Western Assessment of Resource Adequacy

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Prepared for the Reliability Risk Committee and Reliability Assessment Committee

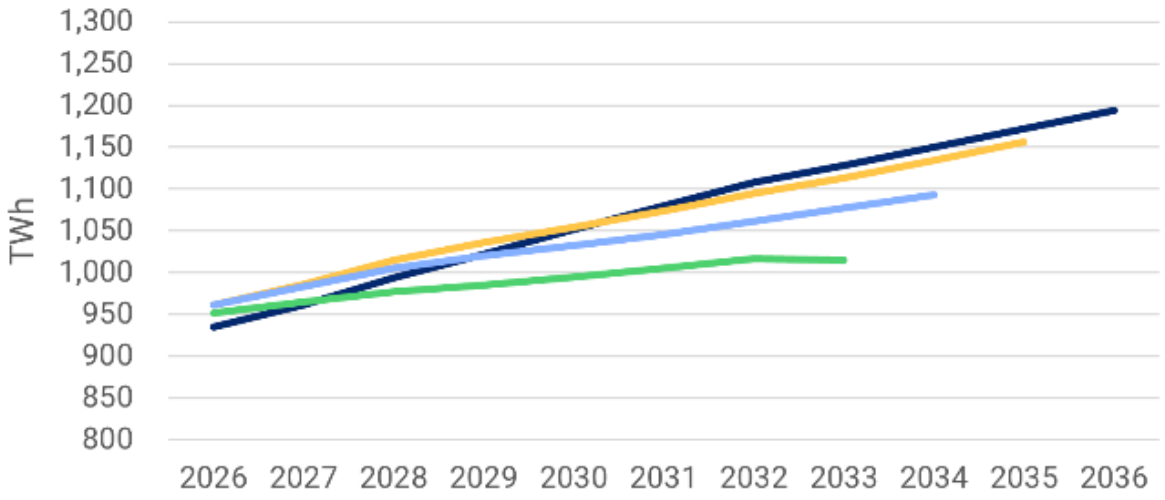
Electric Reliability & Security for the West

March 19, 2026

- Demand Forecasts
- Planned Additions
- Planned Retirements
- Resource Mix
- Resource Scenarios
- Load Scenarios
- Subregional Results
- Links to Material

Demand Forecasts

Annual Demand Projections



Peak Demand Projections

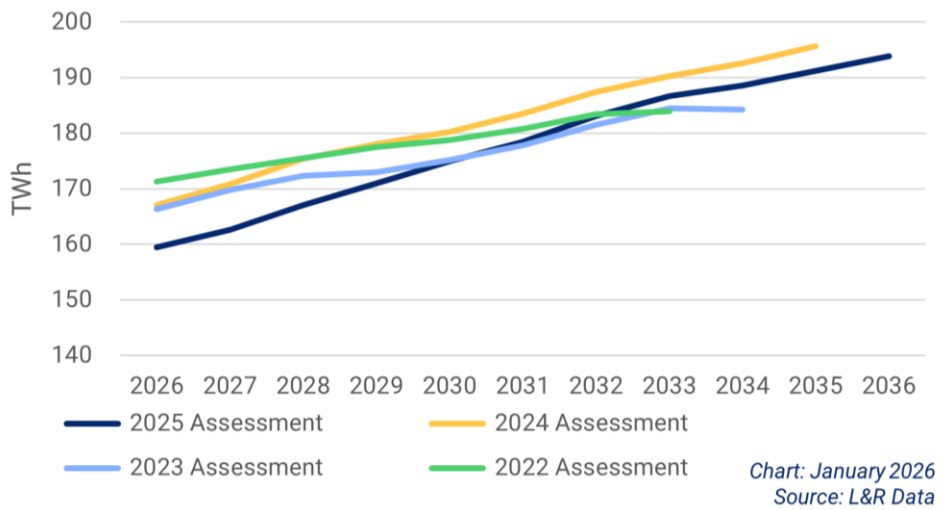


Chart: January 2026
Source: L&R Data

Subregion	10-year Demand Growth Projection	Average Annual Growth Rate
Alberta	8 TWh (9%)	1%
Basin	20 TWh (26%)	2%
British Columbia	5.5 TWh (8%)	1%
California	69 TWh (26%)	2%
Mexico	9 TWh (45%)	4%
Northwest	47 TWh (24%)	2%
Rocky Mountain	21 TWh (27%)	2%
Southwest	67 TWh (42%)	4%

