



PNM 2026 IRP Facilitated Stakeholder Process HEG Results Update July 2026



Outline

- ELCC Updates for HEG
- Revised HEG Modeling Results
- Statement of Need Revisions for HEG Future

Revised HEG Modeling Results



ELCC Updates for HEG Future and Sensitivities

- Initial reliability results from HEG showed PNM's portfolio was over-building to meet system needs.
- PNM worked with PowerGem to adjust ELCC's of energy limited resources (short-duration storage, solar, wind)
- Final adjustments resulted in slight increases to ELCC's to align with portfolio reliability target of 0.1 LOLE
- PNM reran all HEG related sensitivities with the updated ELCC's to determine impacts to capacity expansion plans

ELCC = Effective Load Carrying Capability

HEG = High Economic Growth

ELCC Updates for HEG Future

Comparison between previous ELCC and updated ELCC

Block	Block 0	Block 1	Block 2	Block 3	Block 4	Block 5	Block 6	Block 7	Block 8
2026 IRP 4hr BESS									
Installed capacity (MW)	0	1,690	1,990	2,290	2,590	2,890	3,190	3,490	3,790
May 13th	74.4%	48.8%	32.2%	25.3%	21.3%	18.6%	16.7%	15.2%	13.8%
Updated	77.4%	50.7%	33.5%	26.3%	22.1%	19.4%	17.4%	15.8%	14.3%
2026 IRP Solar PV									
Installed capacity (MW)	0	2,360	2,760	3,160	3,560	3,960	4,360	4,760	5,160
May 13th	19.4%	8.3%	2.9%	1.6%	1.0%	0.7%	0.6%	0.4%	0.3%
Updated	20.2%	8.6%	3.1%	1.7%	1.1%	0.8%	0.6%	0.5%	0.3%
2026 IRP Wind									
Installed capacity (MW)	0	1,460	1,860	2,260	2,660	3,060	3,460	3,860	4,260
May 13th	11.6%	10.8%	4.2%	2.4%	1.6%	1.2%	0.9%	0.7%	0.6%
Updated	12.5%	11.7%	4.5%	2.6%	1.7%	1.3%	1.0%	0.8%	0.6%
2026 IRP 8hr BESS									
Installed capacity (MW)	0	260	560	860	1,160	1,460	1,760	2,060	2,360
May 13th	82.0%	66.3%	45.8%	36.9%	31.7%	28.1%	25.5%	23.5%	21.5%
Updated	88.6%	71.7%	49.5%	39.9%	34.2%	30.4%	27.6%	25.4%	23.2%

High Economic Growth Expansion Plan (updated)

May 13th

HEG Accredited Capacity (MW)													
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
		Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro		SD Storage	Demand Response			Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2029	-	-	169	-	92	-	-	255	-	85	93	-	693
2030	-	-	-	-	92	-	-	-	29	12	-	-	133
2031	-	-	39	-	-	-	-	223	-	38	-	11	311
2032	-	-	-	-	-	-	-	-	-	22	-	11	33
2033	-	-	-	-	276	-	-	-	-	26	3	12	317
2034	-	-	-	-	-	84	-	-	-	32	-	12	128
2035	-	-	-	-	-	-	-	-	-	14	12	11	37
2036	-	-	-	-	-	-	-	-	-	2	8	11	21
Total	-	-	208	-	460	84	-	478	29	232	116	68	1,674

Updated

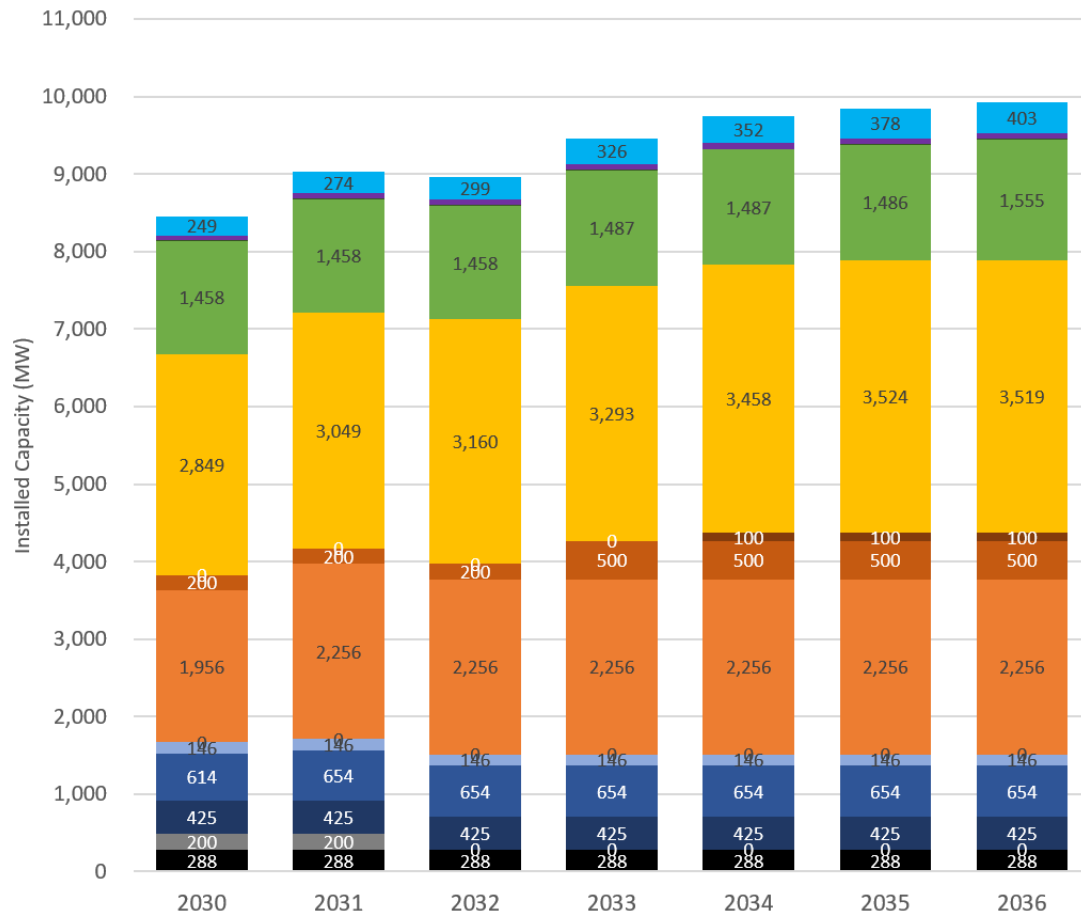
2029	-	-	169	-	-	-	-	308	-	61	113	-	650
2030	-	-	-	-	-	-	-	101	29	27	-	-	157
2031	-	-	39	-	-	-	-	240	-	64	-	11	355
2032	-	-	-	-	-	-	-	-	-	19	-	11	30
2033	-	-	-	-	276	-	-	-	-	23	2	12	313
2034	-	-	-	-	-	84	-	-	-	27	-	12	123
2035	-	-	-	-	-	-	-	-	-	10	16	11	38
2036	-	-	-	-	-	-	-	-	-	7	10	11	27
Total	-	-	208	-	276	84	-	649	29	238	141	68	1,692

Observations

- New observations
 - Less Long-Duration Storage than previous results
 - More Short-Duration Storage than previous results
- Same as the previous
 - Solar and EE bundles added consistently through 2036 (Similar to CTP)
 - Demand Response in 2030 (Peak Saver Extension, EV TOD, TOD) (Similar to CTP)
 - Pumped Hydro needed in in focus years (Incremental to CTP)

