Import Scenarios

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.

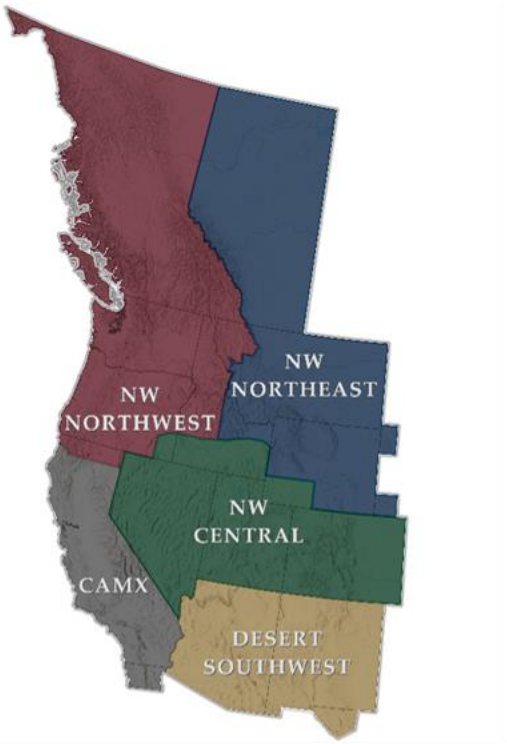

Figure 1: Map of the Western Interconnection with subregions

To better understand how reliant the subregions are on the ability to import electricity, the 2024 Western Assessment examined several scenarios in which either imports or new resources were restricted, and compared this with the same analysis conducted in previous Western Assessments:

- Scenario 1 looked at the impact on demand-at-risk hours in each of the five subregions over the next decade if no new resources were added but imports were allowed.
- Scenario 2 measured the demand-at-risk hours in each subregion if planned new resources were available but imports were not allowed.

Scenario 1: No new resources, with imports for the California-Mexico subregion

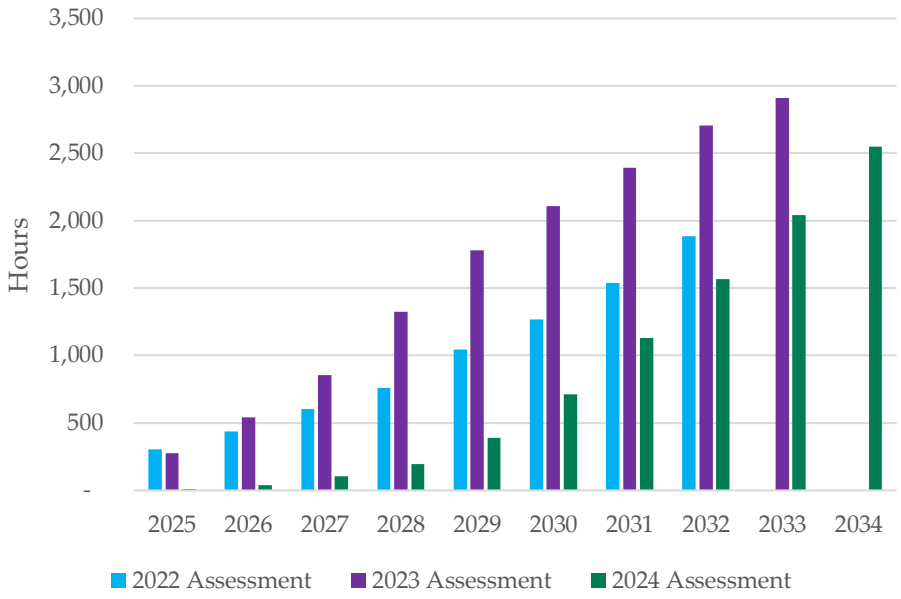

Figure 2: Demand-at-risk hours in the California-Mexico subregion if no new resources are built but imports are available