Subregion	10-year Peak Demand Growth Projection	Average Annual Growth Rate
Alberta	1 GW (8%)	1%
Basin	3 GW (18%)	2%
British Columbia	.4 GW (3%)	.3%
California	12 GW (21%)	2%
Mexico	1.6 GW (41%)	4%
Northwest	7 GW (21%)	2%
Rocky Mountain	3 GW (23%)	2%
Southwest	10 GW (29%)	3%

Planned Additions

Historical and Planned Additions

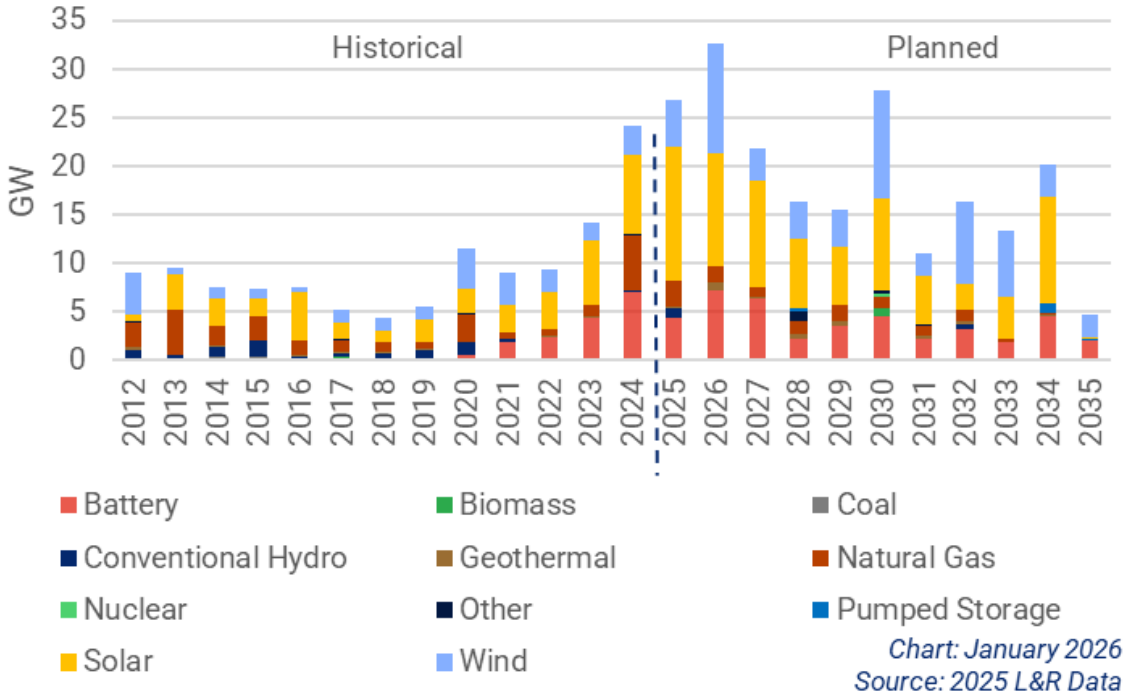


Chart: January 2026
Source: 2025 L&R Data

- 177 GW from 2026-2035
- 90% is inverter-based resources (battery, solar, wind)
- 70% are variable energy resources (solar & wind)

