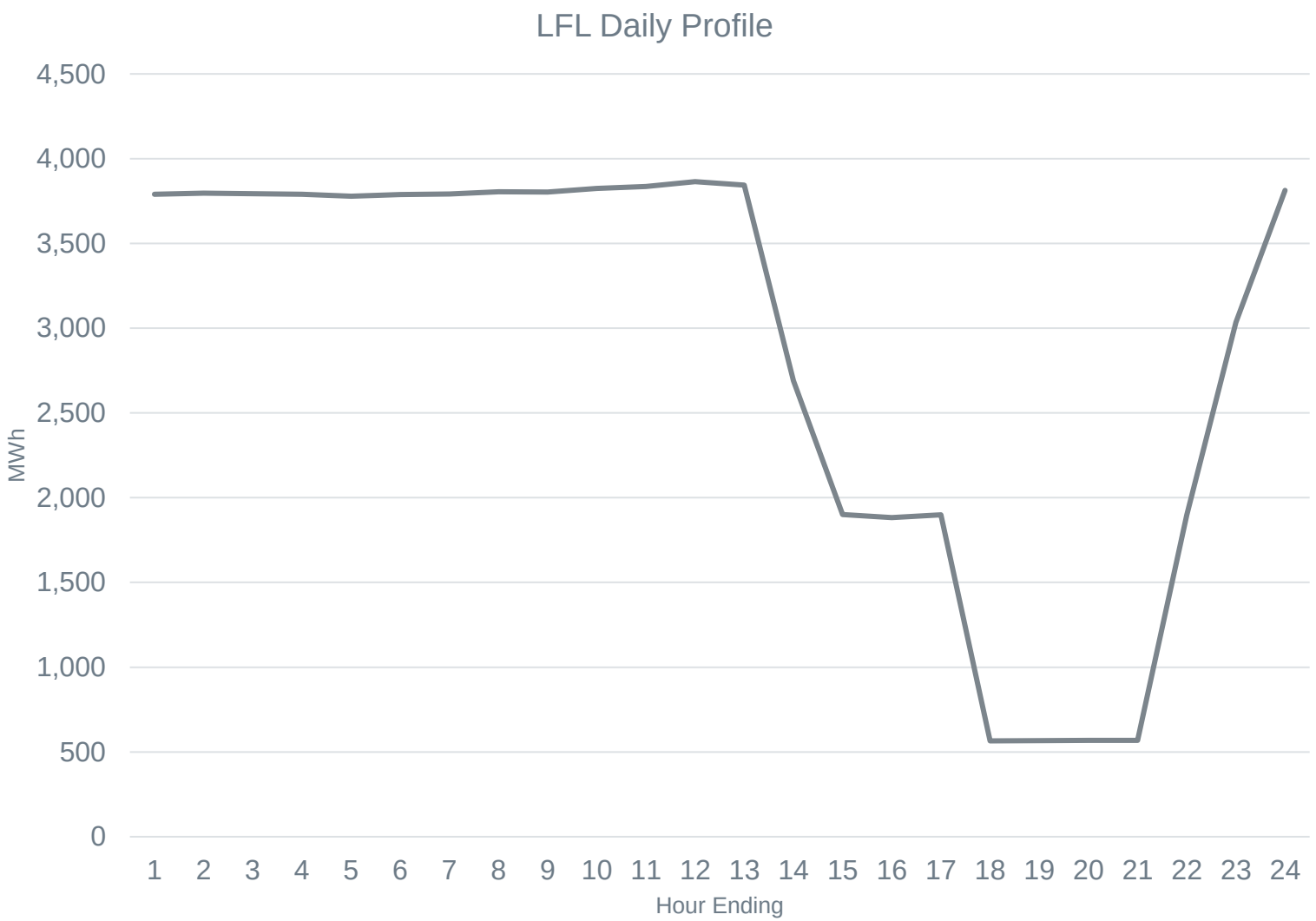
EV Forecast and Outlook



- The EV outlook is growing slightly slower than anticipated due to decline in sales

Year	EV Max Charging (MWh)
2025	475
2026	636
2027	852
2028	1,130
2029	1,507
2030	2,007
2031	2,642

