Post-2028 Perspectives from Puget Sound (P^3)

Seattle City Light, Tacoma Public Utilities, and Snohomish PUD

12.14.22

Who We Are

Customer/Utilities represented in this Presentation:

- **Seattle City Light** (~955k residents, 483,000 customers; TOCA=6.39%)
- **Snohomish PUD** (~900k residents; 360,000 customers; TOCA=10.65%)
- **Tacoma Power** (~220k residents, 184,000 customers; TOCA=5.66%)

  - **Of the 3 listed Washington utilities, we represent ~27% of residents in the state & ~23% BPA's customer basis per TOCA.**

Listening with an Open Mind

KEY MESSAGES:

✓ *A Balanced Approach to System Size and Allocation*
✓ *Tiered Rates and marginal costs*
✓ *Non-Federal Resource development tools*

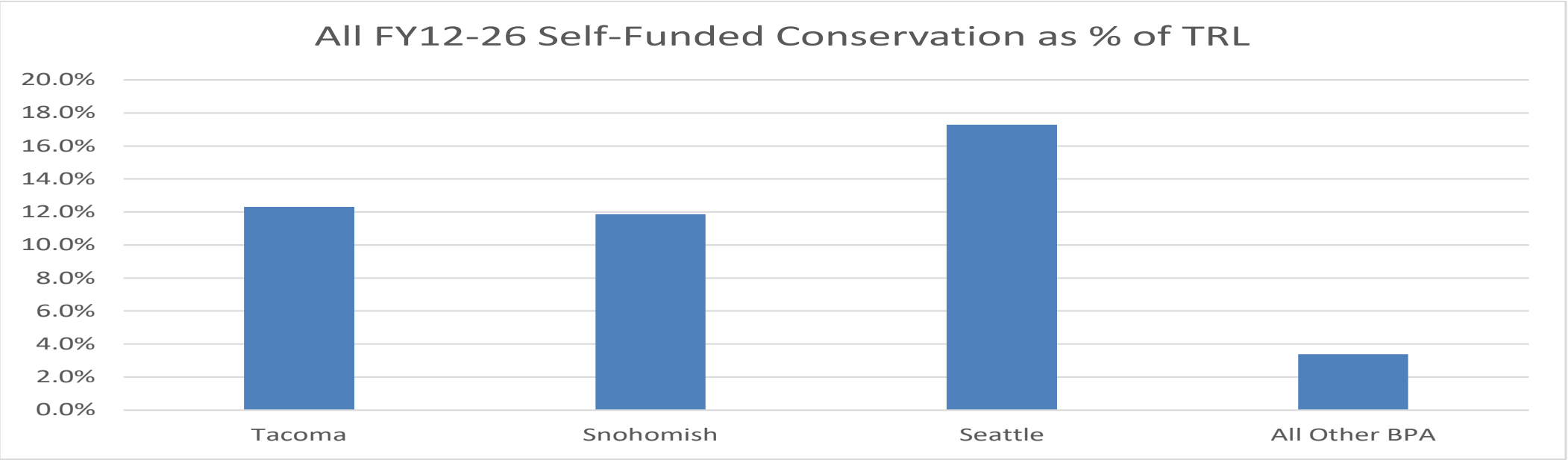
- We have heard our peers: Lanes available to achieve a balanced proposal
- Possibilities for allocation (CHWM) & System Size (Including augmentation)
- WPAG proposal is promising
  - EE needs more discussion
  - Need some value for all 3 groups: Growing, Flat/Declining, Conserving
  - Key distinction: Transitioning RD load service choices in next contract
- New contract should send proper price signals

Cost Shift Considerations for System Size and Allocation

Measuring and addressing cost shifts is an important part of size and allocation decisions

Tacoma Public Utilities

Regional Dialogue Conservation Achievements



			Tacoma	Snohomish	Seattle	
1	FY10 TRL		565	819	1156	(FY10 NR + Dedicated Resources
2	FY12-26 Load Growth		77	108	166	
3	FY12-26 Conservation		96	161	239	
4	FY26 TRL		545	766	1083	(Ln1 + Ln 2 - Ln3)
5	Conservation > Load Growth		20	53	73	(Ln3 - Ln2)
6	Current CHWM "Headroom"		35	84	65	BP-24 RHWM
7	FY12-26 "Self-Funded" Conservation		68	94	194	(Created our current headroom)

Cost Impacts from a Pure CHWM Rest (Assumptions)