Planned Additions by Subregion

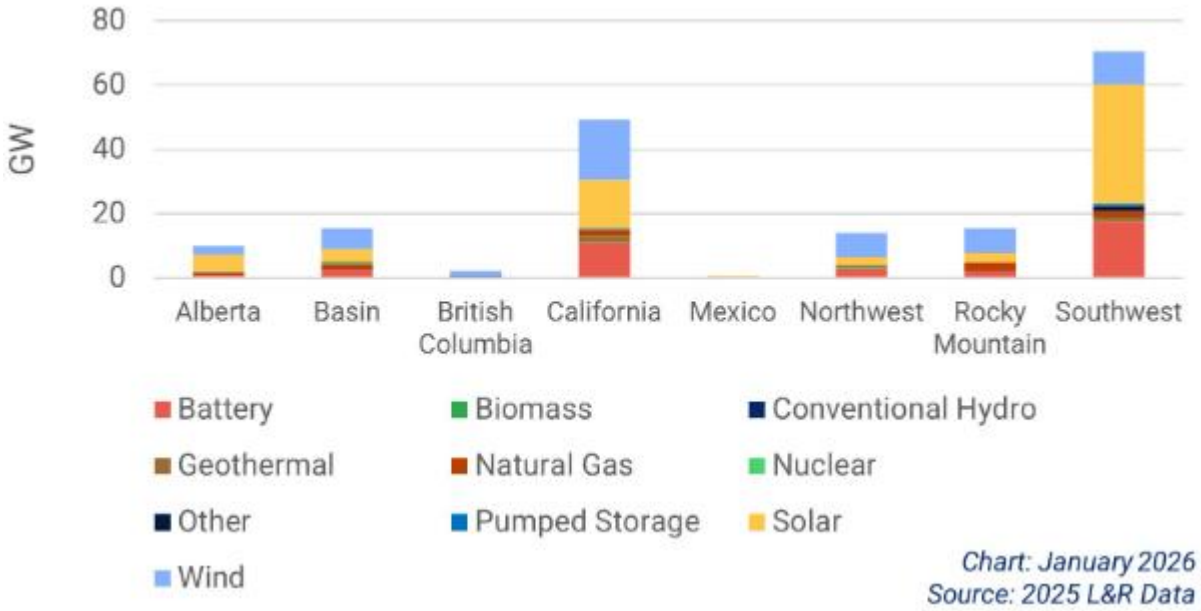
