

2026 PNM IRP Facilitated Stakeholder Workshop 6

May 13, 2026



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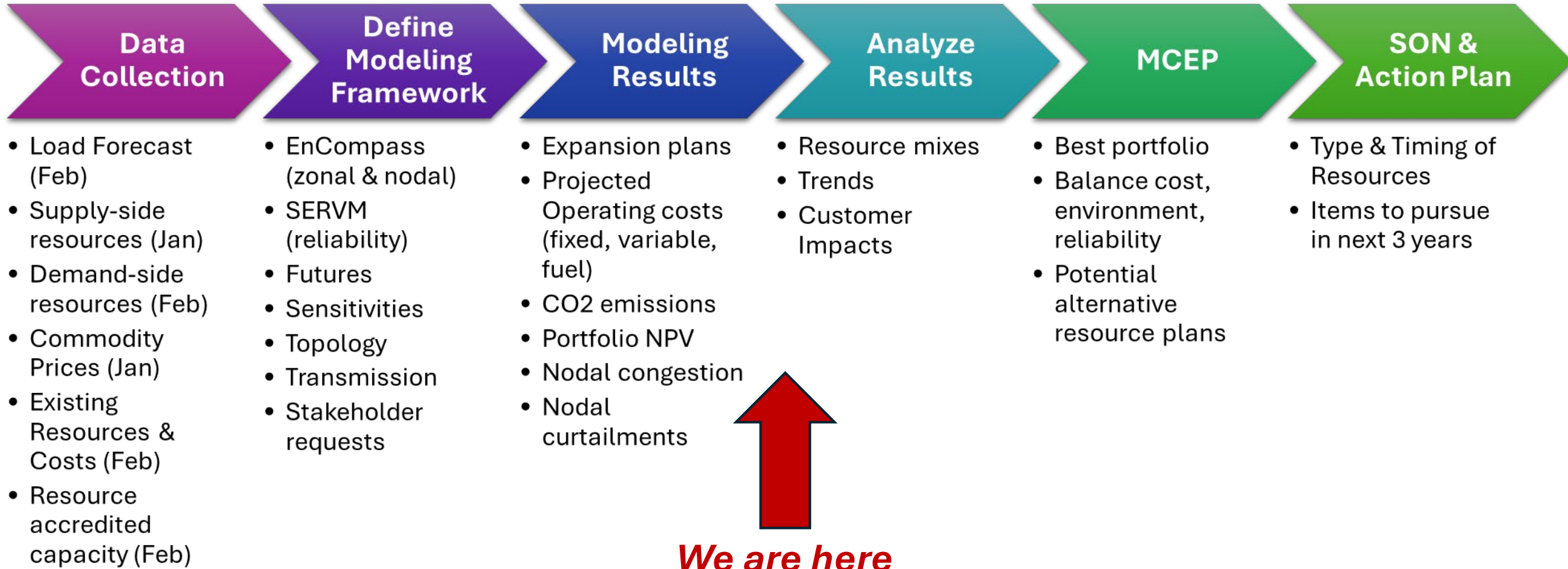
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Workshop #6 Agenda

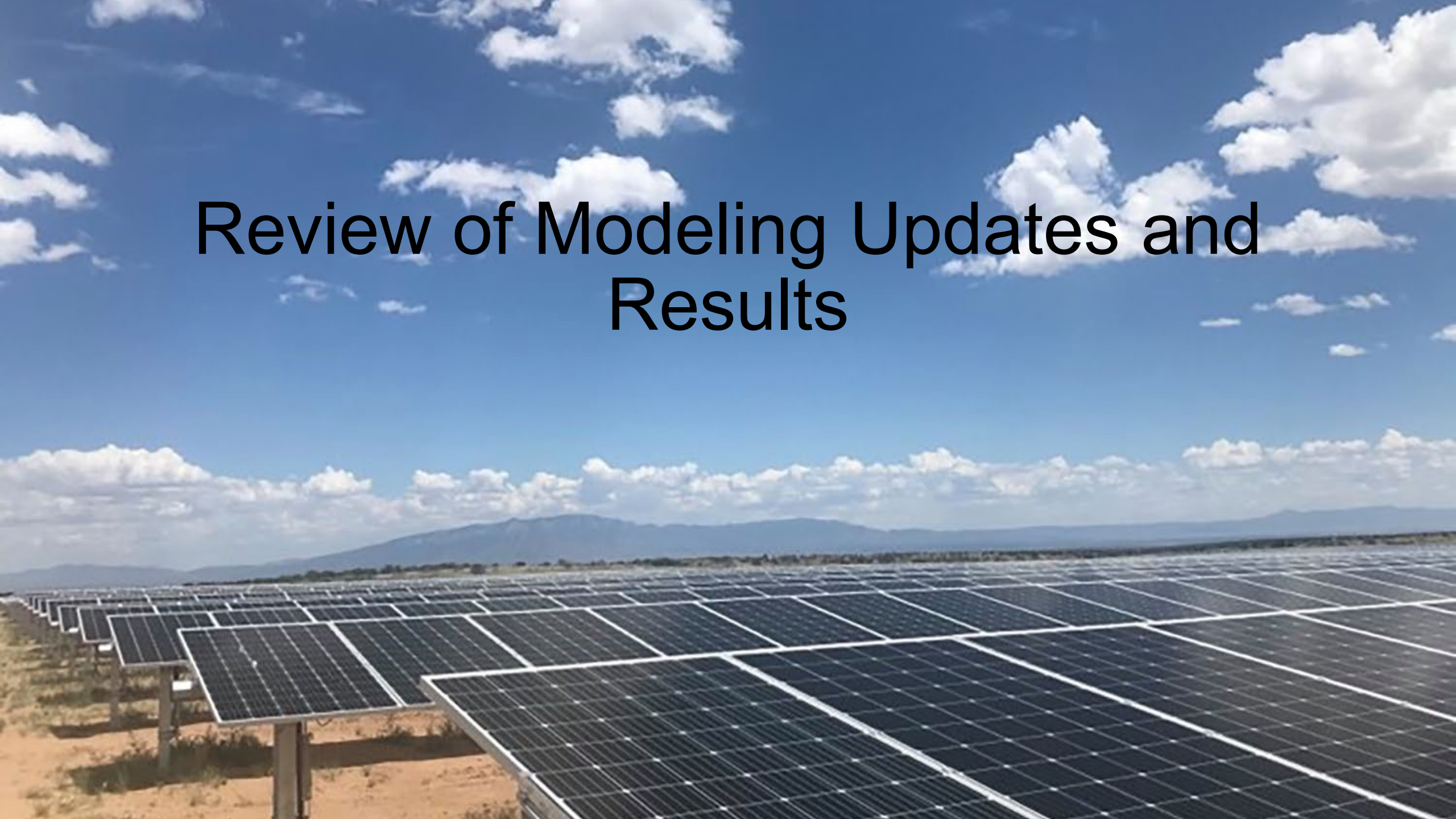
- Review of updated modeling assumptions
- Review of updated CTP, HEG, LEG results
- Stakeholder scenarios received
- Results of Stakeholder scenarios
- Pending Analyses

2026 IRP Process Check

Stakeholder Feedback throughout the FSP



Review of Modeling Updates and Results



Modeling Assumption Updates since Workshop #5

Modeling Framework

- Incorporated transmission cost adders in zonal analysis
 - Framework discussed on April 20, 2026, Transmission Office Hour
- End of study period thermal fleet firm-capacity decline
 - Same modeling assumption used in 2023 IRP
 - 20% YOY firm-capacity decline, 2041-2044
 - Applied to Afton, Luna, Rio Bravo & Reeves

Modeling Assumption Updates since Workshop #5

Operating Parameters

- Generic solar PV capacity factor and degradation
 - Updated generic solar shapes from a 27% to 32% annual CF
 - Applied capacity degradation to approved resources for Data Center Customer
- Book life and EFOR updates
 - 60 to 50 year-life for Pumped Hydro per EPRI data
 - 1% to 5% EFOR for Pumped Hydro per EPRI data
 - 4% to 8% EFOR for 4hr, 8hr and CAES per PowerGem resource adequacy
- Corrected extension of existing gas unit operation in No ETA scenarios

Current Trends & Policies Expansion Plan (updated)

CTP Accredited Capacity (MW)													
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2029	-	-	169	-	-	-	-	250	-	25	93	-	537
2030	-	-	-	-	-	-	-	-	29	10	-	-	39
2031	-	-	39	-	-	-	-	223	-	29	-	11	303
2032	-	-	-	-	-	-	-	-	-	14	-	11	26
2033	-	-	-	-	92	-	-	-	-	22	-	12	125
2034	-	-	-	-	-	-	-	-	-	3	-	12	15
2035	-	-	-	-	-	-	-	-	1	18	-	11	31
2036	-	-	-	-	-	-	-	-	-	13	-	11	24
Total	-	-	208	-	92	-	-	474	30	134	93	68	1,098

Observations from CTP expansion plan

- Long-duration storage added in 2033 (100 MW)
- Solar and EE bundles added consistently through 2036
- Demand Response added in 2030 (Peak Saver Extension, EV TOD, TOD)
- Firm Generation Resources met with procurements in upcoming resource filing

High Economic Growth Expansion Plan (updated)

HEG Accredited Capacity (MW)													
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	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	-	-	-	-	-	-	-	-	1	14	12	11	38
2036	-	-	-	-	-	-	-	-	-	2	8	11	21
Total	-	-	208	-	460	84	-	478	30	232	116	68	1,675

Observations from HEG expansion plan

- More Long-Duration Storage, Less Pumped Hydro & gas than April 15th results
- Solar and EE bundles added consistently through 2036 (Similar to CTP)
- Demand Response in 2030 (Peak Saver Extension, EV TOD, TOD) (Similar to CTP)
- Long-Duration Storage Hydro needed in focus years (Similar to CTP)
- Pumped Hydro needed in in focus years (Incremental to CTP)

Low Economic Growth Expansion Plan (updated)

LEG Accredited Capacity (MW)													
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2029	-	-	169	-	-	-	-	250	-	17	93	-	529
2030	-	-	-	-	-	-	-	-	6	-	-	-	6
2031	-	-	39	-	-	-	-	223	-	29	-	8	300
2032	-	-	-	-	-	-	-	-	-	-	-	8	8
2033	-	-	-	-	-	-	-	-	-	-	-	9	9
2034	-	-	-	-	-	-	-	-	-	-	-	9	9
2035	-	-	-	-	-	-	-	-	-	-	-	9	9
2036	-	-	-	-	-	-	-	-	-	-	-	8	8
Total	-	-	208	-	-	-	-	474	6	47	93	51	879

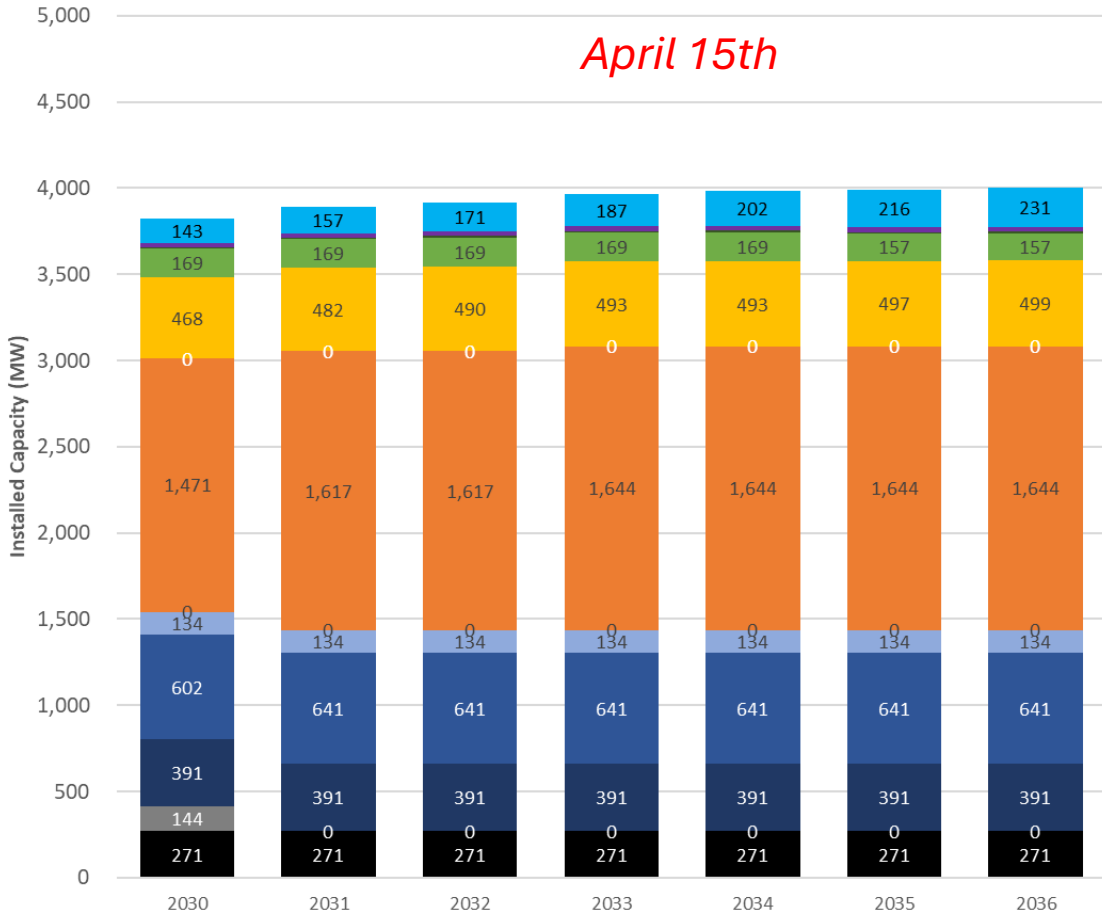
Observations from LEG expansion plan

- Same expansion plan as April 15th results
- EE bundles added consistently through 2036 (levels less than CTP)
- Demand Response added in 2030 (EV TOD)
- No additional resources needed in focus years

Annual Accredited Capacity: Updates to CTP

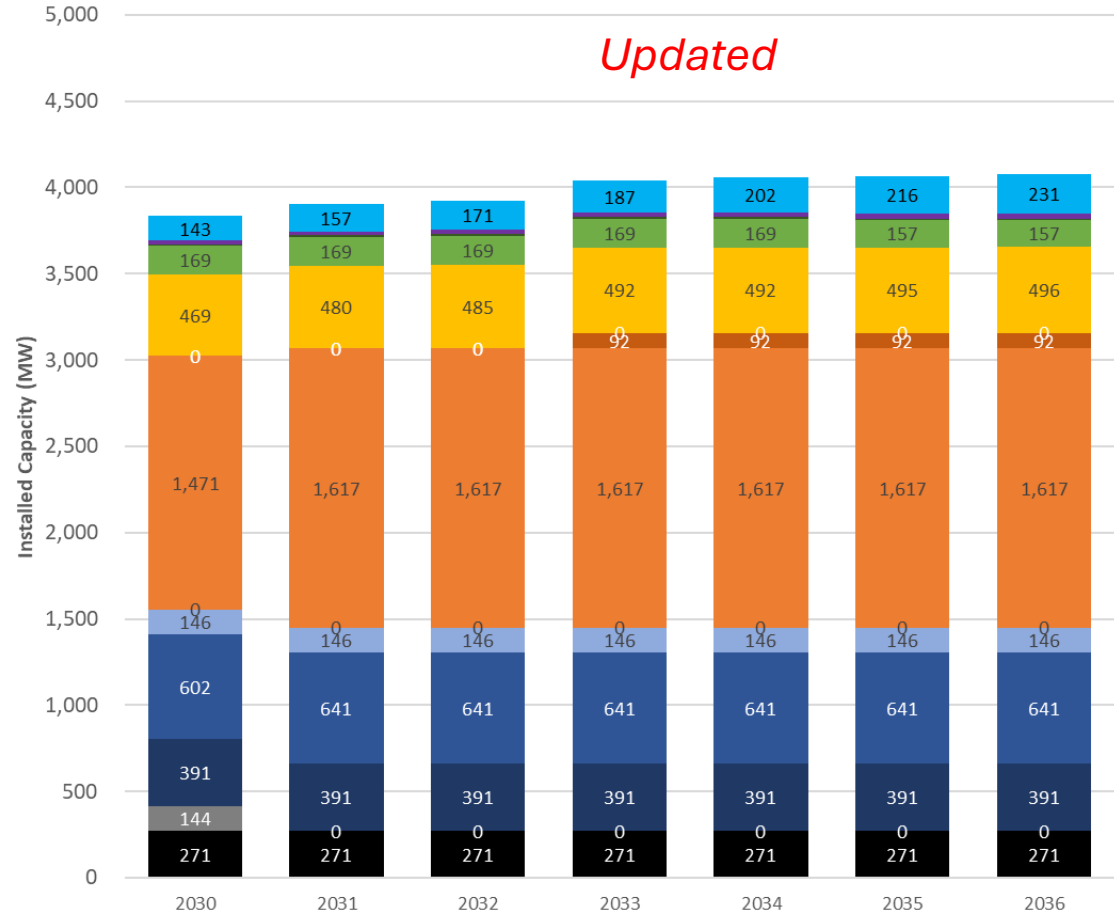
CTP Accredited Capacity (MW)

April 15th



CTP Accredited Capacity (MW)

Updated

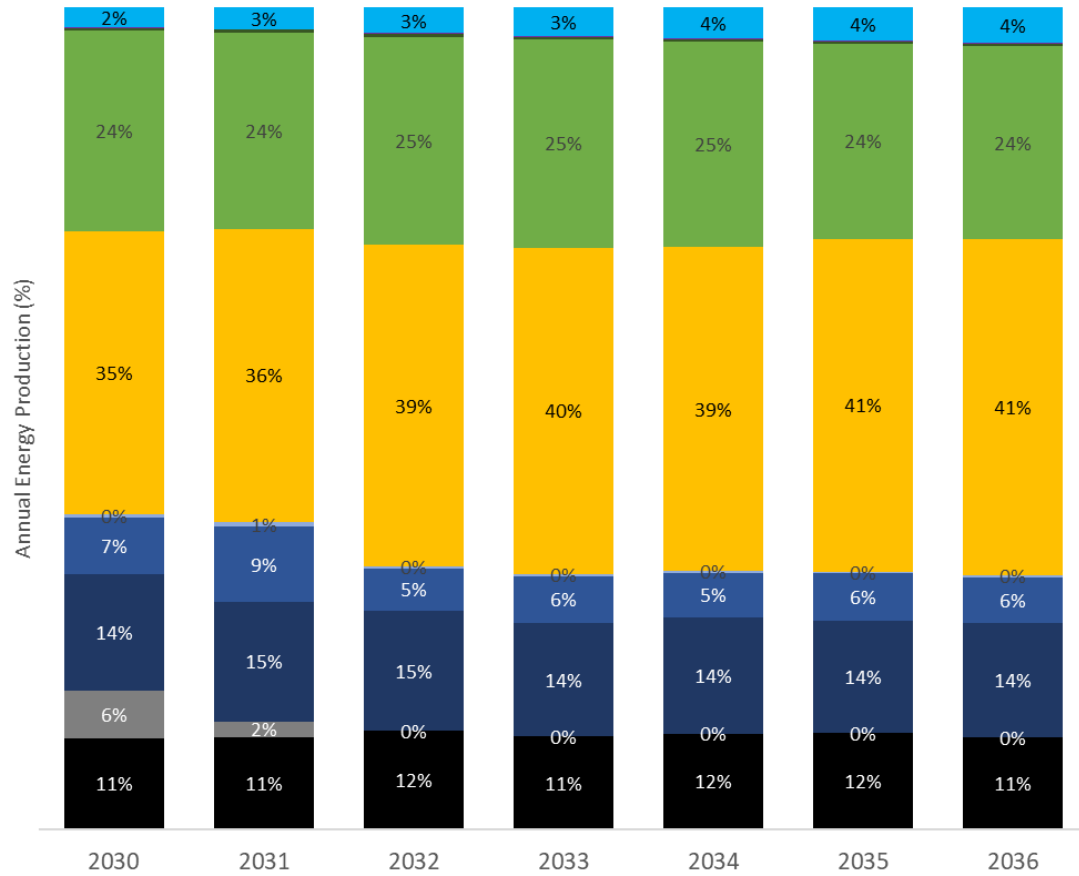


- Energy Efficiency
- DR
- Geothermal
- Wind
- Solar PV
- Pumped Hydro
- LD Storage
- SD Storage
- Internal Combustion
- Steam Turbine
- CT Gas
- Combined Cycle
- Coal
- Nuclear



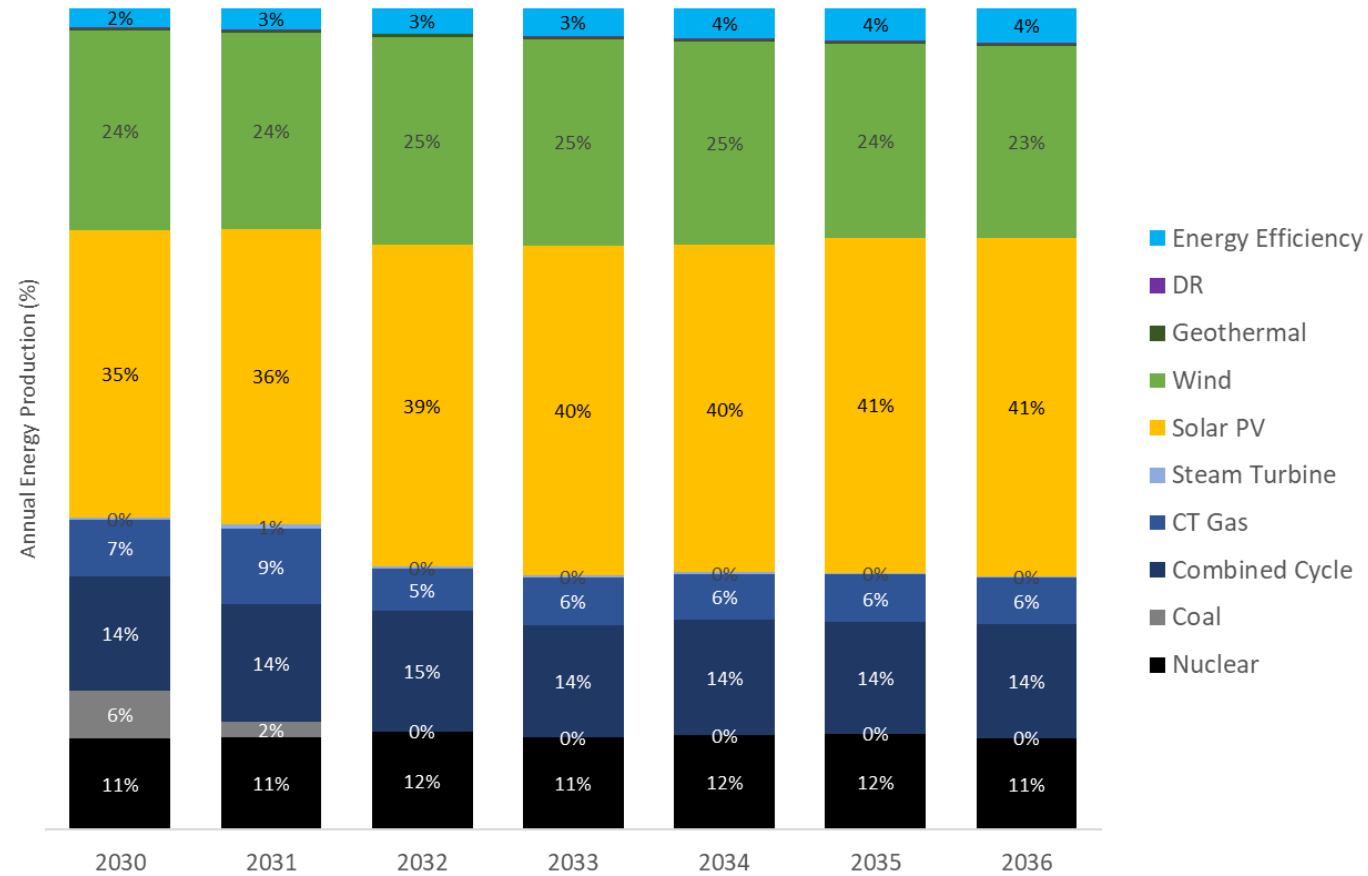
Annual Energy Production: Updates to CTP

CTP Annual Energy Production (%)



April 15th

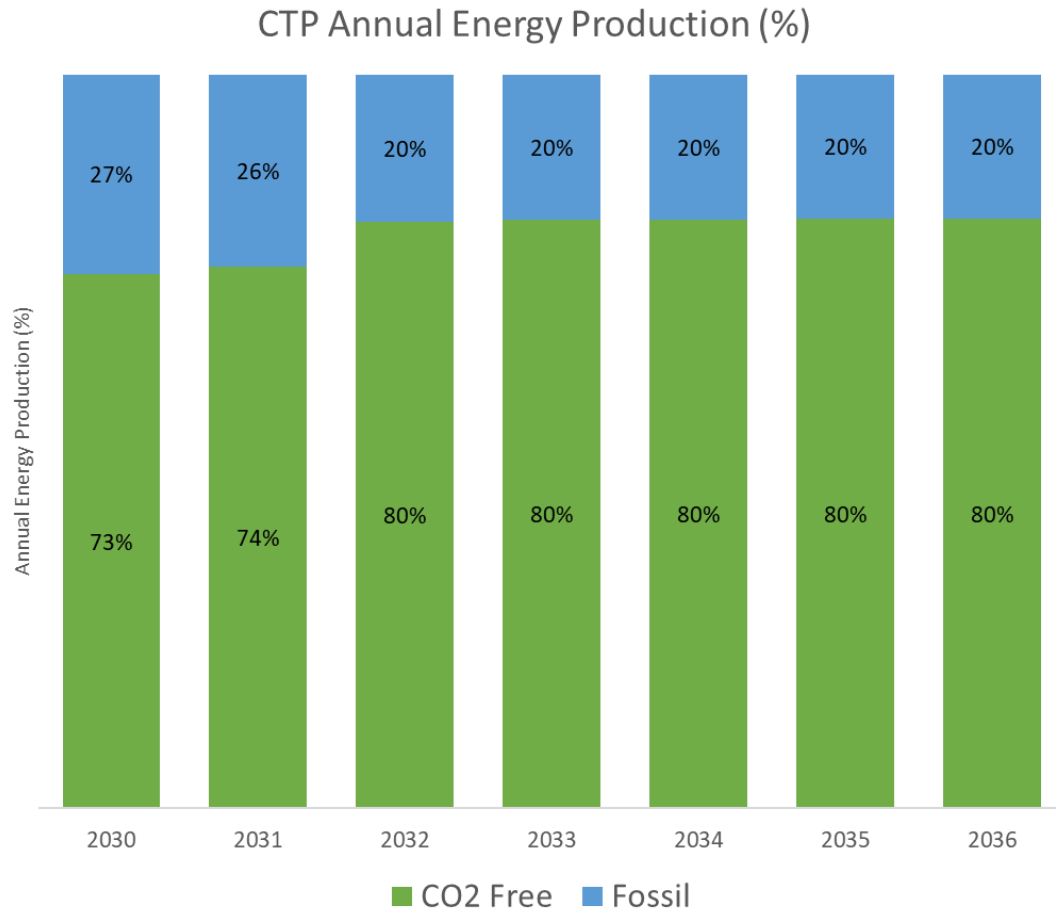
CTP Annual Energy Production (%)



