Peak Demand by Subregion

WECC's annual Western Assessment of Resource Adequacy (Western Assessment) examines resource-adequacy-related risks concerning the reliability of the Western Interconnection over the next 10 years. Through an energy-based probabilistic approach, WECC looks at the risks throughout the interconnection and five subregions (See Figure 1). This work is meant to help stakeholders target specific areas and topics for deeper evaluation and mitigation.

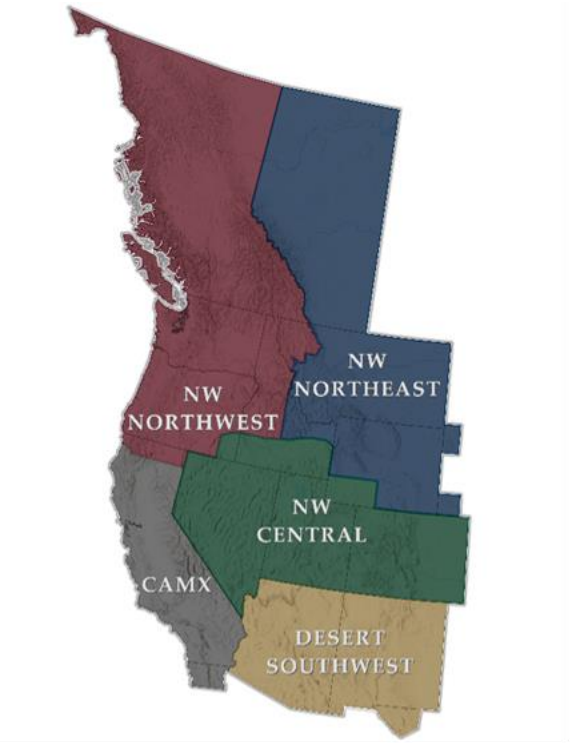

Figure 1: Map of the Western Interconnection with subregions

The 2024 Western Assessment examines the growth in peak demand, in gigawatts, over the next 10 years, and compares this year's forecasts to those made in the 2022 Western Assessment and 2023 Western Assessment.

Across the Western Interconnection. peak demand is expected to grow by 17.2%, from 164 GW in 2025 to 193 GW in 2034 (See Figure 2).

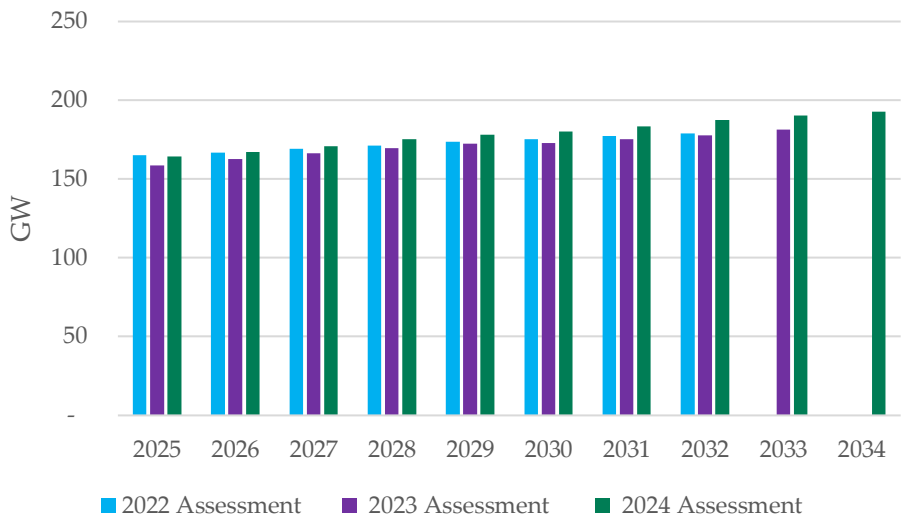

Figure 2: Peak demand projections for the Western Interconnection

Peak demand in the California-Mexico subregion is expected to increase by nearly 21% over the next decade, from 55 GW in 2025 to 66 GW in 2034 (See Figure 3). This is in line with the forecasts made in previous Western Assessments.