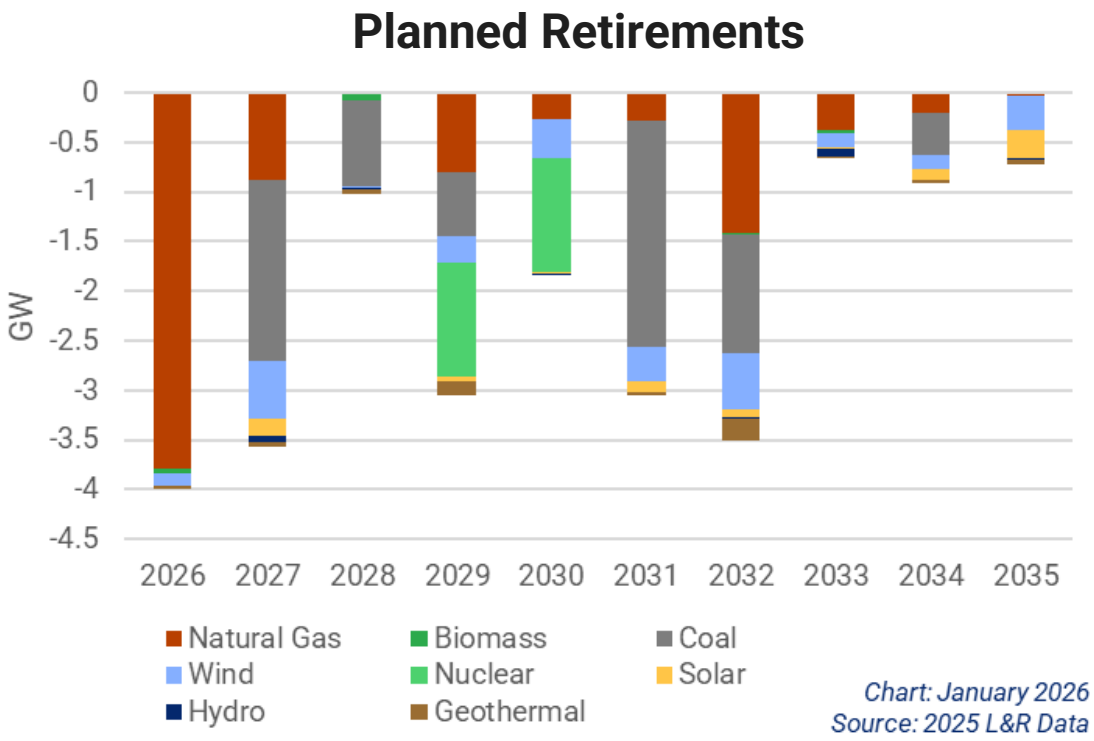
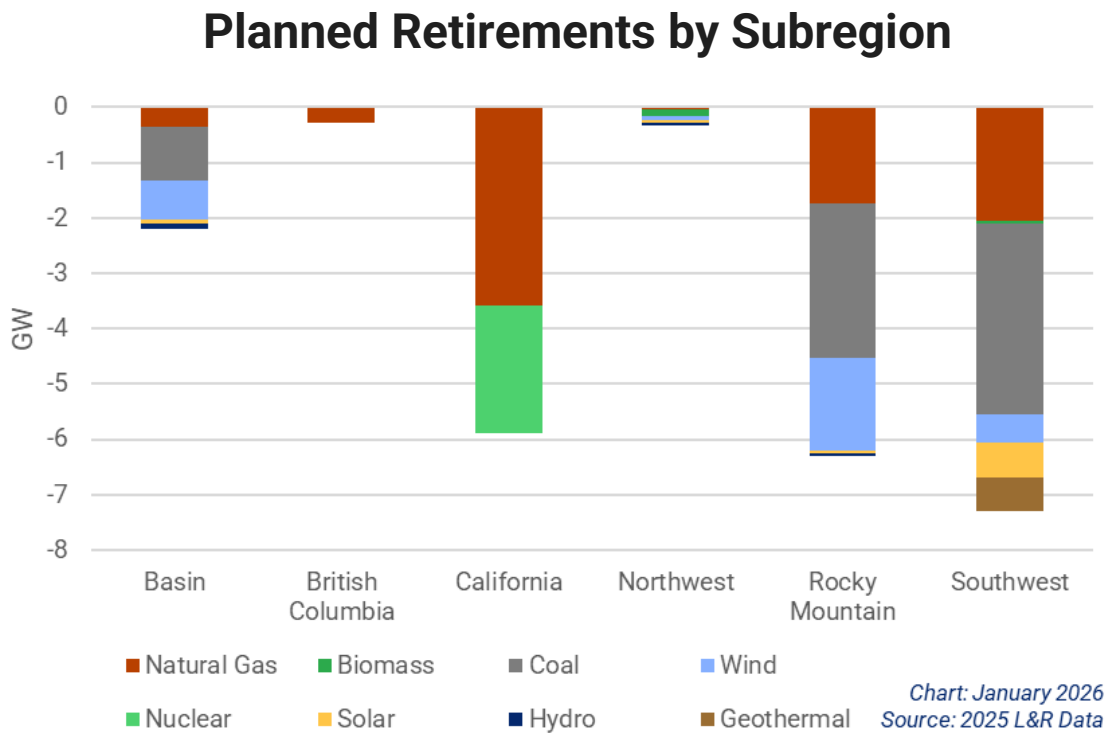