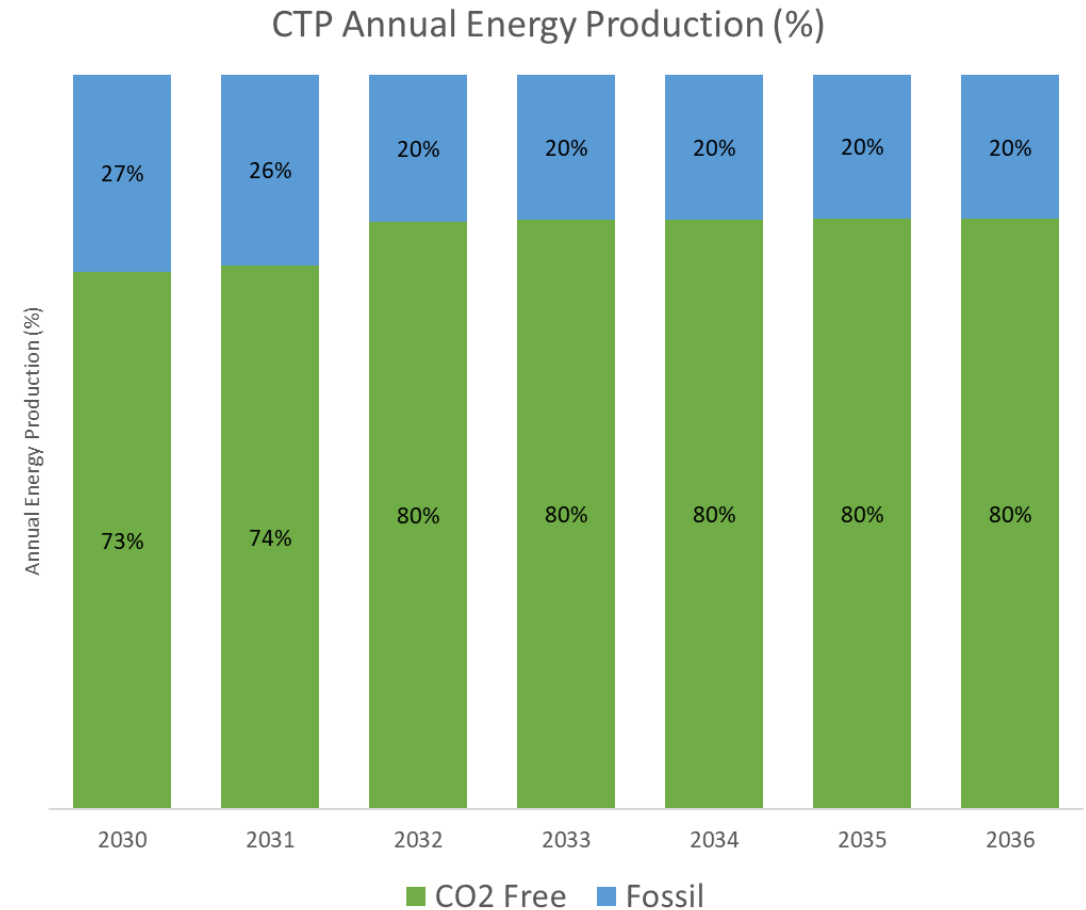
Updated



CO2 Free Energy Production: Updates to CTP



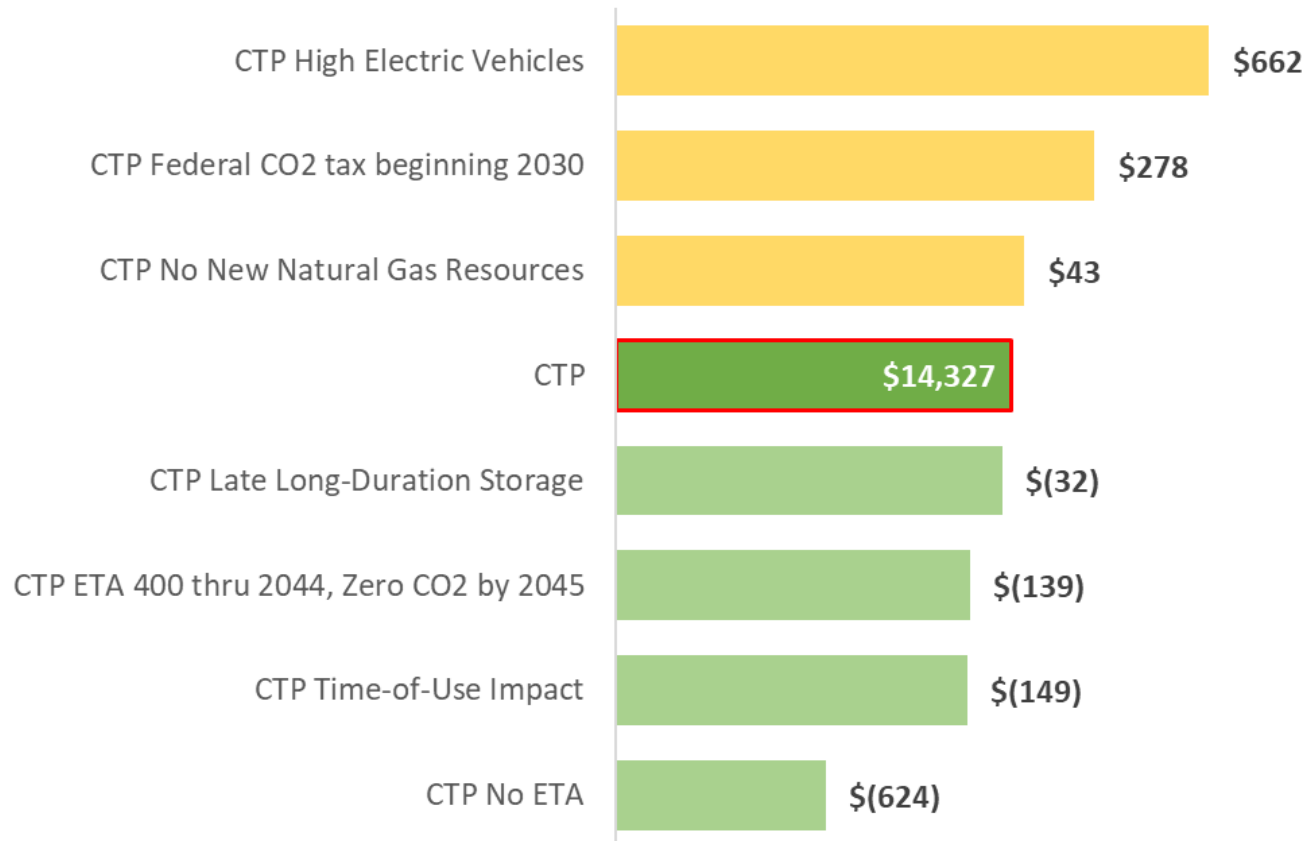
April 15th



Updated

CTP Sensitivities Comparison - NPV

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

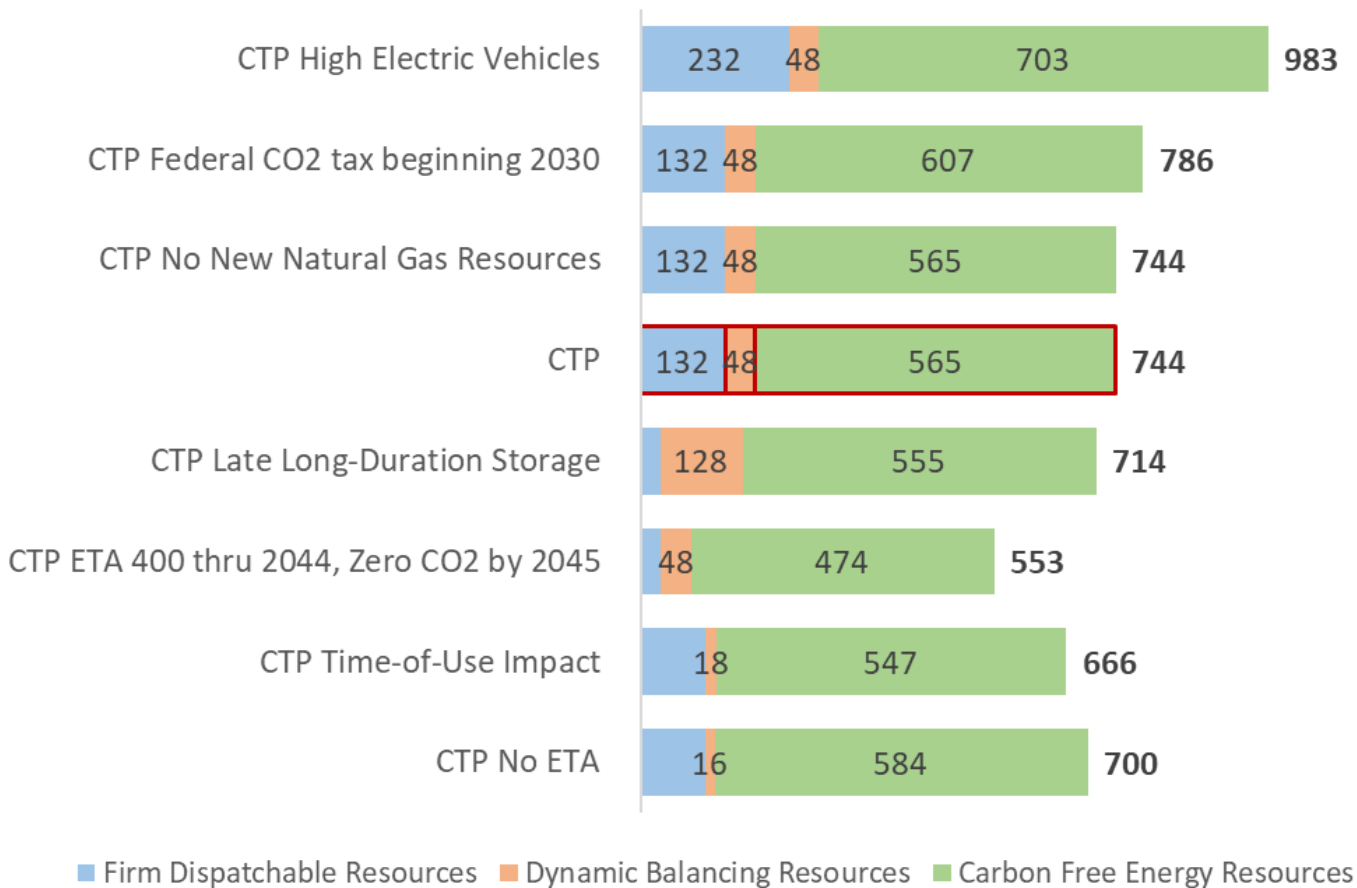


Observations

- Previous CTP NPV was \$14,040 (\$286M NPV difference)
- Delays in long-duration storage viability results in minimal cost decrease
- No ETA and ETA @ 400 lbs/MWh show significantly lower portfolio costs
- Not allowing new natural gas resource additions has moderate cost increase to NPV
- Enforcement of a Federal CO2 tax has significant cost increase to NPV
- Materialization of High EV penetration requires significant resource needs and associated costs
- Implementing a TOU pricing structure shows significant NPV cost decrease

CTP Sensitivities Comparison – Installed Capacity by Type

2030-2036 Installed Capacity (MW)



Observations

- Minimal Firm Dispatchable Resources needed 2030-2036
 - PNM addressing majority of needs in upcoming resource application
 - High Electric Vehicle sensitivity includes additional resources to serve increased EV penetration
- No New Natural Gas sensitivity does not include any incremental resources compared to CTP
- Late long duration storage adds more dynamic balancing resources than CTP
- TOU sensitivity adds less dynamic balancing resources (DR & short-duration storage) than CTP
- No ETA and ETA @ 400 lbs/MWh require less short-duration storage & solar than CTP

CTP, HEG, LEG – Key Trends and Takeaways

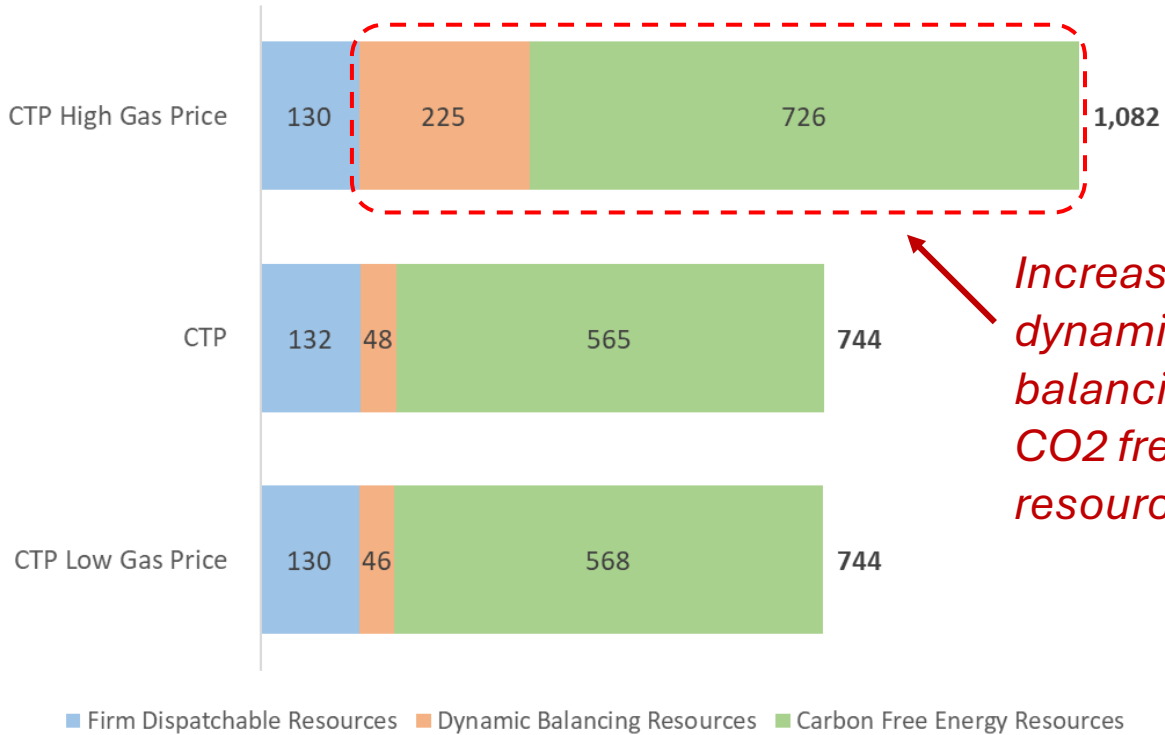
- No changes to key trends with updated modeling assumptions
- All portfolios meet projected RPS requirements and CO2 emission standards
 - CTP, HEG, LEG result in significant progress to CO2 free by early 2030's
- Energy efficiency bundles are consistently included in expansion plan results in all years
- Demand response programs (Peak Saver Extension, EV TOD, TOD) added in 2030 as part of least-cost plans
- HEG future accelerates solar PV and gas additions along with additional long-duration storage
- New solar PV resources are consistently added early in the study window (2030-2036)

Review of Sensitivity Results



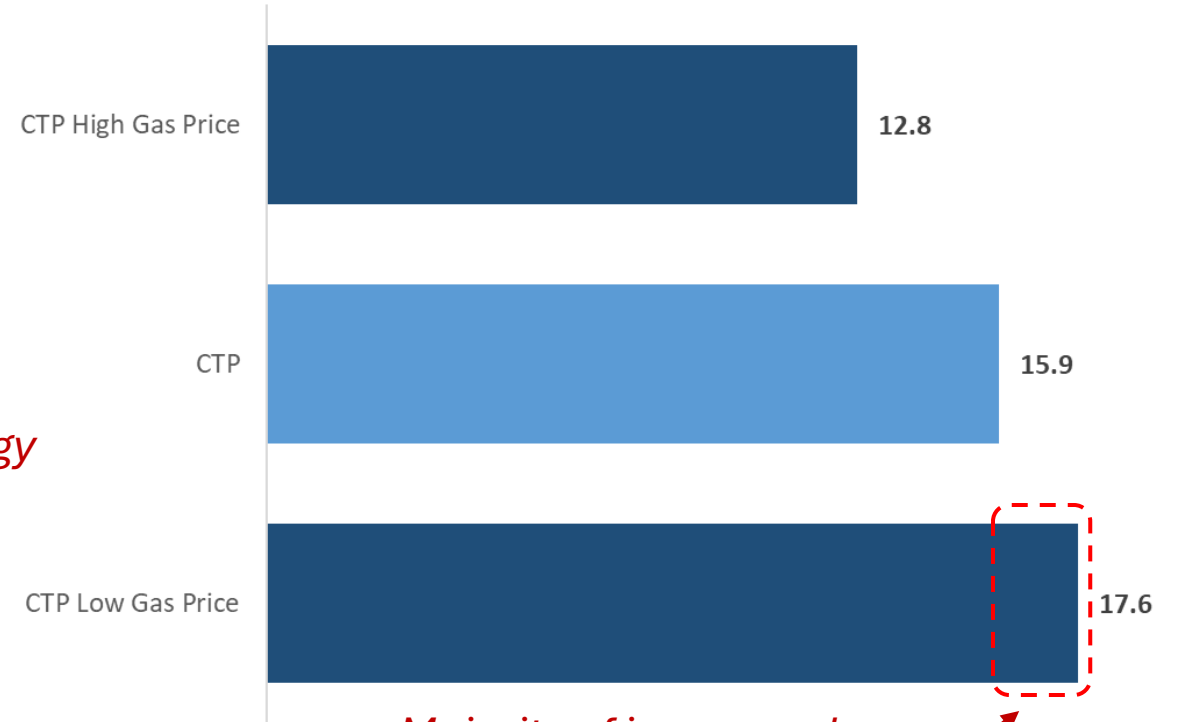
CTP High-Low Gas Sensitivity Results

2030-2036 Installed Capacity (MW)



Increases dynamic balancing and CO2 free energy resources

2030-2036 CO2 Emissions (Million Tons)



Majority of increase due to increased gas utilization 2030 & 2031

CTP High-Low Gas Sensitivity Results

Annual Capacity Factor (%)	CTP		
CTP	Combined Cycle	CT Gas	Steam Turbine
2033	73%	20%	4%
2034	75%	19%	4%
2035	73%	20%	4%
2036	75%	20%	3%

Annual Capacity Factor (%)	CTP Low Gas Price		
CTP Low Gas Price	Combined Cycle	CT Gas	Steam Turbine
2033	74%	19%	5%
2034	77%	18%	4%
2035	74%	19%	5%
2036	78%	19%	4%

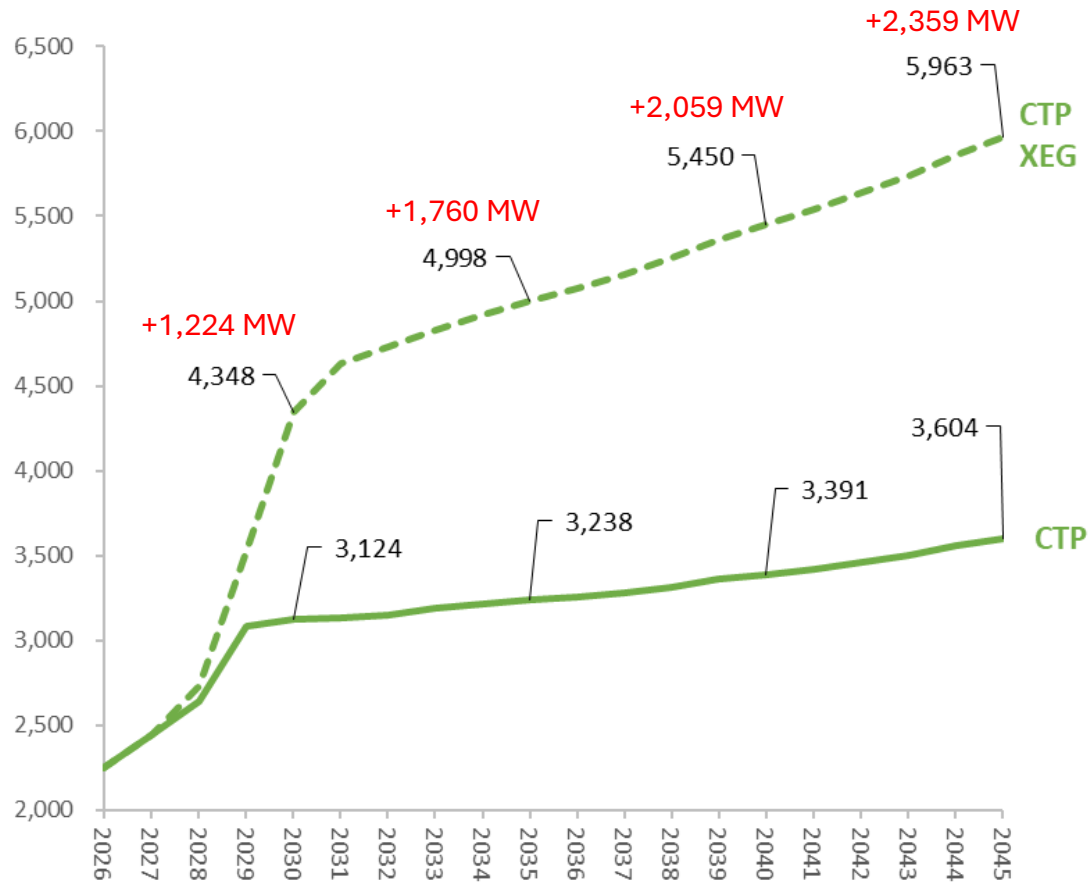
Annual Capacity Factor (%)	CTP SS High Gas Price		
CTP SS High Gas Price	Combined Cycle	CT Gas	Steam Turbine
2033	67%	16%	3%
2034	68%	15%	2%
2035	66%	15%	2%
2036	68%	14%	1%

Observations

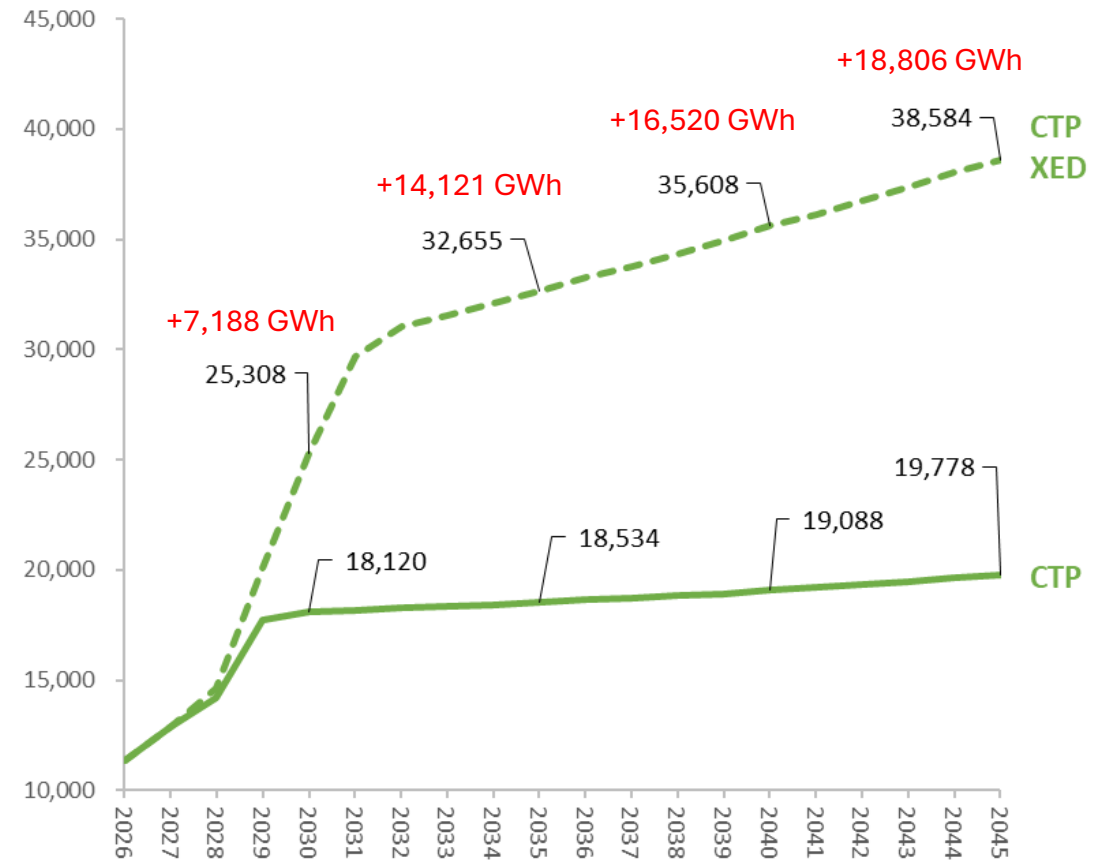
- High gas price changes expansion plan (2030-2036)
 - More renewable energy and dynamic balancing resources compared to CTP
 - Operating costs for existing gas fleet increases, creates need for renewables to serve more energy requirements of the system
 - Lower gas fleet capacity factors, mainly combined cycle
- Low gas price does not change expansion plan (2030-2036)
 - Slight increase in gas fleet annual capacity factors
 - Indicates high utilization of gas fleet at current price projections