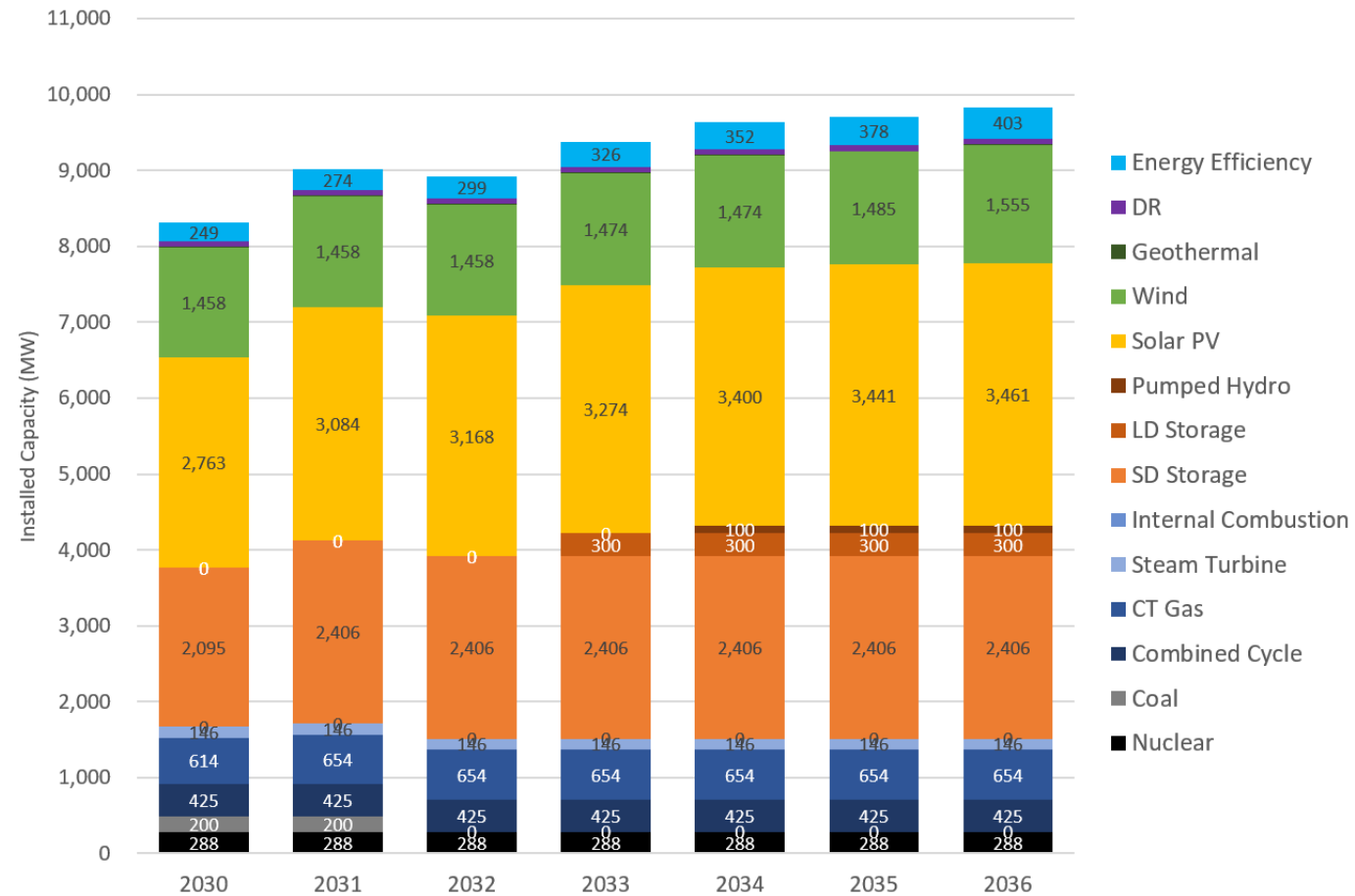
Annual Installed Capacity: Updates to HEG

HEG Installed Capacity (MW)



May 13th

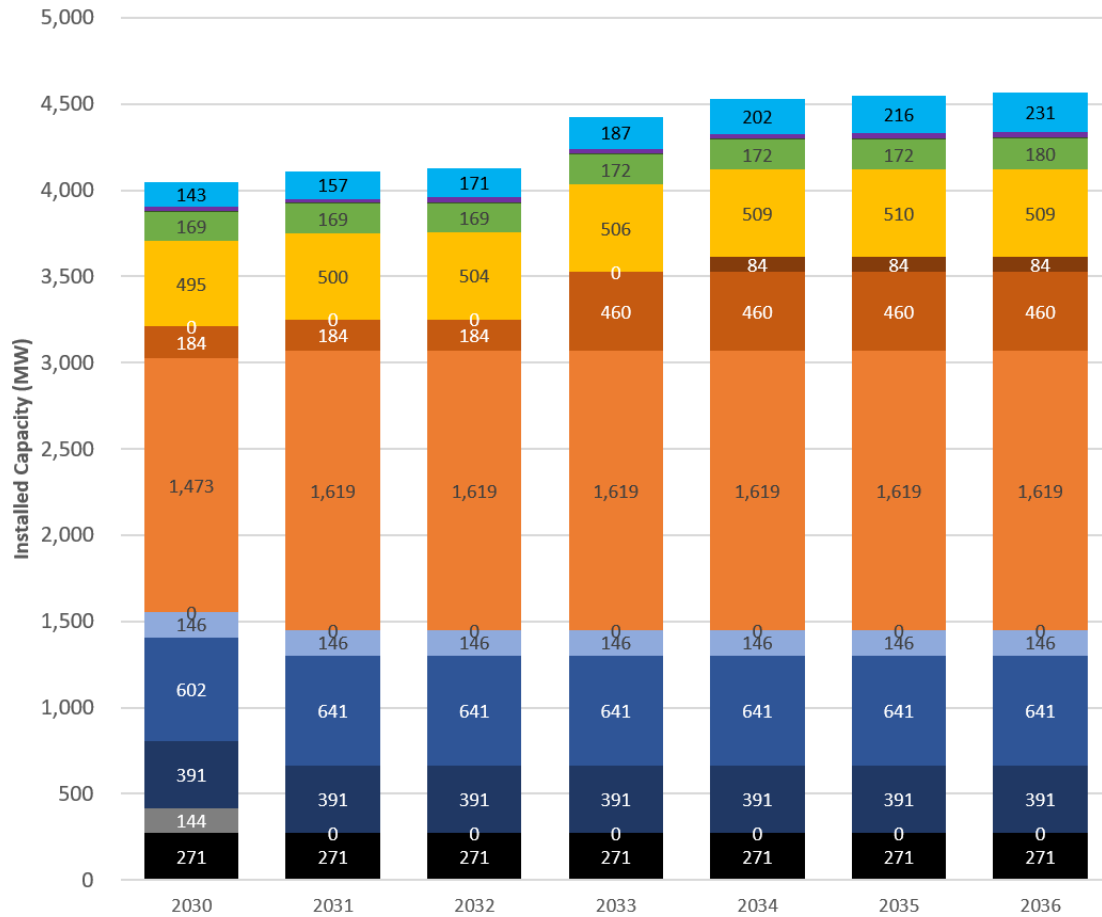
HEG Installed Capacity (MW)