Tier 1 PF	Tier 2 PF	PF "Melded"	Augmentation (aMWs)	Augm. Cost ($/MWh)	PF "Melded + Augm"
$35.00	$62.00	$36.75	400	$50.00	$37.47
				Utility A	**Utility B**
				(High Consev)	(High Load Growth)
		RD FY10 Net Requirement		100	100
			RD CHWM	**100**	**100**
		RD Load Growth		20	50
		Conservation (Self-Funded)		30	0
	POC CHWM (no Conserv add-back)			**90**	**150**

Note – Utility A has 10 aMWs of D Headroom due to aggressive self-funded conservation (RD CHWM of 100 less FY26 NR of 90)

The 4 CHWM Re-Set Cost Impacts
(Annual and Life-of-Contract)

	Utility A		**Utility B**	
FY25 RD BPA Power Bill ("Status Quo")	$27,594,000	90 AMW	$57,816,000	150 aMW
Cost Shift #1 (Melding Tier1 and Tier 2 PF Rate Impact)	1,378,282	5.0%	(9,528,863)	-16.5%
Cost Impact #2 (System Augmentation PF Rate Impact)	601,308	2.1%	1,002,179	2.1%
Cost Shift #4 (Post-2028 Rate Design Changes ???)	???	?	???	?
Total Annual Post-2028 Annual PF Bill	$29,573,590		49,289,316	
Post-2028 Annual Increase/(Decrease)	$1,979,590	7.1%	(8,526,684)	-14.4%
Cost Impact #3 (Loss of Self-funded Conservation Investment)	$20,000,000			
Total Post-2028 Life-of-Contract Cost Impact (FY29-45, $2022)	$51,673,432		($136,426,946)	

* Large rate increase for Utility A and large rate decrease for Utility B…AND, Utility A lost $20M of investment!
* While these are “bookends”, these cost shift occur across all of public power at disparate impacts.

Conservation Considerations

Conservation credits should be consistent with RD contract, regional, and national policy goals

Snohomish PUD

A tale of two utilities.....

Utilities have same "natural load growth". Utility B has done twice as much conservation as Utility A

	Utility A				
	2022-2026	0.5	0.5	0.5	
	Natural Load	BPA Conservation	Self-Funded conservation	Non-Reportable Conservation	Resulting Load
2012	150	0.5	0.5	0.5	149
2013	152	0.5	0.5	0.5	149
2014	154	0.5	0.5	0.5	149
2015	156	0.5	0.5	0.5	150
2016	158	0.5	0.5	0.5	150
2017	160	0.5	0.5	0.5	151
2018	162	0.5	0.5	0.5	151
2019	164	0.5	0.5	0.5	152
2020	166	0.5	0.5	0.5	152
2021	168	0.5	0.5	0.5	153
2022	170	0.5	0.5	0.5	153
2023	172	0.5	0.5	0.5	154
2024	174	0.5	0.5	0.5	155
2025	176	0.5	0.5	0.5	155
2026	178	0.5	0.5	0.5	156

	Utility B				
	2023-2026	1	1	1	
	Natural Load	BPA Conservation	Self-Funded Conservation	Non-Reportable Conservation	Resulting Load
2012	150	1	1	1	147
2013	152	1	1	1	146
2014	154	1	1	1	145
2015	156	1	1	1	144
2016	158	1	1	1	143
2017	160	1	1	1	142
2018	162	1	1	1	141
2019	164	1	1	1	140
2020	166	1	1	1	139
2021	168	1	1	1	138
2022	170	1	1	1	137
2023	172	1	1	1	136
2024	174	1	1	1	135
2025	176	1	1	1	134
2026	178	1	1	1	133

	A	B
2026 Total Retail Load	156	133
2026 Net Requirements	156	133
2018-2026 BPA Self Funded EE	4.5	9
Next Contract CHWM if Reset	160	142

Utility B receives smaller allocation despite staying within initial allocation through load management

Utility B gets larger allocation at lower cost from doing no more new Non-Reportable Conservation

	Utility A				
	2022-2026	0.5	0.5	0.5	
	Natural Load	BPA Conservation	Self-Funded conservation	Non-Reportable Conservation	Resulting Load
2012	150	0.5	0.5	0.5	149
2013	152	0.5	0.5	0.5	149
2014	154	0.5	0.5	0.5	149
2015	156	0.5	0.5	0.5	150
2016	158	0.5	0.5	0.5	150
2017	160	0.5	0.5	0.5	151
2018	162	0.5	0.5	0.5	151
2019	164	0.5	0.5	0.5	152
2020	166	0.5	0.5	0.5	152
2021	168	0.5	0.5	0.5	153
2022	170	0.5	0.5	0.5	153
2023	172	0.5	0.5	0.5	154
2024	174	0.5	0.5	0.5	155
2025	176	0.5	0.5	0.5	155
2026	178	0.5	0.5	0.5	156