CTP Extreme Econ Development Load Forecast

Peak Demand
Prior to EE Adjustments
(MW)

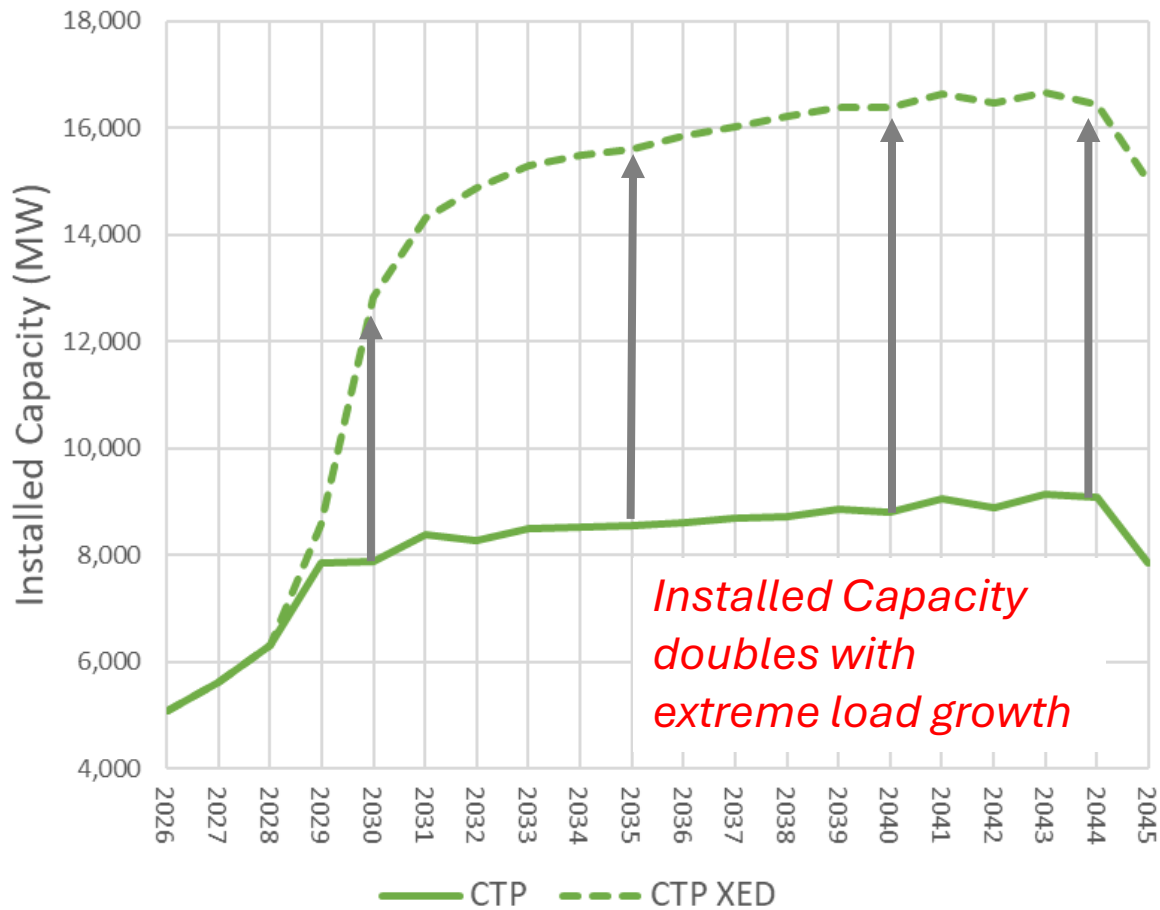


Annual Energy
Prior to EE Adjustments
(GWh)

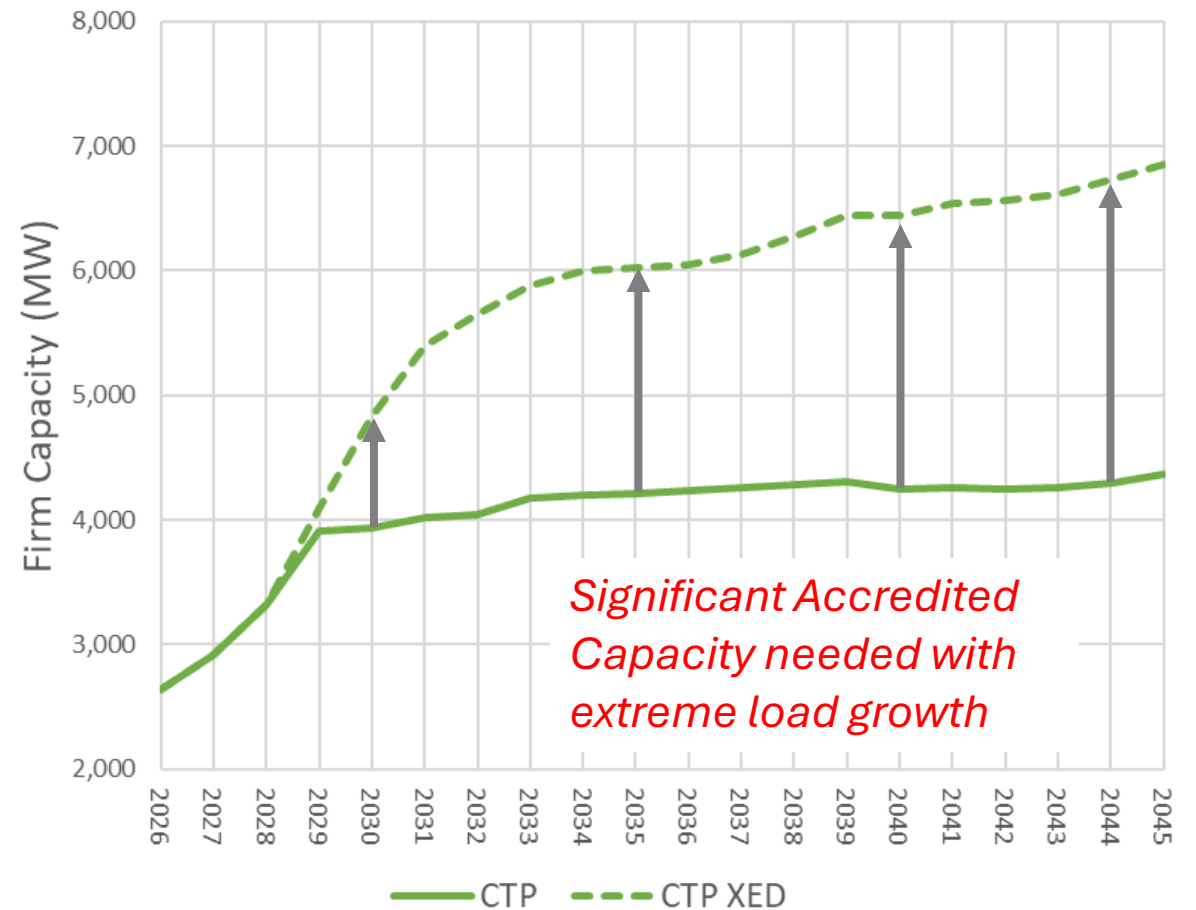


CTP Extreme Econ Dev Sensitivity Results (1 of 3)

Installed Capacity (MW)

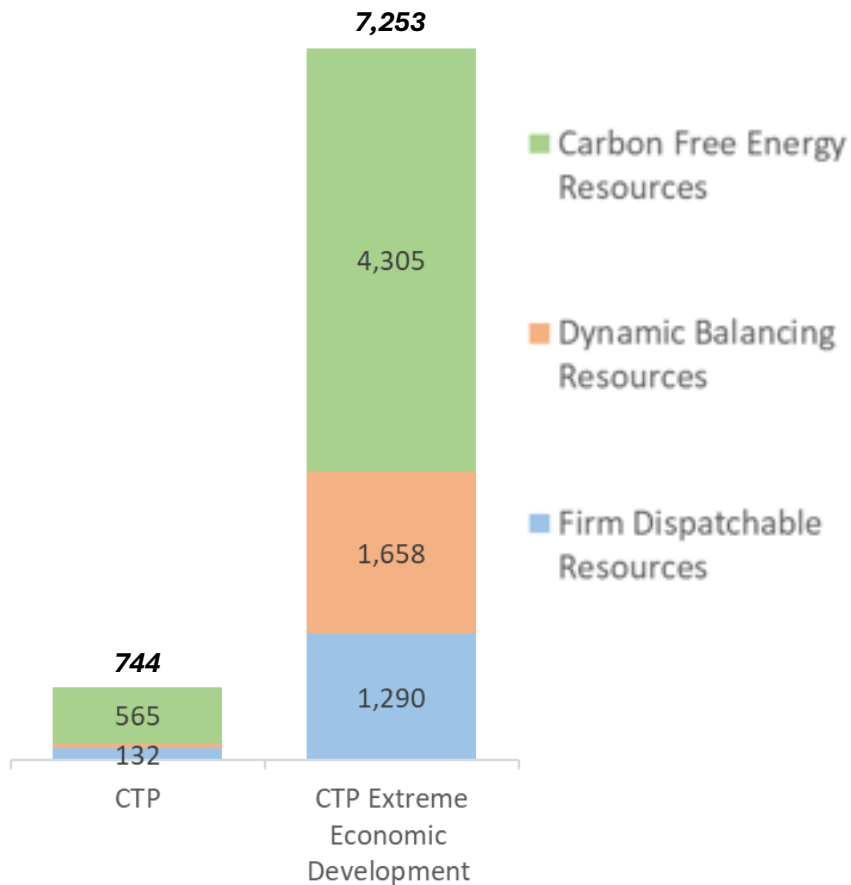


Firm Capacity (MW)

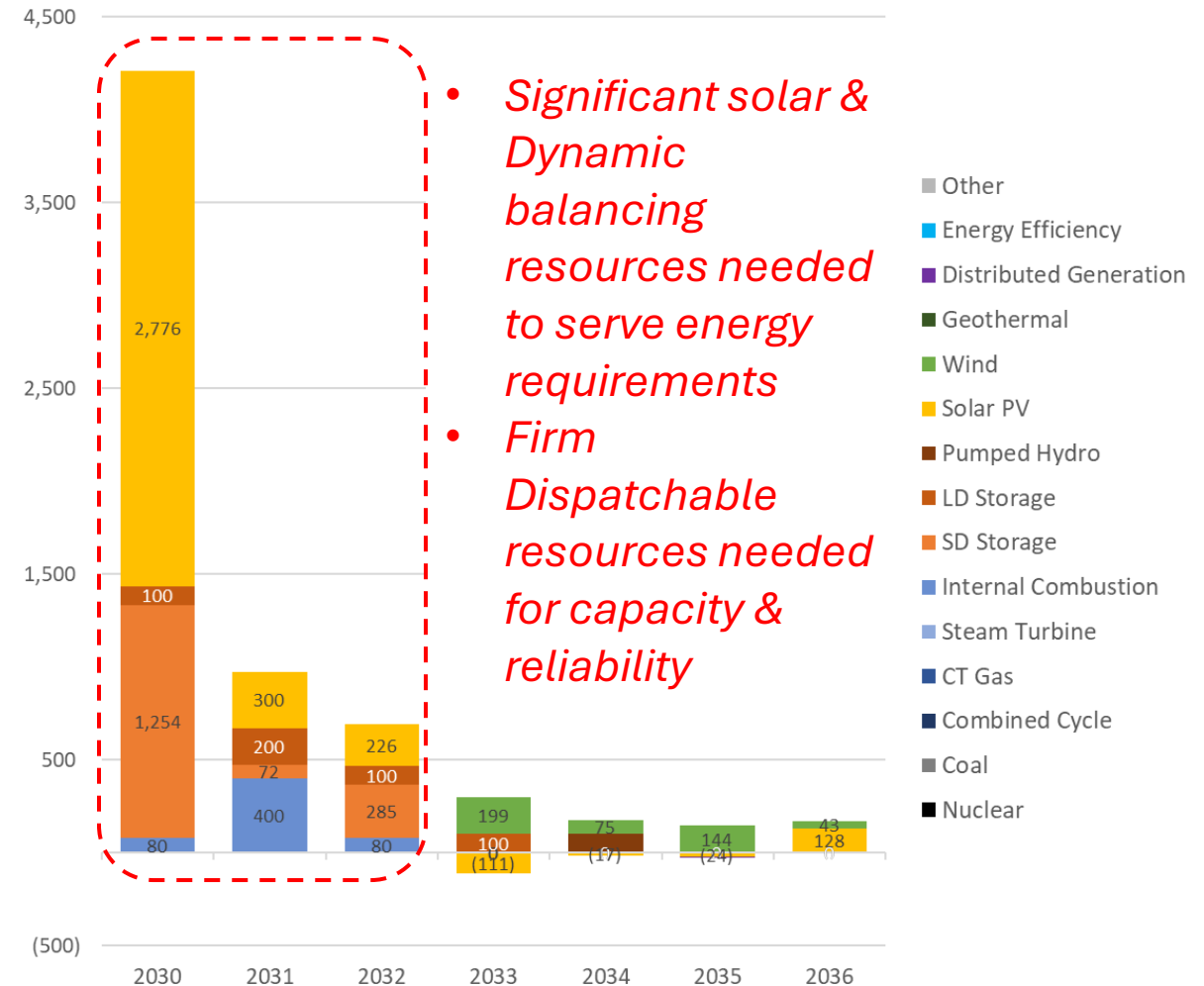


CTP Extreme Econ Dev Sensitivity Results (2 of 3)

2030-2036 Installed Capacity (MW)



CTP XED Incremental Installed Capacity (MW)



CTP Extreme Econ Dev Sensitivity Results (3 of 3)

- Incremental needs for all resource categories (2030-2036)
 - Carbon Free Energy Resources → 6.6X increase
 - Firm Dispatchable Resources → 8.8X increase
 - Dynamic Balancing Resources → 33.5X increase
- Incremental resource needs seem infeasible given scale of additions and likelihood of mobilization to construct
- If resources could be built at that scale, incremental resource capacity composition is same as HEG XED results
 - 60% Renewable Energy, 20% Firm Dispatchable, 20% Dynamic Balancing

Questions

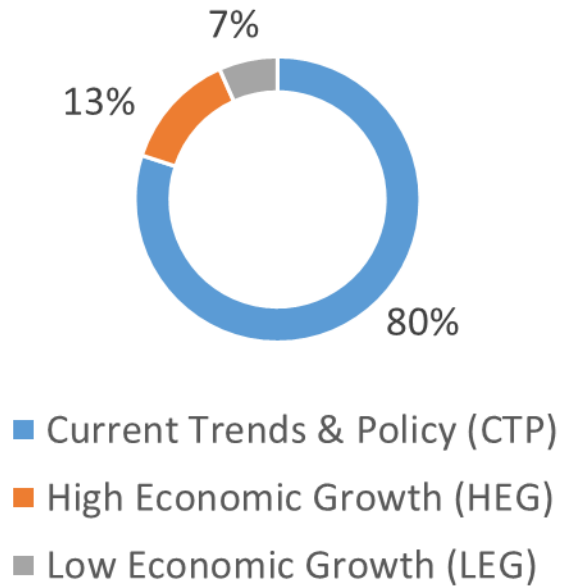
Stakeholder Scenarios



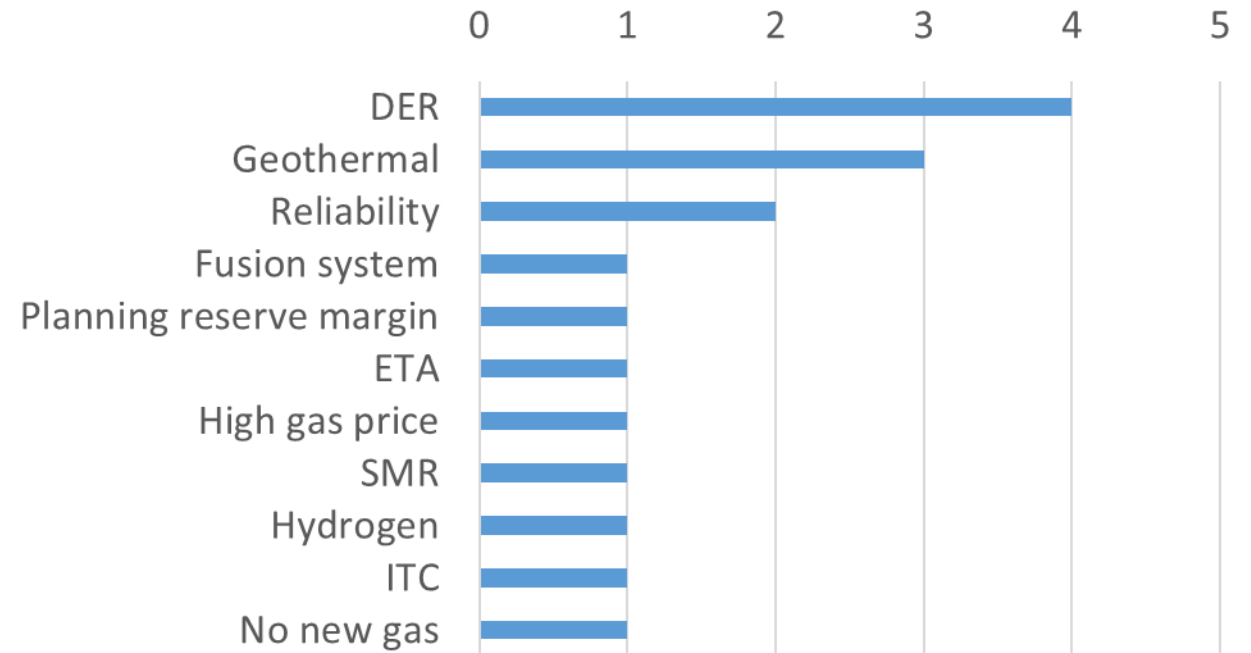
Stakeholder Interests

In total, PNM received 14 stakeholder requests.

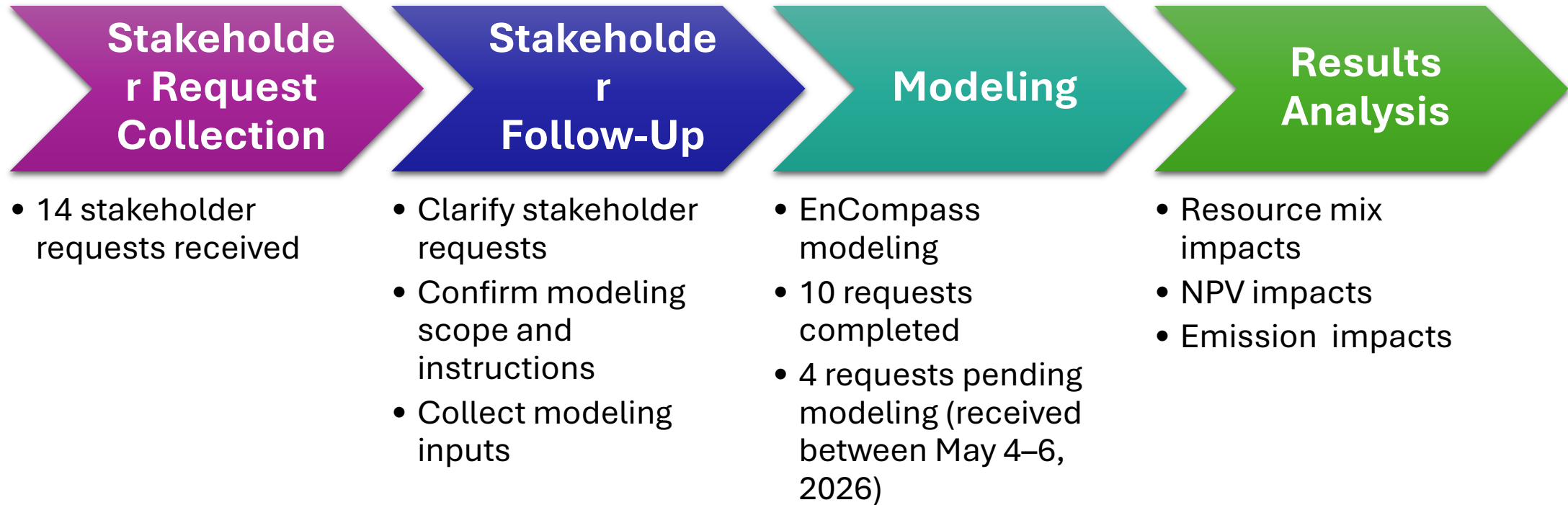
Percentage of Mentions



Number of Mentions



Stakeholder Scenario Processing



Stakeholder Scenario #1

Stakeholder request

- **Stakeholder:** Decarbonization Subgroup
- **Purpose:** Better understand the impact of fusion generation
- **Description:** Understand whether fusion generation would be included in the least-cost generation portfolio (including the timing and scale of capacity additions), as well as the potential impacts to carbon intensity (e.g., accelerated emissions reductions versus a flatter base-case profile), and assess any resulting changes in the estimated cost

PNM modeling changes

- Add fusion as a candidate resource, associated costs and operating characteristics.
- Capital Cost (2040): Fusion – \$6,137/kW; SMR – \$8,402/kW
- Fix O&M (2040): Fusion – \$75/kW-yr; SMR – \$162/kW-yr
- Energy Cost (2040): Fusion – \$1.5/MWh; SMR – \$14/MWh

Stakeholder Scenario #1 (Results)

HEG Fusion Installed Capacity (MW)													
Year	Firm Generating Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	100	-	-	6	-	387	-	-	493
2030	-	-	-	-	100	-	-	-	48	68	-	-	216
2031	-	-	-	-	-	-	-	-	-	57	-	25	82
2032	-	-	-	-	-	-	-	-	-	132	-	25	157
2033	-	-	-	-	-	-	-	380	-	143	-	26	549
2034	-	-	-	-	-	200	-	-	-	249	-	27	476
2035	-	-	-	-	-	-	-	-	4	132	-	26	161
2036	-	-	-	-	-	-	-	-	-	112	-	24	136
2037	-	-	-	80	-	-	-	-	-	-	-	25	105
2038	A	-	-	40	-	-	-	-	-	79	-	25	144
2039	-	-	-	80	-	-	-	-	-	-	-	26	106
2040	300	-	-	-	-	-	-	-	-	-	-	20	320
2041	300	-	-	-	-	-	-	-	-	-	-	25	325
2042	300	-	-	-	-	-	-	-	-	-	-	24	324
2043	300	-	-	-	-	-	-	-	-	-	-	24	324
2044	300	-	-	-	-	-	-	-	-	-	-	25	325
2045	300	-	-	-	-	-	-	112	-	-	-	25	437
Total	1,800	-	-	200	200	200	-	498	52	1,358	-	371	4,679

Key Observations

- A. Add 1800MW of fusions, replacing all SMRs in HEG



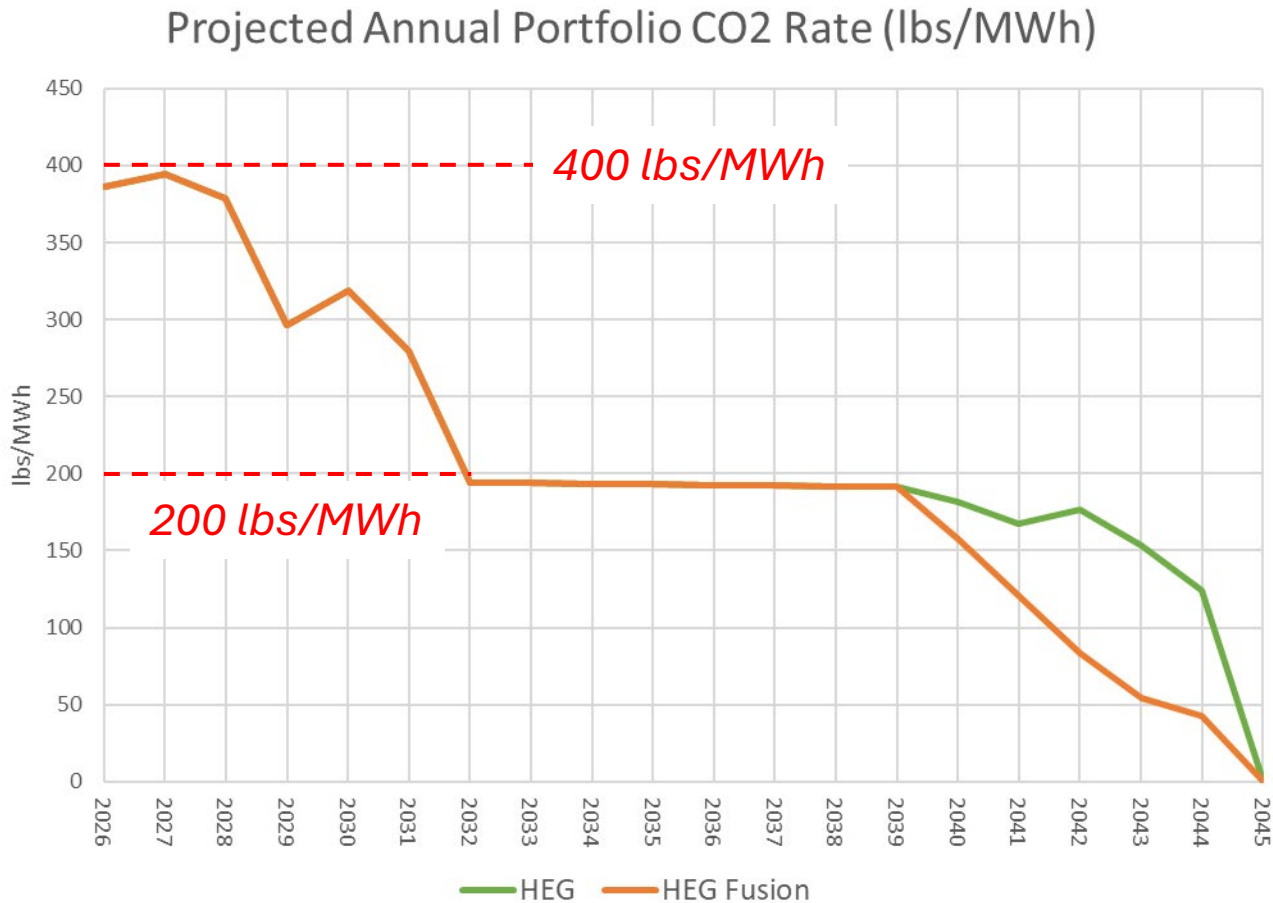
Stakeholder Scenario #1 (Results)

HEG-SS Fusion 8760 minus HEG																
HEG-SS Fusion 8760 minus HEG	Nuclear		LD							SD		Other				Total
	/Fusion	Coal	GasCC	GasCT	GasST	GasLG	Storage	PHS	Geo	Storage	DG	Solar	Wind	EE	Other	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	(0)	-	(0)	-	-	-	(0)
2030	-	-	-	-	-	-	-	-	-	-	2	0	-	-	-	2
2031	-	-	-	-	-	-	-	-	-	(0)	-	(7)	-	-	-	(7)
2032	-	-	-	-	-	-	-	-	-	-	-	7	-	-	-	7
2033	-	-	B.	-	-	-	(300)	-	-	380	-	(5)	(29)	-	-	46
2034	-	-	-	-	-	-	-	100	-	-	-	70	-	-	-	170
2035	-	-	-	-	-	-	-	-	-	-	3	52	(101)	-	-	(46)
2036	-	-	-	-	-	-	-	-	-	-	-	102	(70)	-	-	33
2037	-	-	-	-	-	-	80	-	-	-	-	(73)	-	-	-	7
2038	A.	-	-	-	-	-	-	-	-	-	-	13	-	-	-	13
2039	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2040	154	-	-	-	-	-	(80)	-	-	(21)	(4)	-	-	(6)	-	42
2041	154	-	-	-	-	-	(120)	-	-	-	-	-	-	-	-	34
2042	300	-	-	-	-	-	(120)	-	-	(248)	-	(46)	-	-	-	(114)
2043	154	-	-	-	-	-	-	-	-	(263)	-	(86)	-	(25)	-	(220)
2044	8	-	-	-	-	-	(100)	-	-	-	-	(300)	-	-	-	(392)
2045	8	-	-	-	-	-	-	-	-	(110)	-	(300)	-	-	-	(402)
Total	778	-	-	-	-	-	(240)	(400)	100	-	(262)	0	(572)	(199)	(32)	(827)

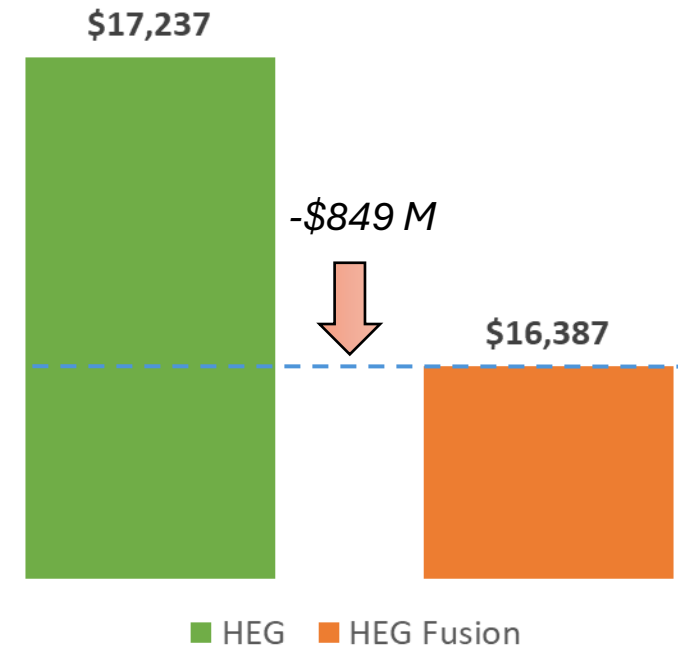
Key Observations

- A. Adds 1800 MW of fusion resources in last six years.
- B. In the focus period, it re-optimizes the different types of storage between Short Duration, Long Duration and Pumped Storage
- C. Reduces Gas, Short Duration Storage, Long Duration Storage, Solar and Wind.