Updated

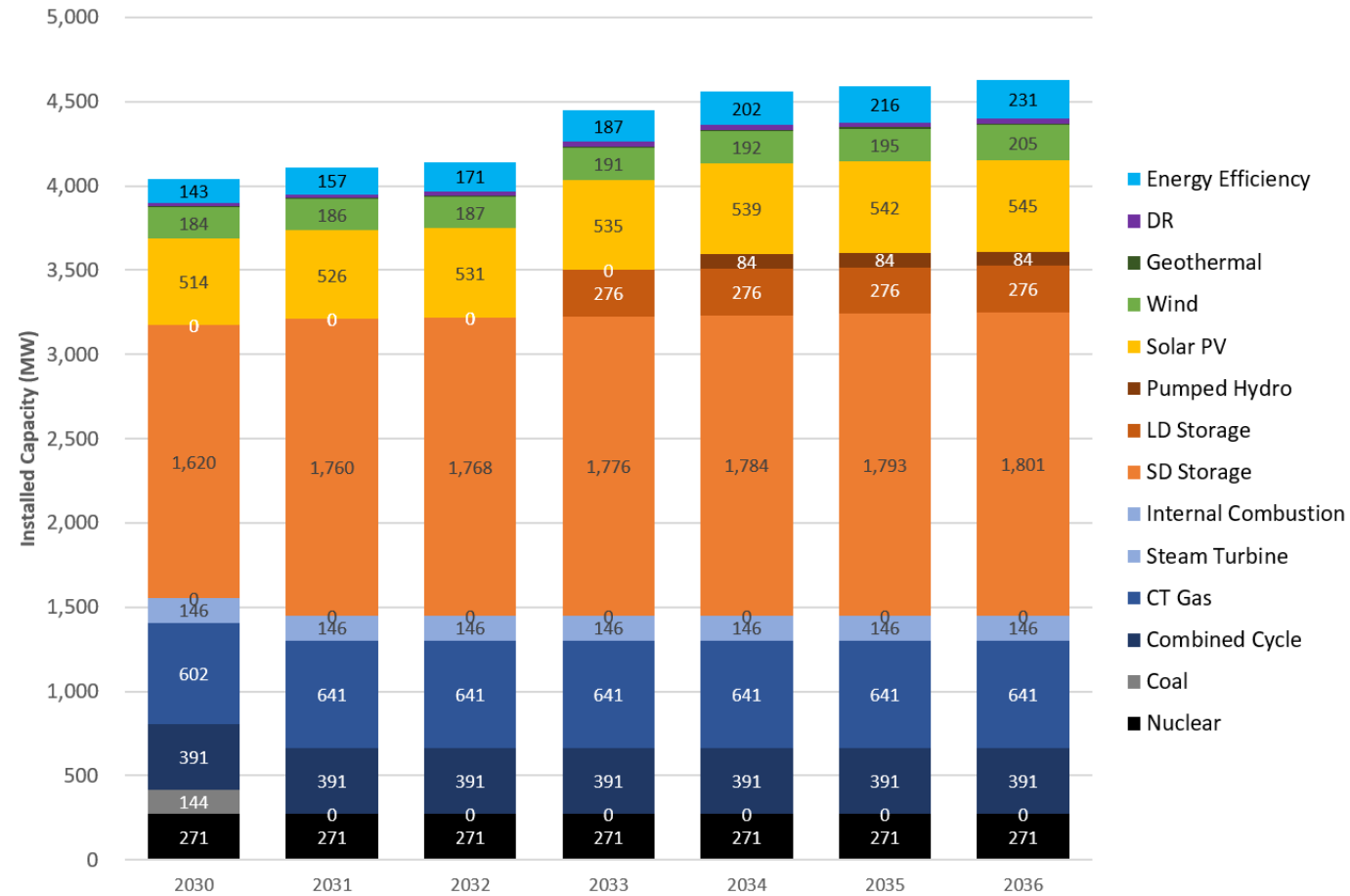
Annual Accredited Capacity: Updates to HEG

HEG Accredited Capacity (MW)



May 13th

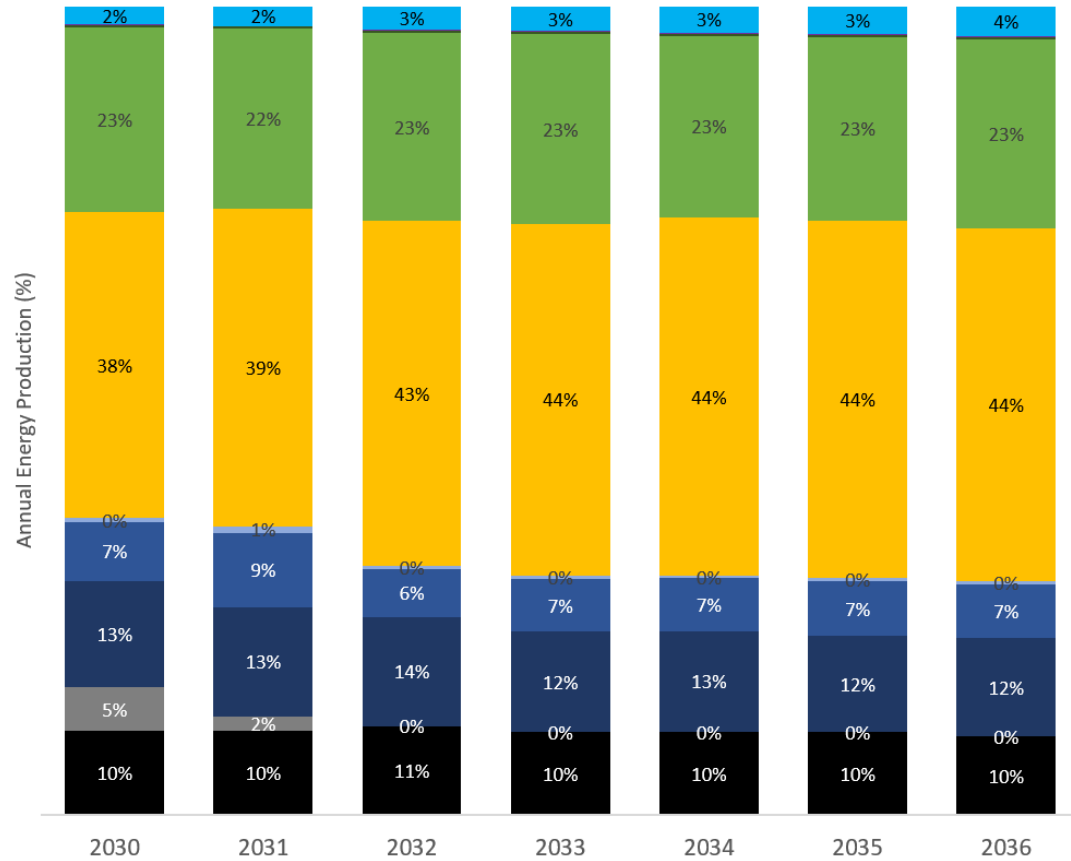
HEG Accredited Capacity (MW)



