

| DOCKETED | |
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| Document Title: | Presentation - Hourly Behind-The-Meter Distributed Generation Forecast Results |
| Description: | 2B. Bobby Wilson, CEC |
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Hourly Behind-The-Meter Distributed Generation Forecast Results

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List of Acronyms and Initialisms

BTM – Behind-the-meter

CAISO – California Independent System Operator

DER – Distributed Energy Resource

DG – Distributed Generation

ITC – Investment Tax Credit

IEPR – Integrated Energy Policy Report

MW – Megawatt

PA – Planning Area

PV – Photovoltaics



Hourly BTM PV Results





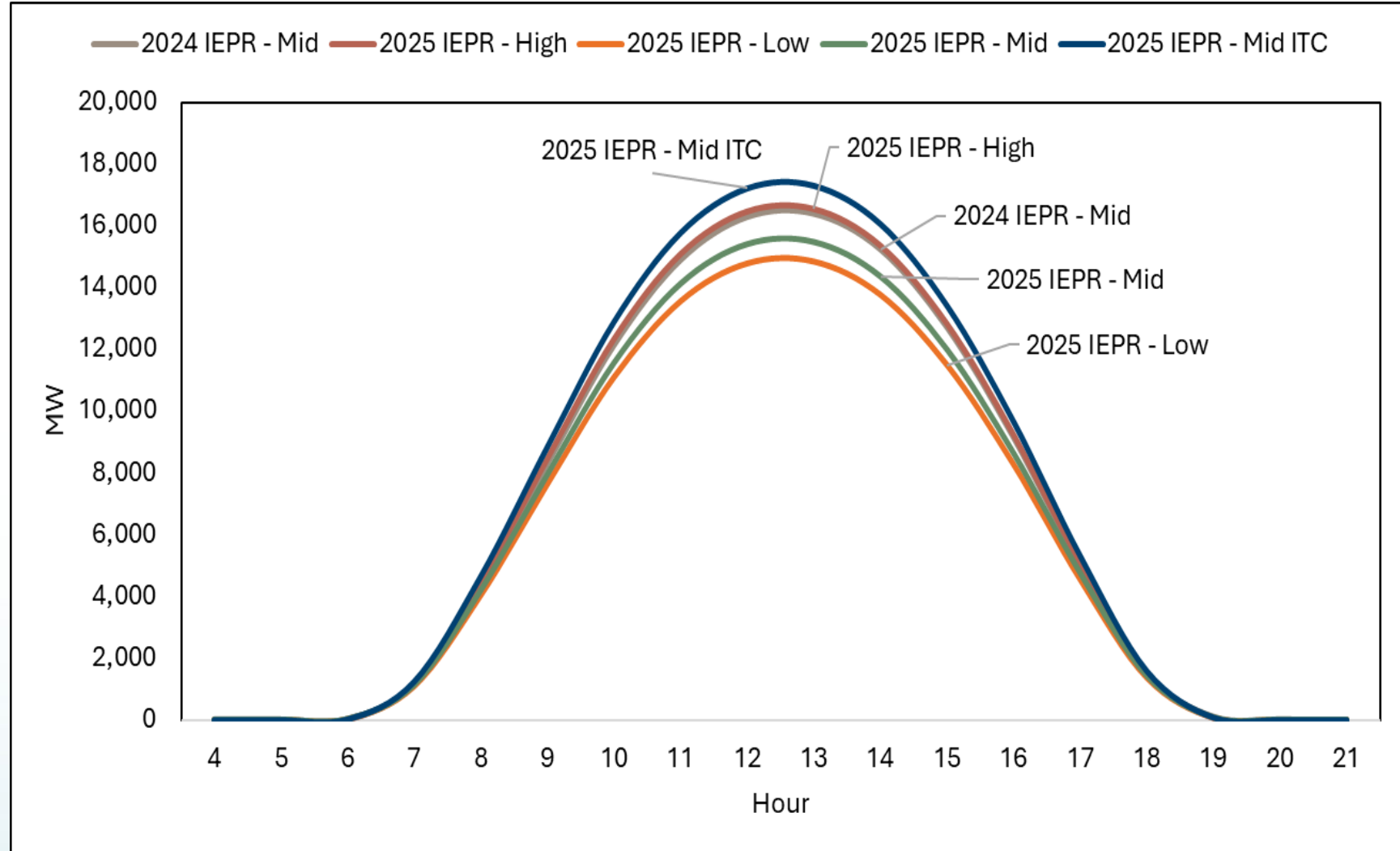
Key Findings: BTM PV Generation Forecast