Stakeholder Scenario #1 (Results)



20-Year Net Present Value (\$M)



Stakeholder Scenario #2

Stakeholder request

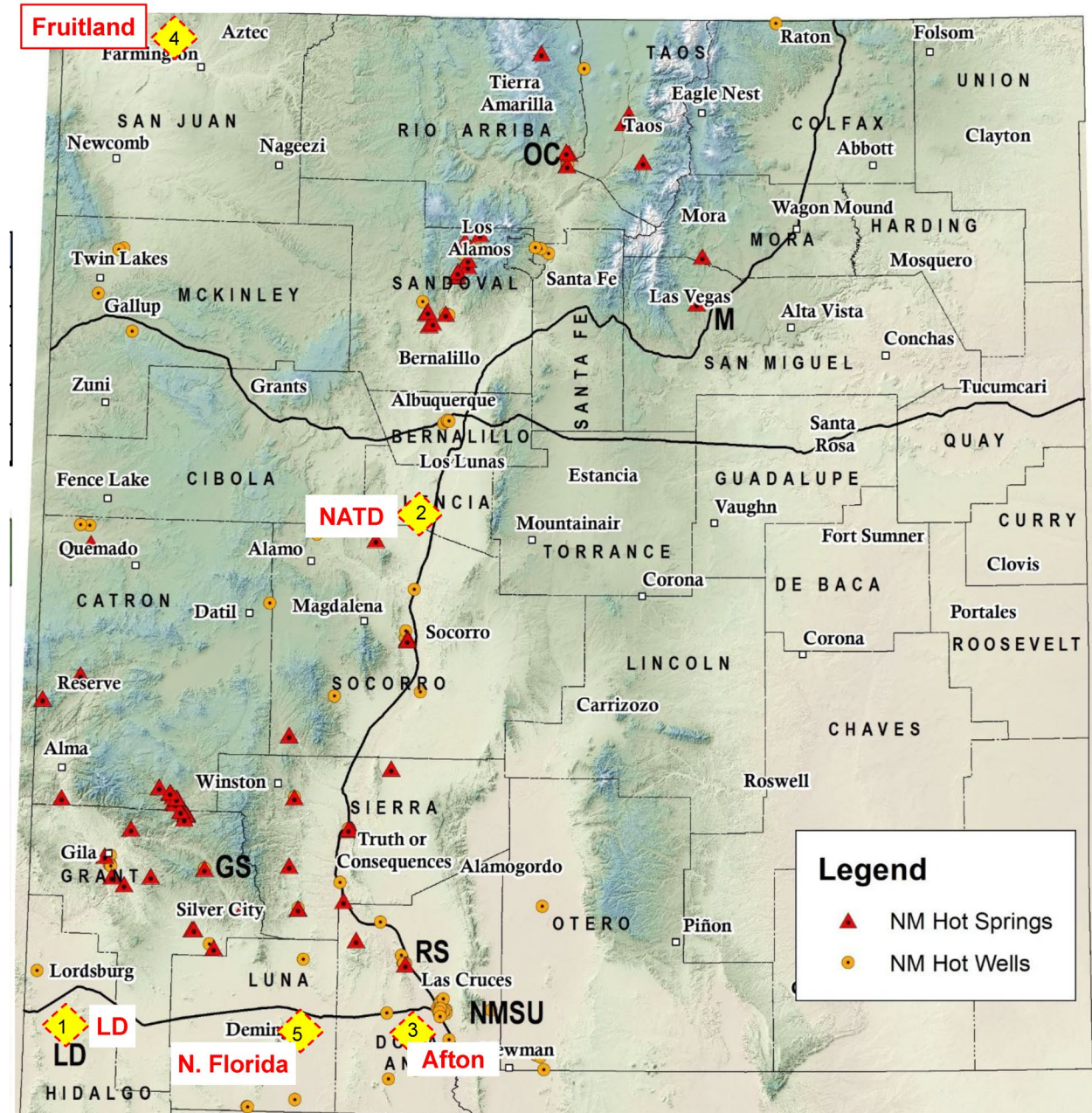
- **Stakeholder:** Geothermal Working Group, BP
- **Purpose:** Understand the effect on a portfolio when adding significant MW of geothermal generation
- **Description:** Include up to 50MW of classic geothermal at \$5,100/kW and \$6,100/kW thereafter to represent EGS enhanced geothermal. Understand the ongoing costs of SMRs and EGS before determining whether to exclude SMRs as a candidate resource

PNM modeling changes

- At most one 50MW conventional geothermal, and unlimited 50MW EGS can be selected
- Capital costs are assumed to be \$5,100/kW for conventional geothermal and \$6,100/kW for EGS in 2030, with a 3% annual escalation thereafter
- A transmission cost adder of \$286/kW (2026\$) is applied

Stakeholder Scenario #2 Transmission map

PNM Used Sites 1 and 2 as proxies for the Geothermal Scenario locations.



Stakeholder Scenario #2 Transmission Cost Adder

Lighting Dock Geothermal

Switching Station Hidalgo	\$	25,000,000	
Line	\$	75,000,000	2.5 M\$/mile transmission assumed, 30 miles
Total	\$	100,000,000	

200 MW Line Capacity

\$ 500.00 \$/kW Cost per kW of line capacity

Geothermal@ Belen

Switching Station	\$	8,000,000	
Line	\$	6,250,000	2.5 M\$/mile transmission assumed, 30 miles
Total	\$	14,250,000	

200 MW Line Capacity

\$ 71.25 \$/kW

Average of both sites: \$ 285.63 Cost per kW of line capacity

- PNM Developed a cost adder by examining two sites by prorating the cost of the line and station upgrades.
- Next, PNM averaged the two sites to provide an average cost of adding a generic geothermal project

Stakeholder Scenario #2 (Results)

- Updated capital costs of conventional geothermal and enhanced geothermal
 - \$5,100/kW for conventional geothermal and \$6,100/kW for enhanced
- Capacity Expansion did not select either conventional or enhanced geothermal based on economics.
- Then ran three scenarios with forcing in geothermal
 - 50 MW conventional
 - 50 MW enhanced
 - 50 MW conventional + 200 MW enhanced

Stakeholder Scenario #2 (Results)

Force in 50 MW conventional geothermal

CTP SS Geo Force Base minus CTP Installed Capacity (MW)

Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	(0)	-	(0)	-	-	(0)
2030	-	-	-	-	-	-	-	-	-	(0)	-	-	(0)
2031	-	-	-	-	A	-	-	(0)	-	A	-	-	(0)
2032	-	-	-	-	-	-	-	-	-	(10)	-	-	(10)
2033	-	-	-	-	(100)	-	50	-	-	(111)	-	-	(161)
2034	-	-	-	-	-	-	-	-	-	(17)	-	-	(17)
2035	-	-	-	-	-	-	-	-	-	5	-	-	5
2036	-	-	-	-	-	-	-	-	-	5	-	-	5
2037	-	-	-	-	-	-	-	-	-	16	-	-	16
2038	-	-	-	-	-	-	-	-	-	(2)	-	-	(2)
2039	-	-	-	-	-	-	-	-	-	(1)	-	-	(1)
2040	146	-	-	(80)	-	-	-	(25)	-	-	-	-	41
2041	(146)	-	-	-	200	-	-	(107)	-	-	-	-	(53)
2042	-	-	-	-	-	-	-	(18)	-	-	-	-	(18)
2043	-	-	-	C	B	-	-	C	(4)	-	-	-	(4)
2044	-	-	-	-	-	-	-	(4)	-	107	-	-	103
2045	-	-	-	-	-	-	-	55	-	0	-	-	55
Total	-	-	-	(80)	100	-	50	(103)	-	(8)	-	-	(41)

Key Observations

- A. Focus period: Postpone 100 MW long duration storage, 118 MW of solar
- B. Add 100 MW additional long duration storage
- C. Reduce 103 MW short duration storage, and 80 MW linear generator
- D. Yields a NPV of \$23M more than the CTP case



Stakeholder Scenario #2 (Results)

Force in 50 MW enhanced geothermal

CTP SS Geo Force Deep minus CTP Installed Capacity (MW)

Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	(0)	-	0	-	-	(0)
2030	-	-	-	-	-	-	-	-	-	0	-	-	0
2031	-	-	-	-	-	-	-	(0)	-	0	-	-	(0)
2032	-	-	-	-	A	-	-	-	-	A	-	-	(14)
2033	-	-	-	-	(100)	-	50	-	-	(111)	-	-	(161)
2034	-	-	-	-	-	-	-	-	-	(17)	-	-	(17)
2035	-	-	-	-	-	-	-	-	-	(8)	-	-	(8)
2036	-	-	-	-	-	-	-	-	-	12	-	-	12
2037	-	-	-	-	-	-	-	-	-	(19)	-	-	(19)
2038	-	-	-	-	-	-	-	-	-	0	-	-	0
2039	-	-	-	-	-	-	-	-	-	2	-	-	2
2040	146	-	-	(80)	-	-	-	(22)	-	-	-	-	44
2041	(146)	-	-	-	200	-	-	(107)	-	-	-	-	(53)
2042	-	-	-	-	-	-	-	(18)	-	-	-	-	(18)
2043	-	-	-	C	B	-	-	C	(4)	-	-	-	(4)
2044	-	-	-	-	-	-	-	(5)	-	134	-	-	129
2045	-	-	-	-	-	-	-	57	-	0	-	-	57
Total	-	-	-	(80)	100	-	50	(98)	-	(19)	-	-	(47)

Key Observations

- A. Focus period: Postpone 100 MW long duration storage, 124 MW of solar
- B. Add 100 MW additional long duration storage
- C. Reduce 98 MW short duration storage, and 80 MW linear generator
- D. Yields a NPV of \$5M more than the CTP case



Stakeholder Scenario #2 (Results)

Force in 50 MW conventional geothermal and 200 MW of enhanced geothermal

CTP SS Geo Force 50MW Base & 200MW Deep minus CTP Installed Capacity (MW)

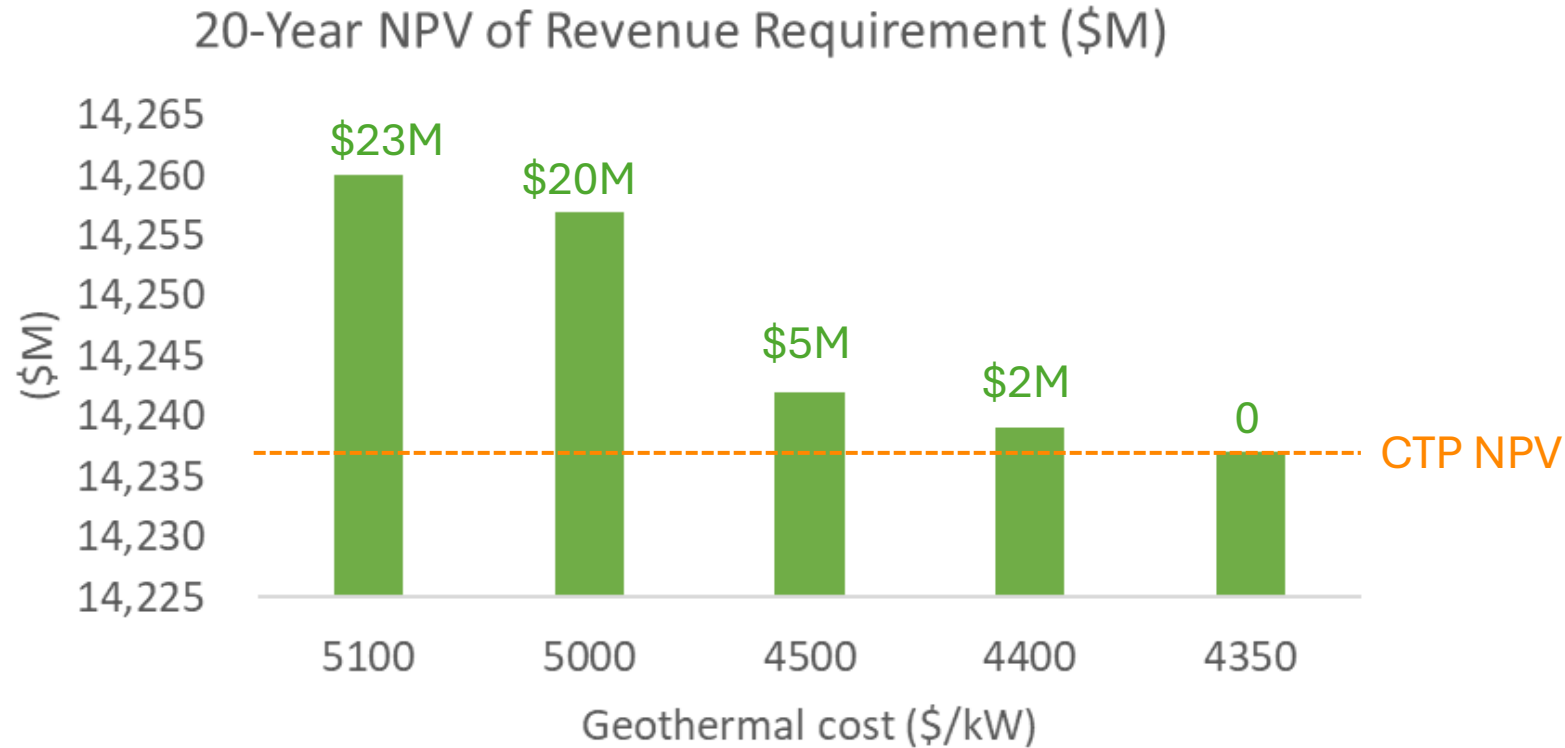
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	(0)	-	0	-	-	0
2030	-	-	-	-	-	-	-	-	-	0	-	-	0
2031	-	-	-	-	A	-	-	(0)	-	0	-	-	(0)
2032	-	-	-	-	-	-	-	-	-	(51)	-	-	(51)
2033	-	-	-	-	(100)	-	100	-	-	(111)	-	-	(111)
2034	-	-	-	-	-	-	50	-	-	(17)	-	-	33
2035	-	-	-	-	-	-	50	-	-	(93)	-	-	(43)
2036	-	-	-	-	-	-	50	-	-	(66)	-	-	(16)
2037	-	-	-	-	-	-	-	-	-	(94)	-	-	(94)
2038	-	-	-	-	-	-	-	-	-	22	-	-	22
2039	-	-	-	-	-	-	-	-	-	(125)	-	-	(125)
2040	-	-	-	(80)	-	-	-	(30)	-	227	-	-	117
2041	-	-	-	-	-	-	-	5	-	-	-	-	5
2042	-	-	-	-	-	-	-	2	-	-	-	-	2
2043	(146)	-	B	-	-	200	C	(152)	-	152	-	-	53
2044	-	-	-	-	-	-	-	(0)	-	145	-	-	145
2045	-	-	-	-	-	-	-	58	-	0	-	-	58
Total	(146)	-	-	(80)	100	-	250	(117)	-	(12)	-	-	(6)

Key Observations

- A. Focus period: Postpone 100 MW long duration storage, 287 MW of solar
- B. Reduce 146 MW of nuclear and 80 MW of linear generator
- C. Add more long duration storage, but less short duration storage
- D. Yields a NPV of \$153M more than the CTP case



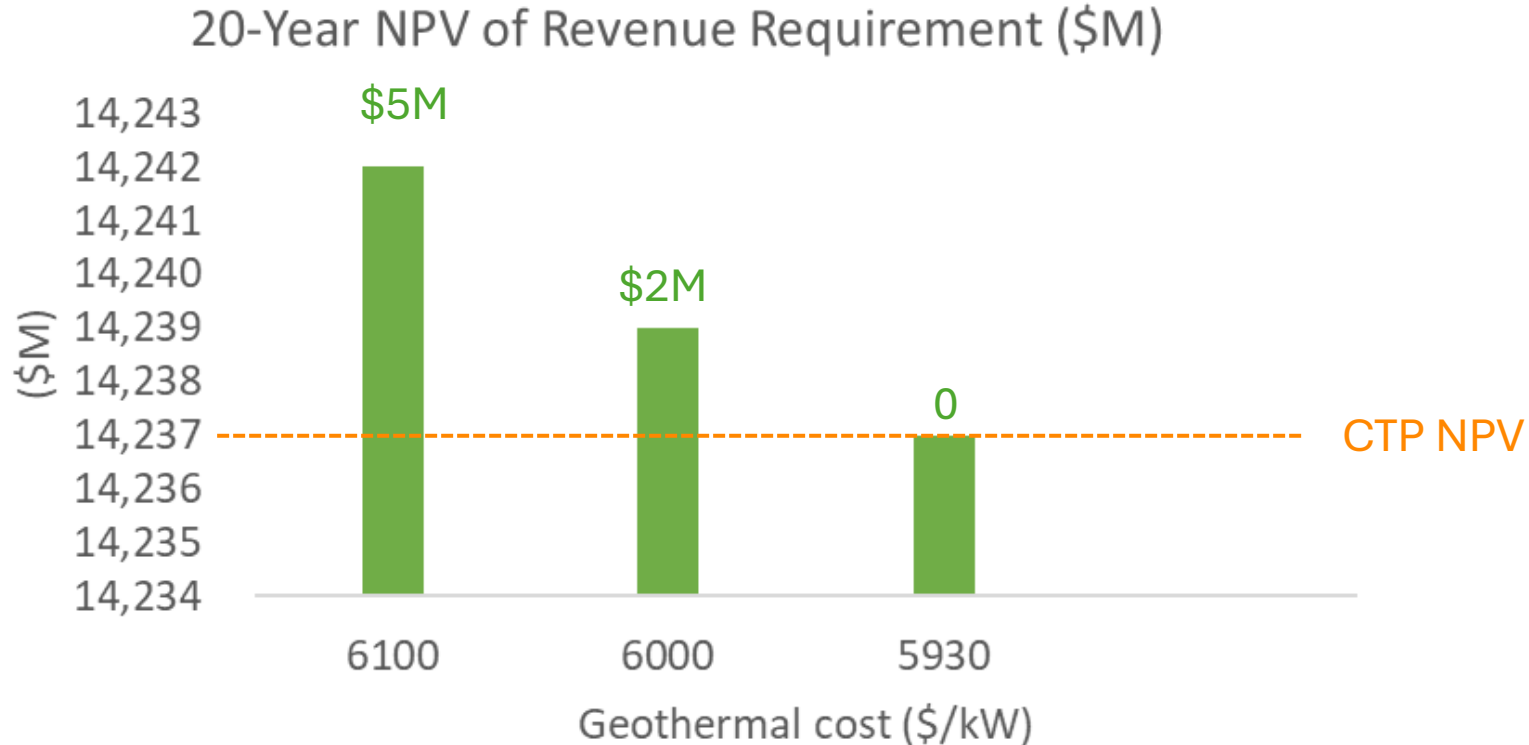
Stakeholder Scenario #2 (Results)



Key Observations:

- Geothermal capital cost would need to be around \$4,350/kW for the technology to be economically competitive in the portfolio.
- Costs were very close to being economically selected.

Stakeholder Scenario #2 (Results)



Key Observations:

- Deep enhanced geothermal capital cost would need to be around \$5,930/kW for the technology to be economically competitive in the portfolio.

Stakeholder Scenario #3

Stakeholder request

- **Stakeholder:** Decarbonization Subgroup
- **Purpose:** ‘Smooth out’ the acquisition of new clean firm resources
- **Description:** Achieve a more gradual, incremental acquisition of clean firm resources during the IRP period. Stakeholder is interested in seeing whether the model selects different resource types, or different increments of resources, with this ‘smoothing’ applied, and whether there is a more gradual increase in capital expenditure requirements

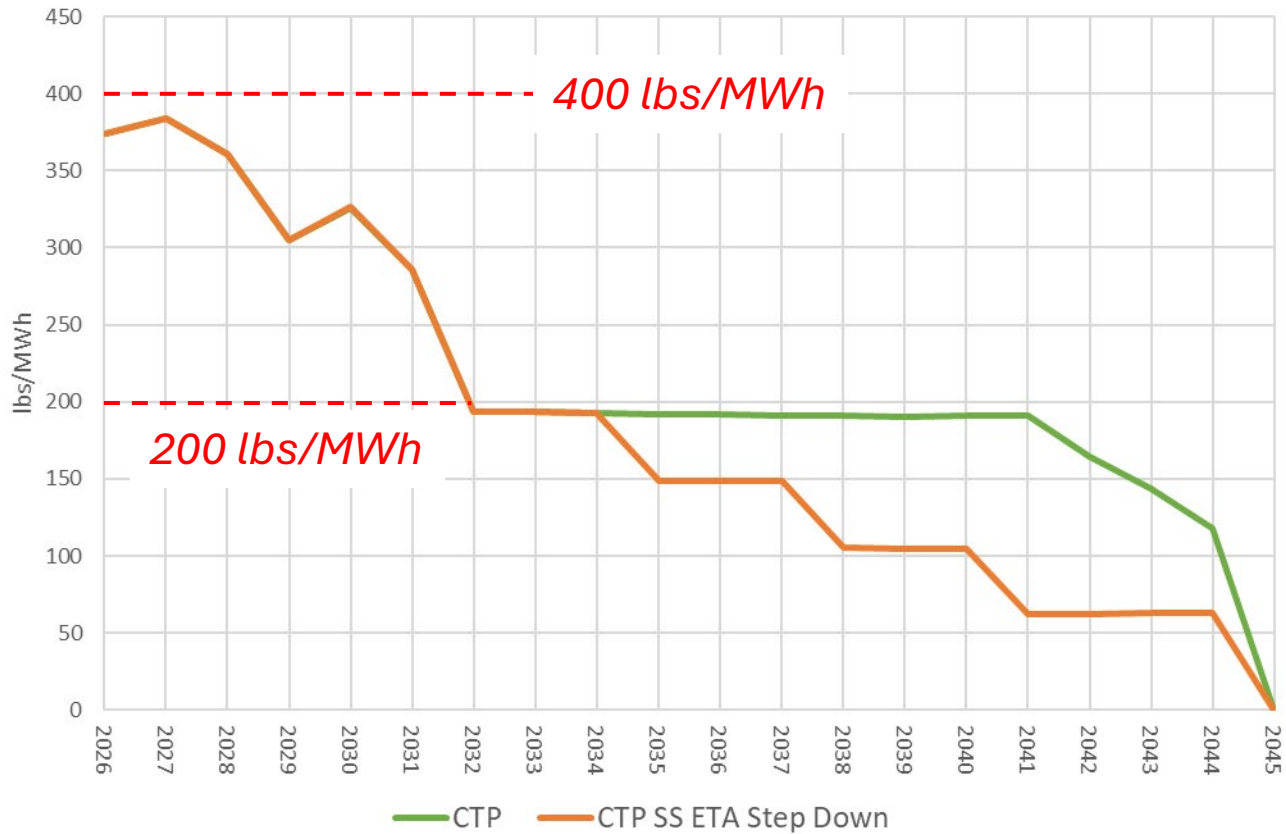
PNM modeling changes

Follow stakeholder's suggestion in CTP, HEG and LEG:

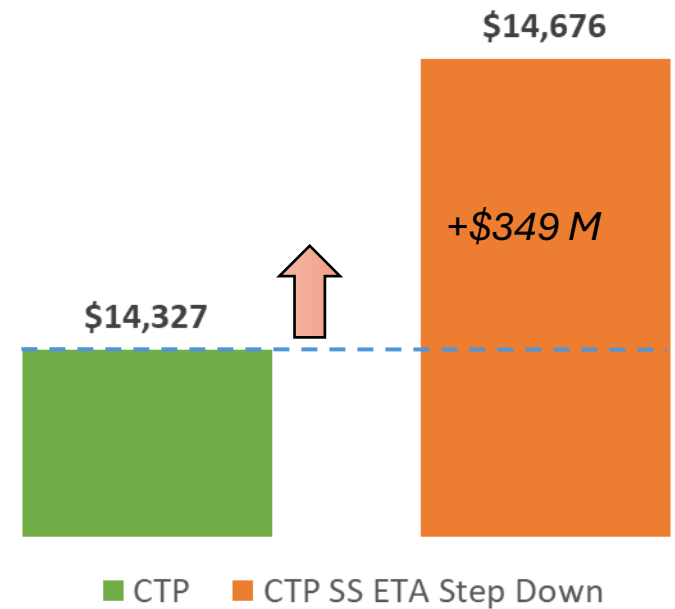
- 2026 - 2031: 400 lbs/MWh;
- 2032 - 2034: 200 lbs/MWh;
- 2035 - 2037: 155 lbs/MWh;
- 2038 - 2040: 110 lbs/MWh;
- 2041 - 2044: 65 lbs/MWh;
- 2045: 0 lbs/MWh.