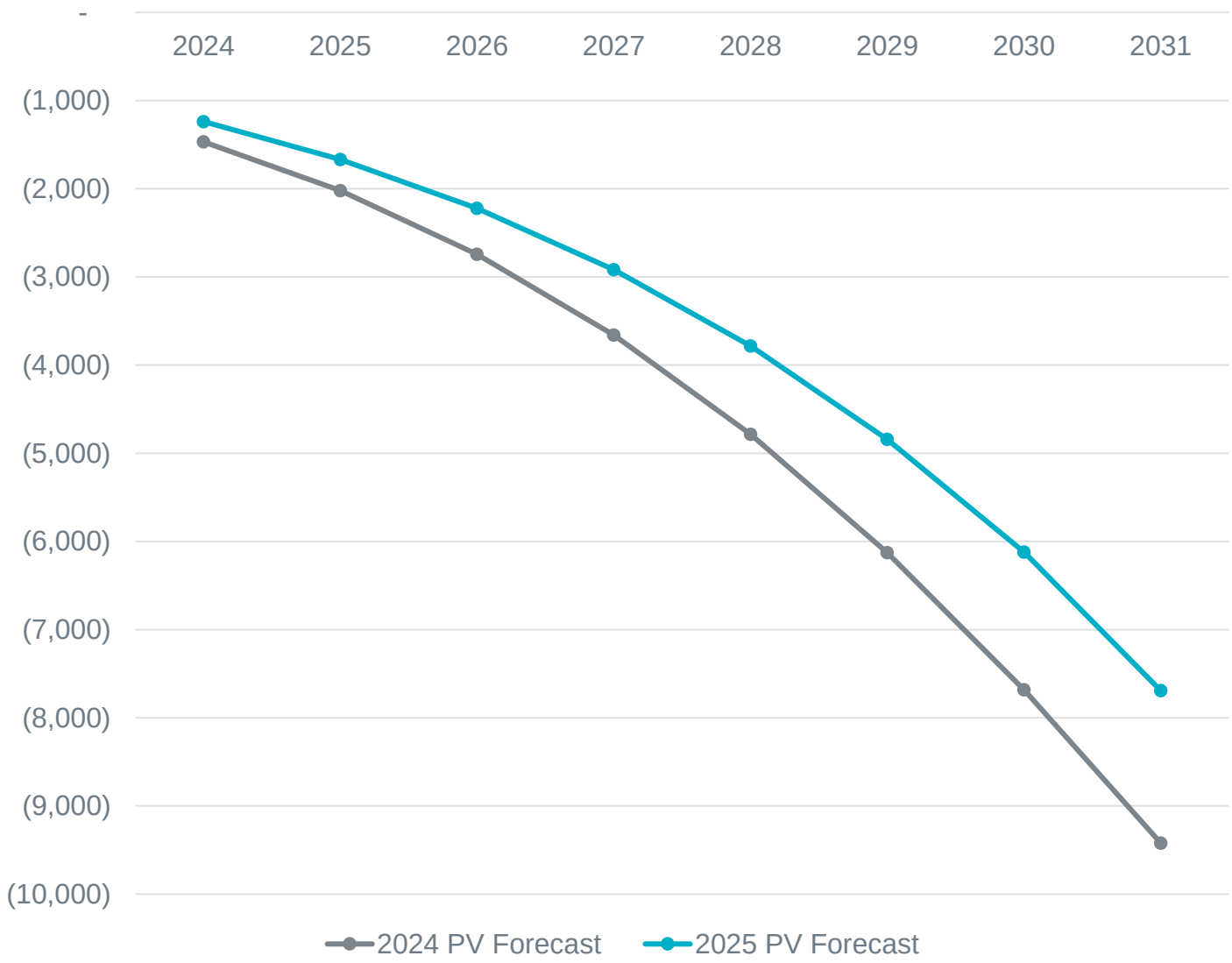
LFL Forecast



- Linear trend using seasonal variables and observed LFL activity
- Summer response curve based on observed 2024 behavior

Forecasted Reduction Schedule -
Summer response pattern:
HE14 – HE15: 70%
HE15 – HE18: 50%
HE18 – HE22: 15%
HE22 – HE23: 50%
HE23 – HE24: 80%

Roof-Top Solar Forecast and Outlook



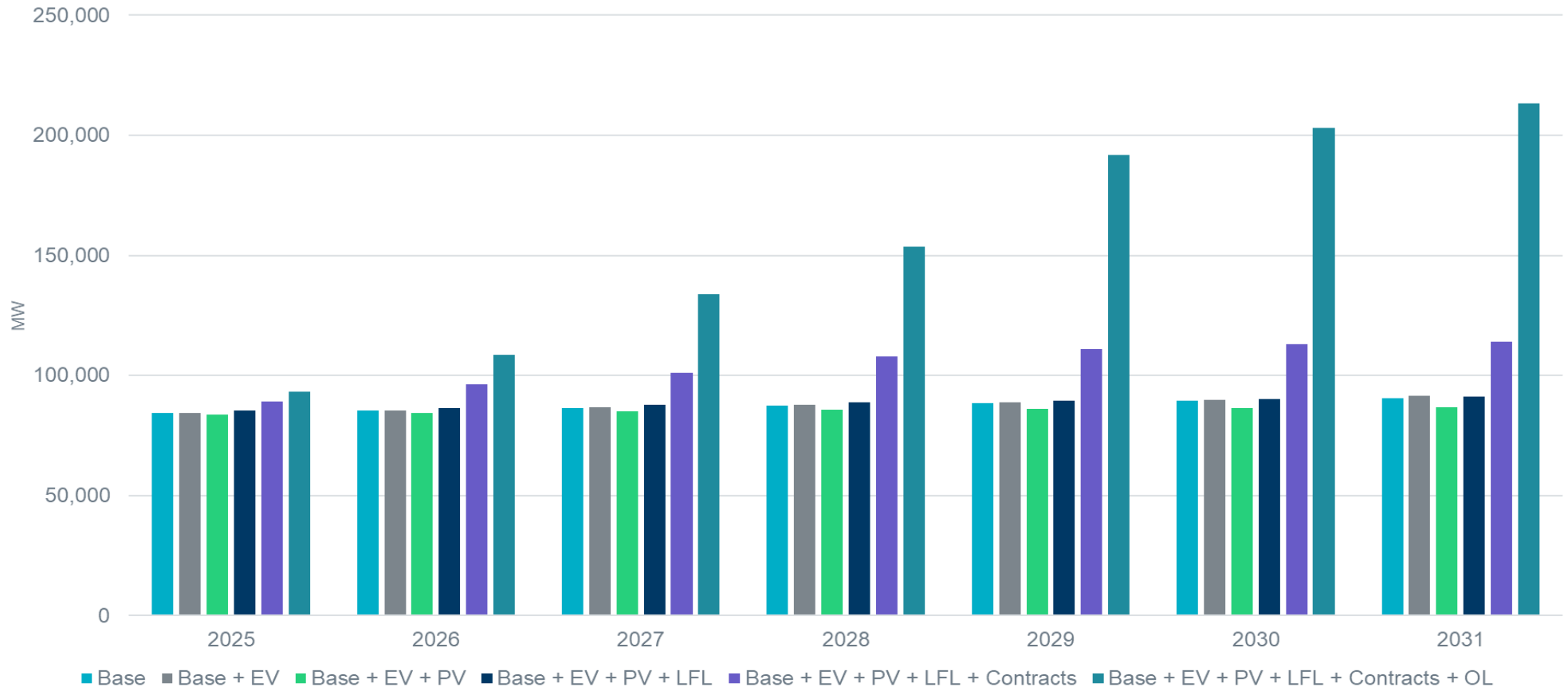
- Roof-top solar load forecast was generated by customer class (Residential/Business)
- Usage per customer was modeled to create a typical profile of rooftop solar customers
- Along with weather and calendar drivers, solar irradiance was used to better capture solar generation
- Customer forecast was generated using most recent growth rates with a gradual decline over time
- The mapping year used was 2018