- Elimination of the ITC leads to lower capacity forecasts and reductions in BTM PV generation in short term
 - 2024 IEPR and 2025 IEPR mid case generation similar by 2040
- Hourly BTM PV generation decreases from the 2024 IEPR to the 2025 IEPR
 - Peak demand (hour 17) generation reduction is **250 MW in 2035 and 20 MW in 2040**
 - Daily max generation (hour 13) reduction is **900 MW in 2035 and 170 MW in 2040**



CAISO Forecast Average Hourly PV Generation: September 2035

| Hour | 2025 IEPR Mid (MW) | 2024 IEPR Mid (MW) |
|------|--------------------|--------------------|
| 13 | 15,500 | 16,400 |
| 17 | 4,750 | 5,000 |

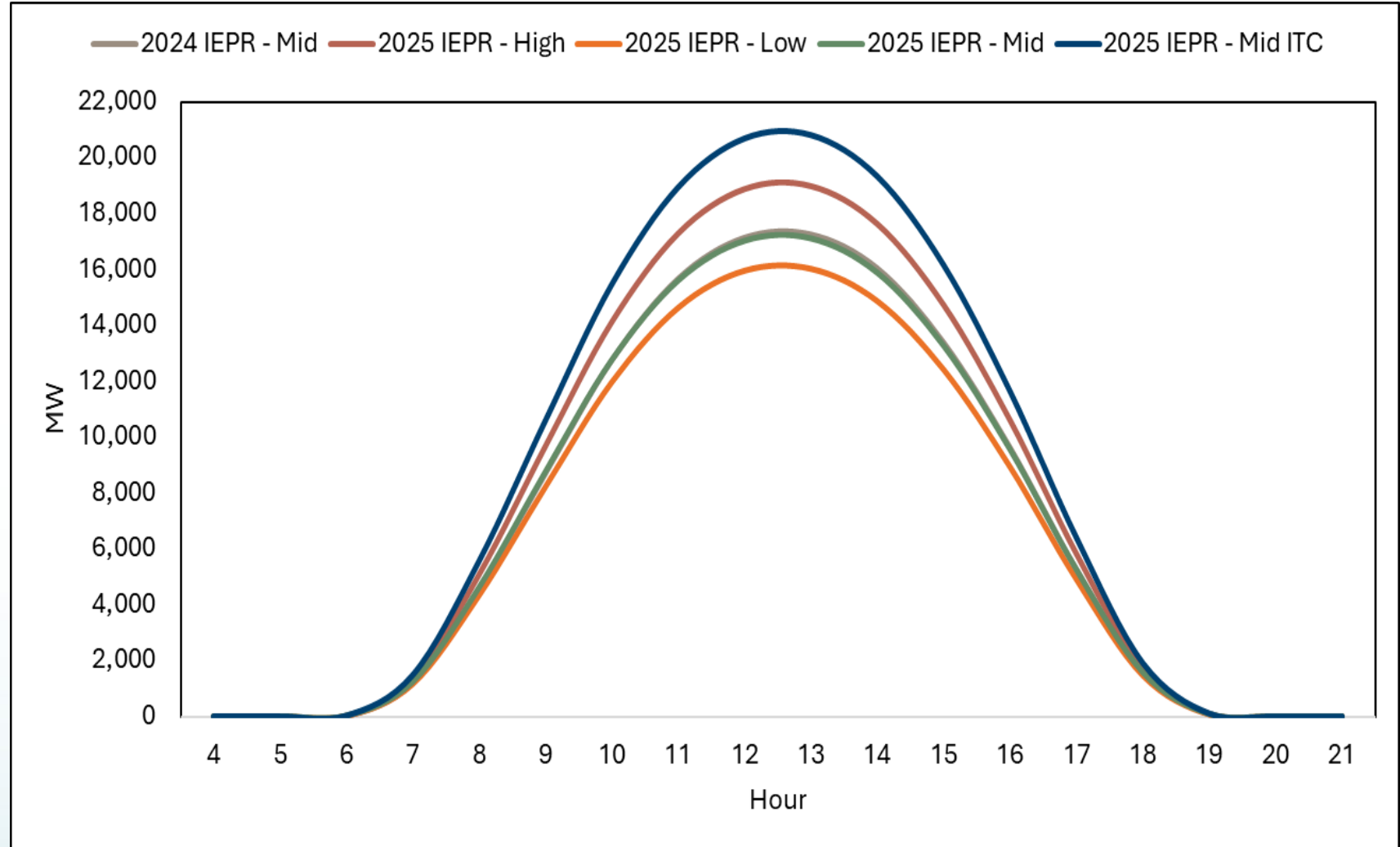


Source: CEC Staff



CAISO Forecast Average Hourly PV Generation: September 2040

| Hour | 2025 IEPR Mid (MW) | 2024 IEPR Mid (MW) |
|------|--------------------|--------------------|
| 13 | 17,100 | 17,270 |
| 17 | 5,240 | 5,260 |