Stakeholder Scenario #3 (Results) CTP

Projected Annual Portfolio CO2 Rate (lbs/MWh)



20-Year Net Present Value (\$M)



Stakeholder Scenario #3 (Results) CTP

CTP-SS ETA Step Down 8760 minus CTP

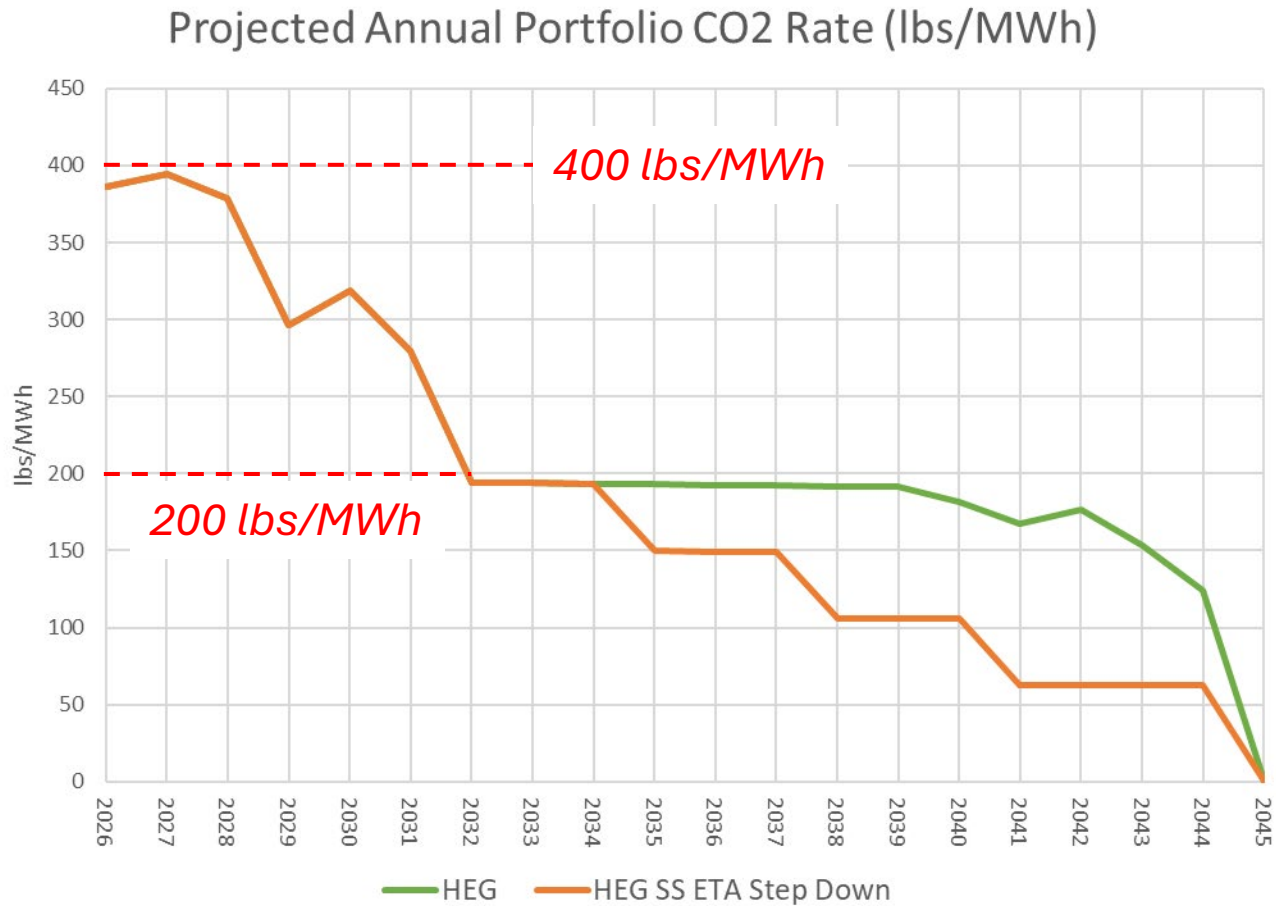
CTP-SS ETA Step Down 8760 minus CTP	Nuclear									LD		SD		Other				Total
	/Fusion	Coal	GasCC	GasCT	GasST	GasLG	Storage	PHS	Geo	Storage	DG	Solar	Wind	EE	Other			
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2029	-	-	-	-	-	-	-	-	-	(0)	-	(0)	-	-	-	(0)		
2030	-	-	-	-	-	-	-	-	-	-	(30)	(0)	-	-	-	(30)		
2031	-	-	-	-	-	-	-	-	-	(0)	-	(0)	-	-	-	(0)		
2032	-	-	-	-	-	-	-	-	-	-	-	0	-	-	-	0		
2033	-	-	-	-	-	-	-	-	-	-	(100)	406	-	70	-	376		
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	(9)	-	(9)		
2035	-	-	-	-	-	-	-	-	-	-	-	(2)	193	53	-	245		
2036	-	-	-	-	-	-	-	-	-	-	-	-	13	-	-	13		
2037	-	-	-	-	-	-	-	-	-	-	-	-	15	-	-	15		
2038	146	-	-	-	-	-	-	-	-	-	-	-	(23)	-	-	123		
2039	-	-	-	-	-	-	-	-	-	-	-	-	(46)	-	-	(46)		
2040	-	-	-	-	-	(120)	-	-	-	-	-	-	15	-	-	(139)		
2041	146	-	-	-	-	(40)	-	-	-	-	(35)	1	-	-	-	(1)		
2042	-	-	-	-	-	-	-	-	-	-	(107)	-	-	-	-	(36)		
2043	(146)	-	-	-	-	-	100	-	-	-	(36)	-	-	-	-	(197)		
2044	(146)	-	-	-	-	80	100	-	-	-	(151)	-	(74)	-	-	(155)		
2045	-	-	-	-	-	40	-	-	-	-	(115)	-	(154)	-	-	(158)		
Total	-	-	-	-	-	(40)	100	-	-	-	(82)	(30)	(0)	53	-	1		

Key Observations

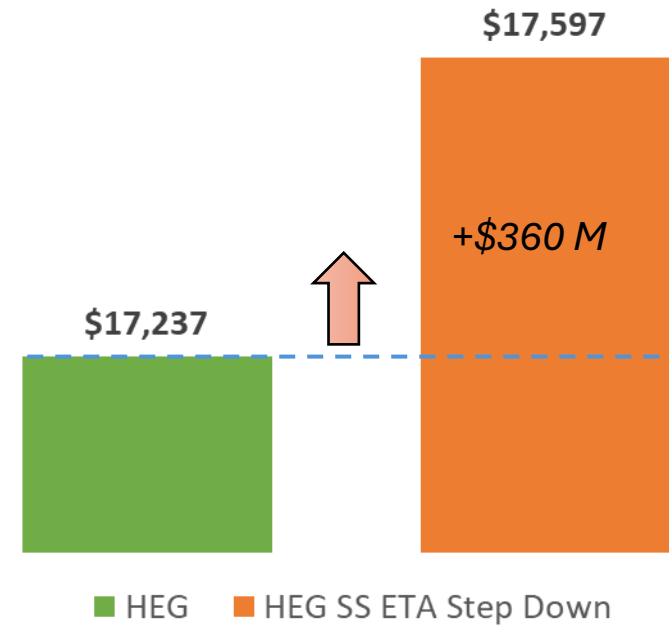
- A. Accelerates base load nuclear – 2038 instead of 2041
- B. Focus period: Accelerate short duration storage
- C. Modest reductions in gas, short duration storage. Slight increase in long duration storage overall.
- D. Capacity neutral



Stakeholder Scenario #3 (Results) HEG



20-Year Net Present Value (\$M)



Stakeholder Scenario #3 (Results) HEG

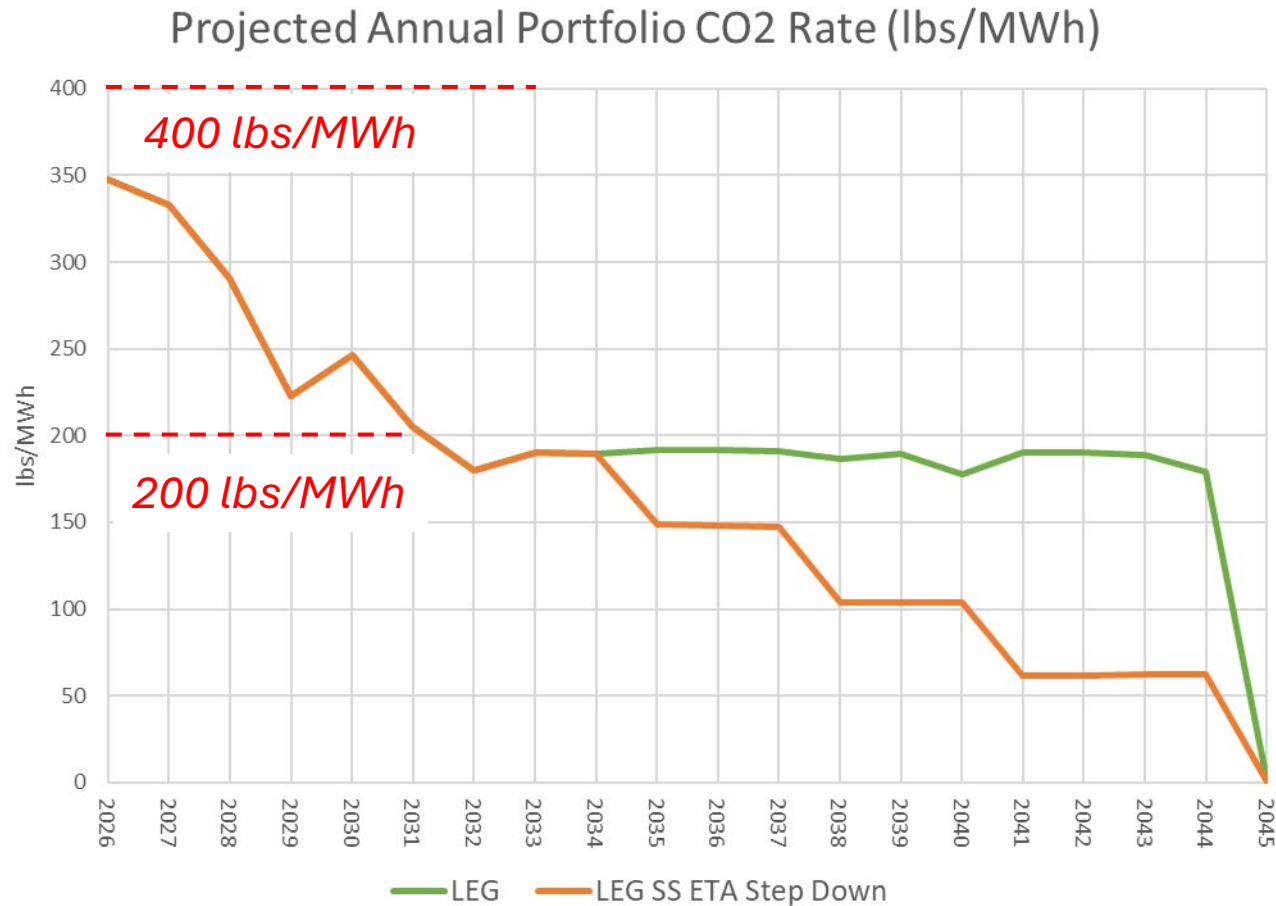
HEG-SS ETA Step Down 8760 minus HEG																		
HEG-SS ETA Step Down 8760 minus HEG	Nuclear									LD		SD		Other				Total
	/Fusion	Coal	GasCC	GasCT	GasST	GasLG	Storage	PHS	Geo	Storage	DG	Solar	Wind	EE	Other			
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-		
2029	-	-	-	-	-	-	-	-	-	0	-	(2)	-	-	-	(2)		
2030	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2		
2031	-	-	-	-	-	-	-	-	-	(0)	-	(4)	-	-	-	(4)		
2032	-	-	-	-	-	-	-	-	-	-	-	3	-	-	-	3		
2033	-	-	-	-	-	-	-	-	-	173	-	85	(29)	-	-	228		
2034	-	-	-	-	-	-	-	-	-	-	-	2	-	-	-	2		
2035	-	-	-	-	-	-	-	-	-	-	-	(9)	93	-	-	84		
2036	-	-	-	-	-	-	-	-	-	-	-	138	(64)	-	-	74		
2037	-	-	-	-	-	-	-	-	-	-	-	113	-	-	-	113		
2038	146	-	-	-	-	(40)	-	-	-	-	-	(24)	-	-	-	82		
2039	146	-	-	-	-	(80)	-	-	-	-	-	-	-	-	-	66		
2040	(146)	-	-	-	-	(80)	-	-	-	(21)	-	-	-	-	-	(247)		
2041	146	-	-	-	-	(120)	-	-	-	-	-	-	-	-	-	26		
2042	-	-	-	-	-	(40)	-	-	-	77	-	110	-	-	-	147		
2043	-	-	-	-	-	-	100	-	-	(263)	-	(86)	-	(25)	-	(274)		
2044	(146)	-	-	-	-	200	(100)	-	-	16	-	(277)	-	-	-	(307)		
2045	(146)	-	-	-	-	160	-	-	-	41	-	(16)	-	-	-	39		
Total	-	-	-	-	-	-	-	-	-	23	-	37	-	(25)	-	34		

Key Observations

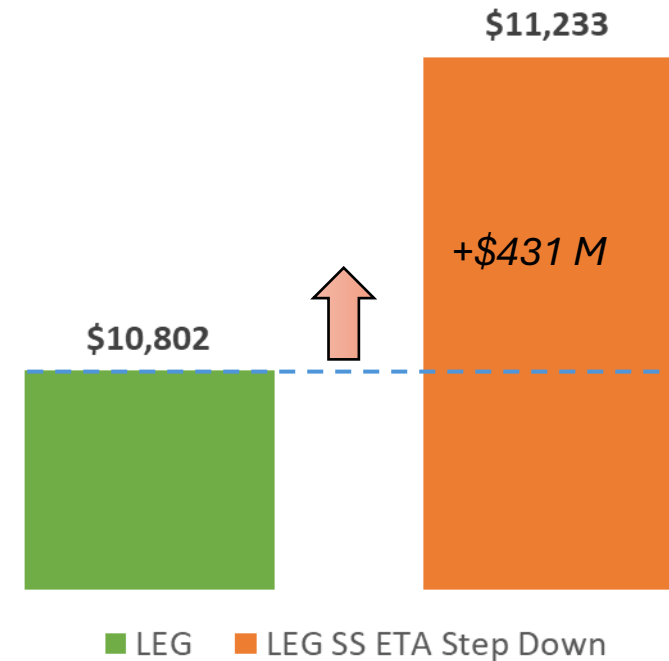
- A. Accelerates nuclear – 2038 instead of 2040
- B. Focus period: accelerates short duration storage
- C. Modest increase in short duration storage and solar
- D. Almost capacity neutral



Stakeholder Scenario #3 (Results) LEG



20-Year Net Present Value (\$M)



Stakeholder Scenario #3 (Results) LEG

LEG-SS ETA Step Down 8760 minus LEG																
LEG-SS ETA Step Down 8760 minus LEG	Nuclear		LD							SD		Other				Total
	/Fusion	Coal	GasCC	GasCT	GasST	GasLG	Storage	PHS	Geo	Storage	DG	Solar	Wind	EE	Other	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	0	-	0	-	-	-	0
2030	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2031	-	-	-	-	-	-	-	-	-	0	-	0	-	-	-	0
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2036	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2037	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2038	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2039	-	-	-	-	-	-	-	-	-	-	-	87	-	-	-	87
2040	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2041	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	292
2042	-	-	-	-	-	-	-	-	-	-	-	60	-	-	-	60
2043	-	-	-	-	-	-	-	-	-	169	-	45	-	-	-	214
2044	-	-	-	-	-	-	(40)	-	-	(333)	-	(262)	-	-	-	(635)
2045	-	-	-	-	-	-	40	-	-	175	-	27	-	-	-	(50)
Total	-	-	-	-	-	-	-	-	-	11	-	(43)	-	-	-	(32)

Key Observations

- A. Accelerates nuclear – 2041 instead of 2044
- B. Focus period: No change
- C. Slight overall change in short duration storage and solar
- D. Almost capacity neutral

Stakeholder Scenario #4

Stakeholder request

- **Stakeholder:** Decarbonization Subgroup
- **Purpose:** Explore the effects of high gas price on the costs of PNM's expansion plan
- **Description:** This scenario is meant to model continued disruption in the Persian Gulf and concomitant tightening of oil prices, along with the rush on gas turbines from data center proliferation

PNM modeling changes

- Use the high natural gas price assumption in CTP

Stakeholder Scenario #4 (Results)

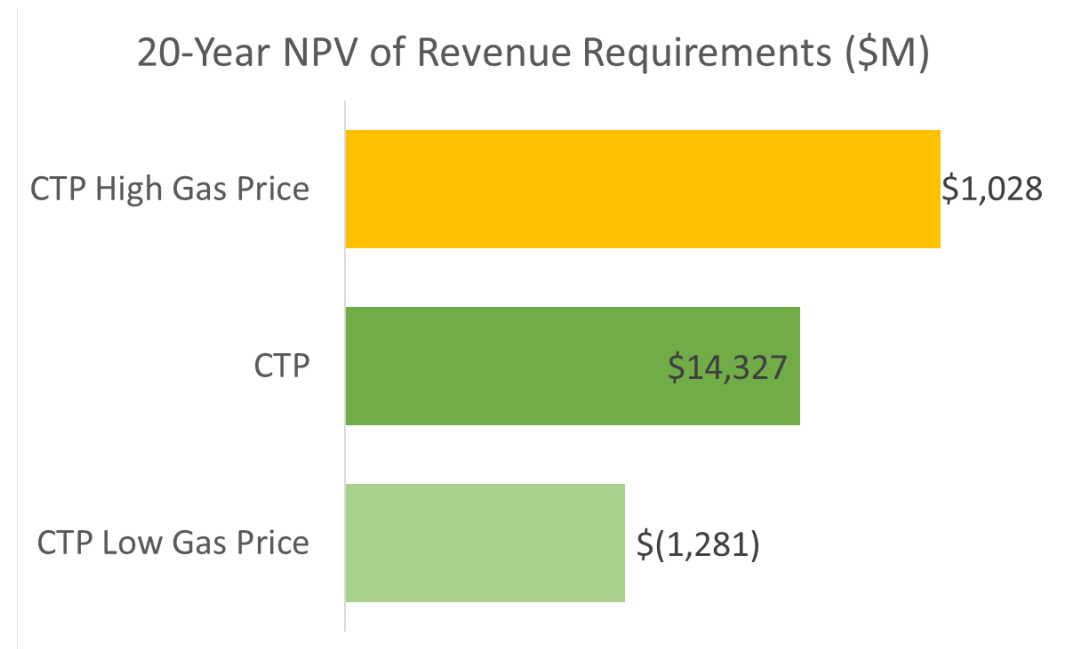
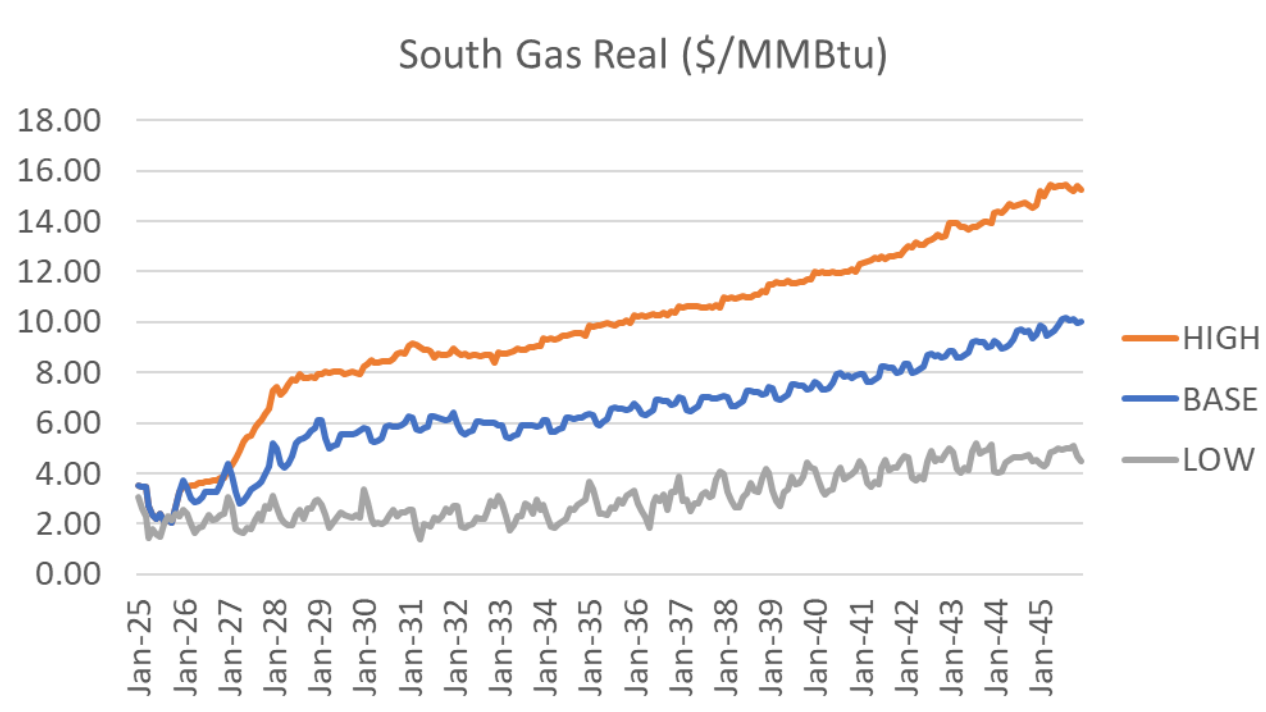
CTP-SS NGH 8760 minus CTP																
CTP-SS NGH 8760 minus CTP	Nuclear			LD						SD		Other				Total
	/Fusion	Coal	GasCC	GasCT	GasST	GasLG	Storage	PHS	Geo	Storage	DG	Solar	Wind	EE	Other	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	-	-	(0)	-	90	-	-	-	90
2030	-	-	-	-	-	-	-	-	-	-	-	22	-	-	-	22
2031	-	-	-	-	-	-	-	-	-	(0)	-	153	-	-	-	153
2032	-	-	-	-	-	-	-	-	-	-	-	(32)	-	-	-	(32)
2033	-	-	-	-	-	-	-	-	-	179	-	37	-	-	-	217
2034	-	-	-	-	-	-	-	-	-	-	-	38	-	-	-	38
2035	-	-	-	-	-	-	-	-	-	-	(2)	-	-	-	-	6
2036	-	-	-	-	-	-	-	-	-	-	-	(65)	-	-	-	(66)
2037	-	-	-	-	-	-	-	-	-	-	-	(56)	-	-	-	(56)
2038	-	-	-	-	-	-	-	-	-	-	-	(23)	-	-	-	(23)
2039	-	-	-	-	-	-	-	-	-	-	-	(125)	-	-	-	(125)
2040	146	-	-	-	-	(120)	-	-	-	(35)	1	-	-	-	-	(8)
2041	-	-	-	-	-	(40)	-	-	-	(107)	-	-	-	-	-	(147)
2042	-	-	-	-	-	-	-	-	-	(1)	-	-	-	-	-	(1)
2043	-	-	-	-	-	40	-	-	-	(126)	-	-	-	-	-	(86)
2044	(146)	-	-	-	-	120	-	-	-	90	-	(48)	-	-	-	16
2045	-	-	-	-	-	-	-	-	-	(0)	-	0	-	-	-	(0)
Total	-	-	-	-	-	-	-	-	-	0	(0)	(0)	-	-	-	0

Key Observations

- A. Accelerates nuclear – 2040 instead of 2044 and delayed linear generators.
- B. Focus period: Short duration and solar accelerated from later years
- C. Capacity neutral



Stakeholder Scenario #4 (Results)