***The PV growth has slowed since last year**

Waterfall Methodology

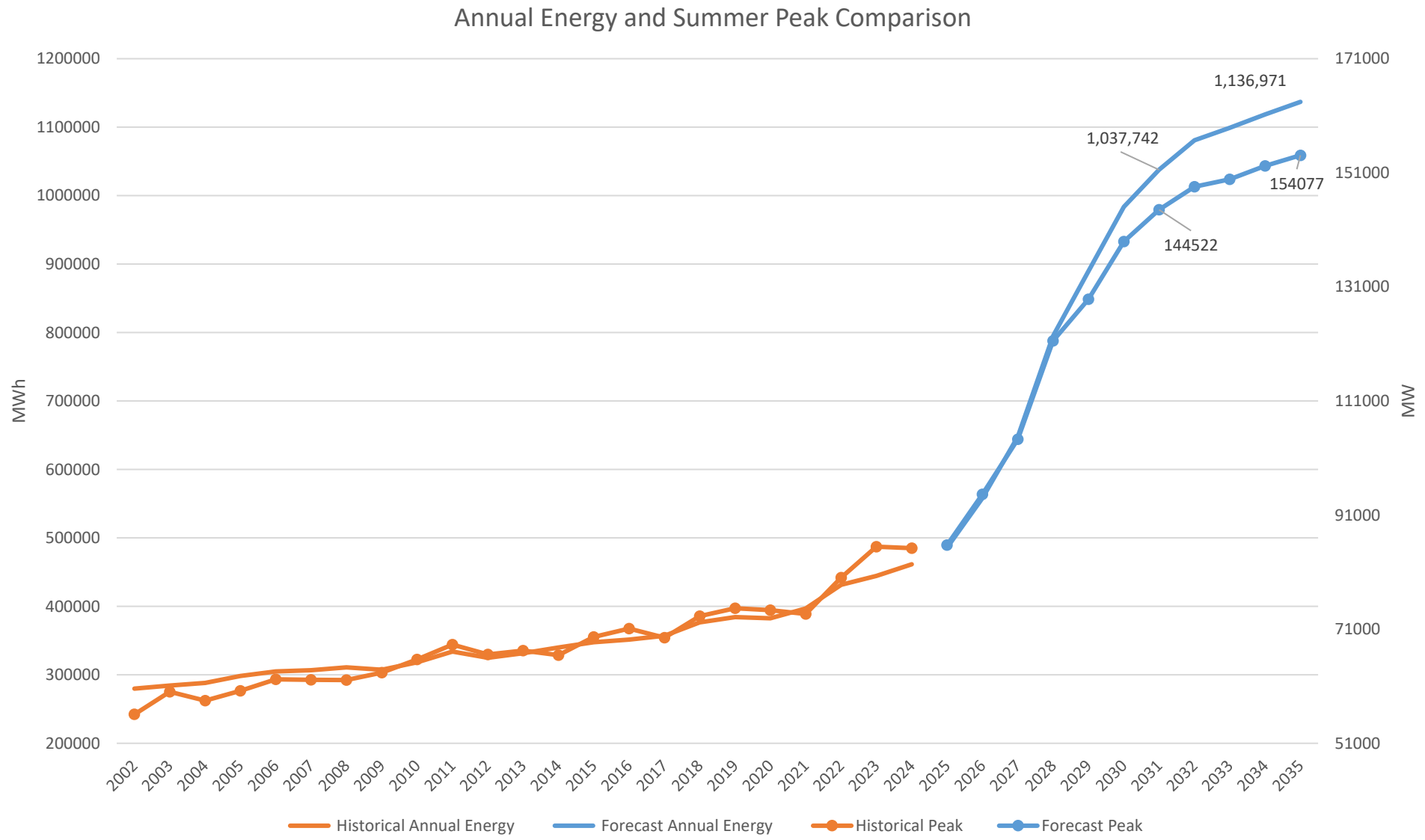
Base Forecast = Base Economic Forecast + EV Forecast + LFL Forecast – PV Forecast

TSP Provided or ERCOT Adjusted is then added for Contracts and Officer Letter Load Projection



Annual Energy and Peak Relationship

*Summer Peak 2024 was 85,199 MW



February 2021 Winter Weather Scenario (MW)