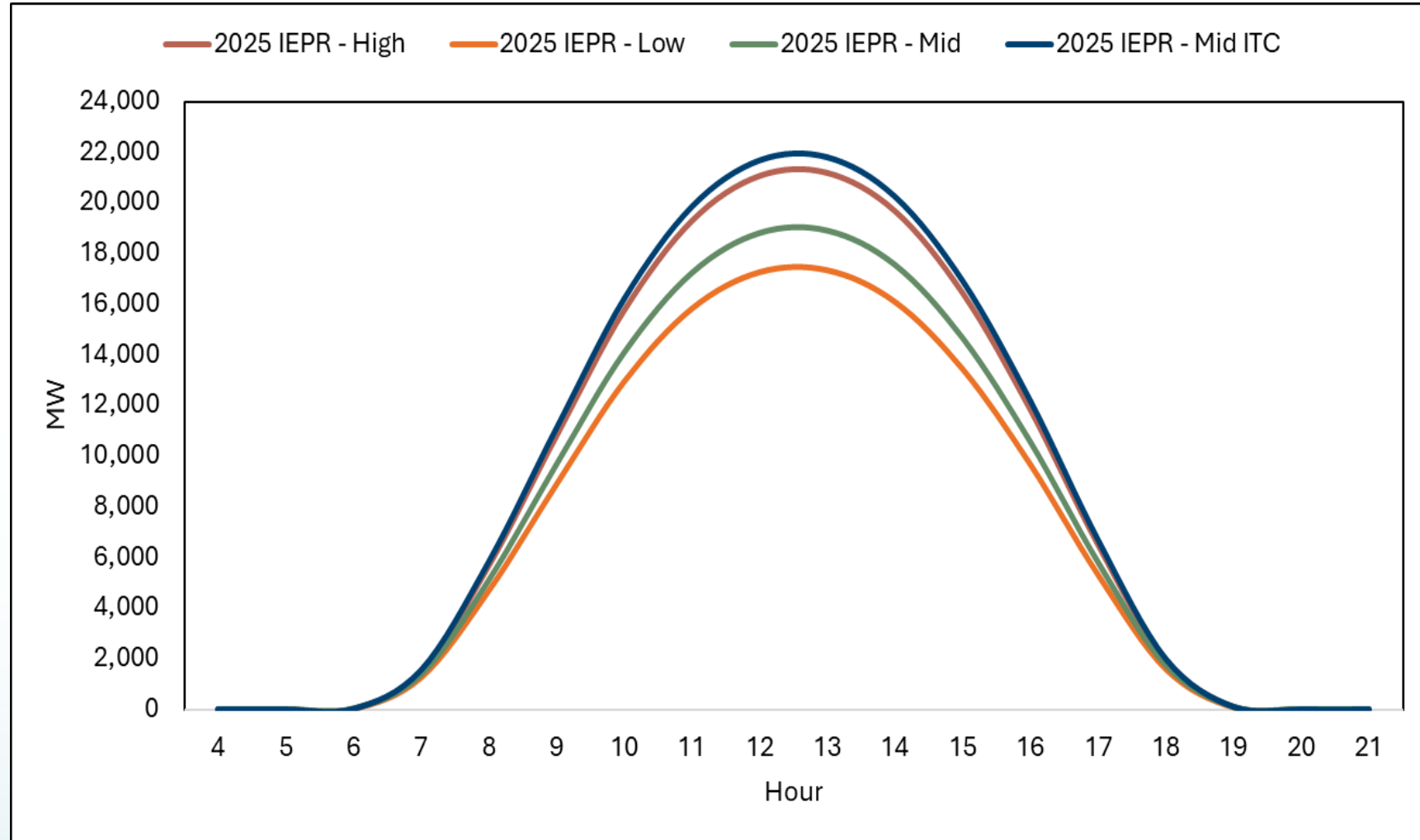


Source: CEC Staff



CAISO Forecast Average Hourly PV Generation: September 2045

- Reintroduction of the ITC drives higher