Stakeholder Scenario #5

Stakeholder request

- **Stakeholder:** DER Subgroup
- **Purpose:** High TOU participation, larger share of EV load managed through EV TOD rates or managed charging
- **Description:** Use a new baseline future: CTP with high the behind-the-meter solar forecast. Modify the TOU participation assumption to reflect a default TOU rate starting in 2030 with approximately 85% participation. Assume by 2030, 85% to 90% of all light-duty EVs are on either an EV TOD rate or a managed charging plan

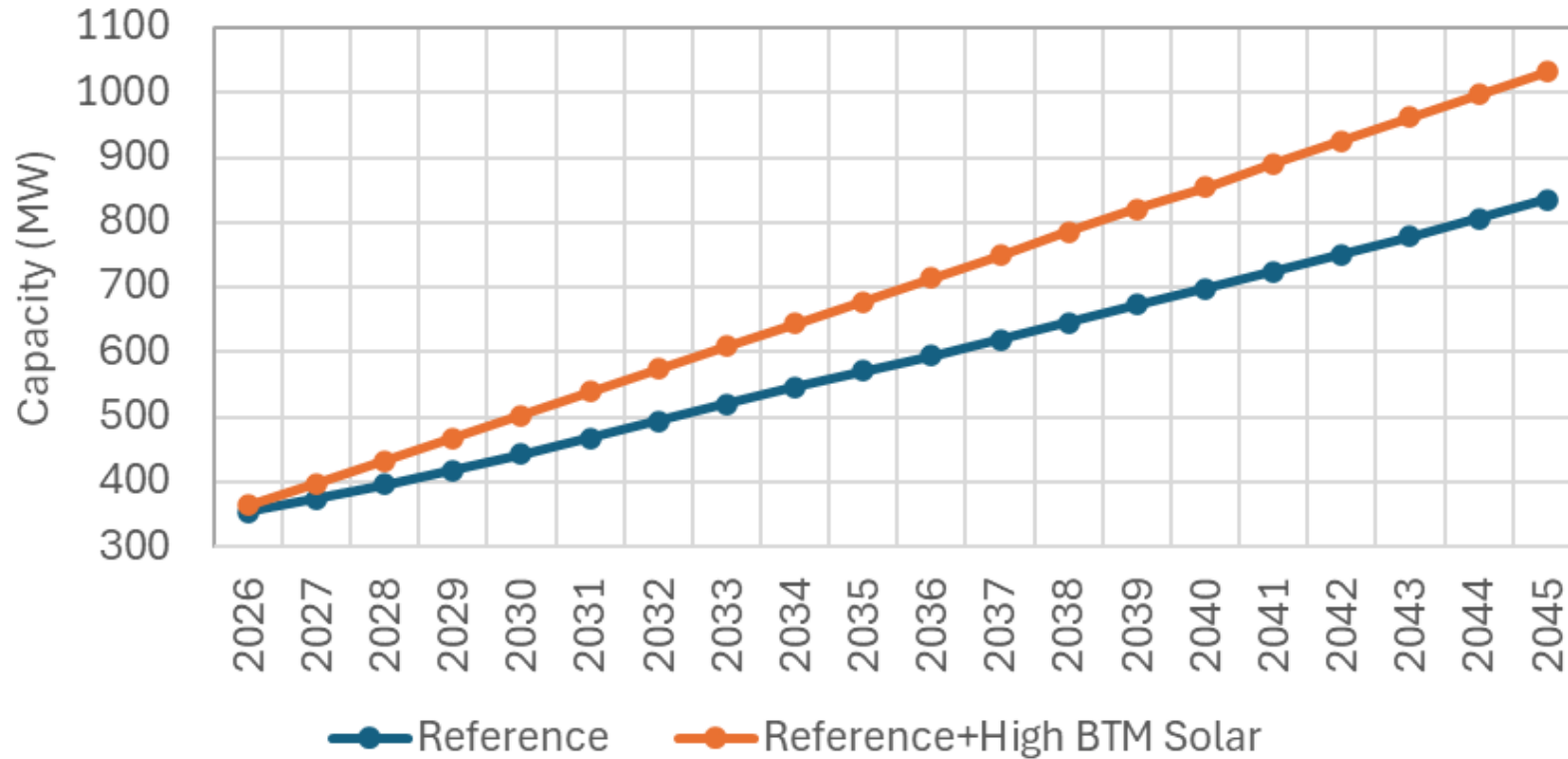
PNM modeling changes

- Change the behind-the-meter solar forecast from Reference to High
- Apply TOU sensitivity
- Two runs:
 - CTP + High BTM solar
 - CTP + High BTM solar + TOU sensitivity (80% participation)

Stakeholder Scenario #5 (Results)

PNM's BTM Solar forecast

BTM Solar (MW)



Stakeholder Scenario #5 (Results)

CTP + High BTM solar

CTP SS High BTMS minus CTP Installed Capacity (MW)													
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	0	-	(16)	-	-	(16)
2030	-	-	-	-	-	-	-	-	-	(21)	-	-	(21)
2031	-	-	-	-	-	-	-	0	-	(0)	-	-	(0)
2032	-	-	-	-	-	-	-	-	-	(3)	-	-	(3)
2033	-	-	-	-	-	-	-	-	-	(45)	-	-	(45)
2034	-	-	-	-	-	-	-	-	-	(8)	-	-	(8)
2035	-	-	-	-	-	-	-	-	-	25	-	-	25
2036	-	-	-	-	-	-	-	-	-	8	-	-	8
2037	-	-	-	-	-	-	-	-	-	8	-	-	8
2038	-	-	-	-	-	-	-	-	-	(11)	-	-	(11)
2039	-	-	-	-	-	-	-	-	-	(3)	-	-	(3)
2040	-	-	-	(40)	-	-	-	(35)	-	-	-	-	(75)
2041	-	-	-	-	-	-	-	(7)	-	-	-	-	(7)
2042	-	-	-	-	-	-	-	26	-	-	-	-	26
2043	-	-	-	-	-	-	-	(10)	-	-	-	-	(10)
2044	-	-	-	-	-	-	-	9	-	0	-	-	9
2045	-	-	-	-	-	-	-	17	-	0	-	-	17
Total	-	-	-	(40)	-	-	-	0	-	(66)	-	-	(106)

Key Observations

- Focus period: Reduces supply side solar needs
- Yields a NPV of 160 M\$ less than the CTP case

Stakeholder Scenario #5 (Results)

CTP + High BTM solar + TOU

CTP SS High BTMS+TOU minus CTP Installed Capacity (MW)													
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2026	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	-	-	-	-	0	-	(18)	-	-	(18)
2030	-	-	-	-	-	-	-	-	(46)	(27)	-	-	(73)
2031	-	-	-	-	-	-	-	0	-	0	-	-	0
2032	-	-	-	-	-	-	-	-	-	(8)	-	-	(8)
2033	-	-	-	-	-	-	-	-	-	(14)	-	-	(14)
2034	-	-	-	-	-	-	-	-	-	(12)	-	-	(12)
2035	-	-	-	-	-	-	-	-	-	4	-	-	4
2036	-	-	-	-	-	-	-	-	-	16	-	-	16
2037	-	-	-	-	-	-	-	-	-	6	-	-	6
2038	-	-	-	-	-	-	-	-	-	(10)	-	-	(10)
2039	-	-	-	-	-	-	-	-	-	2	-	-	2
2040	-	-	-	(80)	-	-	-	(35)	-	-	-	-	(115)
2041	-	-	-	(40)	-	-	-	(106)	-	-	-	-	(146)
2042	-	-	-	-	-	-	-	(10)	-	-	-	-	(10)
2043	-	-	-	40	-	-	-	(75)	-	-	-	-	(35)
2044	-	-	-	-	-	-	-	64	-	(2)	-	-	62
2045	-	-	-	-	-	-	-	75	-	0	-	-	75
total	-	-	-	(80)	-	-	-	(87)	(46)	(62)	-	-	(275)

Key Observations

- Focus period: Reduces supply side solar needs like just high behind the meter only
- Reduces DR selection, gas build and short-duration storage in post-2040 timeframe.
- Yields a NPV of 282 M\$ less than the CTP case



Stakeholder Scenario #5 (Results)

(CTP SS High BTMS+TOU) minus (CTP SS High BTMS) Installed Capacity (MW)													
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear (MW)	Gas Combined Cycle (MW)	Gas Combustion Turbine (MW)	Gas Internal Combustion (MW)	LD Storage (MW)	Pumped Hydro (MW)	Geothermal (MW)	SD Storage (MW)	Demand Response (MW)	Solar (MW)	Wind (MW)	Energy Efficiency (MW)	
2029	-	-	-	-	-	-	-	(0)	B -	(1)	-	-	(1)
2030	-	-	-	-	-	-	-	-	(46)	(6)	-	-	(52)
2031	-	-	-	-	-	-	-	(0)	-	0	-	-	(0)
2032	-	-	-	-	-	-	-	-	-	(5)	-	-	(5)
2033	-	-	-	-	-	-	-	-	-	31	-	-	31
2034	-	-	-	-	-	-	-	-	-	(5)	-	-	(5)
2035	-	-	-	-	-	-	-	-	-	(21)	-	-	(21)
2036	-	-	-	-	-	-	-	-	-	8	A -	-	8
Total	-	-	-	-	-	-	-	(0)	(46)	0	A -	-	(46)

Key Observations

- A. Minimal effect on supply side resource additions
- B. Less selection of demand response programs

\$122M improvement in NPV over CTP with high behind the meter solar.

Stakeholder Scenario #6

Stakeholder request

- **Stakeholder:** DER Subgroup
- **Purpose:** Evaluate impact of additional demand response
- **Description:** Power Saver program to be selected in the model through 2045 and on top of that have a 25% increase in magnitude of the Power Saver/water heater portfolio.

PNM modeling changes

- Change the behind-the-meter solar forecast from Reference to High
- Apply TOU sensitivity
- Force in Power Saver Extension with additional 25% potential magnitude; force in water heater programs with additional 25% potential magnitude

Stakeholder Scenario #6 (Results)

(CTP SS High BTMS+TOU+125% PS) minus (CTP SS High BTMS) Installed Capacity (MW)

Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2029	-	-	-	-	-	-	-	(0)	-	(1)	-	-	(1)
2030	-	-	-	-	-	-	-	-	39	(6)	-	-	33
2031	-	-	-	-	-	-	-	(0)	-	(0)	-	-	(0)
2032	-	-	-	-	-	-	-	-	-	(5)	-	-	(5)
2033	-	-	-	-	(100)	-	-	20	-	1	-	-	(79)
2034	-	-	-	-	-	-	-	-	-	2	-	-	2
2035	-	-	-	-	-	-	-	-	(2)	6	-	-	4
2036	-	-	-	-	-	-	-	-	-	14	-	-	14
Total	-	-	-	-	(100)	-	-	20	37	10	-	-	(33)

Key Observations

- A. Postpone addition of long duration storage
- B. More DR programs because Power Saver & Water heater programs are forced in

Stakeholder Scenario #7 (Modeling)

Stakeholder request

- **Stakeholder:** DER Subgroup
- **Purpose:** Evaluate impact of rapidly developing VPP resource in capacity planning
- **Description:** Starting in 2030, 50% of new solar installation will have a storage, and 90% of those batteries enroll or participate in a VPP program; Starting in 2029, 1% of existing solar installations will install a 4-hour battery, and 90% of those batteries enroll or participate in a VPP program

PNM modeling changes

- Change the behind-the-meter solar forecast from Reference to High
- Apply TOU sensitivity
- Force in Power Saver Extension and water heater programs with additional 25% potential magnitude
- Update the Battery-DLC potential by assuming 50% 4-hour attachment of new BTM solar, 90% enrollment, 60 events per year, and 1% annual battery adoption for existing BTM solar installations starting in 2030.

Stakeholder Scenario #7 (Results)

(CTP SS High BTMS+TOU+125% PS+50% Battery) minus (CTP SS High BTMS) Installed Capacity (MW)

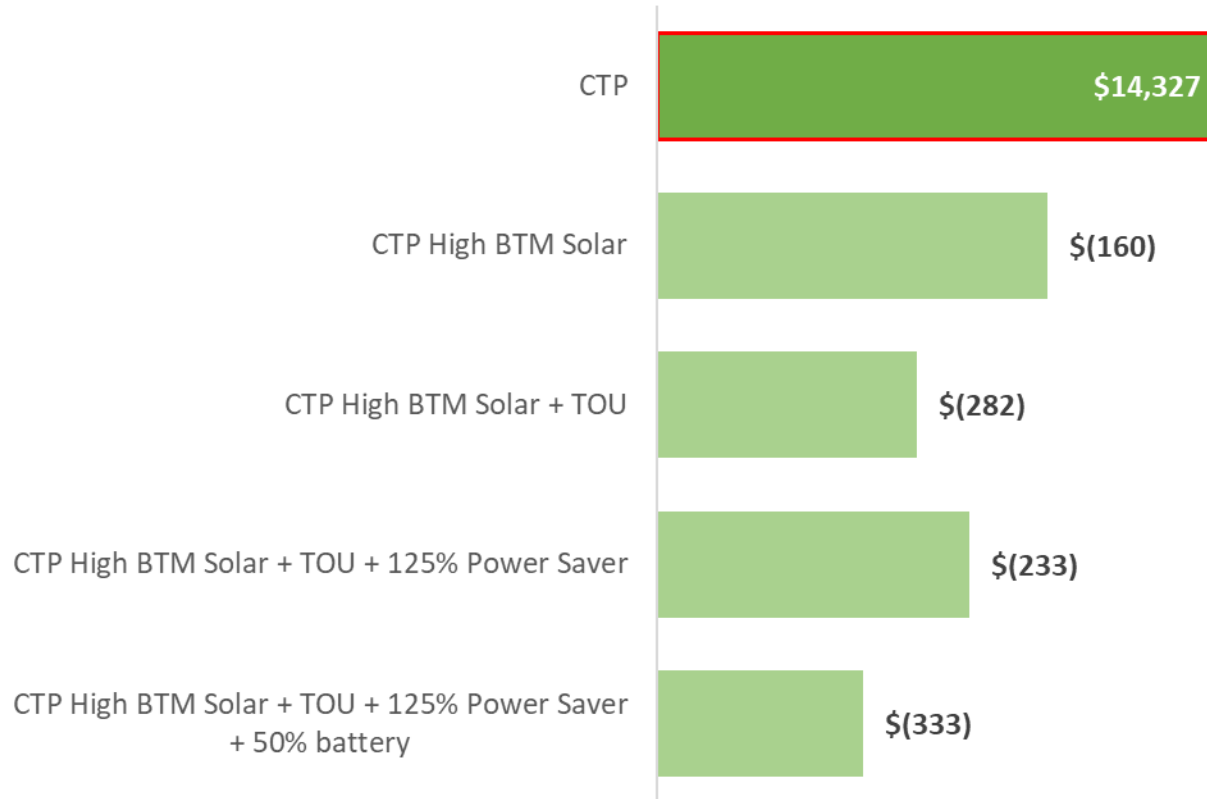
Year	Firm Dispatchable Resources							Dynamic Balancing Resources		Carbon-Free Energy Resources			Total (MW)
	Nuclear	Gas Combined Cycle	Gas Combustion Turbine	Gas Internal Combustion	LD Storage	Pumped Hydro	Geothermal	SD Storage	Demand Response	Solar	Wind	Energy Efficiency	
	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	(MW)	
2029	-	-	-	-	-	-	-	(0)	-	(1)	-	-	(1)
2030	-	-	-	-	-	-	-	-	B 60	(6)	-	-	54
2031	-	-	-	-	-	-	-	(0)	-	-	-	-	(0)
2032	-	-	-	-	-	-	-	-	-	(5)	-	-	(5)
2033	-	-	-	-	A (100)	-	-	-	-	(53)	38	-	(115)
2034	-	-	-	-	-	-	-	-	-	(10)	8	-	(2)
2035	-	-	-	-	-	-	-	-	(2)	(47)	29	-	(20)
2036	-	-	-	-	-	-	-	-	-	14	-	-	14
Total	-	-	-	-	(100)	-	-	(0)	58	(108)	75	-	(75)

Key Observations

- A. Postpone addition of long duration storage
- B. More DR programs because: 1) Power Saver & Water heater programs are forced in; 2) A 50% battery attachment rate on new BTM solar
- C. Capacity of Battery DLC increases from 21MW in 2030 to 328MW in 2045

Stakeholder Scenarios #5-#7 (Results)

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

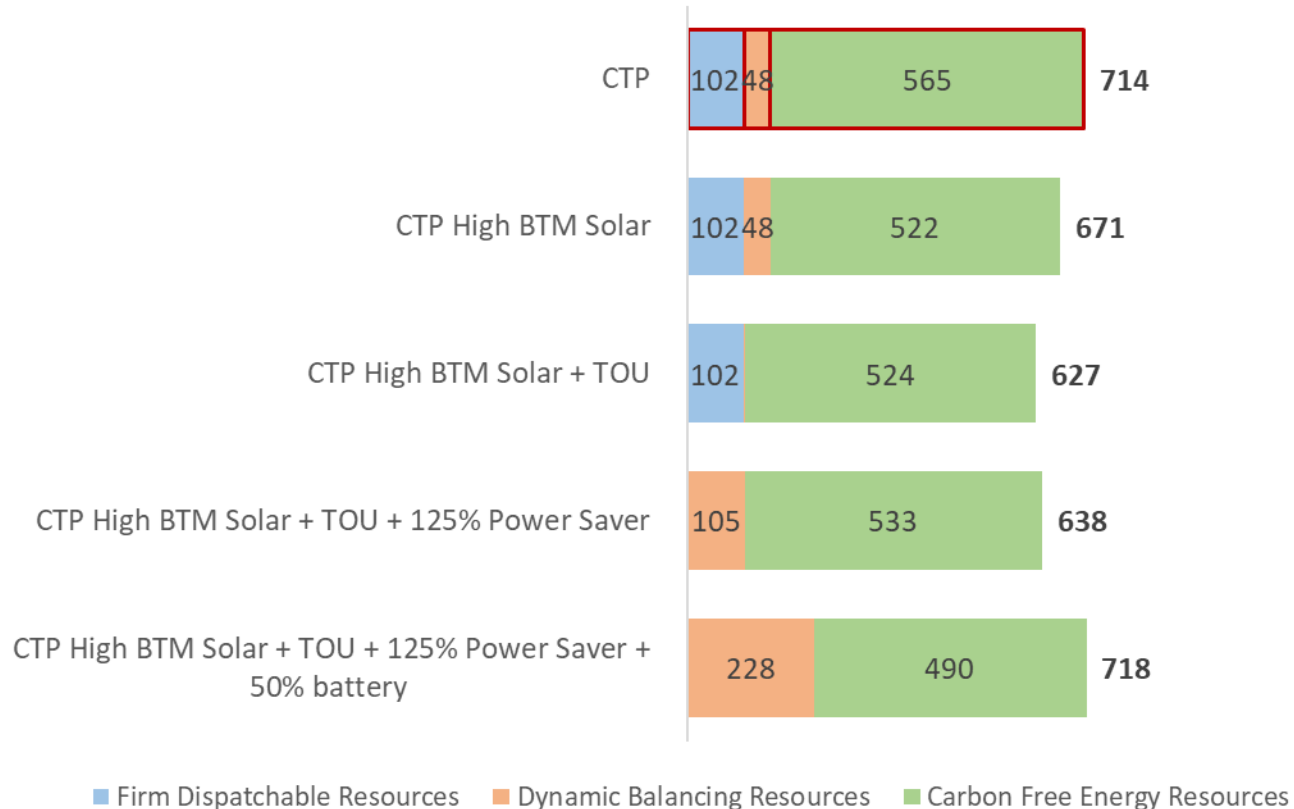


Key Observations

- High BTM solar installation shows significant NPV cost decrease
- High TOU participation further lowers NPV
- Forcing in Power Saver & Water heater programs increases the NPV due to their high fixed O&M costs
- A 50% battery attachment rate on new BTM solar provides additional NPV reductions

Stakeholder Scenarios #5-#7 (Results)

2030-2036 Installed Capacity (MW)



Key Observations

- High BTM solar installation displaces utility-scale solar capacity additions
- High TOU participation reduces the selection of demand response programs
- Forcing in Power Saver & Water heater programs postpone the need of new firm resources
- Attaching batteries to 50% of new BTM solar further reduces the need for firm and carbon-free resources

Stakeholder Scenario #8

Stakeholder request

- **Stakeholder:**
- **Purpose:** Understand how low carbon flexible generation would impact
- **Description:** Long duration storage might not be needed if geothermal generation gets build in PNM

PNM modeling changes

- Combine this scenario with Scenario #2 (Geothermal) which shows how geothermal additions the CTP portfolio.

Stakeholder Scenario #9

Stakeholder request

- **Stakeholder:** NM AREA
- **Purpose:** Impact of joining EDAM on planning reserve margin
- **Description:** Would like to see a modification of the CTP 8760 expansion plan with the PRM is reduced. What is the impact of reducing the PRM to 13%. PNM has committed to joining the EDAM in 2027, which will give it access to additional resources.

PNM modeling changes

- Discussed with the stakeholder, agreed scenario was not needed after explaining that EDAM does not provide reserves. PNM must come with a balanced portfolio in the day-ahead market.

Stakeholder Scenario #10

Stakeholder request

- **Stakeholder:** Transmission subgroup
- **Purpose:** Understand the impact of Sun Zia, Rio Sol, and Blackwater DC Tie projects on reliability and portfolio composition
- **Description:** Assess reliability using SERVM by adjusting transfer limits and market access assumptions to reflect increased transmission connectivity, including adding SPP and CAISO zones. Portfolios should be right-sized to achieve equivalent reliability to the CTP case, followed by full production cost modeling. NPV comparisons should reflect both capacity and production cost benefits, with clear documentation of all transmission and market access assumptions.

PNM modeling changes

- Scenario requires more time to complete
- PNM discussed the scenario with the requestors and decided that the existing SERVM model was not granular enough to address the specific question requested.
- PNM proposed to double the minimum transfer capability in the SERVM model as a proxy for expansion and calculate a new planning reserve margin (PRM).
- PNM will provide a EnCompass Capacity Expansion model run using the CTP and revised PRM.

Stakeholder Scenario #11 & 12

Stakeholder request

- **Stakeholder:** Geothermal, CCAE, DER Subgroup
- **Purpose:** Understand the impact of geothermal, ITC, availability of SMR, high DER, no hydrogen conversion, and with and without 172 MW gas unit added in 2029
- **Description:** Follow stakeholder scenarios #2 and #7; add in ITC assumptions for both geothermal and SMRs; move new SMR first year available date to 2040; remove hydrogen conversion and CCS from project options; with and without 172 MW gas unit added in 2029

PNM modeling changes

Two runs

- Run 1: Follow stakeholder scenarios #2 and #7; add in ITC assumptions for both geothermal and SMRs; move new SMR first year available date to 2040; remove hydrogen conversion and CCS from project options
- Run 2: Follow stakeholder scenarios #2 and #7; add in ITC assumptions for both geothermal and SMRs; move new SMR first year available date to 2040; remove hydrogen conversion and CCS from project options; remove 172 MW gas unit added in 2029

Stakeholder Scenario #13

Stakeholder request

- **Stakeholder:** EFG/CCAEE
- **Purpose:** Investigate how the risks not studied currently in the SERVM model might influence resource adequacy outcomes
- **Description:** Assess the reliability impacts of interruptible gas service for natural gas generators, including seasonal or year-round interruptions, using SERVM. Potential approaches include temperature-based fuel interruption assumptions or other methods that reasonably reflect gas interruption risk in New Mexico

PNM actions

- Discussed with stakeholder, SERVM modeling changes cannot be completed within the timeframe.
- 2026 IRP will include gas resiliency study that should address the intended request
- 2026 IRP will include a gas volatility study to address gas risks

Questions

Review of Pending Analyses



Pending Analyses

1. Reliability Analysis (LOLE of CTP, HEG, others)
2. Remaining Stakeholder Scenarios
3. Customer Impacts for CTP, HEG, LEG
4. Qualitative Analysis
5. Determination of MCEP
6. Draft SON
7. Draft Action Plan

Appendix



Current Trends & Policies Expansion Plan (update)

New Installed Capacity (MW)	CTP																
	CTP	Nuclear	Coal	GasCC	GasCT	GasST	GasLG	SD Storage	LD Storage	PHS	Solar	Wind	Geo	DG	EE	Other	Total
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	172	-	-	310	-	-	-	129	800	-	-	-	-	1,411
2030	-	-	-	-	-	-	-	-	-	-	51	-	46	-	-	-	97
2031	-	-	-	40	-	-	300	-	-	-	150	-	-	-	25	-	515
2032	-	-	-	-	-	-	-	-	-	-	74	-	-	-	25	-	99
2033	-	-	-	-	-	-	-	-	100	-	111	-	-	-	26	-	237
2034	-	-	-	-	-	-	-	-	-	-	17	-	-	-	27	-	44
2035	-	-	-	-	-	-	-	-	-	-	93	-	-	2	26	-	121
2036	-	-	-	-	-	-	-	-	-	-	66	-	-	-	24	-	90
2037	-	-	-	-	-	-	-	-	-	-	94	-	-	-	25	-	118
2038	-	-	-	-	-	-	-	-	-	-	23	-	-	-	25	-	47
2039	-	-	-	-	-	-	-	-	-	-	125	-	-	-	26	-	151
2040	-	-	-	-	-	120	35	-	-	-	-	-	4	26	-	-	186
2041	146	-	-	-	-	40	107	-	-	-	-	-	-	25	-	-	317
2042	146	-	-	-	-	-	36	-	-	-	-	-	-	24	-	-	206
2043	146	-	-	-	-	-	152	-	-	-	-	-	-	24	-	-	322
2044	292	-	-	-	-	-	151	-	-	-	155	-	-	25	-	-	623
2045	292	-	-	-	-	-	237	-	-	-	300	-	-	25	-	-	854
Total	1,022	-	-	212	-	160	1,328	100	-	-	1,388	800	-	52	377	-	5,439

High Economic Growth Expansion Plan (update)