Scenario 2: With new resources, no imports for the California-Mexico subregion

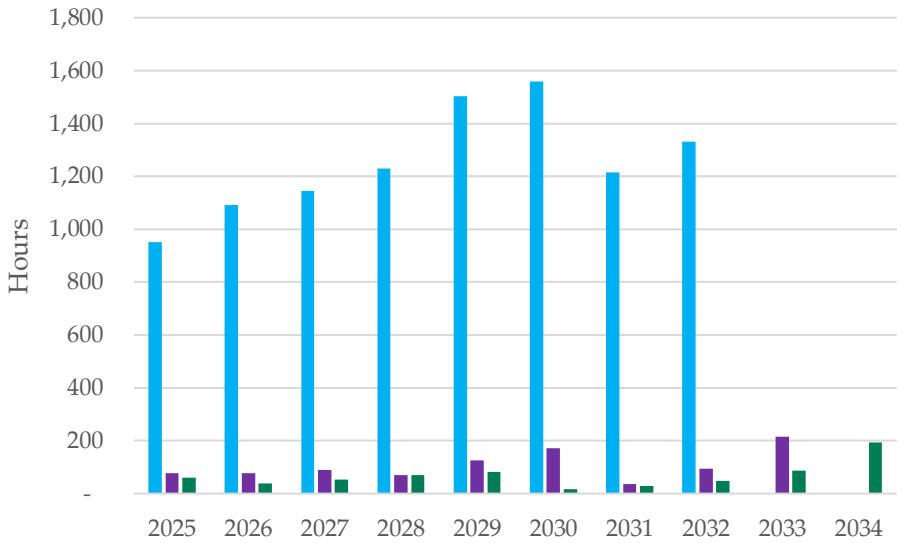

Figure 3: Demand-at-risk hours in the California-Mexico subregion if planned new resources are built but imports are not available

Scenario 1: No new resources, with imports for the NW-Central subregion

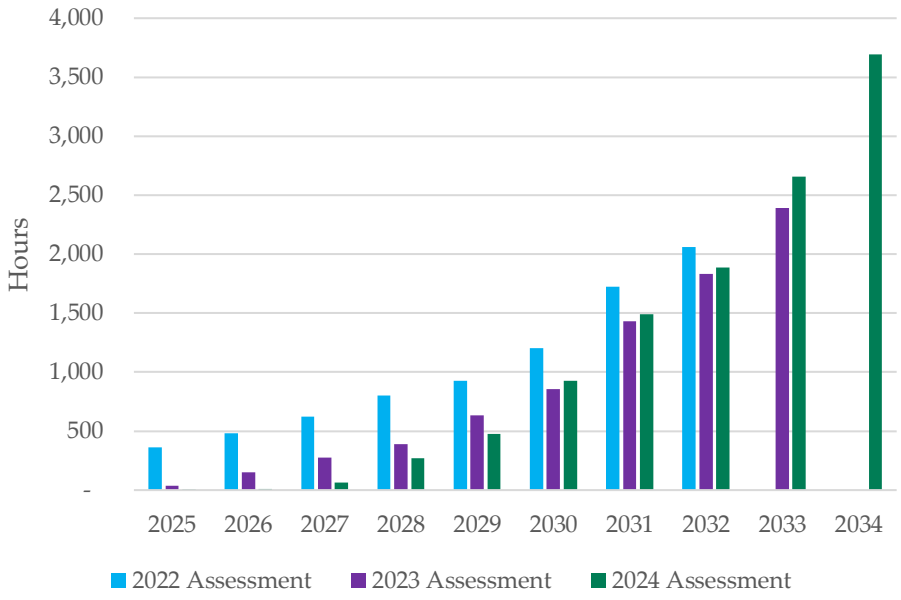

Figure 4: Demand-at-risk hours in the NW-Central subregion if no new resources are built but imports are available