Chart: January 2026
Source: 2025 L&R Data

- 119 GW of resource additions are in California and the Southwest
- 15 GW of additions in Basin, the Northwest, and Rocky Mountain
- 13 GW of additions in Alberta, British Columbia, and Mexico

Planned Retirements





- 22 GW from 2026–2035
- 80% is natural gas, coal, or nuclear

- 7 GW in the Southwest
- 6 GW in California and Rocky Mountain

Resource Mix

Year-End 2024

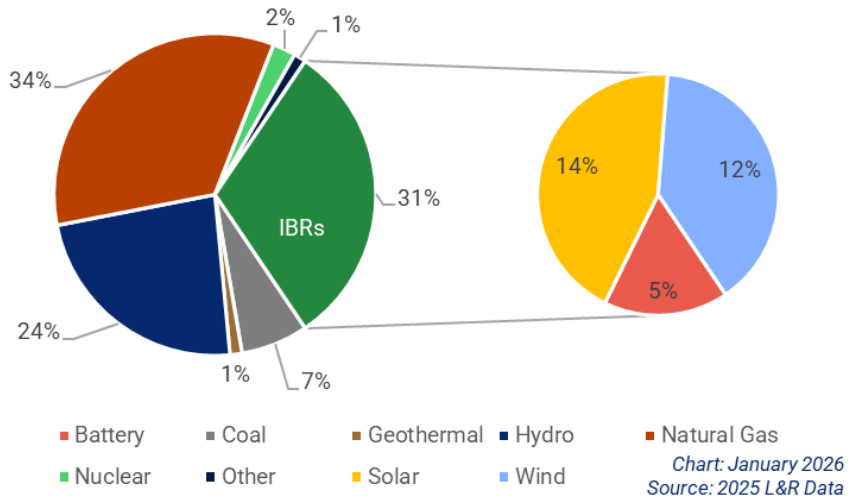


Chart: January 2026