<i>New Installed Capacity (MW)</i>		<i>HEG</i>														
<i>HEG</i>	<i>Nuclear</i>	<i>Coal</i>	<i>GasCC</i>	<i>GasCT</i>	<i>GasST</i>	<i>GasLG</i>	<i>SD Storage</i>	<i>LD Storage</i>	<i>PHS</i>	<i>Solar</i>	<i>Wind</i>	<i>Geo</i>	<i>DG</i>	<i>EE</i>	<i>Other</i>	<i>Total</i>
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	172	-	-	316	100	-	477	800	-	-	-	-	1,865
2030	-	-	-	-	-	-	-	100	-	68	-	-	46	-	-	214
2031	-	-	-	40	-	-	300	-	-	214	-	-	-	25	-	579
2032	-	-	-	-	-	-	-	-	-	125	-	-	-	25	-	150
2033	-	-	-	-	-	-	-	300	-	148	29	-	-	26	-	503
2034	-	-	-	-	-	-	-	-	100	179	-	-	-	27	-	306
2035	-	-	-	-	-	-	-	-	-	79	101	-	2	26	-	207
2036	-	-	-	-	-	-	-	-	-	9	70	-	-	24	-	103
2037	-	-	-	-	-	-	-	-	-	73	-	-	-	25	-	97
2038	-	-	-	-	-	40	-	-	-	66	-	-	-	25	-	131
2039	-	-	-	-	-	80	-	-	-	-	-	-	-	26	-	106
2040	146	-	-	-	-	80	21	-	-	-	-	-	4	26	-	278
2041	146	-	-	-	-	120	-	-	-	-	-	-	-	25	-	291
2042	-	-	-	-	-	120	248	-	-	46	-	-	-	24	-	437
2043	146	-	-	-	-	-	263	-	-	86	-	-	-	49	-	544
2044	292	-	-	-	-	-	-	100	-	300	-	-	-	25	-	717
2045	292	-	-	-	-	-	222	-	-	300	-	-	-	25	-	840
<i>Total</i>	<i>1,022</i>	<i>-</i>	<i>-</i>	<i>212</i>	<i>-</i>	<i>440</i>	<i>1,370</i>	<i>600</i>	<i>100</i>	<i>2,170</i>	<i>999</i>	<i>-</i>	<i>52</i>	<i>403</i>	<i>-</i>	<i>7,368</i>

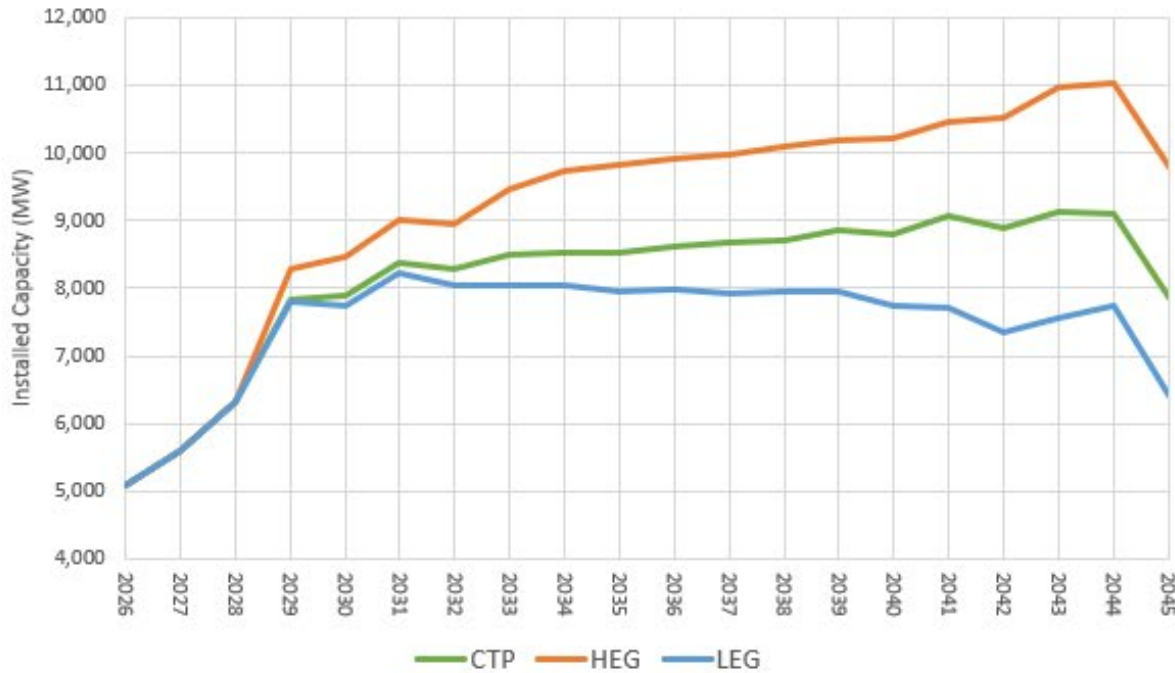
Low Economic Growth Expansion Plan (update)

<i>New Installed Capacity (MW)</i>		<i>LEG</i>														
<i>LEG</i>	<i>Nuclear</i>	<i>Coal</i>	<i>GasCC</i>	<i>GasCT</i>	<i>GasST</i>	<i>GasLG</i>	<i>SD Storage</i>	<i>LD Storage</i>	<i>PHS</i>	<i>Solar</i>	<i>Wind</i>	<i>Geo</i>	<i>DG</i>	<i>EE</i>	<i>Other</i>	<i>Total</i>
2026	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2027	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2028	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
2029	-	-	-	172	-	-	310	-	-	90	800	-	-	-	-	1,372
2030	-	-	-	-	-	-	-	-	-	-	-	-	10	-	-	10
2031	-	-	-	40	-	-	300	-	-	150	-	-	-	20	-	510
2032	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	20
2033	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	21
2034	-	-	-	-	-	-	-	-	-	-	-	-	-	21	-	21
2035	-	-	-	-	-	-	-	-	-	-	-	-	-	20	-	20
2036	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	19
2037	-	-	-	-	-	-	-	-	-	-	-	-	-	19	-	19
2038	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	25
2039	-	-	-	-	-	-	-	-	-	-	-	-	-	26	-	26
2040	-	-	-	-	-	-	-	-	-	-	-	-	7	26	-	33
2041	-	-	-	-	-	-	-	-	-	-	-	-	-	25	-	25
2042	-	-	-	-	-	-	-	-	-	-	-	-	-	24	-	24
2043	-	-	-	-	-	-	-	-	-	255	-	-	-	24	-	279
2044	146	-	-	-	-	40	333	-	-	300	-	-	-	25	-	844
2045	438	-	-	-	-	-	31	-	-	273	-	-	2	25	-	770
<i>Total</i>	<i>584</i>	<i>-</i>	<i>-</i>	<i>212</i>	<i>-</i>	<i>40</i>	<i>974</i>	<i>-</i>	<i>-</i>	<i>1,068</i>	<i>800</i>	<i>-</i>	<i>19</i>	<i>338</i>	<i>-</i>	<i>4,036</i>

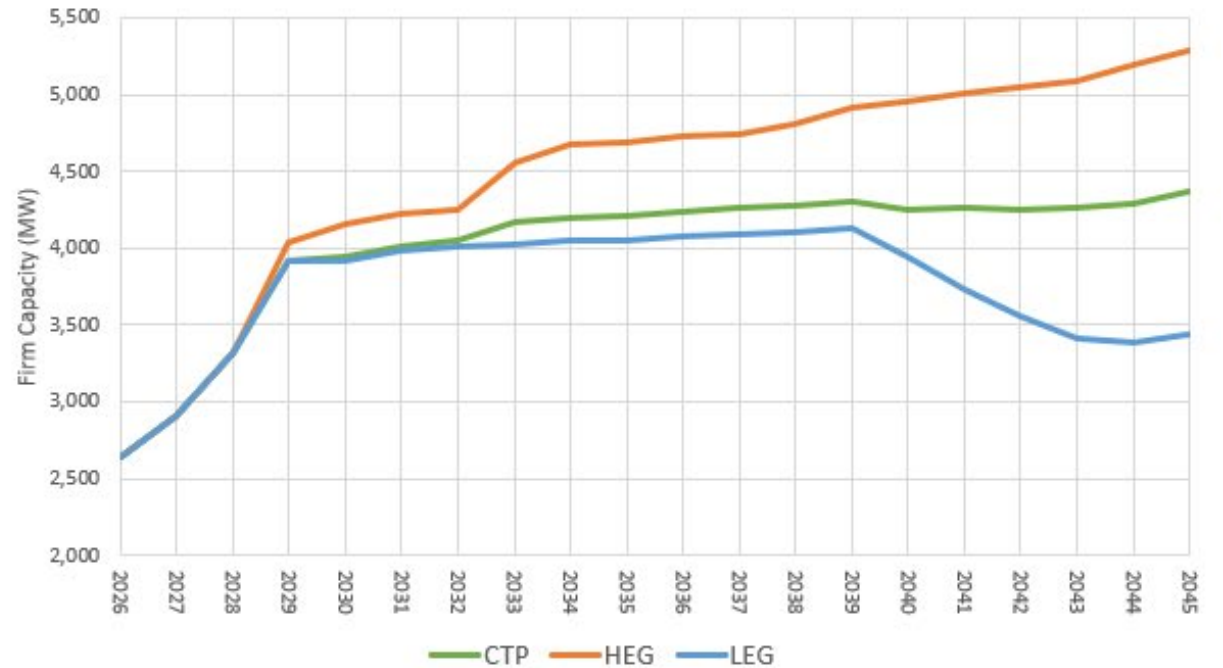


CTP, HEG, LEG Resource Capacity (update)

Installed Capacity (MW)

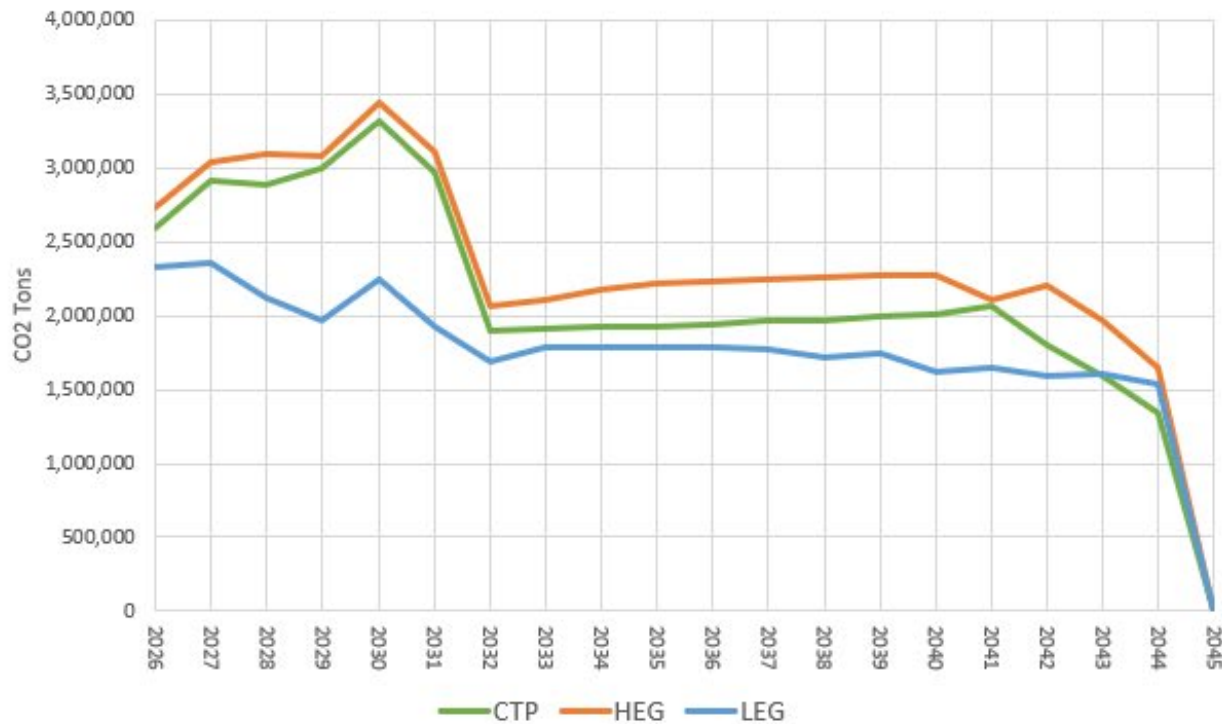


Firm Capacity (MW)

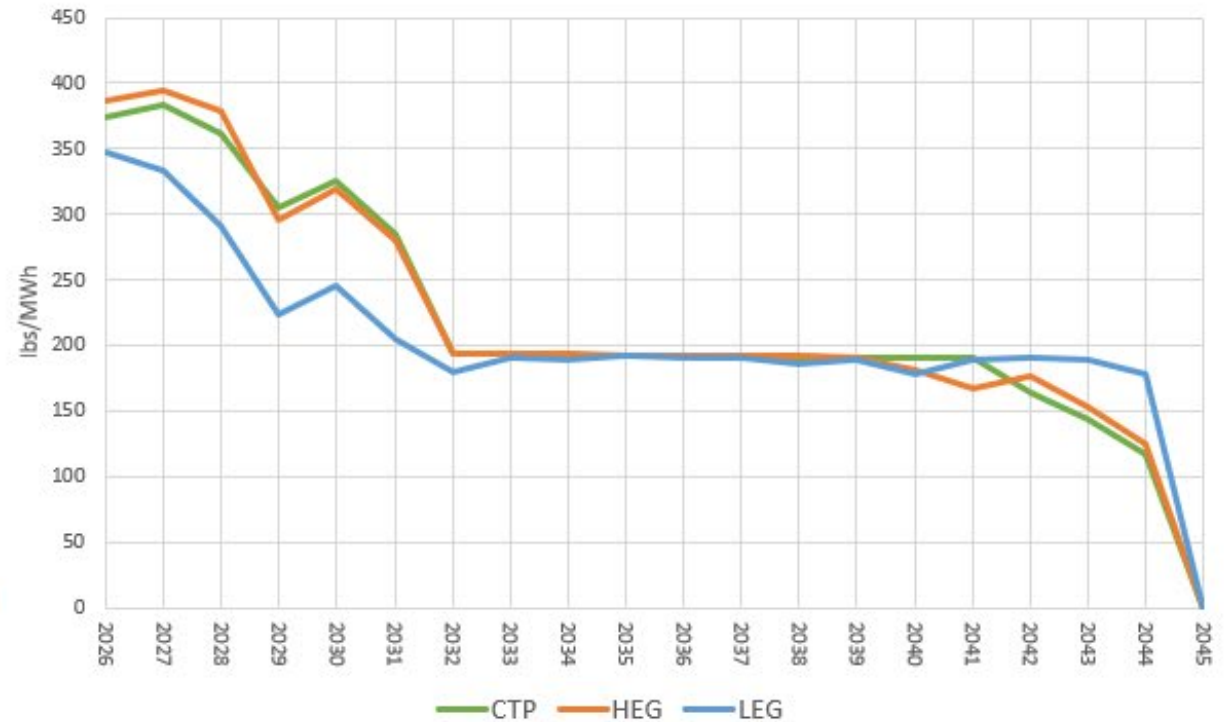


CTP, HEG, LEG CO2 Emissions (update)

Projected Annual Portfolio CO2 (Tons)

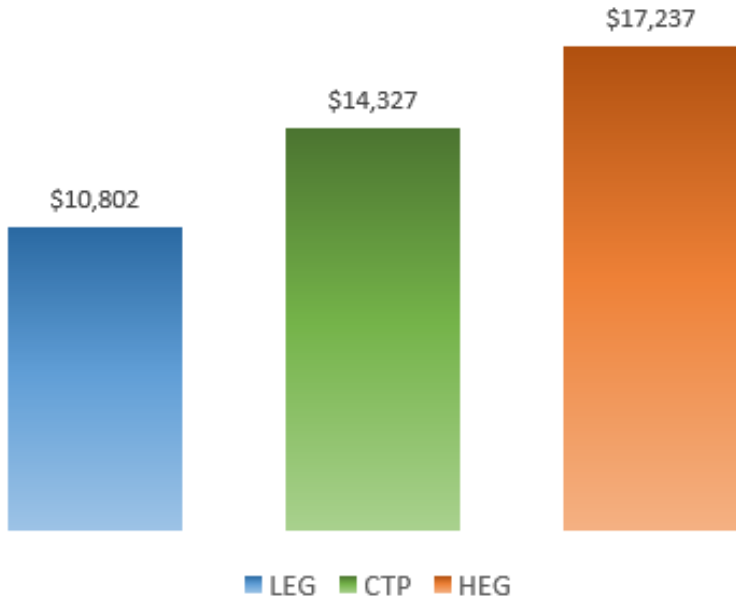


Projected Annual Portfolio CO2 Rate (lbs/MWh)

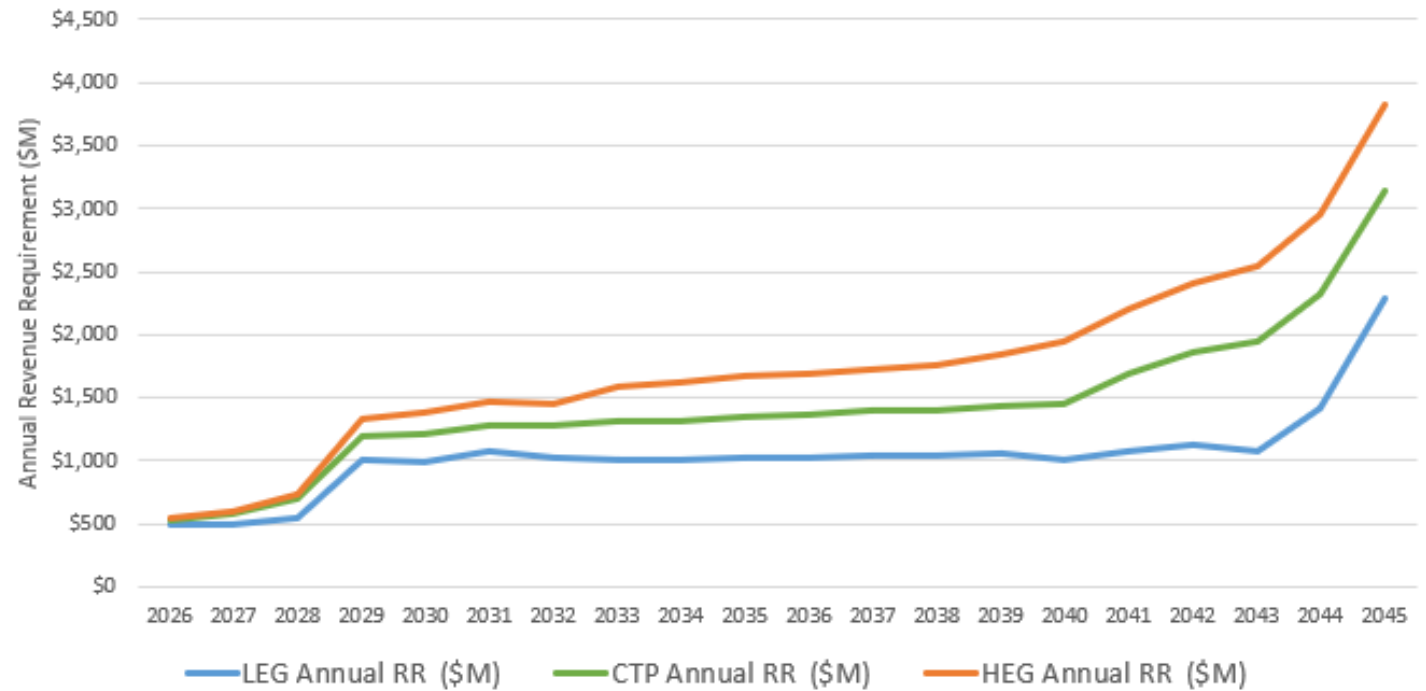


CTP, HEG, LEG Portfolio Costs (update)

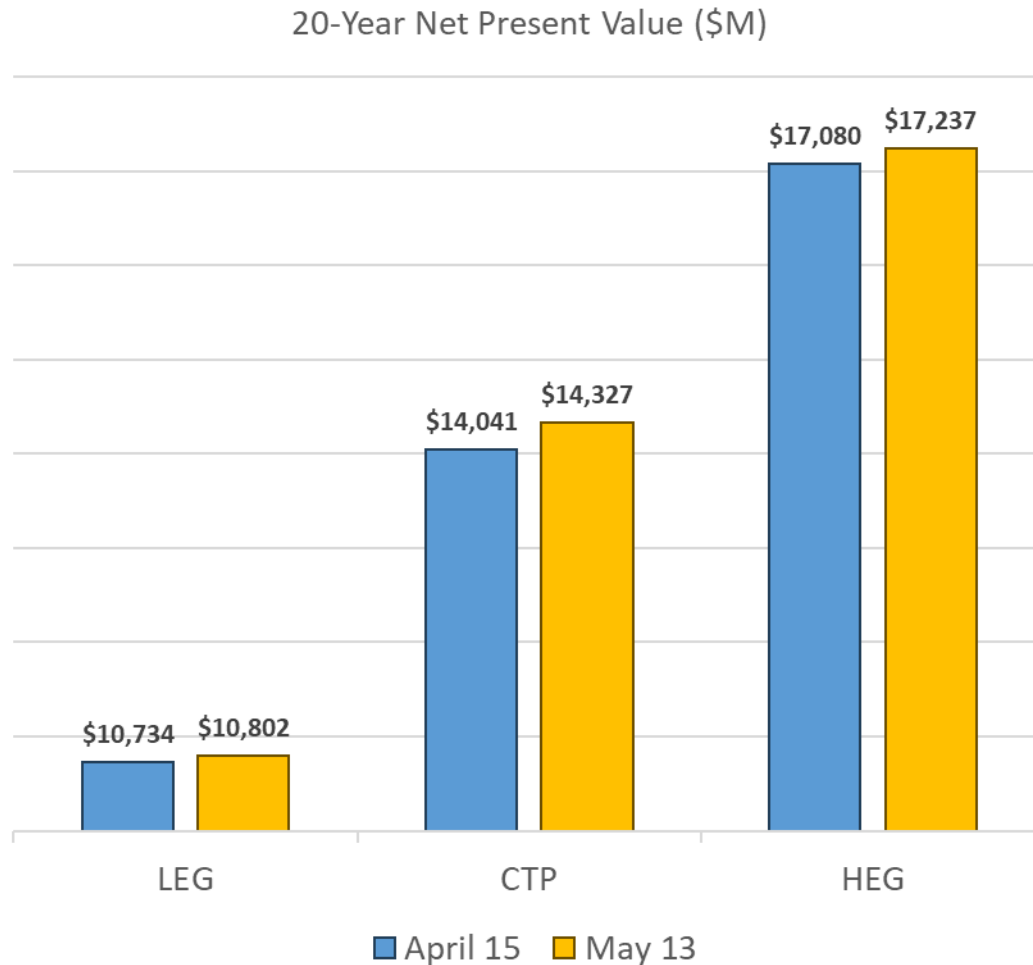
20-Year Net Present Value (\$M)



Annual Revenue Requirement (\$M)



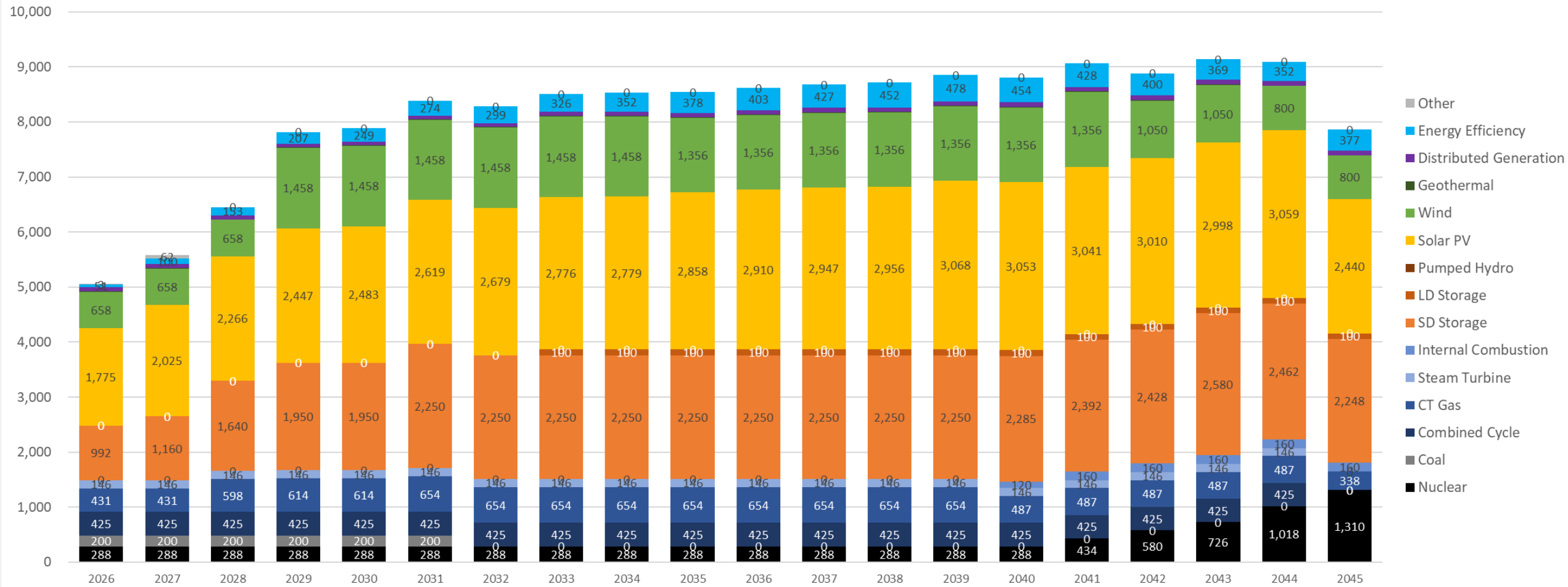
Changes in 20-year NPV



- Low Economic Growth
 - NPV increased by \$68M
- Current Trends & Policies
 - NPV increased by \$286M
- High Economic Growth
 - NPV increased by \$157M
- All futures have increased in total portfolio cost over 20-year study horizon due to changes in modeling assumptions discussed on slides 6 and 7

