

Overview of System Level Forecasting

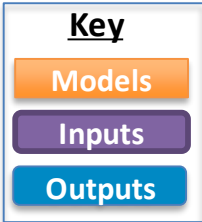
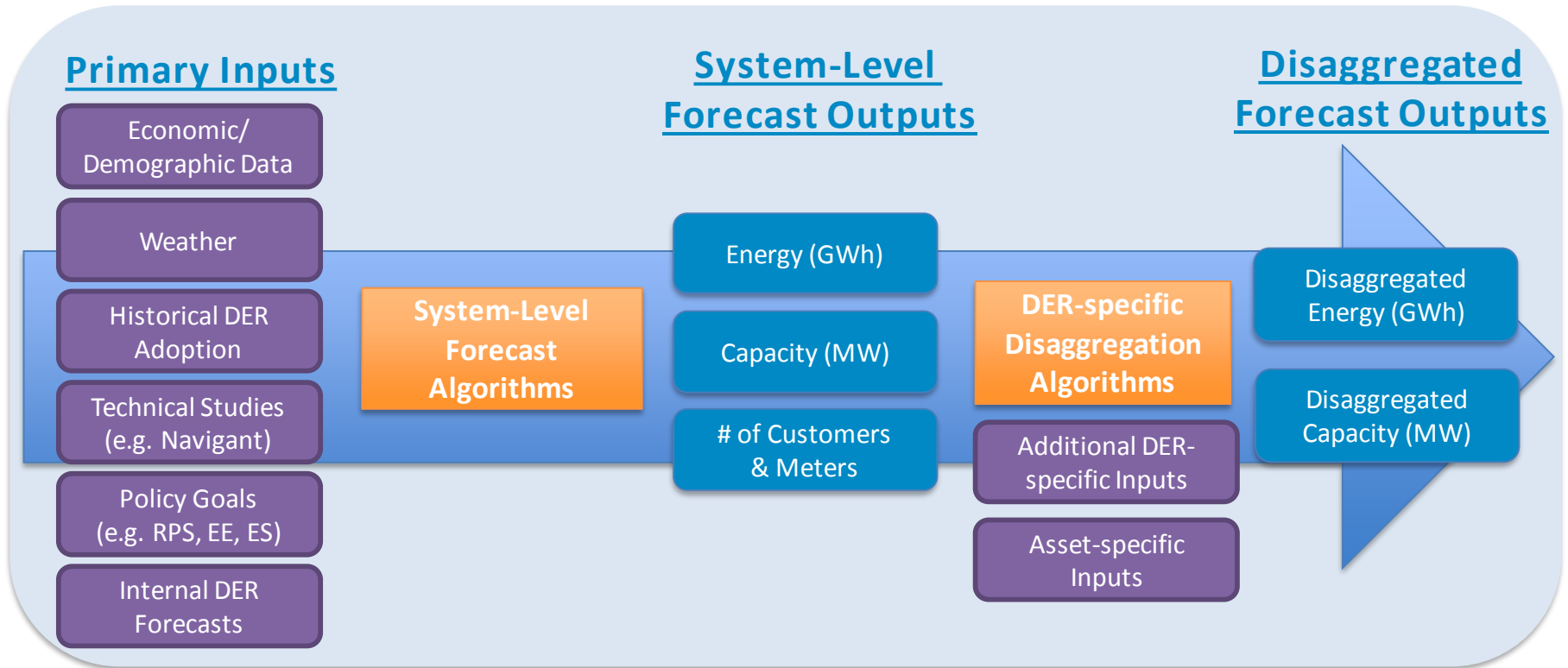
April 17, 2017



Overview of System-Level Forecasting

- Each IOU regularly develops long-term system-level electric energy and capacity forecasts
 - SCE: Annually in November
 - PGE: Annually in March
 - SDG&E: Biennially and as required
- The forecasts support a variety of processes:
 - **Internal:** Financial and Strategic Planning, Procurement
 - **External:** IEPR, ERRR, LTPP/IRP, RPS, BPP, Rate Filings

IOU Forecast Components



DER Include: DG, EE, PEV, DR, ES

Integrated Energy Policy Report (IEPR)

- Produced by the CEC on a biennial cycle
- Full forecast developed every odd year (e.g. 2017)
- California Energy Demand (CED) forecast updated in even years (e.g. 2016)
- The most recent CED forecast supporting the 2016 IEPR Update was adopted in February of 2017

Composition of an IEPR Update

- Revised economic and demographic drivers from the prior full IEPR with most current projections
- Addition of a year of
 - Historical consumption data
 - Peak demand data
 - Self generation technology adoptions
- Typically other factors such as results of energy efficiency programs and projected rates are not updated. (AAEE also remains unchanged)

Coordination between IOU and CEC Forecasts

- IOUs inform the California Energy Demand forecast as part of the IEPR process, but the CEC ultimately develops the forecast
 - CEC utilizes its own forecasting models
 - IOUs submit long-term, system-level forecasts (Feb-April)
 - The Demand Analysis Working Group (DAWG) provides an opportunity for stakeholder review
 - Regular meetings held to address specific topics such as new technologies or improved forecasting methods
- In Spring 2017 IOUs will file data for use in the 2017 IEPR
- Preliminary CEC forecasts will be available in summer and revised results in the fall

System Planning

- Ongoing statewide planning efforts are being coordinated via the Joint Agency Steering Committee (JASC) [CAISO, CEC, and CPUC]
- As presented at the February 10th DER Scenarios workshop, there is a continued need for coordinated assumptions
- Transmission Planning assumptions for CAISO and IOUs are provided annually via an ACR (Primarily based on latest IEPR)