Source: 2025 L&R Data

Projected Year-End 2035

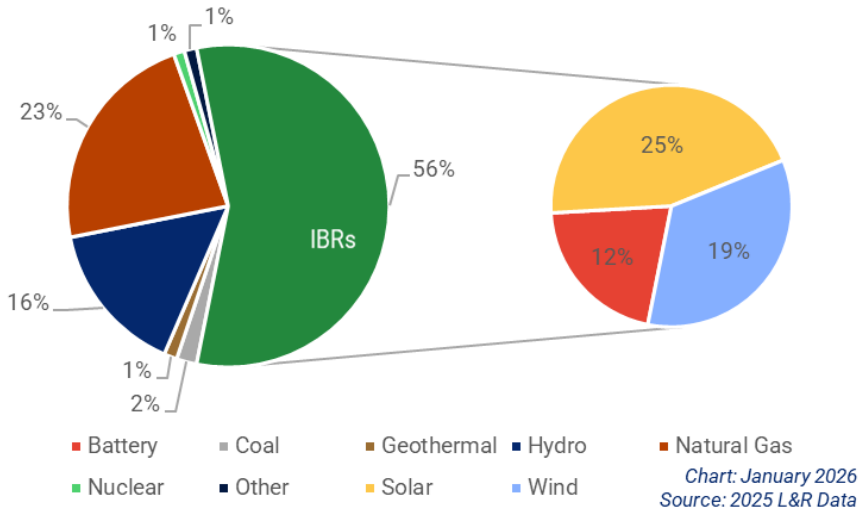


Chart: January 2026
Source: 2025 L&R Data

Comparison of Nameplate Capacity to Available Energy

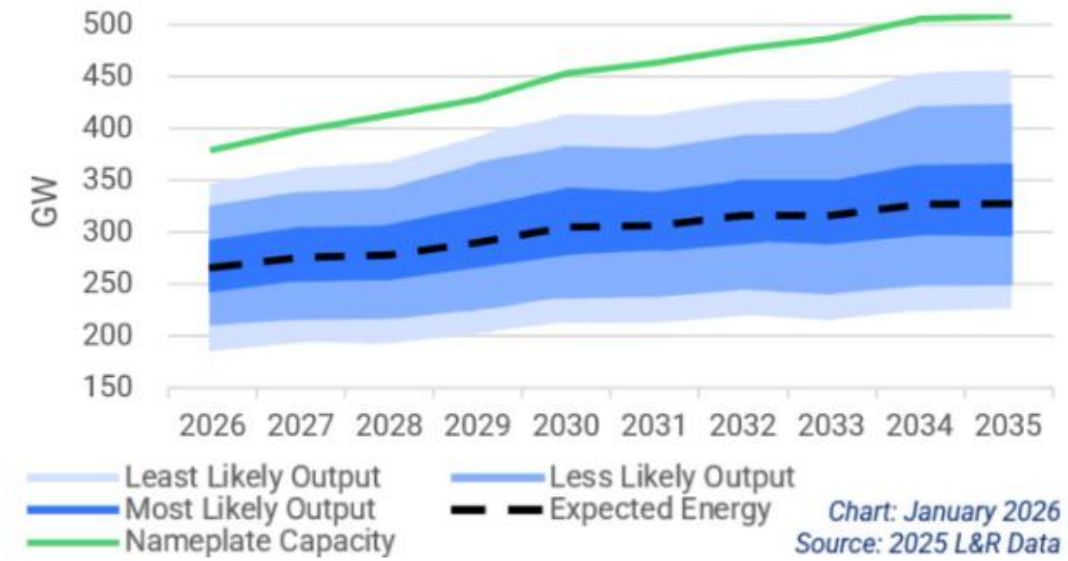


Chart: January 2026
Source: 2025 L&R Data

Resource Scenarios

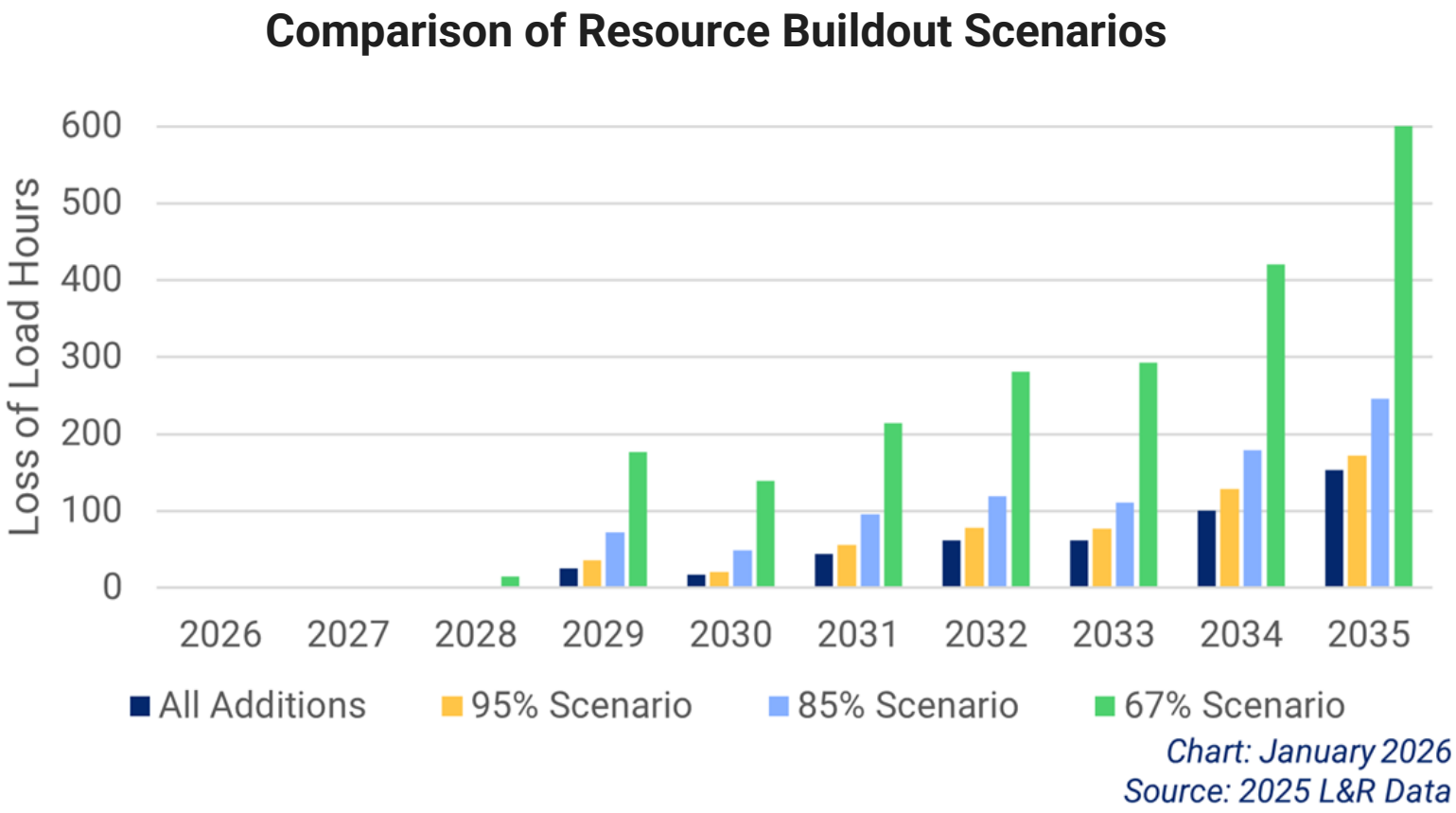


Chart: January 2026
Source: 2025 L&R Data

Even with all planned resource additions, loss of load is encountered.

Load Scenarios (2030 and 2035)