generation in the Mid ITC case



Source: CEC Staff



Hourly BTM Storage Results





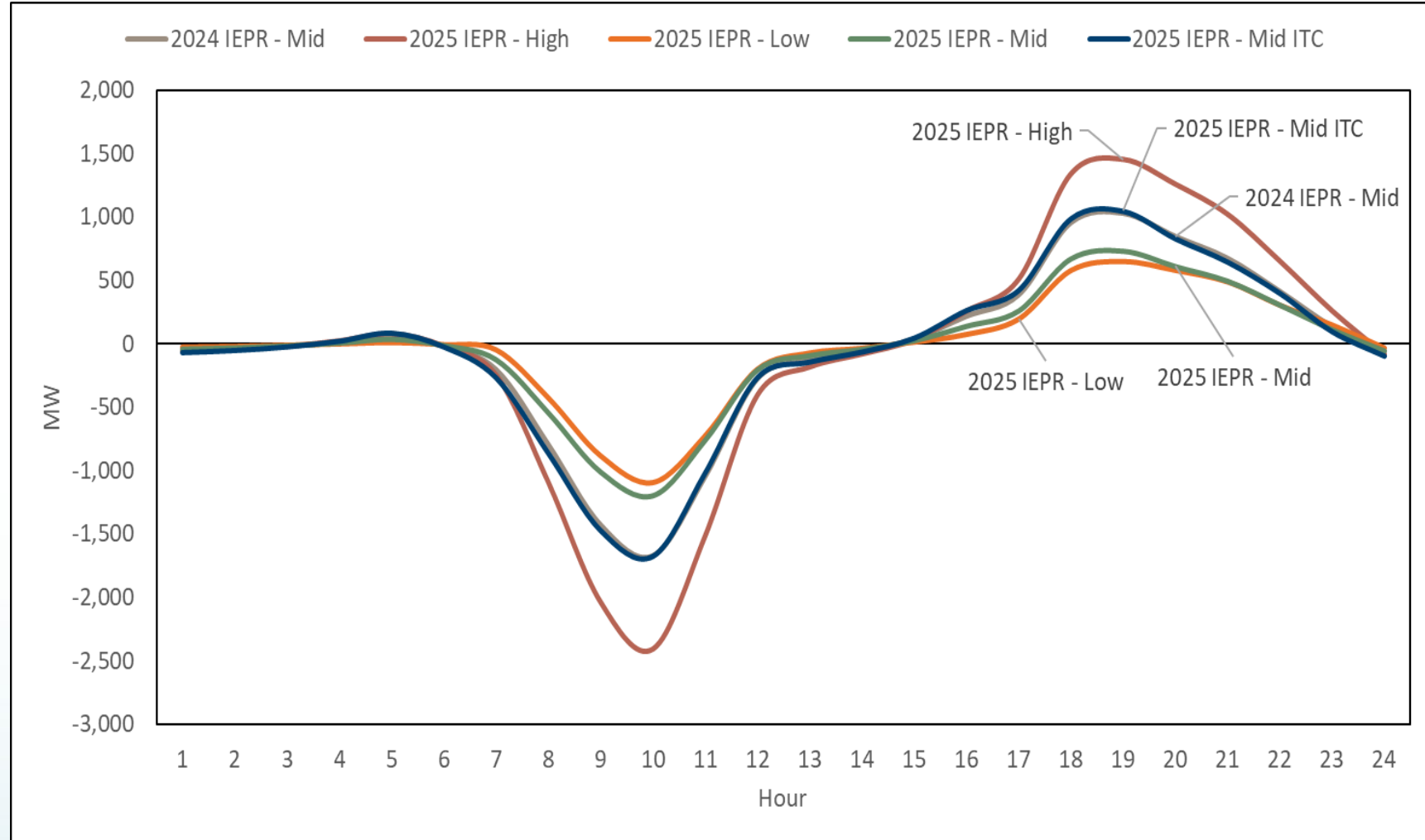
Key Findings: BTM Energy Storage Forecast