Updated

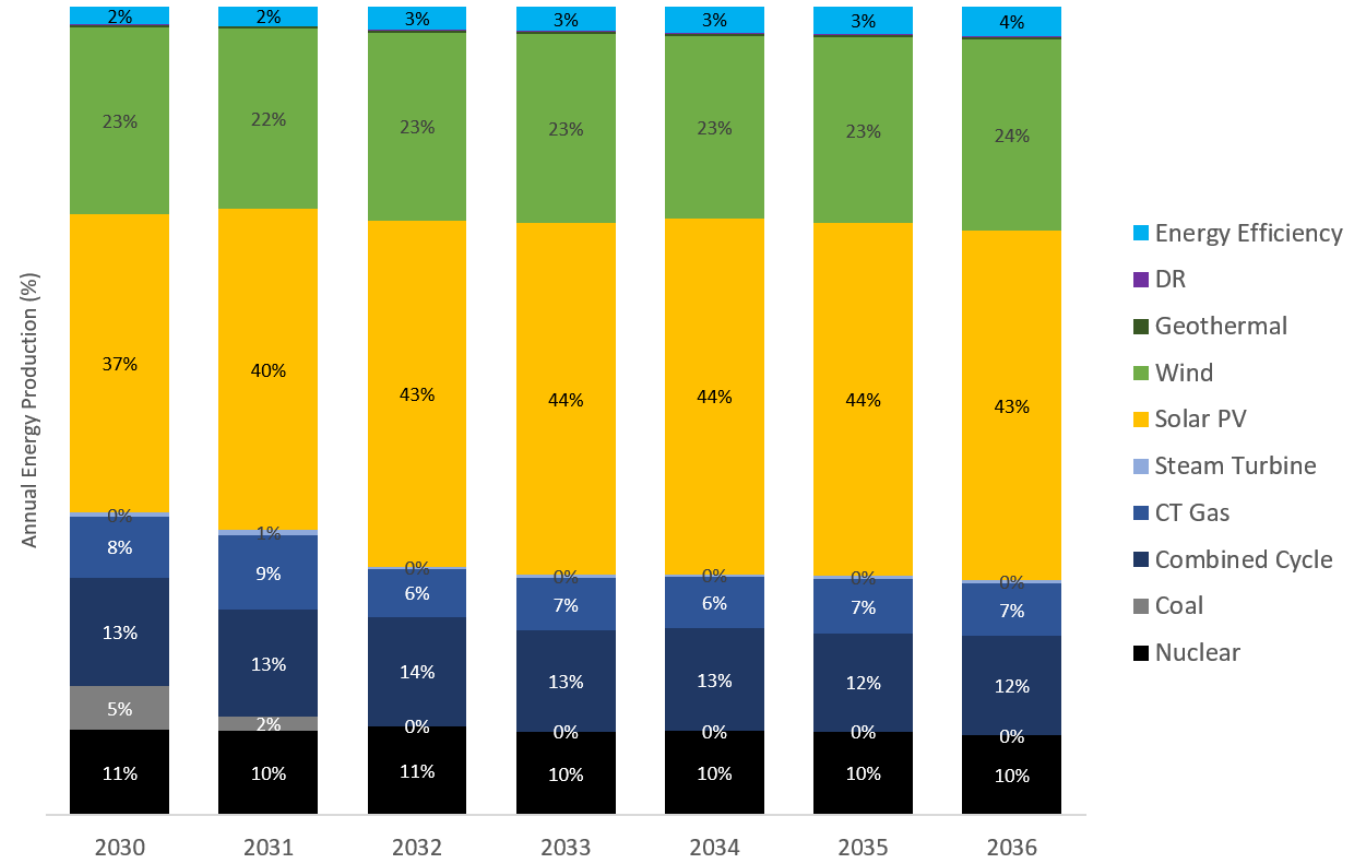
Annual Energy Production: Updates to HEG

HEG Annual Energy Production (%)



May 13th

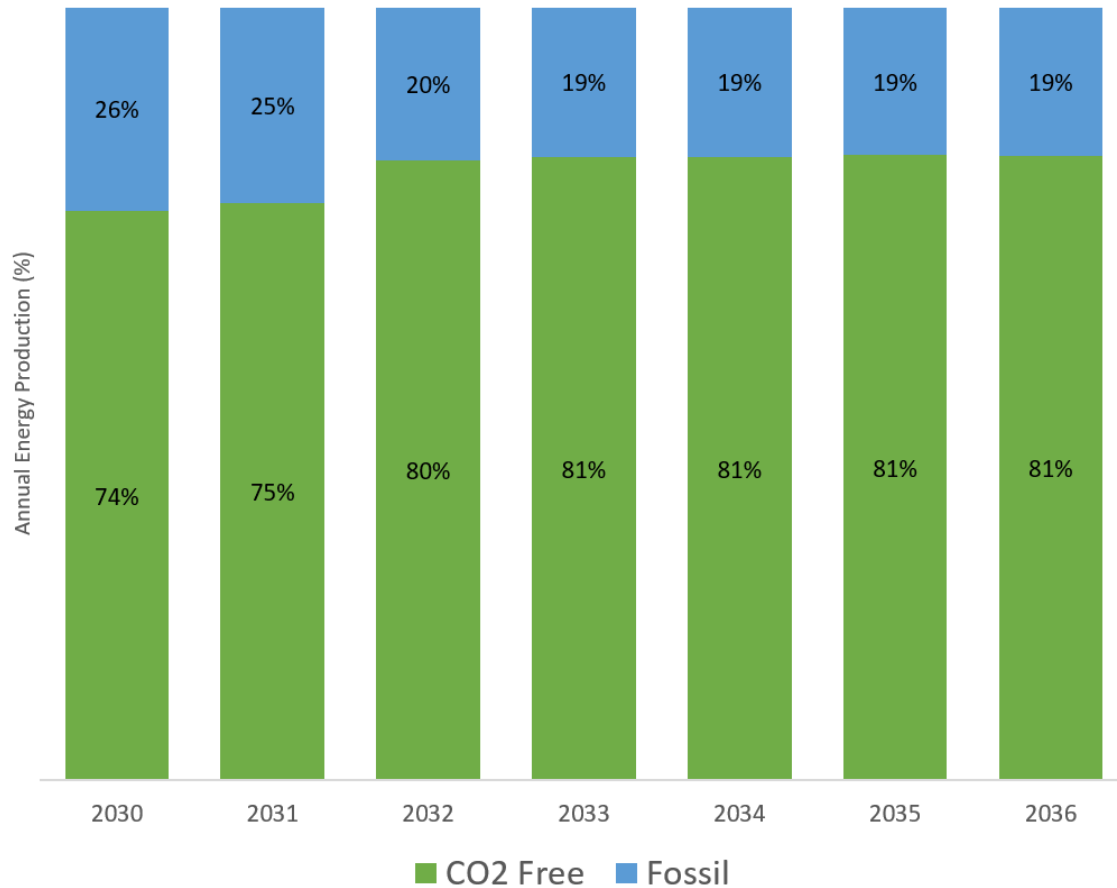
HEG Annual Energy Production (%)