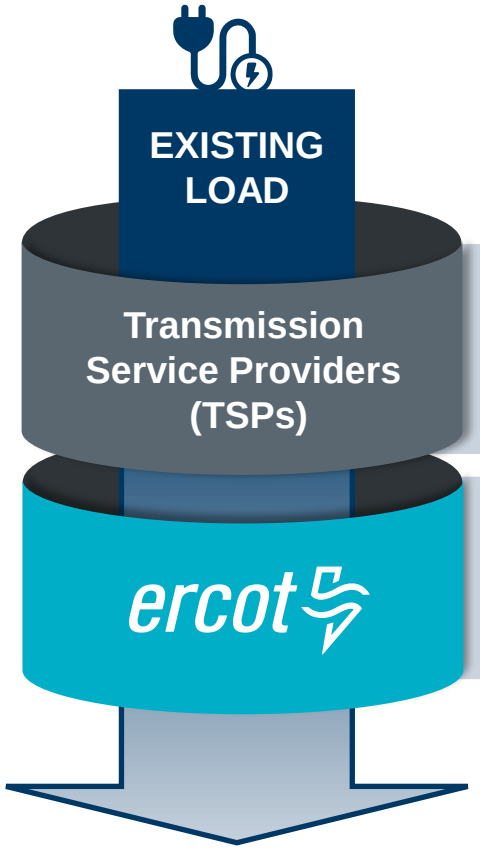
2025	2026	2027	2028	2029	2030	2031
97,351	106,539	121,961	136,696	148,177	155,250	160,630

December 2022 Winter Weather Scenario (MW)

2025	2026	2027	2028	2029	2030	2031
88,782	98,026	113,454	128,191	139,651	146,701	152,046

New Methodologies for 2025

HB5066 Load Forecasting Process



- Executed Customer Agreements
- Credible 3rd Party Forecasts (e.g., S&P Global oil and gas)
- **TSP Officer Attested Letters** *New*

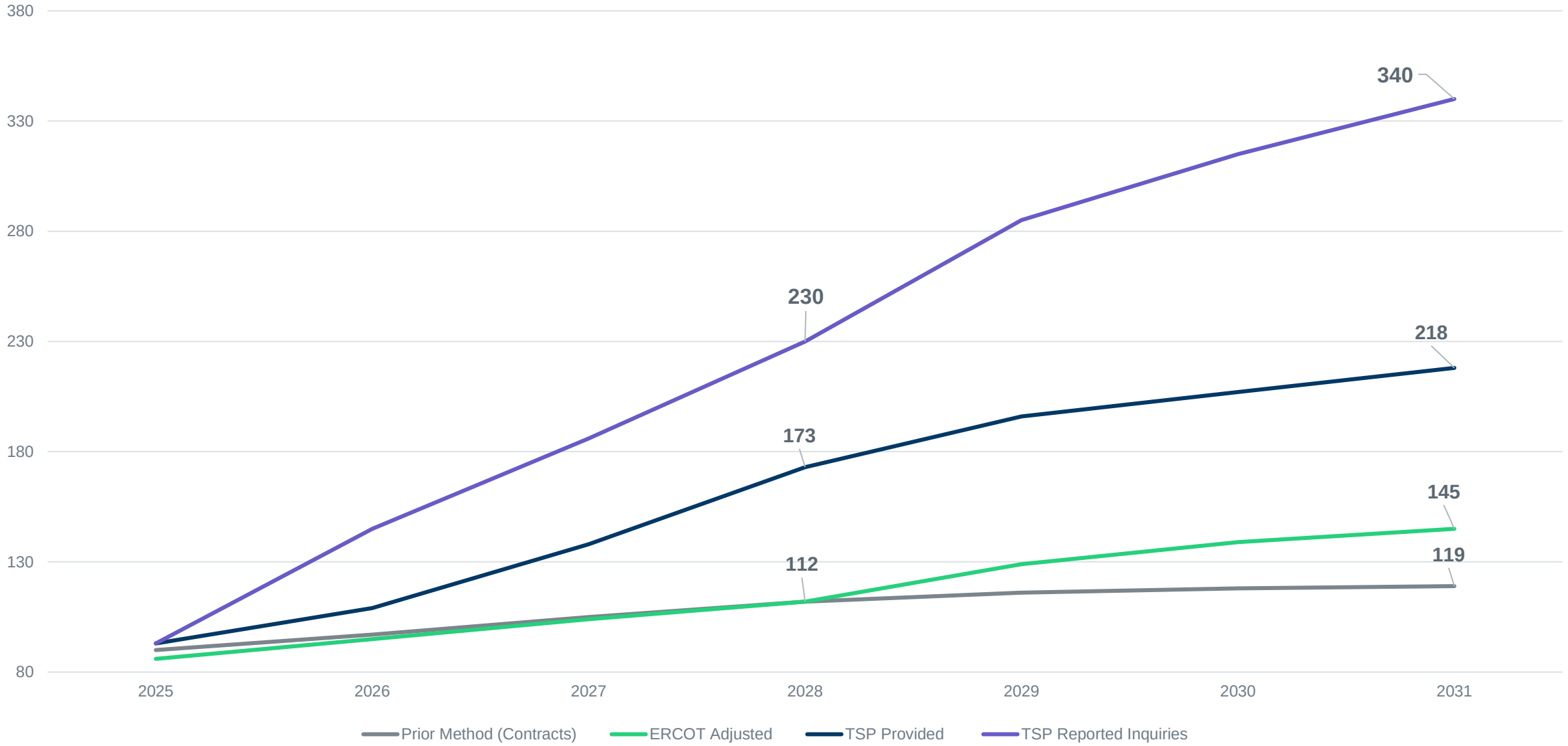
- Base Economic Forecast
- Electric Vehicle forecast **plus** existing Crypto Site Load growth **minus** Rooftop Photovoltaic