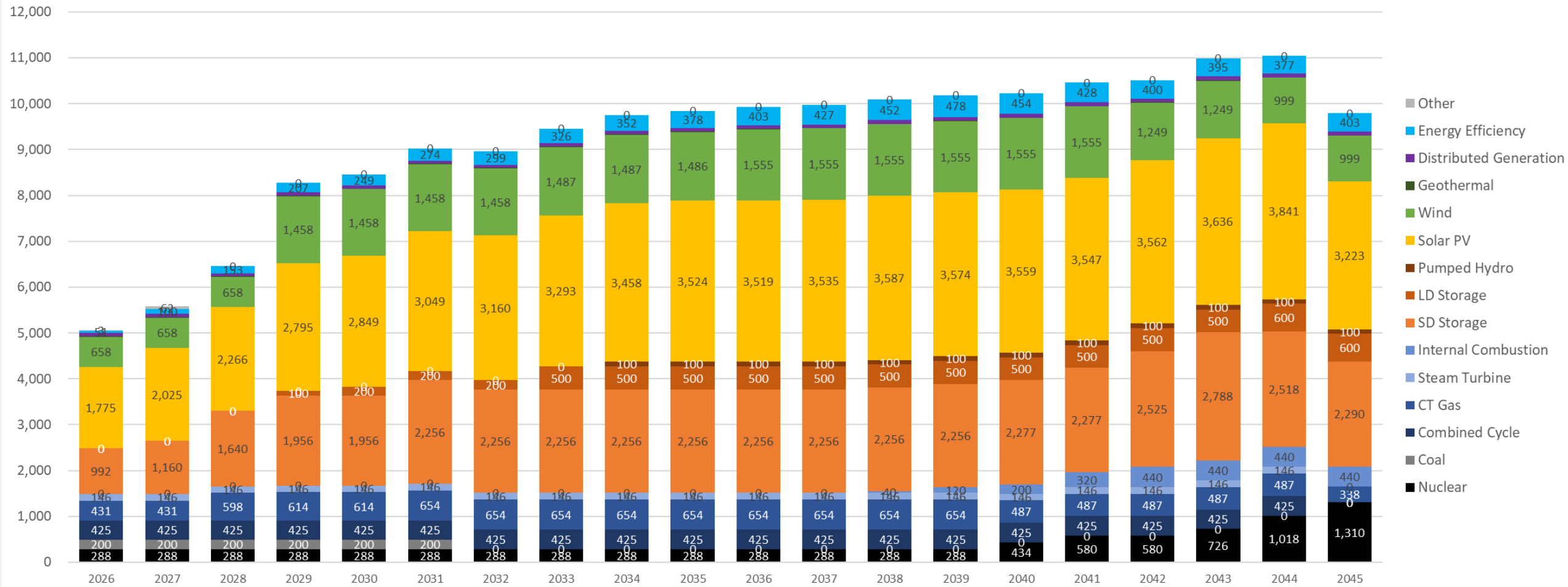
CTP Annual Installed Capacity (update)

Installed Capacity (MW)



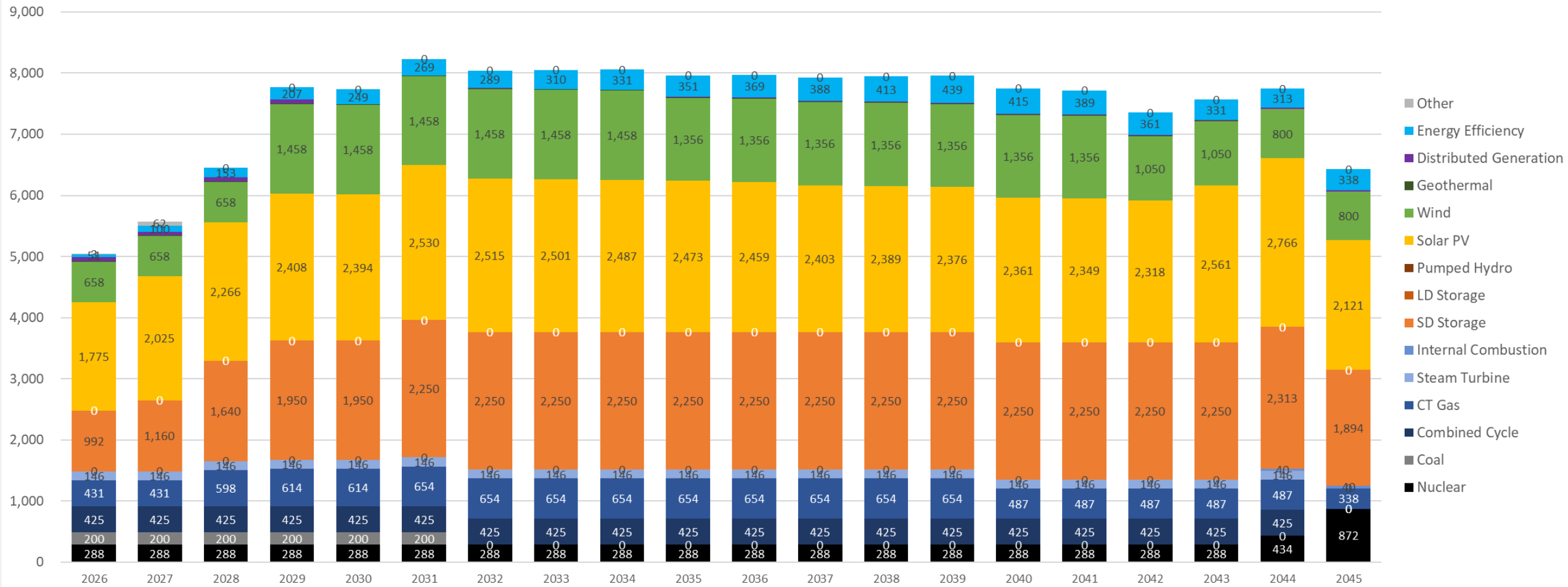
HEG Annual Installed Capacity (update)

Installed Capacity (MW)



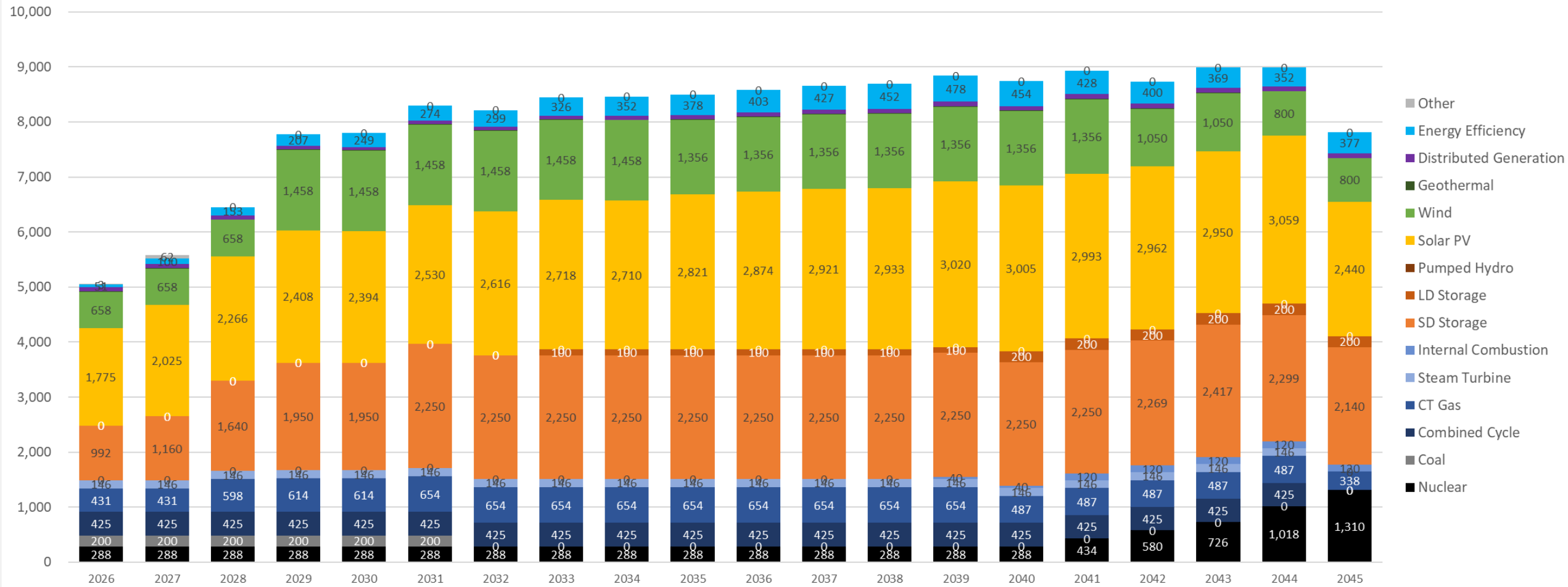
LEG Annual Installed Capacity (update)

Installed Capacity (MW)



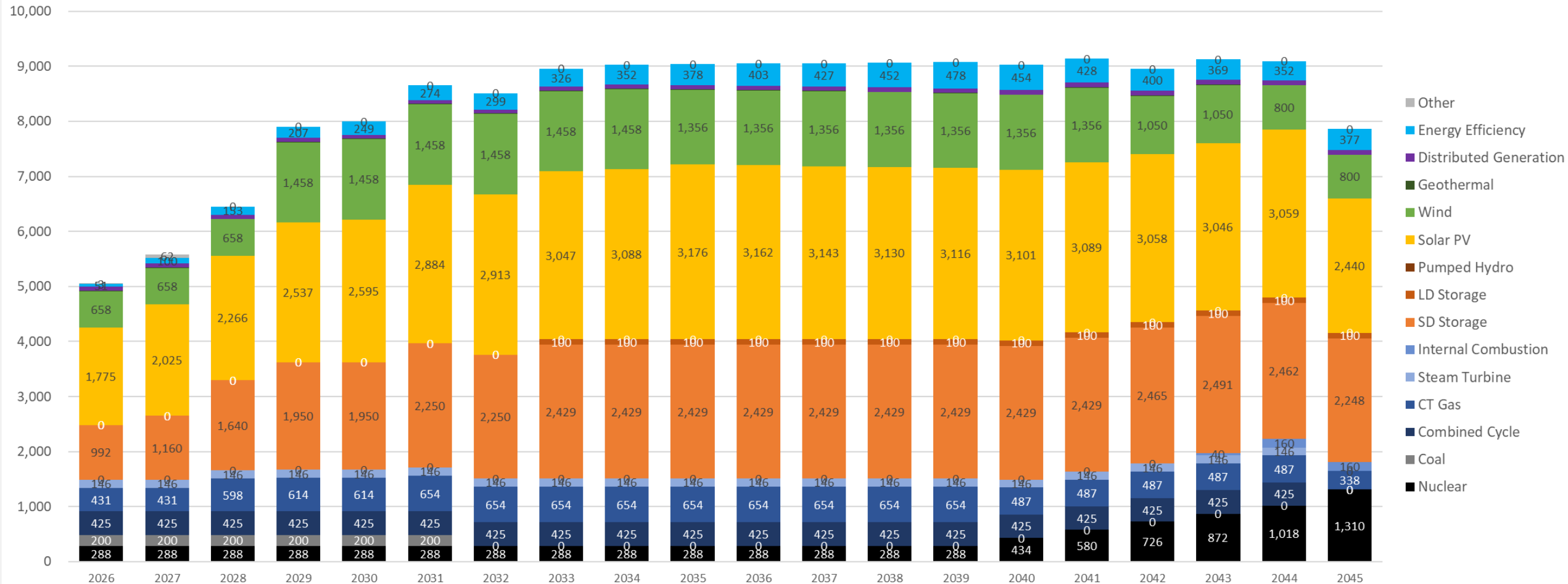
CTP Low Gas Annual Installed Capacity (update)

Installed Capacity (MW)



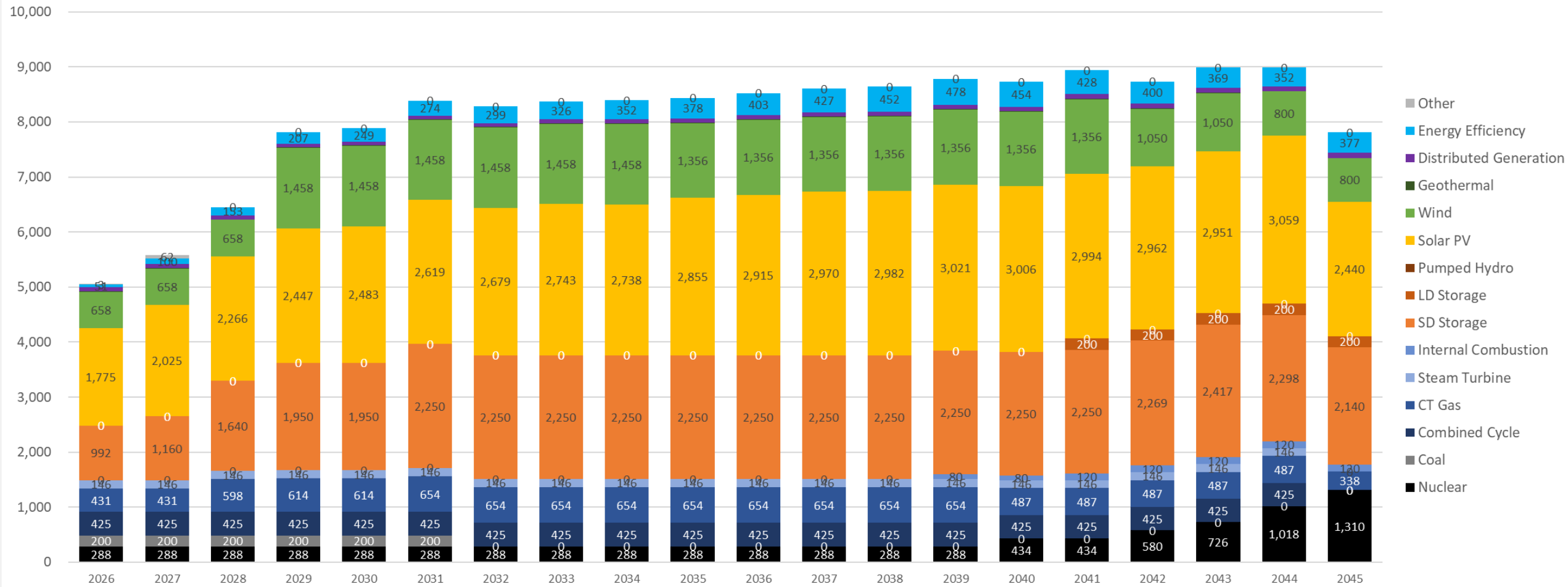
CTP High Gas Annual Installed Capacity (update)

Installed Capacity (MW)



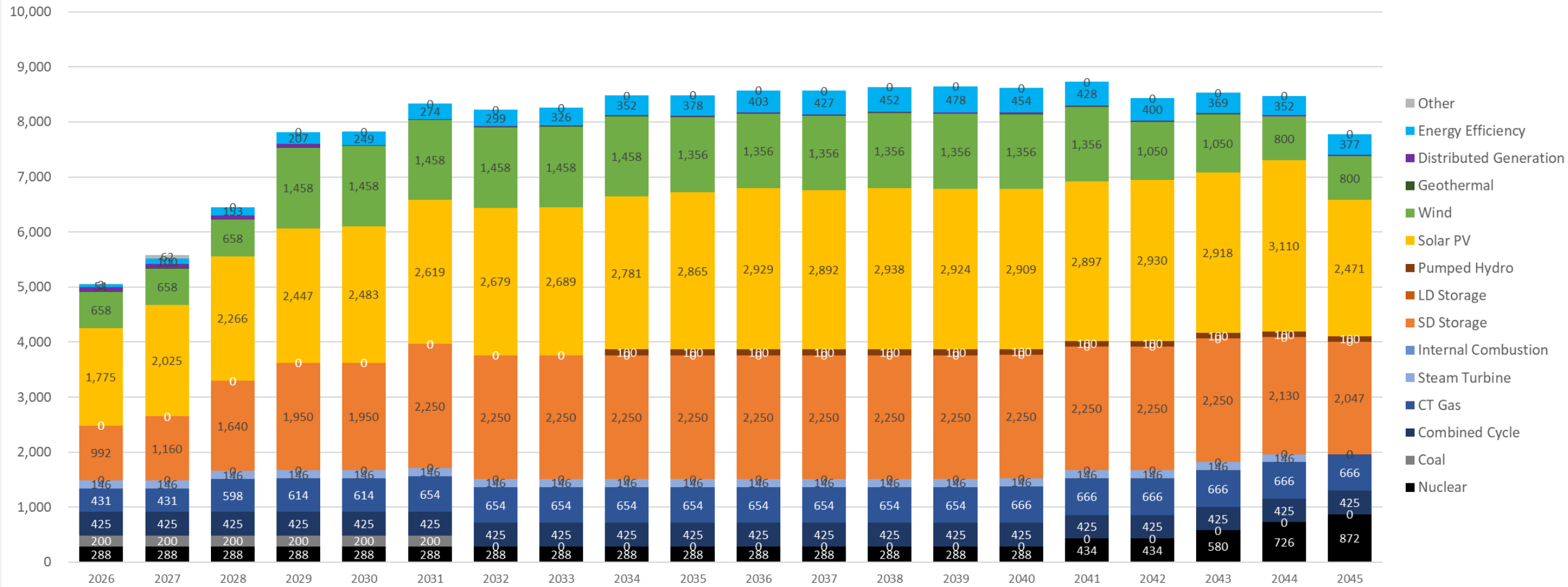
CTP Late LDS Annual Installed Capacity (update)

Installed Capacity (MW)



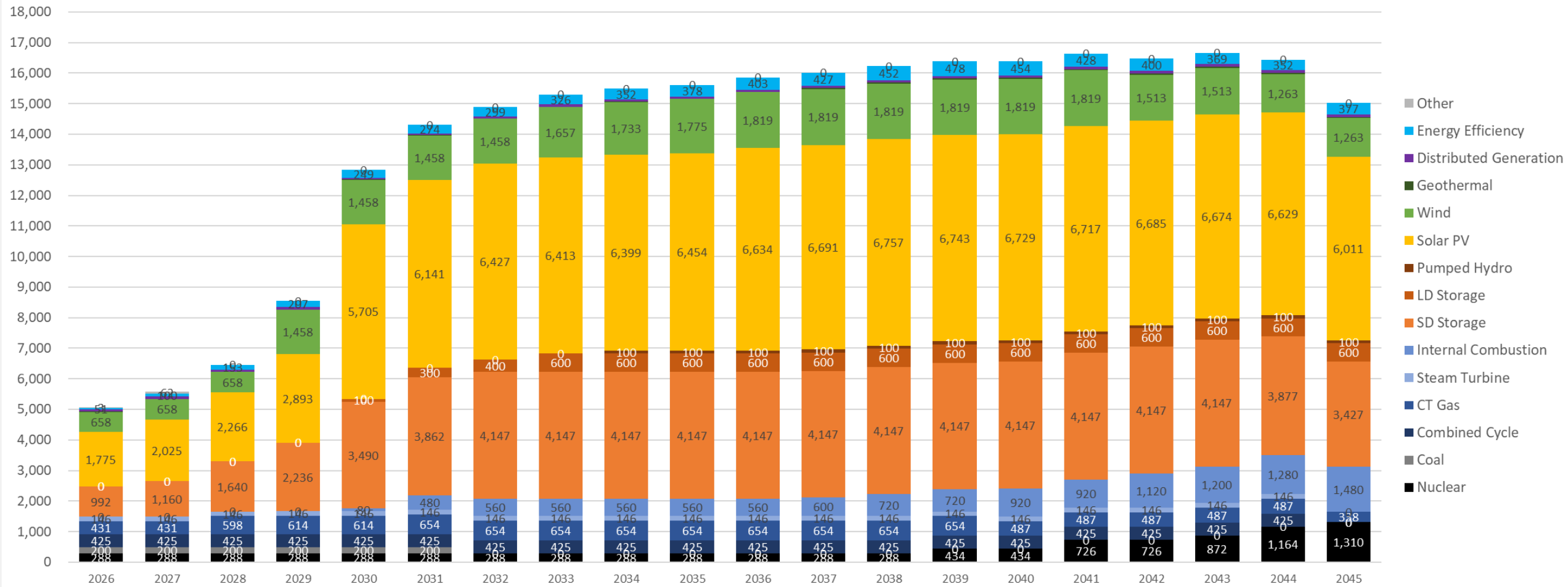
CTP No ETA Annual Installed Capacity (update)

Installed Capacity (MW)

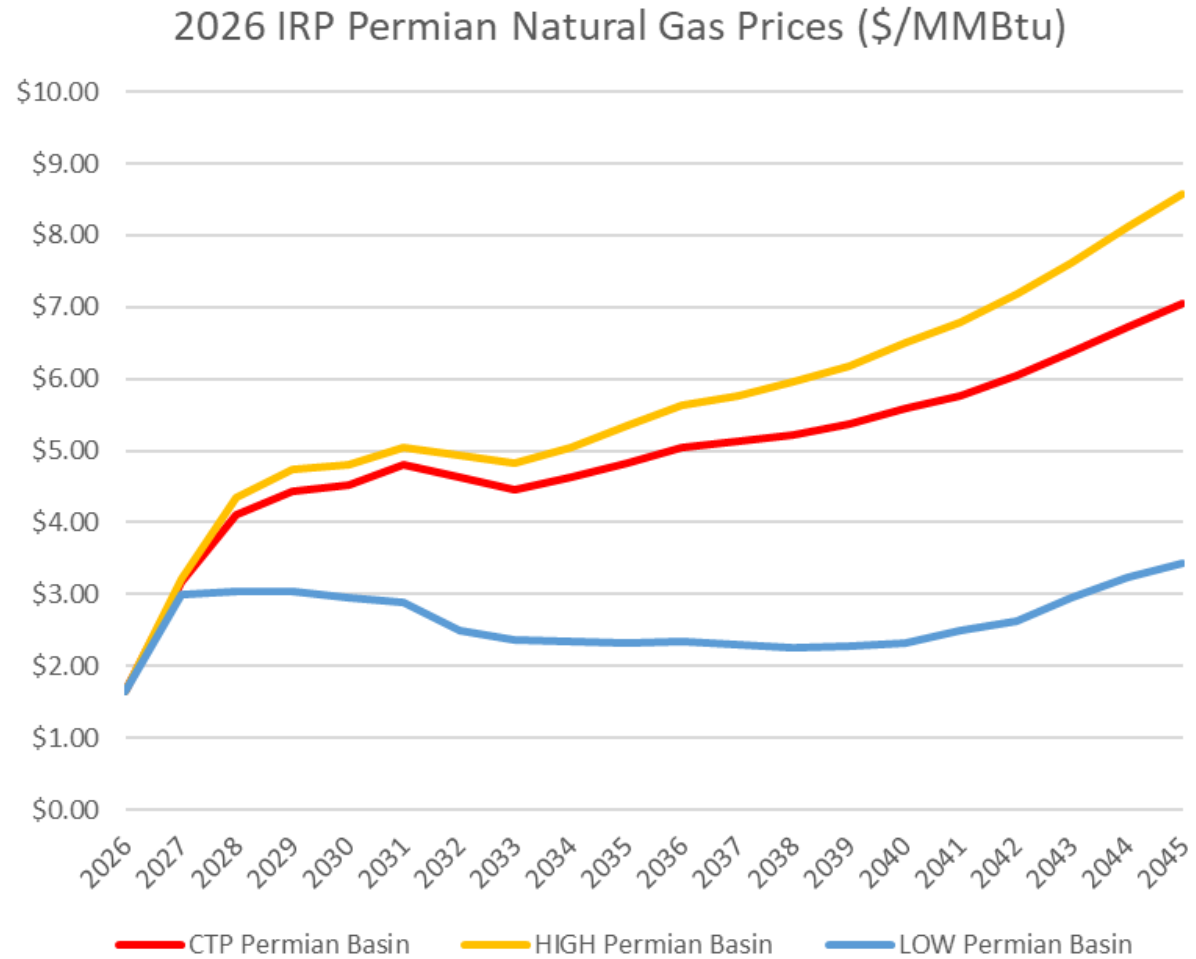


CTP XED Annual Installed Capacity

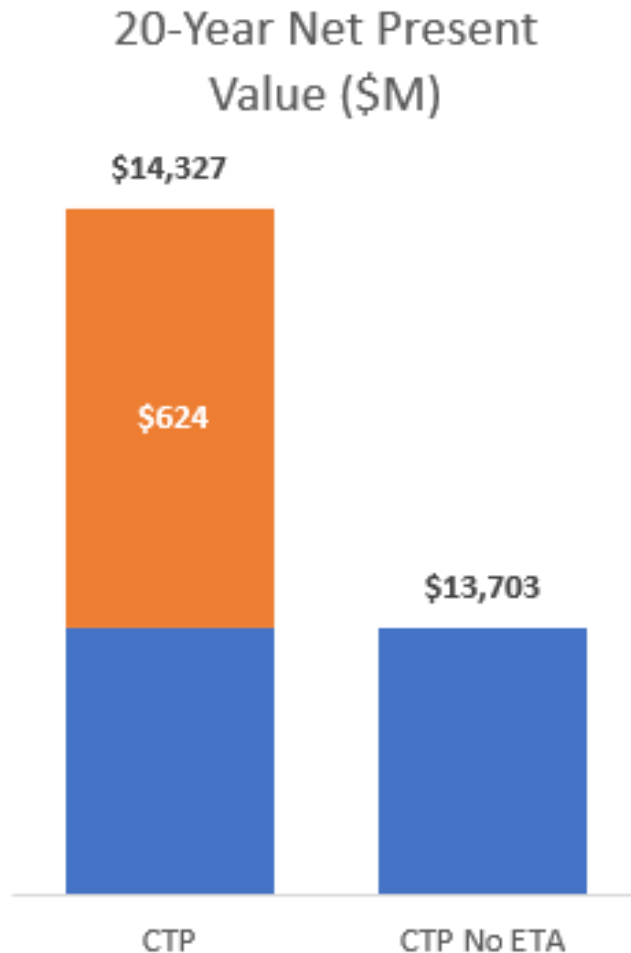
Installed Capacity (MW)



CTP High-Low Gas Price Assumptions



CTP and CTP No ETA Portfolio Costs (update)



Observations

- No ETA scenario has lower present value cost than CTP
- Additional considerations;
 - ETA progress is largely accomplished by 2032 with existing and planned resource additions. As a result, ETA requirements have a relatively limited impact until end of 20-year study period.
 - Largest annual cost differences in portfolios are in last 5 years of 20-year study window.
 - Impacts of ETA compliance in last 5 years are substantial but are heavily discounted in a 20-year NPV determination. Customer impacts would continue well beyond 2045.