Updated

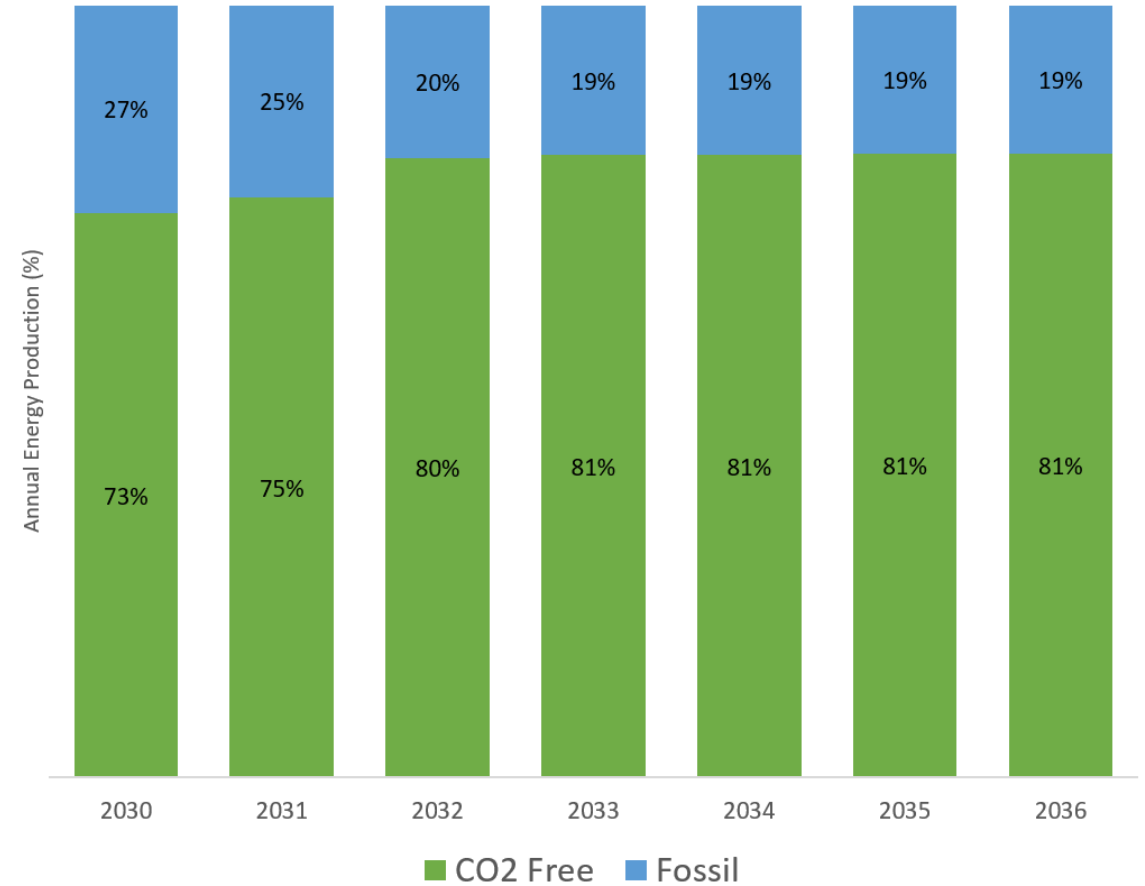
CO2 Free Energy Production: Updates to HEG

HEG Annual Energy Production (%)



May 13th

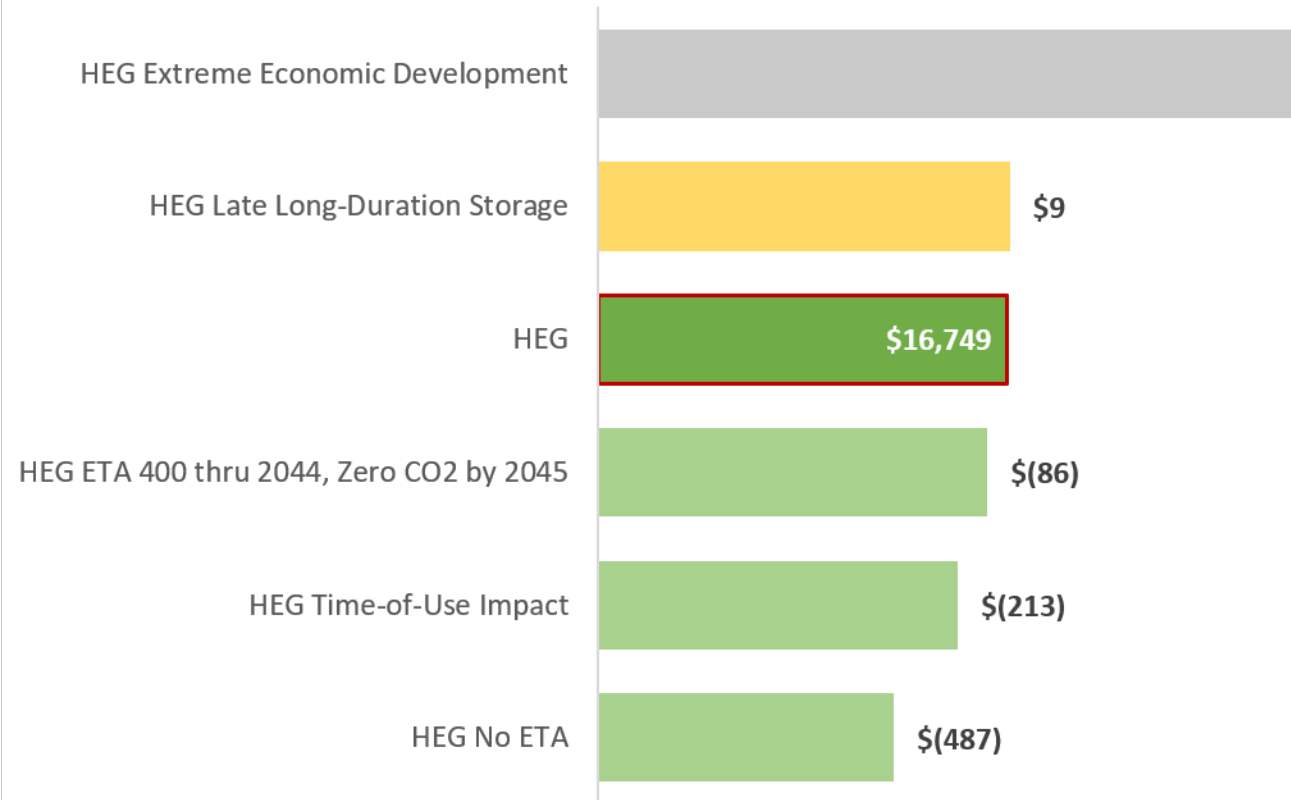
HEG Annual Energy Production (%)



Updated

HEG Sensitivities Comparison - NPV

20-Year NPV of Revenue Requirements (\$M)