ERCOT LOAD FORECAST

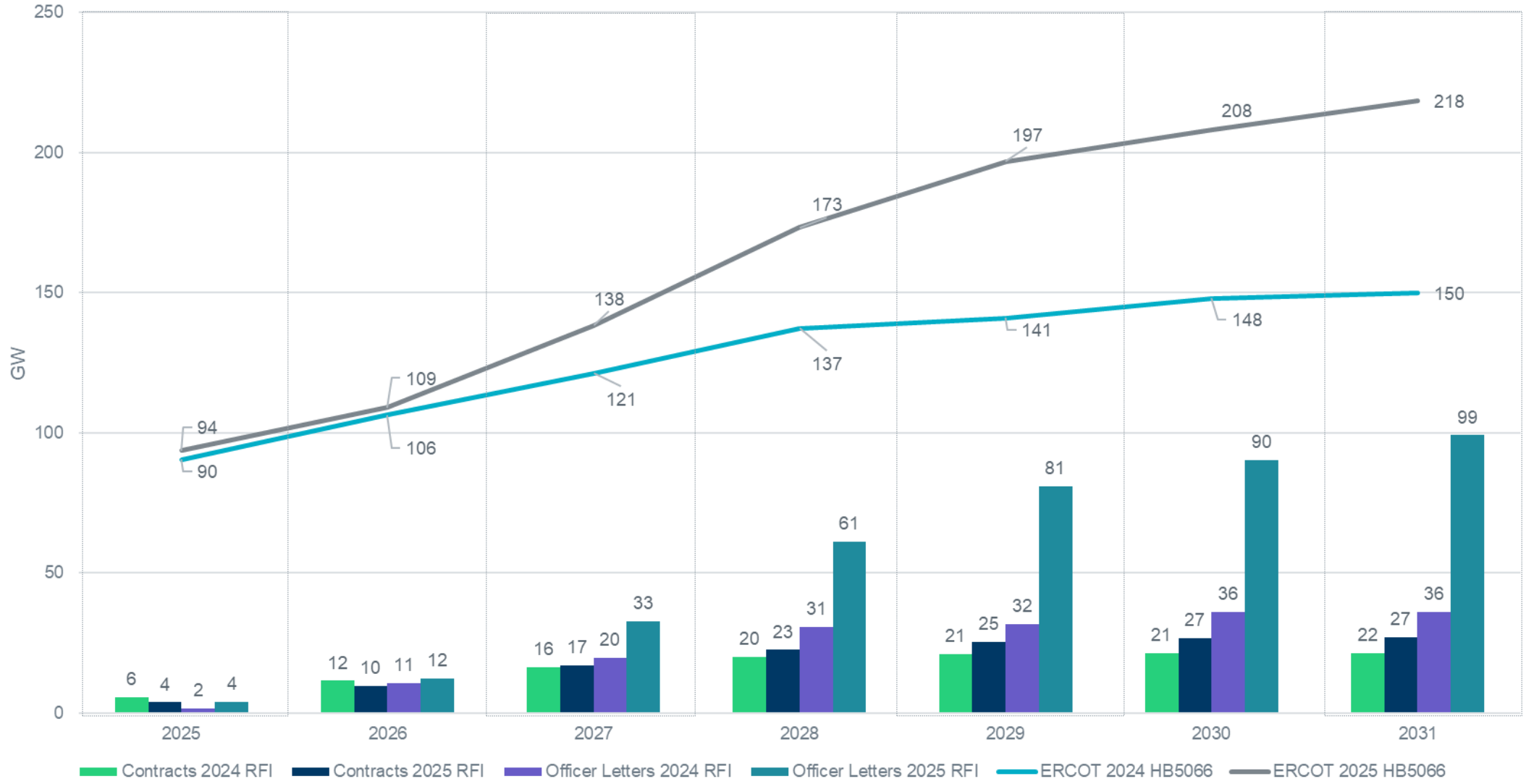
Key Takeaways:

- Most impactful difference between the HB5066 process and ERCOT's previous Load forecasting process is that ERCOT must accept TSP Officer Attested Letters as reasonable.
- ERCOT has limited data to be able to verify Loads provided in TSP's Officer Attested load category.