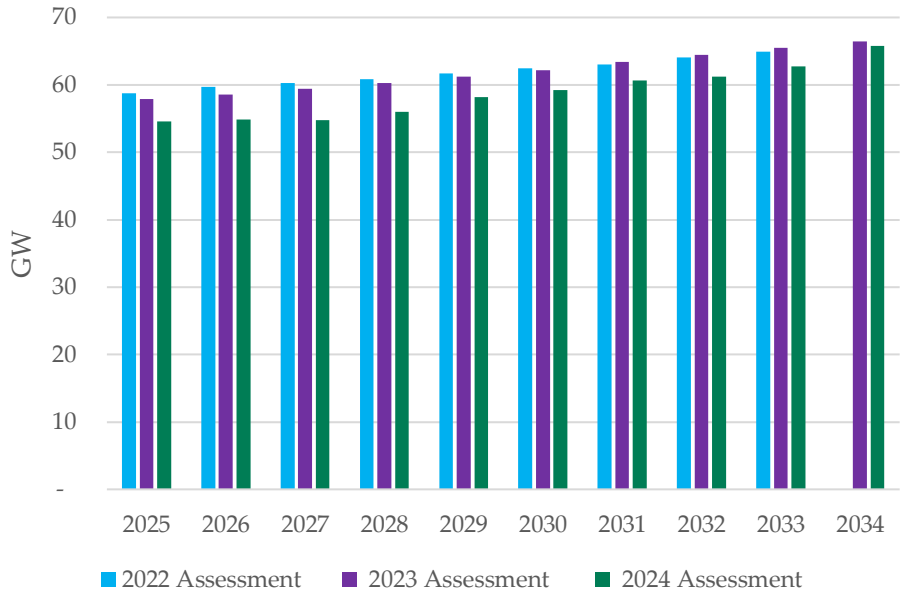

Figure 3: Peak demand projections for the California-Mexico subregion

Peak demand in the NW-Central subregion is forecast to grow by 8.5% over the next decade, from 33 GW in 2025 to 36 GW in 2034 (See Figure 4). This is slightly less than those made in the 2023 Western Assessment and considerably less than those made in the 2022 Assessment.

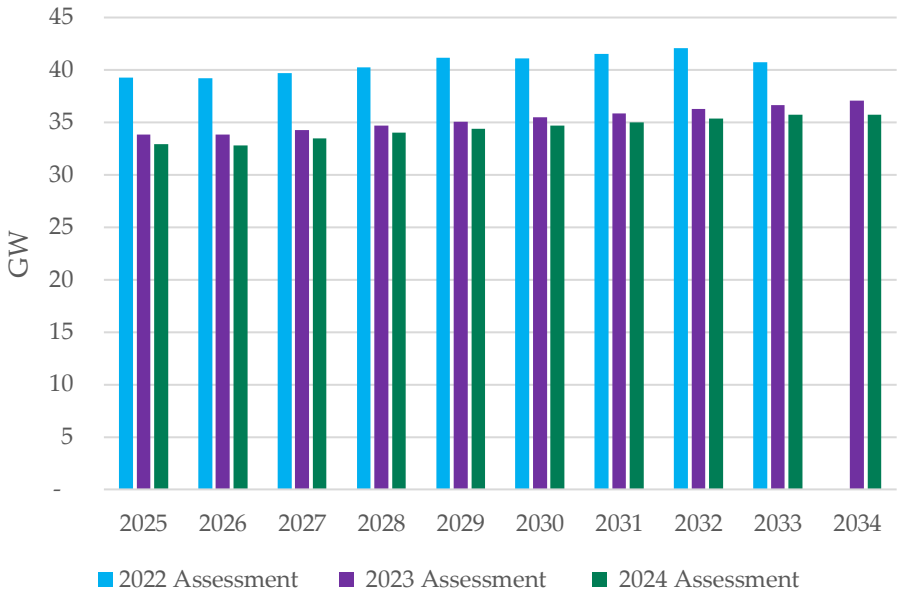

Figure 4: Peak demand projections for the NW-Central subregion

Peak demand in the NW-Northeast subregion is forecast to grow 11.3% over the next decade, from 19 GW in 2025 to 21 GW in 2034 (See Figure 5). Peak demand projections in this subregion have steadily increased in recent Western Assessments.

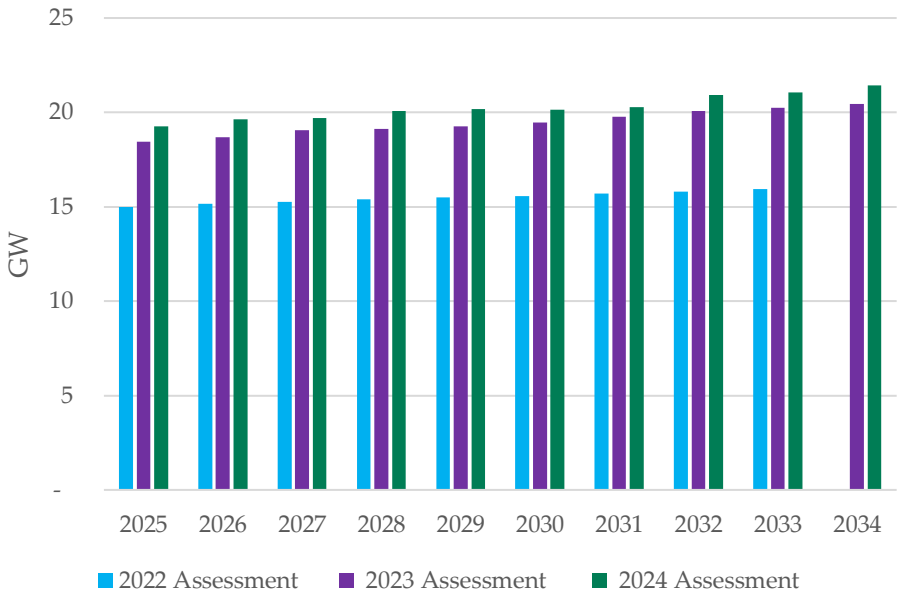

Figure 5: Peak demand projections for the NW-Northeast subregion

Peak demand in the NW-Northwest subregion is forecast to grow by 13.5% over the next decade, from