Comparison of Load Scenarios

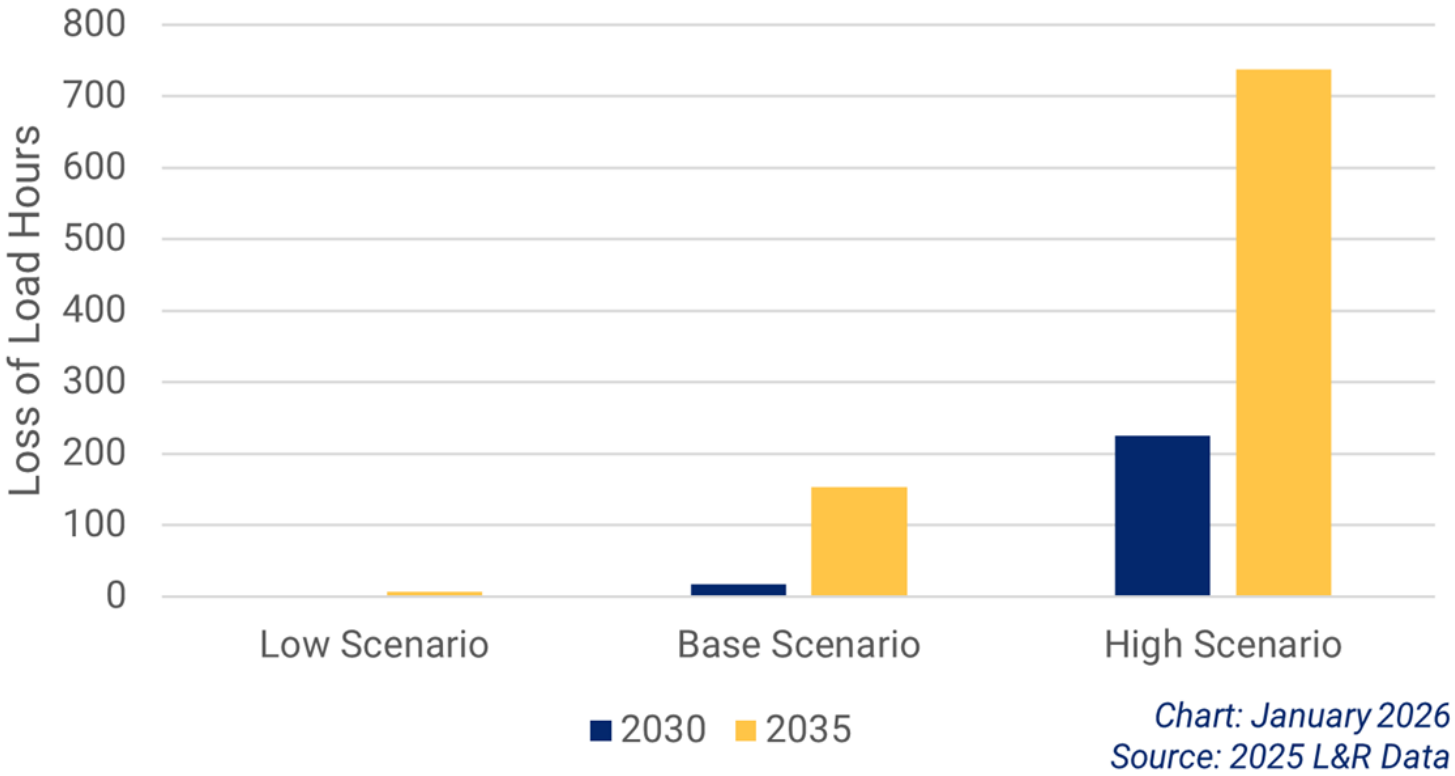


Chart: January 2026
Source: 2025 L&R Data

High Load Scenario

Incremental Net Energy Added to Load Forecast (GWH)		
Region	2030	2035
Alberta	13,315	17,476
California	-	876
Northwest	27,484	30,774
Rocky Mountain	5,231	6,336
Southwest	27,028	33,273
Total	**73,058**	**88,736**

Low Load Scenario

Summer Peak		Winter Peak		Annual Demand	
2030	2035	2030	2035	2030	2035
-2.5%	-5.0%	-5.0%	-10%	-5.0%	-10%

Even with all planned resource additions **and** a reduction in demand, loss of load is encountered in the Northwest subregion.

Northwest

All Additions: 445 LOLH

85%: 706 LOLH

High Load: 218 LOLH (2030), 714 LOLH (2035)

95%: 525 LOLH

67%: 1,294 LOLH

Low Load: 1 LOLH (2030), 7 LOLH (2035)

Northwest: 67% Additions 2035 LOLH	Hour Beginning																							
Month	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	4	4	4	4	4	5	4	8	5	5	5	5	5	5	4	5	7	11	8	6	6	5	5	3
2	-	-	-	-	-	-	2	4	1	-	-	-	-	-	-	-	-	2	3	2	1	-	-	-
3	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	1	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	2	3	4	5	7	11	6	1	-	-	-
8	-	-	-	-	-	-	-	-	-	-	1	1	2	2	3	4	6	7	10	9	5	2	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	7	10	8	1	-	-	-	-
10	-	-	-	-	-	1	2	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	2	-	-	-	-	-	-	-	-	1	5	5	2	-	-	-	-
12	-	-	-	-	-	2	7	12	10	3	2	-	-	-	-	1	8	13	8	8	6	1	-	-

Northwest: 67% Additions 2035 EUE (MWh)	Hour Beginning																							
Month	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	272	577	869	771	607	280	133	1,707	1,939	1,789	1,448	1,039	773	683	659	1,175	4,213	7,064	6,311	4,673	1,424	979	184	107
2	-	-	-	-	-	-	39	222	18	-	-	-	-	-	-	-	-	32	309	280	1	-	-	-
3	-	-	-	-	-	-	-	143	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	11	5	-	-	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	25	125	267	1,455	1,419	2,310	1,897	1	-	-	-
8	-	-	-	-	-	-	-	-	-	-	5	563	1,563	2,684	3,400	3,712	4,891	6,027	6,627	5,131	3,169	130	-	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	13	280	254	158	809	1	-	-	-	-
10	-	-	-	-	-	12	8	1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	12	-	-	-	-	-	-	-	-	1	131	87	4	-	-	-	-
12	-	-	-	-	-	20	226	609	211	8	2	-	-	-	-	2	59	1,385	509	380	139	3	-	-