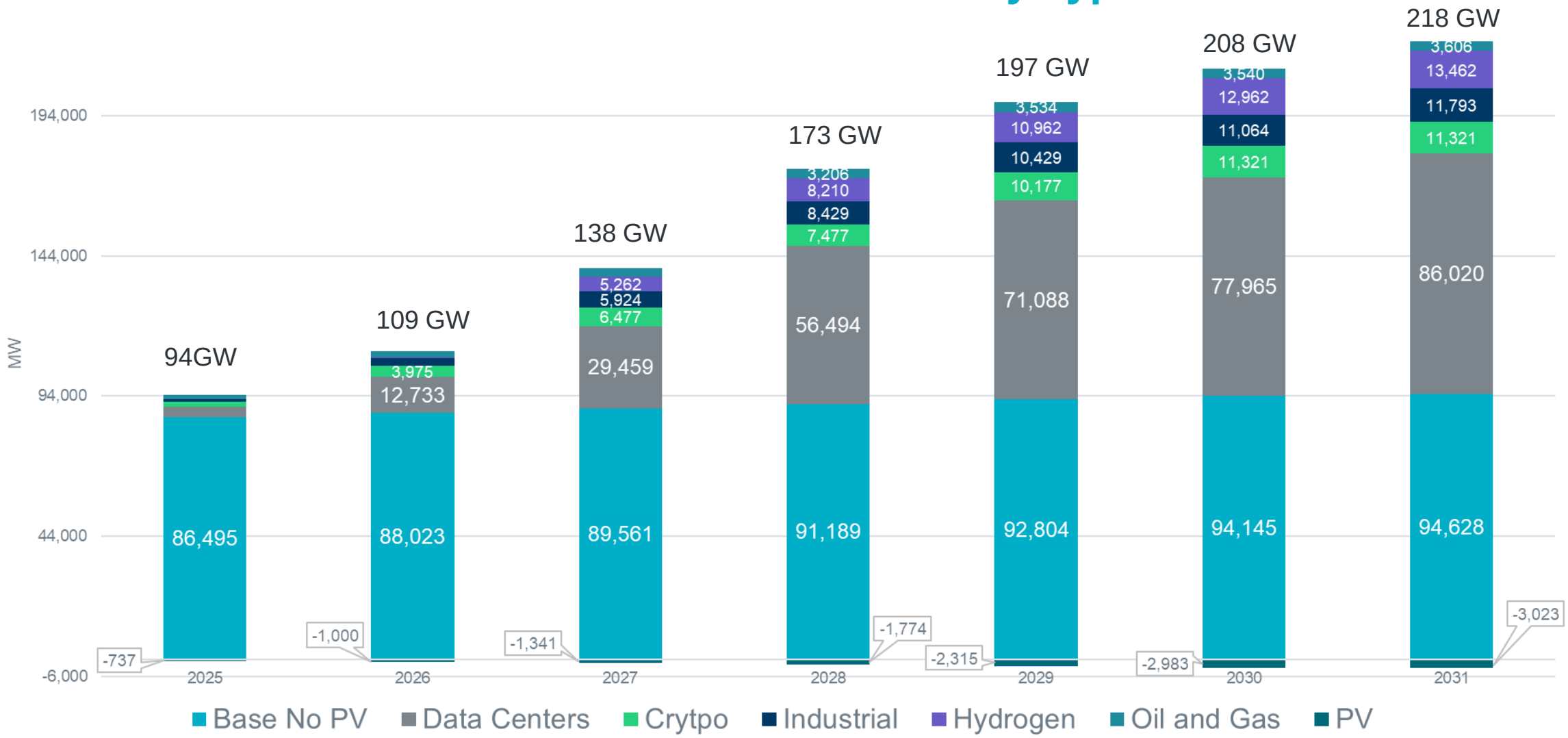
TSP Reported Large Load Inquiries



TSP Provided Load Forecast Comparison of Demand (2024 to 2025)



2025 TSP-Provided Load Forecast Breakdown by Type



Key Takeaway: New Data Centers continue to be the major area of new growth in the 2025 TSP-Provided Load forecast.

Forecast Methodologies

TSP-Provided Load Forecast

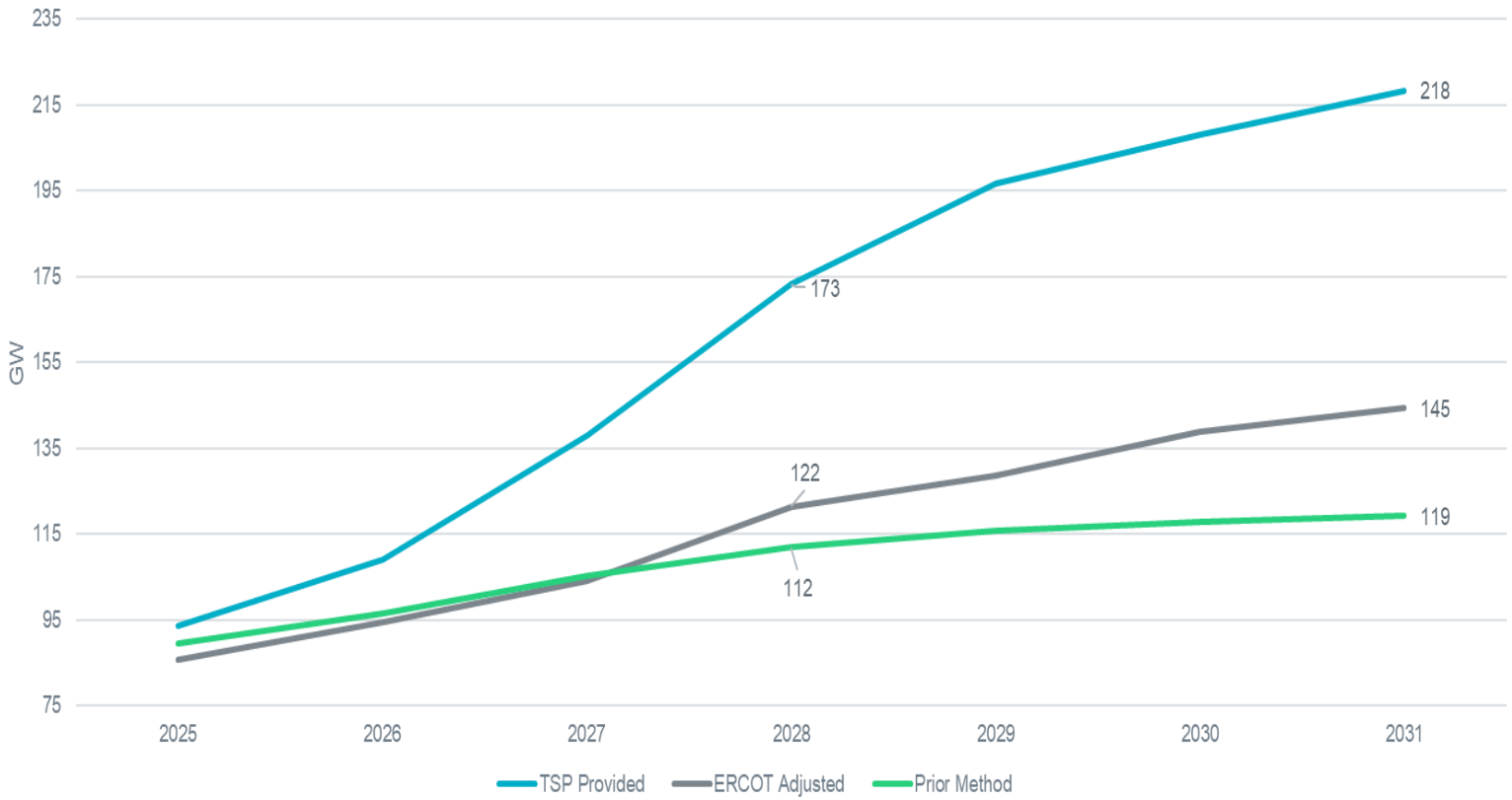
- All contracts and Officer Letter Loads based on the in-service dates and MWs that the TSPs provided