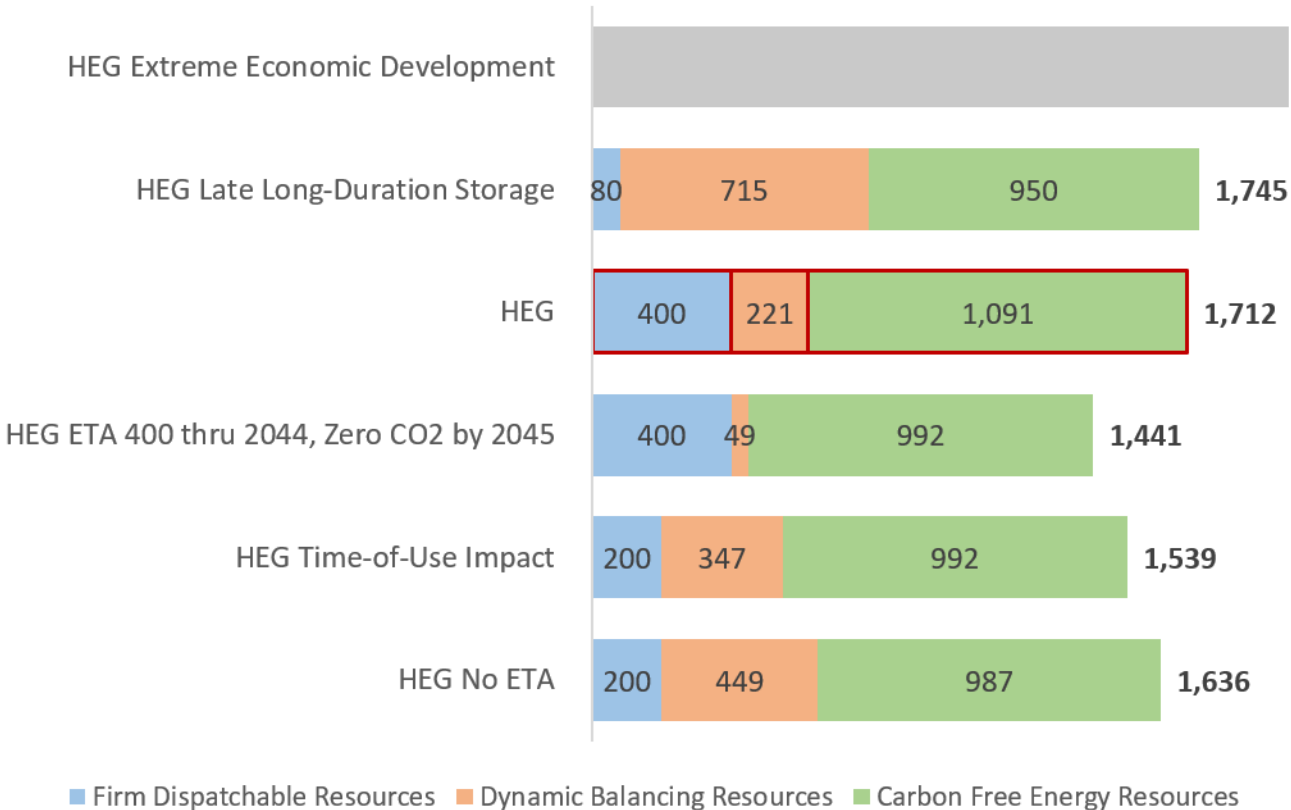


Key Observations (similar to the previous results)

- Delays in long-duration storage viability will result in higher costs
- No ETA and ETA @ 400 lbs/MWh show lower portfolio cost over 20-years
- Implementing TOU shows significant cost decrease under the HEG future

HEG Sensitivities Comparison – Installed Capacity by Type

2030-2036 Installed Capacity (MW)

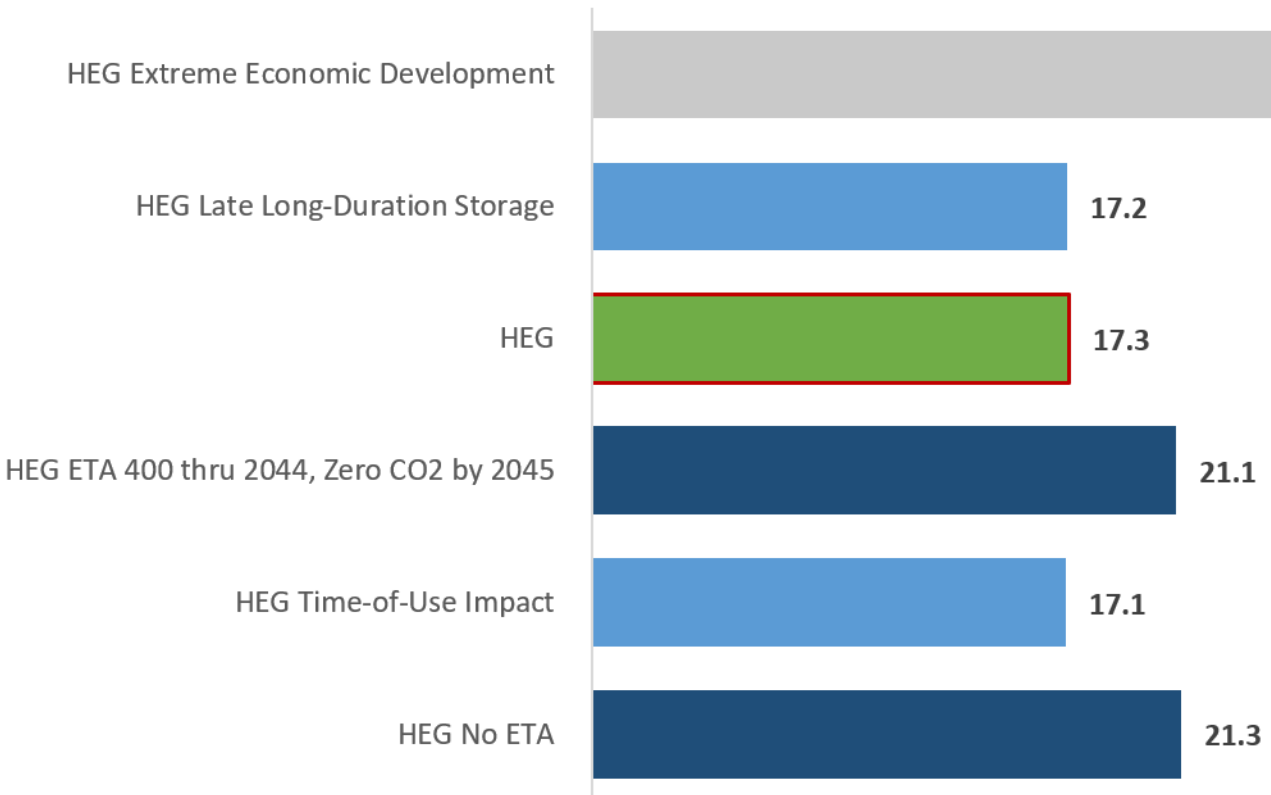


Key Observations (similar to the previous results)

- Delays in long-duration storage viability results in significantly more Dynamic Balancing Resources, and less Firm Dispatchable Resources between 2030-2036
- ETA @ 400 lbs/MWh requires less Dynamic Balancing Resources
- Implementing a TOU rate structure reduces Firm Dispatchable Resources compared to HEG
- No ETA requires less Firm Generating Resources & Carbon Free Energy Resources, and more Dynamic Balancing Resources

HEG Sensitivities Comparison – CO2 Emissions

2030-2036 CO2 Emissions (Million Tons)



Key Observations (similar to the previous results)

- Late Long-Duration Storage and TOU sensitivities result in similar CO2 emissions 2030-2036
- No ETA and ETA @ 400 lbs/MWh sensitivities emit more CO2 than HEG but not significantly more than similar CTP sensitivities

**All modeled sensitivities (except No ETA and ETA @ 400 lbs/MWh) meet current and future ETA CO2 emission rate requirements*

HEG– Key Trends and Takeaways

New takeaways

- Less Long-Duration Storage needed in the updated results
- No significant changes to key trends with updated modeling assumptions

Same as the previous takeaways

- All portfolios meet projected RPS requirements and CO2 emission standards
 - HEG result in significant progress to CO2 free by early 2030's
- Energy efficiency bundles are consistently included in expansion plan results in all years
- Demand response programs (Peak Saver Extension, EV TOD, TOD) added in 2030 as part of least-cost plans
- New solar PV resources are consistently added early in the study window (2030-2036)