42 GW in 2025 to 47 GW in 2034 (See Figure 6). This is slightly less than the forecast in the 2023 Western Assessment, but over 10% more than the forecast made in the Western Assessment.

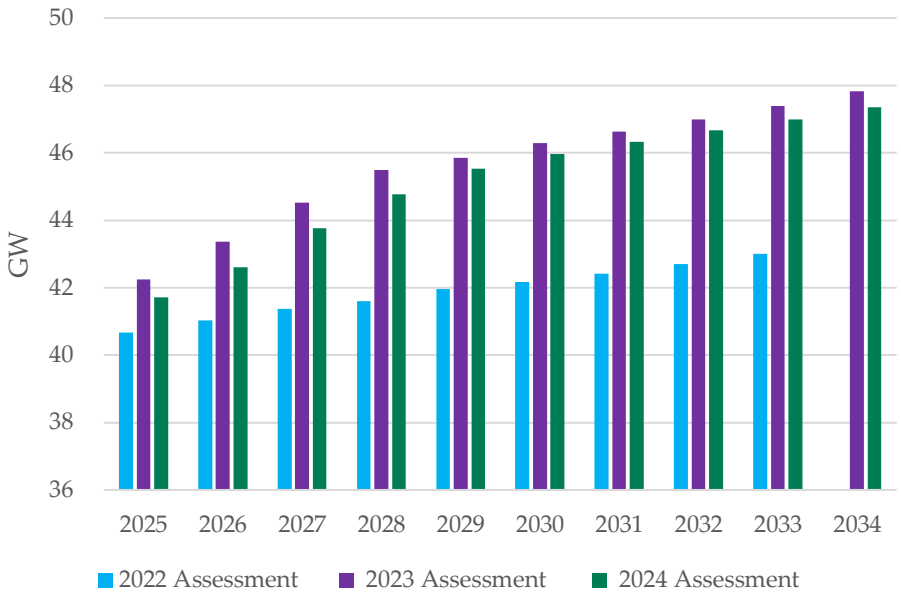

Figure 6: Peak demand projections for the NW-Northwest subregion

Peak demand in the Desert Southwest subregion is expected to grow 22.5% over the next decade, from 28 GW in 2025 to 34 GW in 2034 (See Figure 7). This is a slight increase over the forecast made in the 2023 Western Assessment.

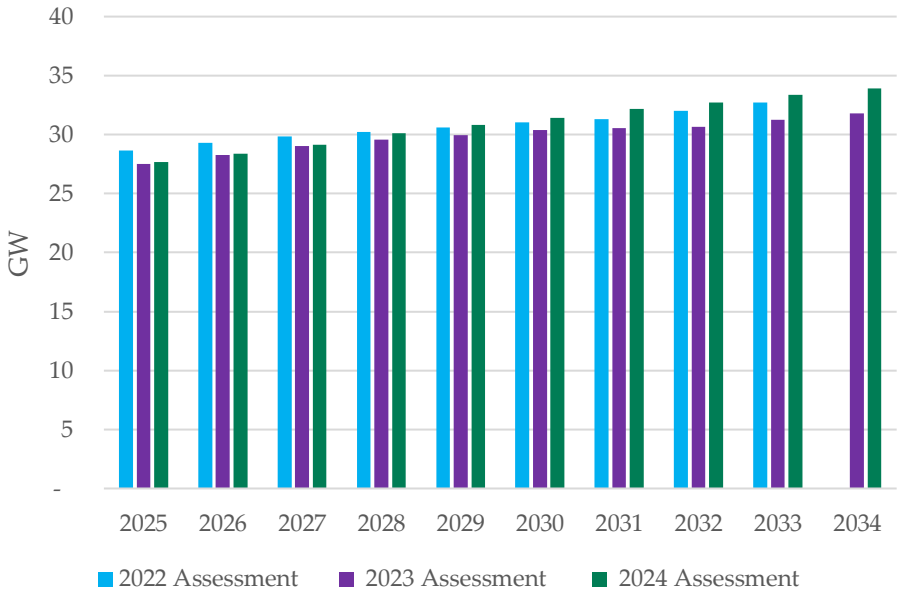

Figure 7: Peak demand projections for the Desert Southwest subregion