Scenario 2: With new resources, no imports for the NW-Central subregion

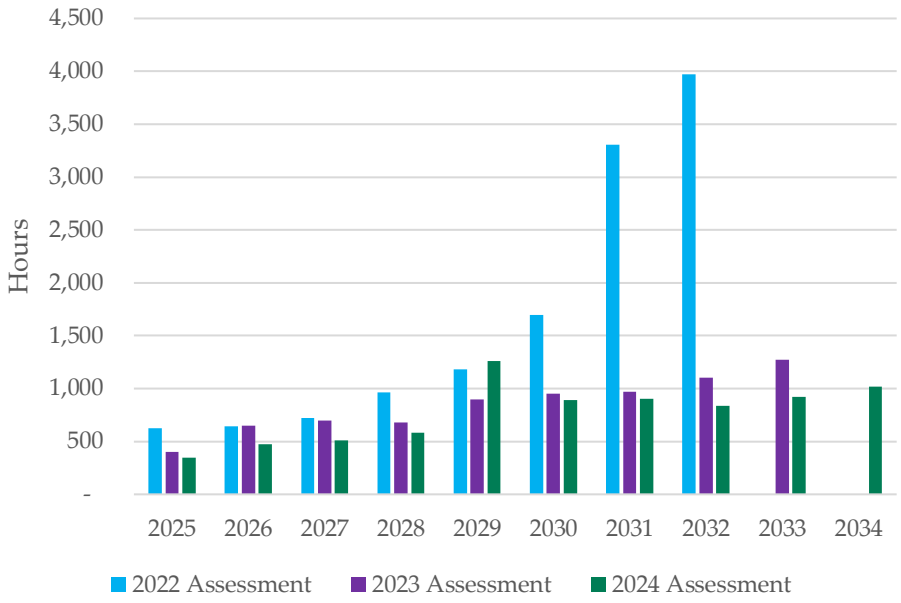

Figure 5: Demand-at-risk hours in the NW-Central subregion if planned new resources are built but imports are not available

Scenario 1: No new resources, with imports for the NW-Northeast subregion

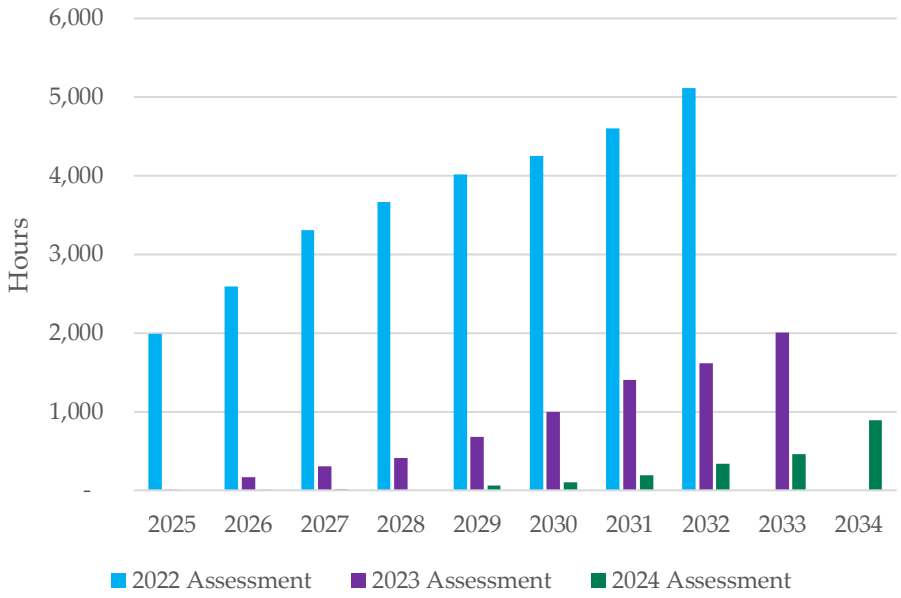

Figure 6: Demand-at-risk hours in the NW-Northeast subregion if no new resources are built but imports are available

Scenario 2: With new resources, no imports for the NW-Northeast subregion

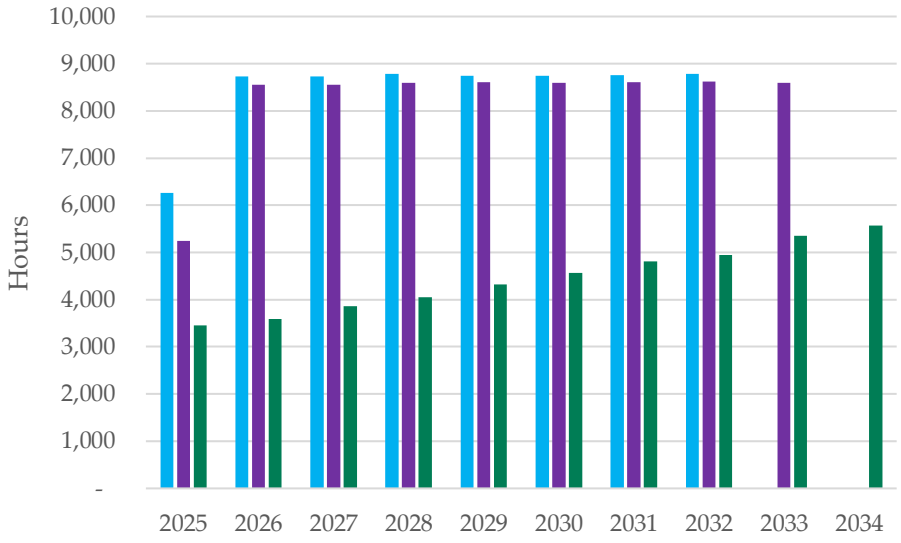

Figure 7: Demand-at-risk hours in the NW-Northeast subregion if planned new resources are built but imports are not available