ERCOT Adjusted Load Forecast –

- 180 Day delay for all contract and Officer Letter Load
- All new Data Center Load reduced to 49.8% of request
- Then All Officer Letter Load reduced to 55.4% of request

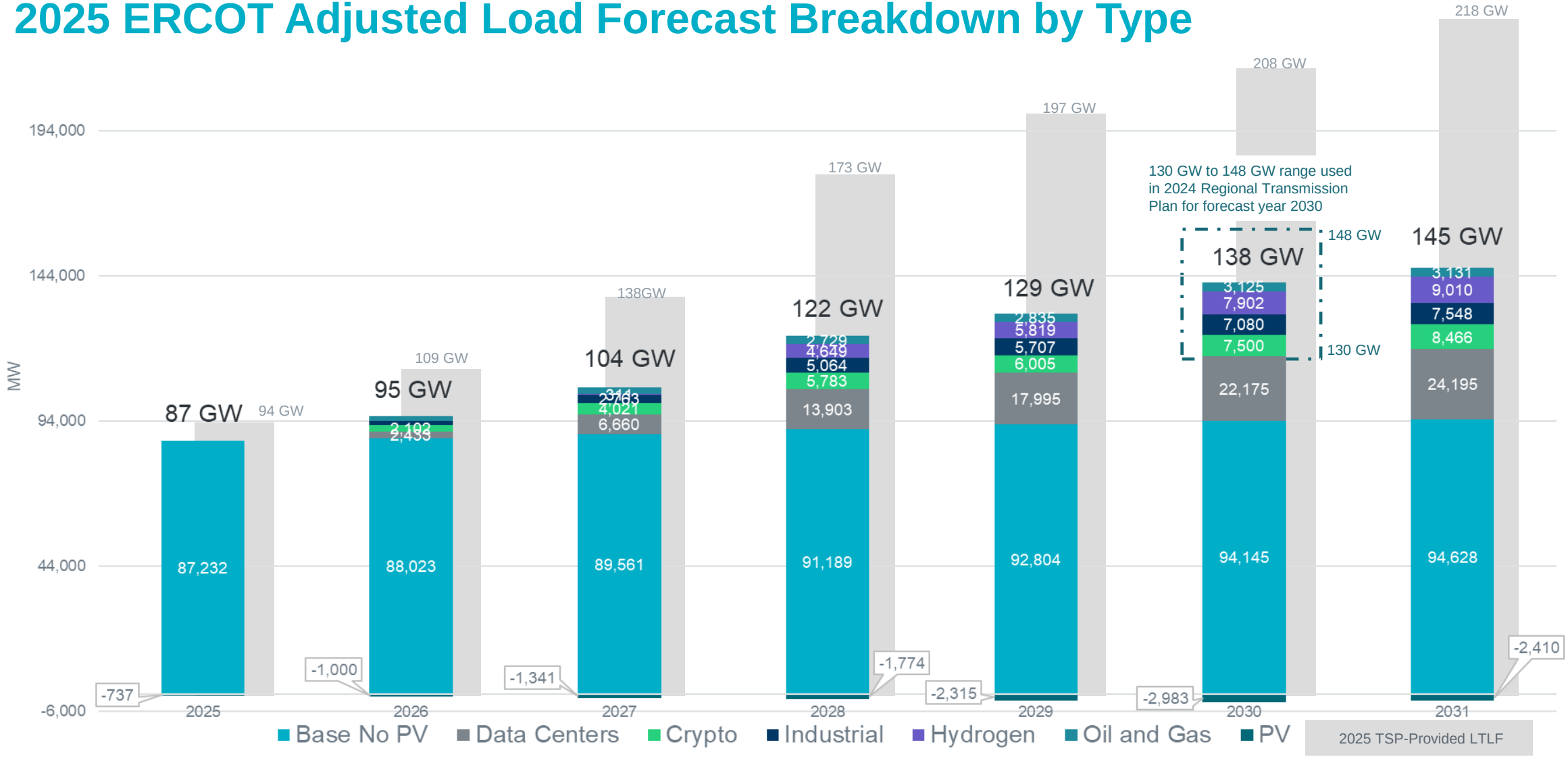
Pre-2024 Load Forecast Method

- Contracts only on the ramp schedule provided by the TSPs



Key Takeaway: ERCOT will begin incorporating an adjusted Load Forecast in analysis that uses historic trends to adjust the TSP-Provided Load Forecast.