Statement of Need Revisions for HEG Future



High Economic Growth – Resource Additions

Resources	2029 - 2032 System Resources	2029 - 2032 Supplement Procurements	2032		2036		2040		2045	
			Min	Max	Min	Max	Min	Max	Min	Max
Solar	240	0	517	653	716	1199	770	1529	1185	2333
Wind	800	0	0	0	0	199	0	207	0	207
EE	0	0	93	93	196	196	298	298	420	420
Carbon Free	1,040	0	610	746	912	1595	1067	2034	1605	2959
Short-Duration Battery	610	0	1	182	1	674	1	678	201	1482
DR	0	0	10	40	15	46	19	50	21	53
Dynamic Balancing	610	0	11	223	16	720	20	728	222	1535
Natural Gas	0	0	0	0	0	0	0	179	0	358
Advanced Generator	0	0	0	0	0	80	0	400	0	720
Nuclear	0	0	0	0	0	0	0	292	584	1314
Geothermal	0	0	0	0	0	0	0	0	0	0
Pumped Hydro Storage	0	0	0	0	0	200	0	300	0	300
Long-Duration Storage	0	100	0	100	0	400	0	400	0	400
Firm Dispatchable	186	172	0	100	0	680	0	1571	584	3092

Extreme Economic Development Sensitivity – Resource Additions

Resources	2029 - 2032 System Resources	2029 - 2032 Supplement Procurements	2032	2036	2040	2045
Solar	240	0	4279	4737	5004	5522
Wind	800	0	0	462	462	462
EE	0	0	93	196	298	420
Carbon Free	1,040	0	4372	5396	5765	6405
Short-Duration Battery	610	0	2328	2328	2328	2328
DR	0	0	40	45	49	52
Dynamic Balancing	610	0	2367	2373	2377	2379
Natural Gas	186	172	0	0	0	0
Advanced Generator	0	0	680	760	1120	2000
Nuclear	0	0	0	0	292	1022
Geothermal	0	0	0	0	0	0
Pumped Hydro Storage	0	0	0	100	100	100
Long-Duration Storage	0	0	300	500	500	500
Firm Dispatchable	186	172	980	1360	2012	3622

Statement of Need

Category	2032		2036		2040		2045	
	Low	High	Low	High	Low	High	Low	High
Baseline Resources (MW)								
Carbon Free	1,040		1,040		1,040		1,040	
Dynamic Balancing	610		610		610		610	
Firm Dispatchable	358		358		358		358	
CTP Incremental Generic Resource Need (MW)								
Carbon Free	194	327	493	804	636	1,303	1,178	2,187
Dynamic Balancing	10	40	15	125	16	164	536	935
Firm Dispatchable	0	0	0	200	0	865	584	2,208
HEG Incremental Generic Resource Need (MW) - Above the CTP Case								
Carbon Free	416	419	419	791	431	731	427	772
Dynamic Balancing	1	183	1	595	4	564	0	600
Firm Dispatchable	0	100	0	480	0	706	0	885
HEG Incremental Generic Resource Need (MW) - Above the Baseline Resources								
Carbon Free	610	746	912	1595	1067	2034	1605	2959
Dynamic Balancing	11	223	16	720	20	728	222	1535
Firm Dispatchable	0	100	0	680	0	1571	584	3092
XEG Generic Resource Need (MW) - Above the Baseline Resources								
Carbon Free	4,372		5,396		5,765		6,405	
Dynamic Balancing	2,367		2,373		2,377		2,379	
Firm Dispatchable	980		1,360		2,012		3,622	

Comparison Between Results of June 17th and Updated

June 17th

Category	2032		2036		2040		2045	
	Low	High	Low	High	Low	High	Low	High
HEG Incremental Generic Resource Need (MW) - Above the CTP Case								
Carbon Free	458	460	604	817	610	719	532	781
Dynamic Balancing	35	218	35	582	35	569	0	591
Firm Dispatchable	0	420	0	1,099	0	1,259	146	1,658
XEG Generic Resource Need (MW) - Above the Baseline Resources								
Carbon Free	4,451		5,539		6,035		6,698	
Dynamic Balancing	2,163		2,168		2,171		2,194	
Firm Dispatchable	1,280		1,780		2,472		4,122	

Difference from June 17th results

HEG: difference								
Carbon Free	(42)	(41)	(185)	(26)	(179)	12	(105)	(9)
Dynamic Balancing	(34)	(35)	(34)	13	(31)	(5)	0	9
Firm Dispatchable	0	(320)	0	(619)	0	(553)	(146)	(773)
XEG: difference								
Carbon Free	(79)		(143)		(270)		(293)	
Dynamic Balancing	204		205		206		185	
Firm Dispatchable	(300)		(420)		(460)		(500)	

HEG Takeaways

Compared to the previous results

- Less Firm Dispatchable resources are needed
- Less Carbon-free resources are needed
- In XEG sensitivity, more Dynamic Balancing resources are needed