- Reduced forecasted PV capacity due to ITC elimination decreases BTM energy storage capacity and hourly storage impacts
- Compared to 2024 IEPR, reductions in daily max energy storage discharge decrease slightly through forecast period
 - 300 MW in 2035
 - 220 MW in 2040



CAISO Forecast Average Hourly Storage: September 2035

| Hour | 2025 IEPR Mid (MW) | 2024 IEPR Mid (MW) |
|------|--------------------------|--------------------------|
| 19 | 730 | 1,030 |

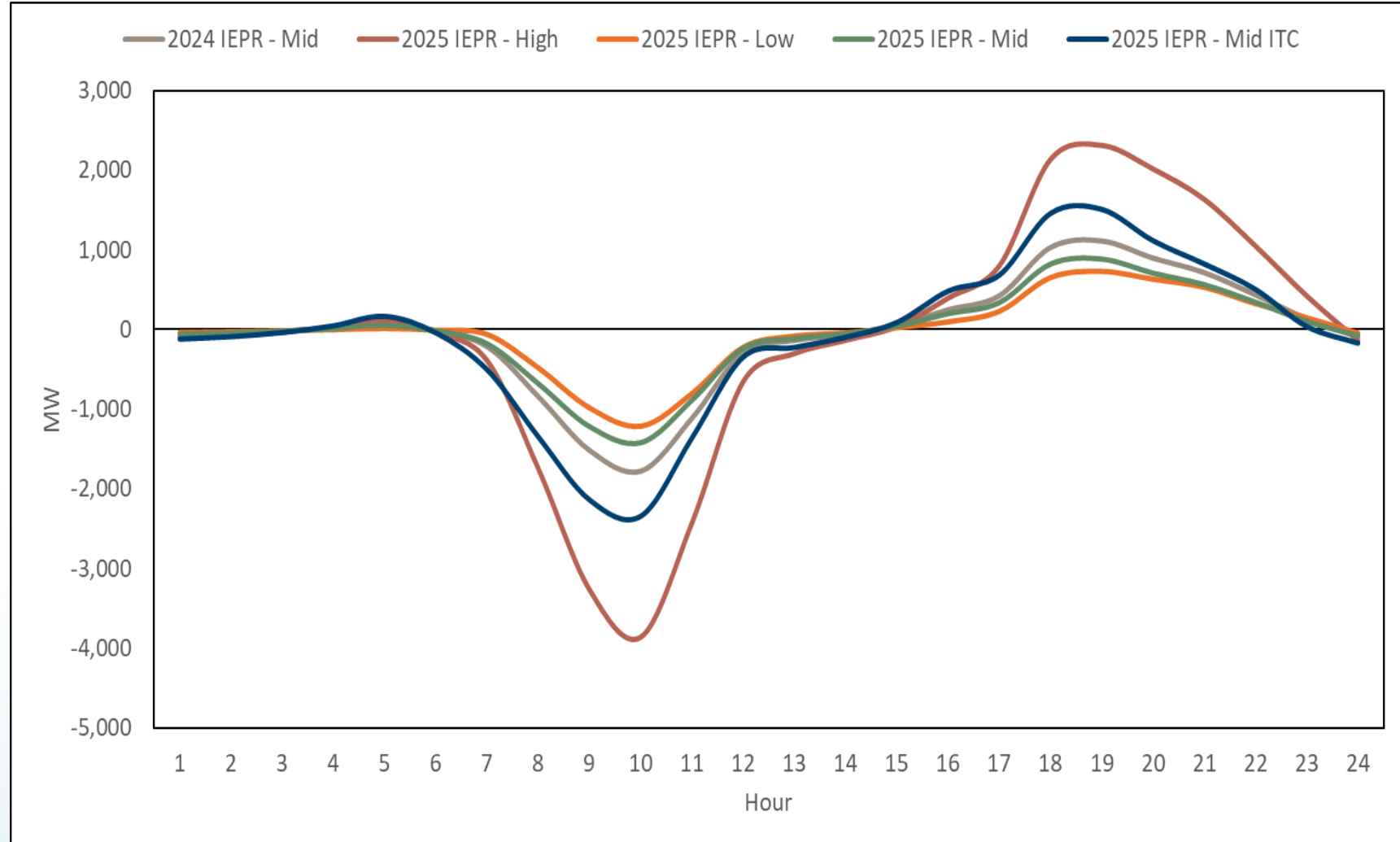


Source: CEC Staff



CAISO Forecast Average Hourly Storage: September 2040

| Hour | 2025 IEPR Mid (MW) | 2024 IEPR Mid (MW) |
|------|--------------------------|--------------------------|
| 19 | 880 | 1,100 |