2025 ERCOT Adjusted Load Forecast Breakdown by Type



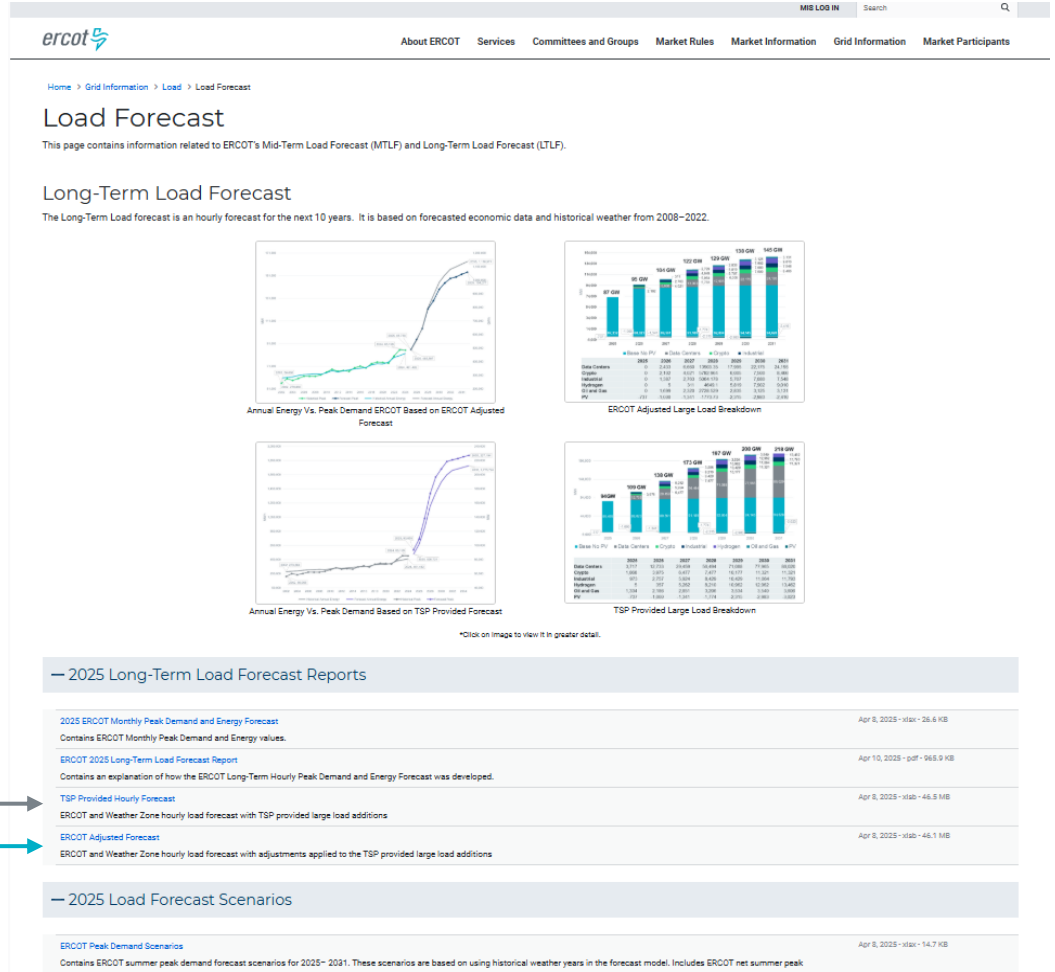
Key Takeaway: After adjustments, Data Center Load remains the largest growth by type.

Use of ERCOT Adjusted Load Forecast

The ERCOT Adjusted Load Forecast will be utilized in the following areas:

- **Capacity Demand and Reserves (CDR) Report** – Beginning with the May 2025 CDR, ERCOT will utilize the ERCOT Adjusted Load Forecast for developing the Planning Reserve Margin. Additional scenarios will capture the TSP-Provided Load Forecast for comparison purposes.
- **Regional Transmission Plan (RTP)** – To develop the annual regional transmission roadmap and support NERC transmission planning obligations, ERCOT will utilize the ERCOT Adjusted Load Forecast. ERCOT is beginning discussions with Market Participants on how to incorporate the TSP-Provided Load Forecast into longer term transmission planning analysis.
- **Regional Planning Group (RPG) Projects** – ERCOT analysis will begin with the Adjusted Load Forecast; however, the TSP-Provided Load Forecast will be accepted in the RPG review process.
- **Resource Outage Scheduling –** ERCOT has initiated changes to how the Maximum Daily Resource Planned Outage Capacity (MDRPOC) is calculated. Once those changes are approved, the MDRPOC would be updated based on the ERCOT Adjusted Load Forecast.

Forecast Postings



https://www.ercot.com/gridinfo/load/forecast/