## Western Resource Adequacy/Sufficiency Programs & Processes Inventory

DRAFT, v2, 8/12/2022

Darker shade= Timeframes that are emphasized/examined in more detail

| Responsible Entity | Program/Product | Area | Type | Time Frame | Frequency | Method/Approach | Timeframes: Day Ahead, Real-time | Next Month/ Quarter/ Season Ahead | 12-18 Months Ahead | Year 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 16 | 17 | 18 | 19 | 20 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Resource Adequacy Programs/Planning/Assessments (near to long-term)** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Investor-owned Utilities Consumer-owned Utilities | Utility IRPs (including BPA Resource Program) | BAAs/ Retail Customer Loads | Planning | Medium/ Long-term | ~2-5 years | Varies | | | | Action plan period | | | | | | | | | | | | | | | | | | |
| Northwest Power & Conservation Council | Northwest Power Plan | Pacific NW (WA, OR, Western MT and ID) | Planning | Medium/ Long-term | 5 years | - Two load forecast models; Aurora (prices)<br>- "New" Genesys (Monte Carlo hourly chronological simulation)<br>- Regional Portfolio Model (RPM) | | | | Action plan period | | | | | | | | | | | | | | | | | | |
| | NW Council Annual Adequacy Assessments | | Assessment | Medium/ Long-term | Annual | "New" Genesys, 5 year out "early warning"<br>5% annual LOLP (event year) | | | | | | | | Year 5 | | | | | | | | | | | | | | |
| BPA | Whitebook | Pacific NW (WA, OR, Western MT and ID) | Assessment | Long-term | | Deterministic | | | | | | | | | | | | | | | | | | | | | | |
| PNUCC | NW Regional Forecast | | Assessment | Long-term | | Deterministic | | | | | | | | | | | | | | | | | | | | | | |
| WPP | WRAP Forward-Showing Program | Participating Western Entities | Compliance | Near-term | Continuous | Load Responsible Entity (LRE) resource sufficiency evaluation | | Under development | | Tariff filing planned Q3 2022 | | | | | | | | | | | | | | | | | | |
| CPUC | CPUC RA Program | Load Serving Entities in CPUC's jurisdiction | Compliance | Near-term | Monthly and Annual | Load Serving Entity (LSE) resource sufficiency evaluation | | | | | | | | | | | | | | | | | | | | | | |
| WECC > NERC | Summer Reliability Assessment<br>Winter Reliability Assessment | Western U.S. > North America | Assessment | Near-term | Annual | MAVRIC (convolution) | | | | | | | | | | | | | | | | | | | | | | |
| | Long-term Reliability Assessment (LTRA) | | Assessment | Medium/ Long-term | Annual | | | | | | | | | | | | | | | | | | | | | | | |
| | Probabilistic Assessment (ProbA) | | Assessment | Medium/ Long-term | Biennial | | | | | | | | | | | | | | | | | | | | | | | |
| WECC | Western Assessment of Resource Adequacy | Western States and Canadian Provinces | Assessment | Medium/ Long-term | Annual | PCM, Capital Expansion, MAVRIC | | | | | | | | | | | | | | | | | | | | | | |
| **Operations (short-term) Programs** | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WPP | WRAP Operational Program | Participating Western Entities | Compliance | Operational | Continuous | Load Responsible Entity (LRE) | Under development | Tariff filing planned Q3 2022 | | | | | | | | | | | | | | | | | | | | |
| SPP | Markets+ Program | Participating Entities | Compliance | Operational | Continuous | BA-based | Under development | Tariff filing planned 2023? | | | | | | | | | | | | | | | | | | | | |
| CAISO | Western Day-ahead Markets Enhancement (EDAM, DAME) | CAISO and Participating Entities | Compliance | Operational | Continuous | | Under development | Tariff filing planned Q2 2023 | | | | | | | | | | | | | | | | | | | | |
| | Western Energy Imbalance Market (EIM) | CAISO and Participating Entities | Compliance | Operational | Continuous | | | | | | | | | | | | | | | | | | | | | | | |

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