Scenario 1: No new resources, with imports for the NW-Northwest subregion

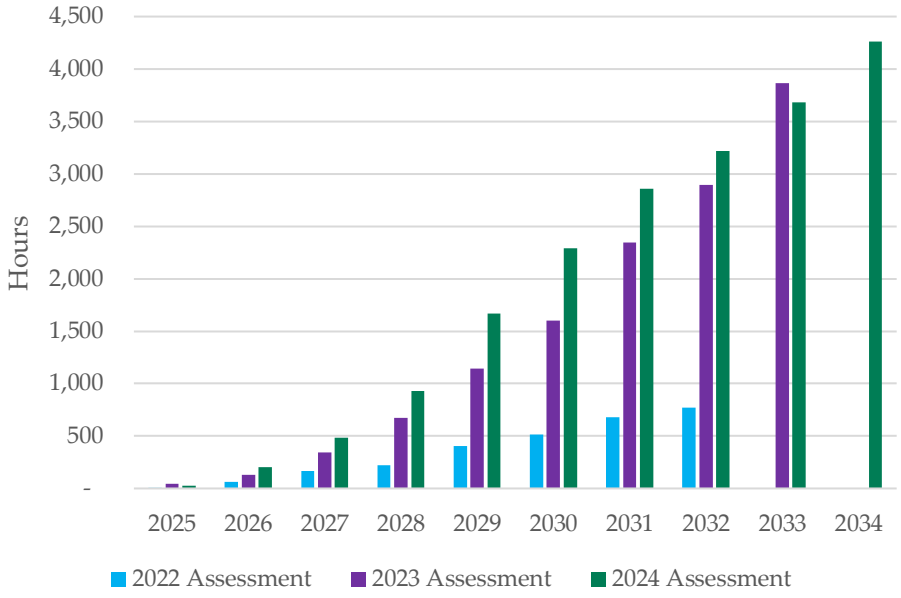

Figure 8: Demand-at-risk hours in the NW-Northwest subregion if no new resources are built but imports are available

Scenario 2: With new resources, no imports for the NW-Northwest subregion

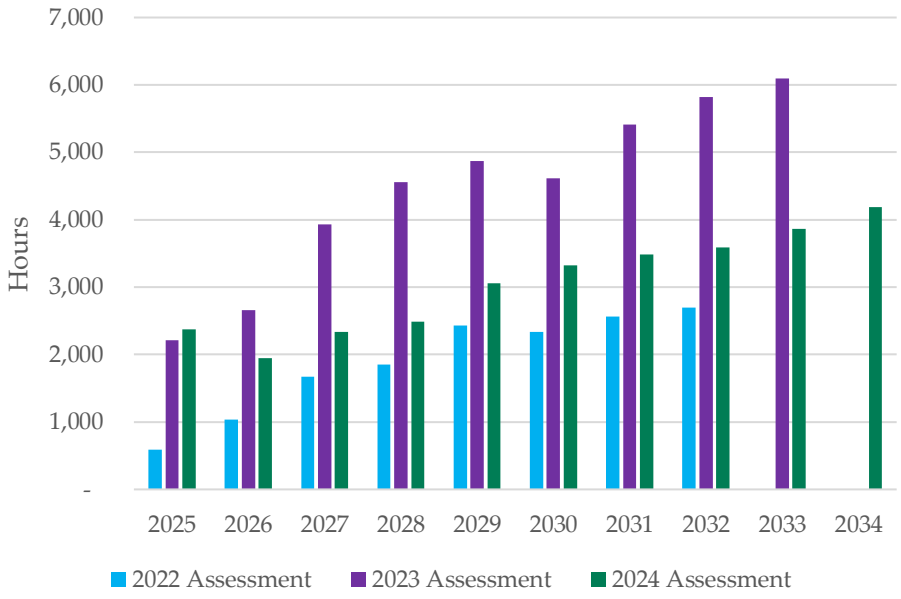

Figure 9: Demand-at-risk hours in the NW-Northwest subregion if planned new resources are built but imports are not available