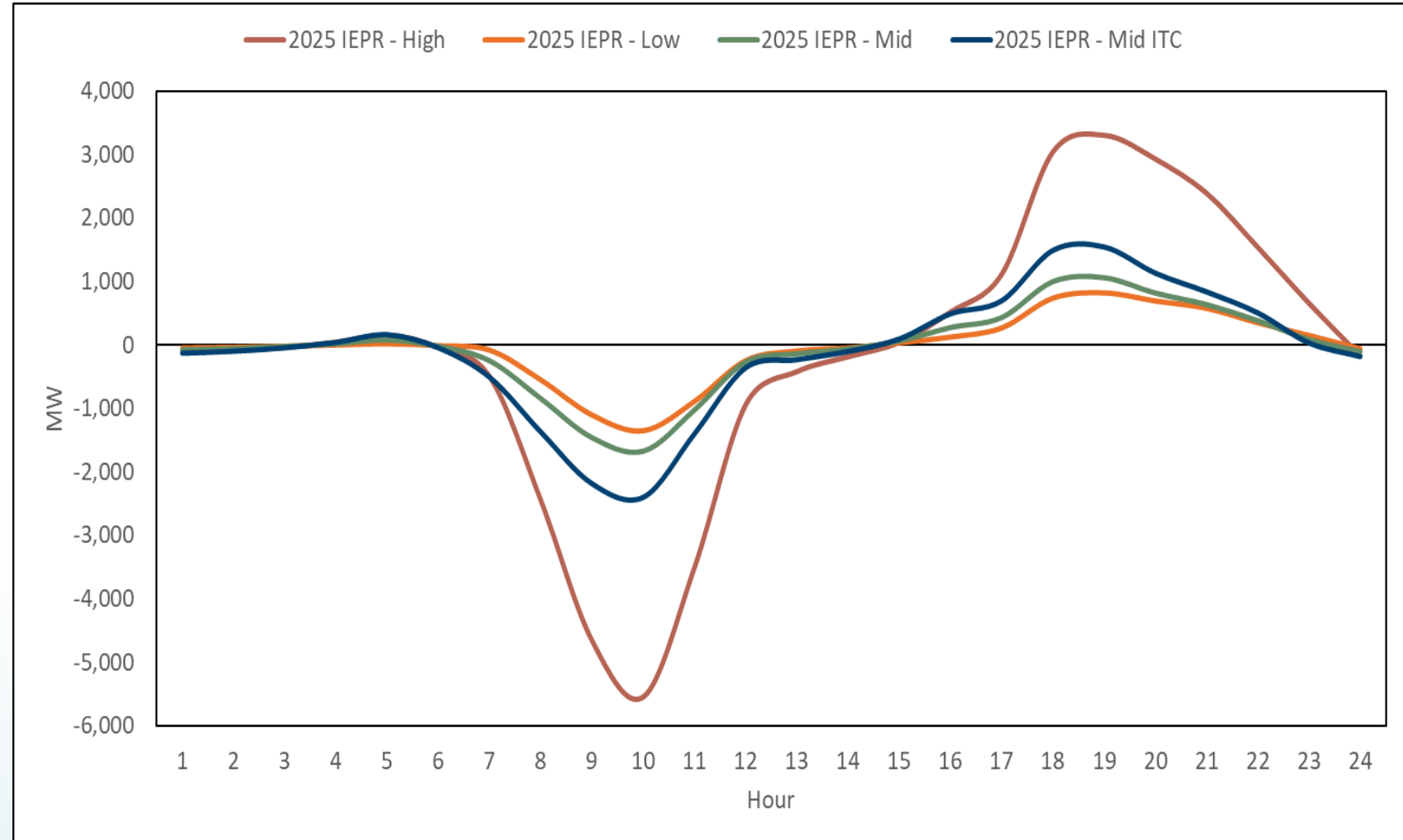


Source: CEC Staff



CAISO Forecast Average Hourly Storage: September 2045

- NEM turnover additions drive the increased energy storage impacts in the High case



Source: CEC Staff



Closing Remarks

- A special thanks to our DG Forecast team
 - Mark Palmere
 - Sudhakar Konala
 - Alex Lonsdale
- Have a question? Contact us!
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Thank You!

