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<th><strong>Docket Number:</strong></th>
<th>19-IEPR-03</th>
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<tr>
<td><strong>Project Title:</strong></td>
<td>Electricity and Natural Gas Demand Forecast</td>
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<tr>
<td><strong>TN #:</strong></td>
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<tr>
<td><strong>Document Title:</strong></td>
<td>Emerging Trends for the California Energy Demand Forecast</td>
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<tr>
<td><strong>Description:</strong></td>
<td>Presentation by Cary Garcia, California Energy Commission</td>
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<tr>
<td><strong>Filer:</strong></td>
<td>Raquel Kravitz</td>
</tr>
<tr>
<td><strong>Organization:</strong></td>
<td>California Energy Commission</td>
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<tr>
<td><strong>Submitter Role:</strong></td>
<td>Commission Staff</td>
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<tr>
<td><strong>Submission Date:</strong></td>
<td>9/25/2019 3:57:26 PM</td>
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<td><strong>Docketed Date:</strong></td>
<td>9/25/2019</td>
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Emerging Trends for the California Energy Demand Forecast

Forecasting Community Choice Aggregation
CED Forecast Overview

Odd-IEPR
- Data collected through IEPR Forms and Instructions
- Full sector model runs

Even-IEPR
- Economic update of previous forecast
- Includes updated self-generation and transportation forecasts
CED Forecast Forms

Adopted Demand Forecast Forms
- Baseline and managed scenarios by PA
- Hourly Forecast and monthly peaks for CAISO territory
- LSE and BA tables

California Energy Demand Updated Forecast, 2018-2030
California Energy Demand 2018-2030 Baseline Forecast
  » High Demand Case
  » Mid Demand Case
  » Low Demand Case
California Energy Demand 2018-2030 Other Forecast Documents
  » Hourly Forecast
  » Load Modifiers
  » Load-Serving Entity and Balancing Authority Forecasts
### LSE and BA Table: Form 1.1c

#### LSE Sales Forecasts
- Historical data collected from QFER
- Disaggregation of PA forecasts
- PA growth applied to respective LSEs
- If needed, incremental load growth adjustments
### CCA Forecast Use Cases

<table>
<thead>
<tr>
<th>Forecast Product</th>
<th>Scope</th>
<th>Use Case</th>
<th>Method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form 1.1c (Sales by LSE)</td>
<td>10 years</td>
<td>CPUC Integrated Resource Plan</td>
<td>CEC disaggregates IEPR forecast by LSE; limited input from CCAs and ESPs</td>
</tr>
<tr>
<td>TAC Area Monthly Peaks</td>
<td>Year-Ahead (3 Years Local)</td>
<td>RA Year-Ahead System and Local Requirements</td>
<td>LSEs provide their forecasts to CEC; CEC adjusts for consistency with IEPR monthly peak demand</td>
</tr>
<tr>
<td>Departing Load Scenarios (TBD)</td>
<td>3-10 years</td>
<td>CPUC TBD</td>
<td>Probabilistic or Scenario-Based</td>
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### Process Comparison for Existing CCAs

<table>
<thead>
<tr>
<th></th>
<th>Current Method</th>
<th>Proposed Improvement</th>
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<tbody>
<tr>
<td><strong>Near-term</strong></td>
<td>- Year-ahead filings</td>
<td>- Year-ahead filings</td>
</tr>
<tr>
<td>(1-2 years)</td>
<td>- Implementation plans</td>
<td>- Implementation plans</td>
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<tr>
<td></td>
<td><strong>Mid/Long-term</strong></td>
<td><strong>Proposed Improvement</strong></td>
</tr>
<tr>
<td>(3-10 years)</td>
<td>- Disaggregation of PA forecast</td>
<td>- Leverage FZ projections</td>
</tr>
<tr>
<td></td>
<td>- Limited LSE-specific data used</td>
<td>- Addtl. CCA/ESP data</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- informs long-term adjustments</td>
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CCA Forecasts-Next Steps

- Evaluate alignment with CPUC IRP and other processes
- Identify additional data requirements
- Consider need for IEPR data request changes
- Take up probabilistic departing load topic with DAWG
Appendix: Forecast Forms

CEDU 2018
Baseline and Managed Forecast Forms
https://ww2.energy.ca.gov/2018_energypolicy/documents/#cedu

CED 2019 Preliminary
Baseline Forecast Forms
https://ww2.energy.ca.gov/2019_energypolicy/documents/#08152019
### Appendix: Forecast Zones by Planning Area

<table>
<thead>
<tr>
<th>Planning Area</th>
<th>FZ #</th>
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<tbody>
<tr>
<td>PG&amp;E</td>
<td>1-6</td>
</tr>
<tr>
<td>SCE</td>
<td>7-11</td>
</tr>
<tr>
<td>SDG&amp;E</td>
<td>12</td>
</tr>
<tr>
<td>Northern California Non-CAISO</td>
<td>13-15</td>
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<tr>
<td>LADWP</td>
<td>16-17</td>
</tr>
<tr>
<td>Burbank/Glendale</td>
<td>18</td>
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<tr>
<td>Imperial Irrigation District</td>
<td>19</td>
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<tr>
<td>Valley Electric Association</td>
<td>20</td>
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