Scenario 1: No new resources, with imports for the Desert Southwest subregion

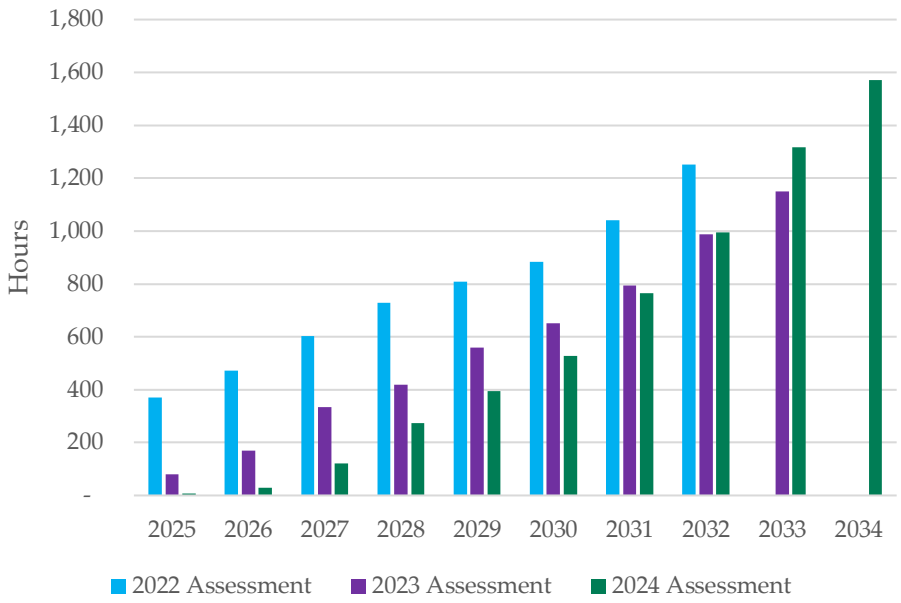

Figure 10: Demand-at-risk hours in the Desert Southwest subregion if no new resources are built but imports are available

Scenario 2: With new resources, no imports for the Desert Southwest subregion

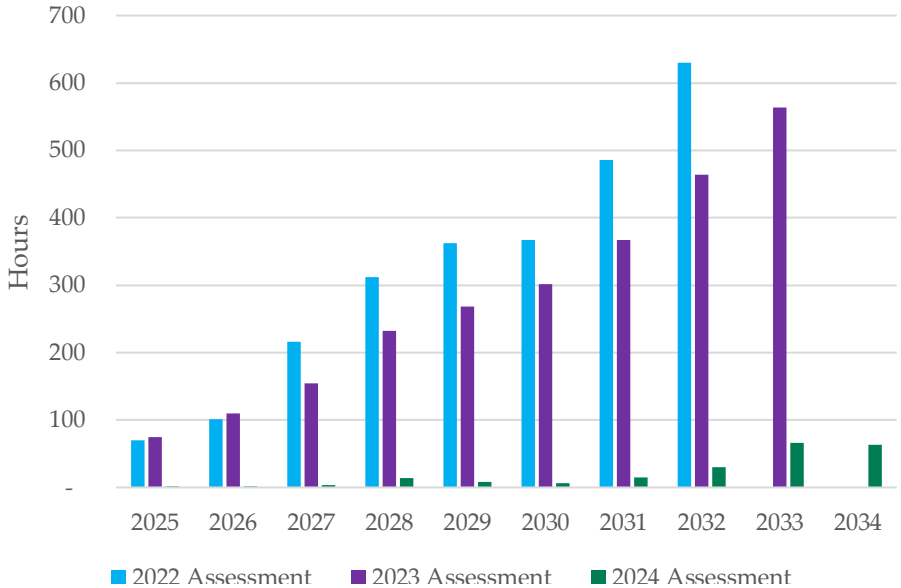

Figure 11: Demand-at-risk hours in the Desert Southwest subregion if planned new resources are built but imports are not available