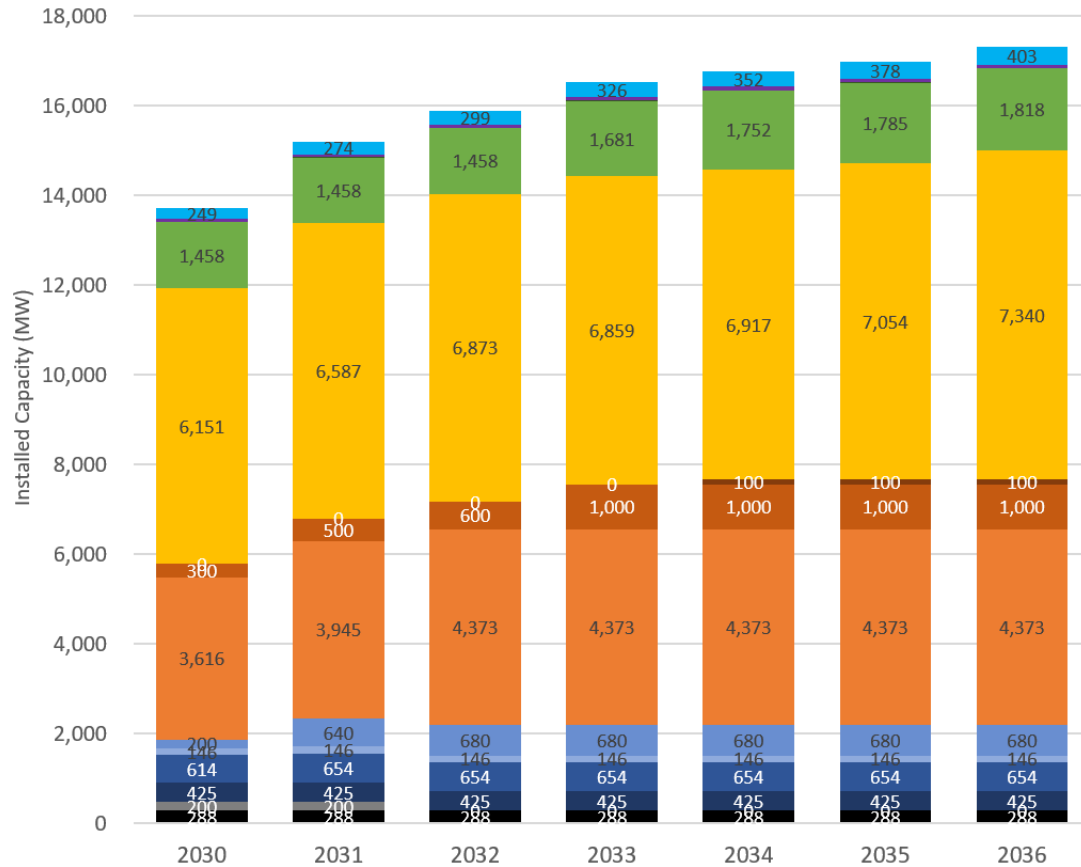
Appendix



Annual Installed Capacity: Updates to XEG

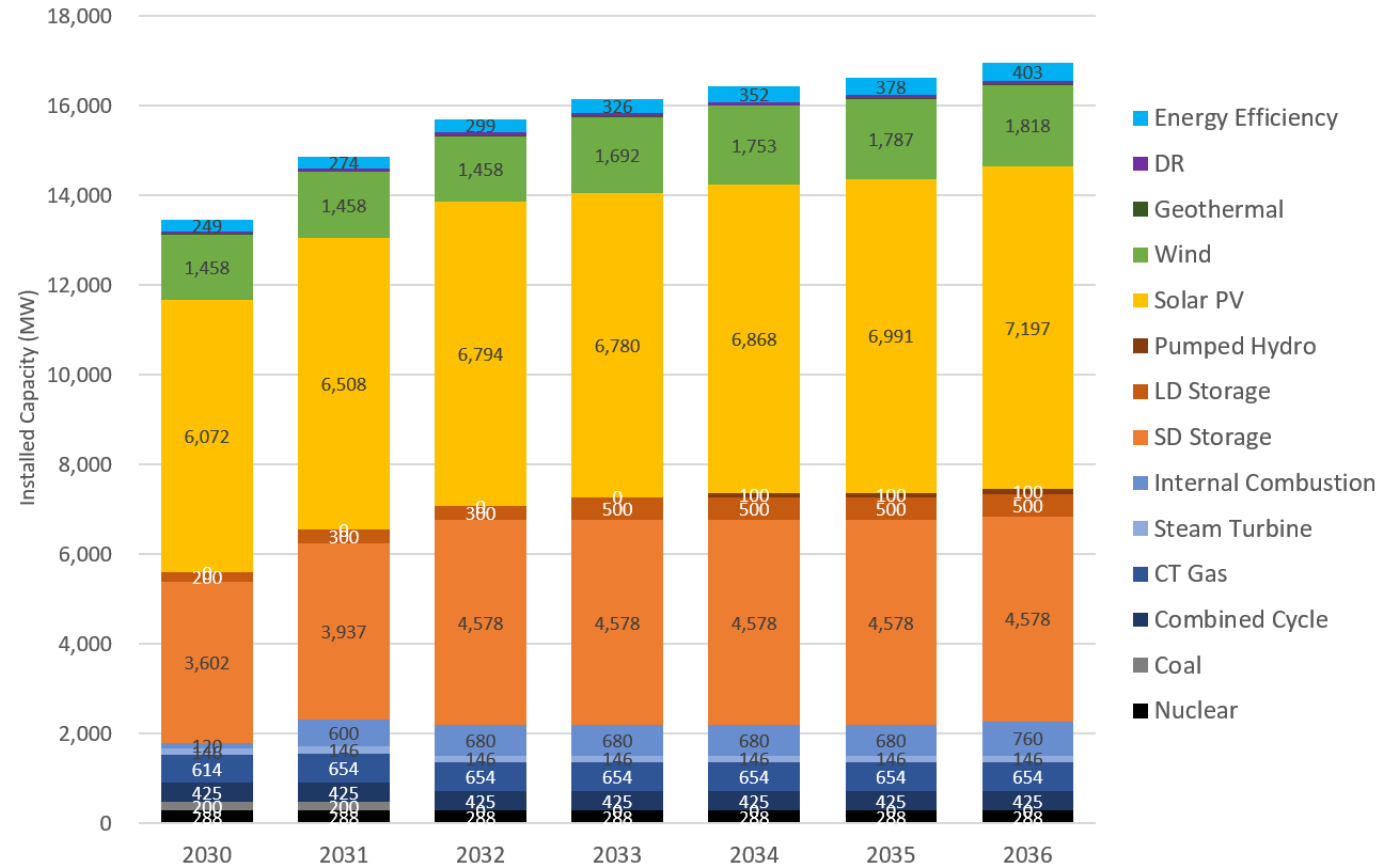
HEG-XED P2 Installed Capacity (MW)

May 13th



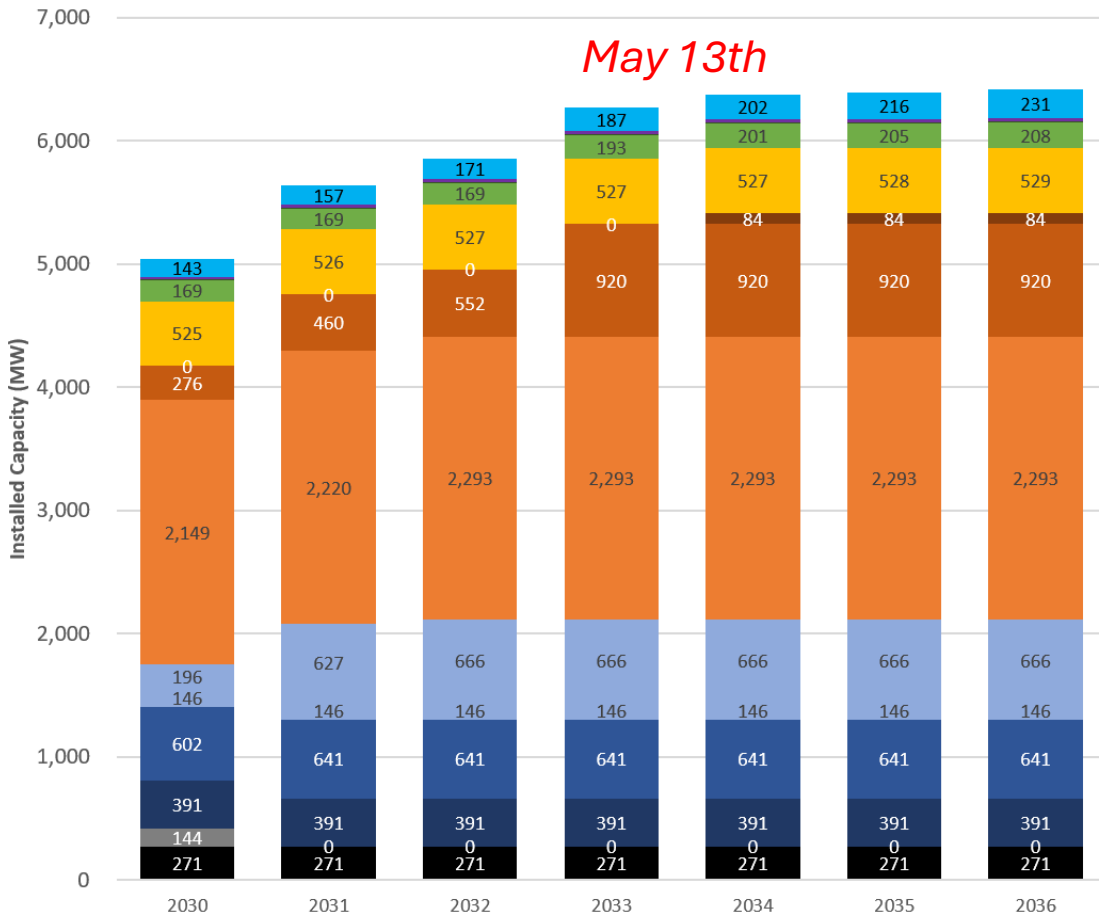
HEG-XED P3 Installed Capacity (MW)

Updated



Annual Accredited Capacity: Updates to XEG

HEG-XED P2 Accredited Capacity (MW)



HEG-XED P3 Accredited Capacity (MW)