Basin

All Additions: 18 LOLH

85%: 163 LOLH

High Load: 7 LOLH (2030), 24 LOLH (2035)

95%: 43 LOLH

67%: 711 LOLH

Basin: 67% Additions 2035 LOLH	Hour Beginning																						
Month	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
4	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	5	5	1	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	2	11	18	16	7	-	-
8	-	-	-	-	-	-	-	1	-	-	-	-	-	-	-	-	-	3	14	18	8	5	1	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	7	10	10	3	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Basin: 67% Additions 2035 EUE (MWh)	Hour Beginning																						
Month	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23
1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
3	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
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5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	290	4,709	1,541	3	-	-
7	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	740	24,700	13,825	188	-	-
8	-	-	-	-	-	-	-	15	-	-	-	-	-	-	-	-	-	18	10,626	19,406	8,615	1,797	2	-
9	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	30	5,621	5,099	127	-	-	-
10	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
11	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
12	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Other Subregions

Rocky Mountain

85% Scenario: 4 LOLH

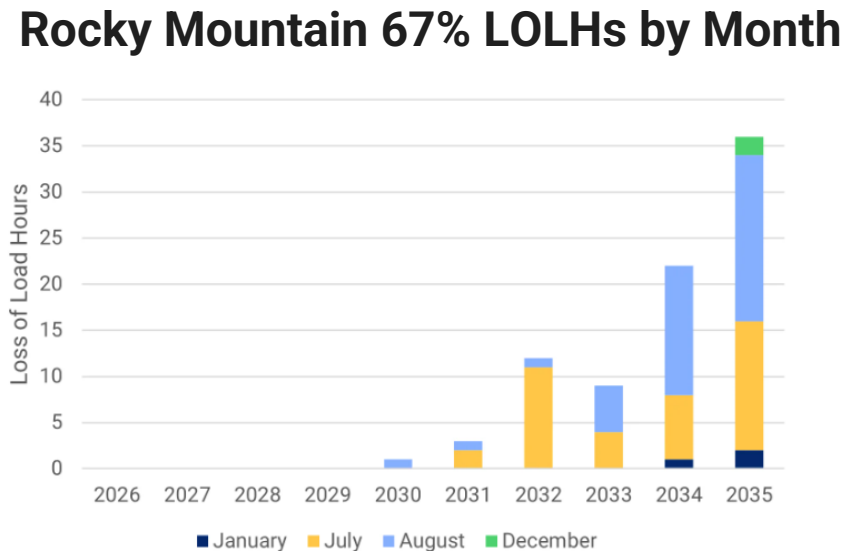
67% Scenario: 83 LOLH

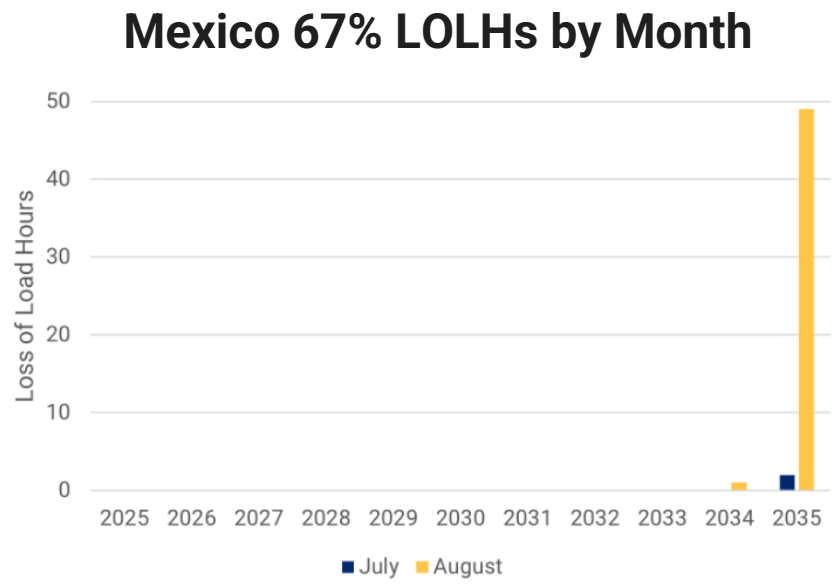
Mexico

67% Scenario: 52 LOLH

California

67% Scenario: 4 LOLH





Western Assessment Material

- 2025 Western Assessment of Resource Adequacy
- Western Assessment Supplemental Material
- Western Assessment of Resource Adequacy Modeling Approach
- Western Assessment Glossary

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