	Utility B				
	2023-2026	1	1	0	
	Natural Load	BPA Conservation	Self-Funded Conservation	Non-Reportable Conservation	Resulting Load
2012	150	1	1	1	147
2013	152	1	1	1	146
2014	154	1	1	1	145
2015	156	1	1	1	144
2016	158	1	1	1	143
2017	160	1	1	1	142
2018	162	1	1	1	141
2019	164	1	1	1	140
2020	166	1	1	1	139
2021	168	1	1	1	138
2022	170	1	1	0	138
2023	172	1	1	0	138
2024	174	1	1	0	138
2025	176	1	1	0	138
2026	178	1	1	0	138

Original Allocation

	A	B
2026 Total Retail Load	156	133
2026 Net Requirements	156	133
2018-2026 BPA Self Funded EE	4.5	9
Next Contract CHWM if Reset	160	142

	A	B
2026 Total Retail Load	156	138
2026 Net Requirements	156	138
2018-2026 BPA Self Funded EE	4.5	9
Next Contract CHWM if Reset	160	147

Utility B receives larger allocation than previous "plan" by growing load

Utility B gets larger allocation at lowest cost from doing no new Self-Funded Conservation at all

	Utility A				
	2022-2026	0.5	0.5	0.5	
	Natural Load	BPA Conservation	Self-Funded conservation	Non-Reportable Conservation	Resulting Load
2012	150	0.5	0.5	0.5	149
2013	152	0.5	0.5	0.5	149
2014	154	0.5	0.5	0.5	149
2015	156	0.5	0.5	0.5	150
2016	158	0.5	0.5	0.5	150
2017	160	0.5	0.5	0.5	151
2018	162	0.5	0.5	0.5	151
2019	164	0.5	0.5	0.5	152
2020	166	0.5	0.5	0.5	152
2021	168	0.5	0.5	0.5	153
2022	170	0.5	0.5	0.5	153
2023	172	0.5	0.5	0.5	154
2024	174	0.5	0.5	0.5	155
2025	176	0.5	0.5	0.5	155
2026	178	0.5	0.5	0.5	156

	Utility B				
	2023-2026	1	0	0	
	Natural Load	BPA Conservation	Self-Funded Conservation	Non-Reportable Conservation	Resulting Load
2012	150	1	1	1	147
2013	152	1	1	1	146
2014	154	1	1	1	145
2015	156	1	1	1	144
2016	158	1	1	1	143
2017	160	1	1	1	142
2018	162	1	1	1	141
2019	164	1	1	1	140
2020	166	1	1	1	139
2021	168	1	1	1	138
2022	170	1	0	0	139
2023	172	1	0	0	140
2024	174	1	0	0	141
2025	176	1	0	0	142
2026	178	1	0	0	143

Original Allocation

	A	B
2026 Total Retail Load	156	133
2026 Net Requirements	156	133
2018-2026 BPA Self Funded EE	4.5	9
Next Contract CHWM if Reset	160	142

Second Allocation

	A	B
2026 Total Retail Load	156	138
2026 Net Requirements	156	138
2018-2026 BPA Self Funded EE	4.5	9
Next Contract CHWM if Reset	160	147

	A	B
2026 Total Retail Load	156	143
2026 Net Requirements	156	143
2018-2026 BPA Self Funded EE	4.5	4
Next Contract CHWM if Reset	160	147

Utility B receives largest, lowest-cost allocation by doing no new self-funded EE

Summary Thoughts

- Current conservation credit constructs result in economic incentives to:
  - Stop all forms of self-funded conservation immediately
  - Address load growth in next contract with term-limited supply-side PPAs so as not to be penalized in future allocations and effectively strand assets
  - Update conservation resource economics to price in penalty of load outcome at end of contract below starting allocation, for this contract and beyond
- These incentives feel out of alignment with RD policy goals, and big-picture national and regional goals
- More conversation is needed to create better constructs for conservation credit
  - There are many paths to better alignment
  - Inter-contract allocation incentives are most powerful conservation incentive

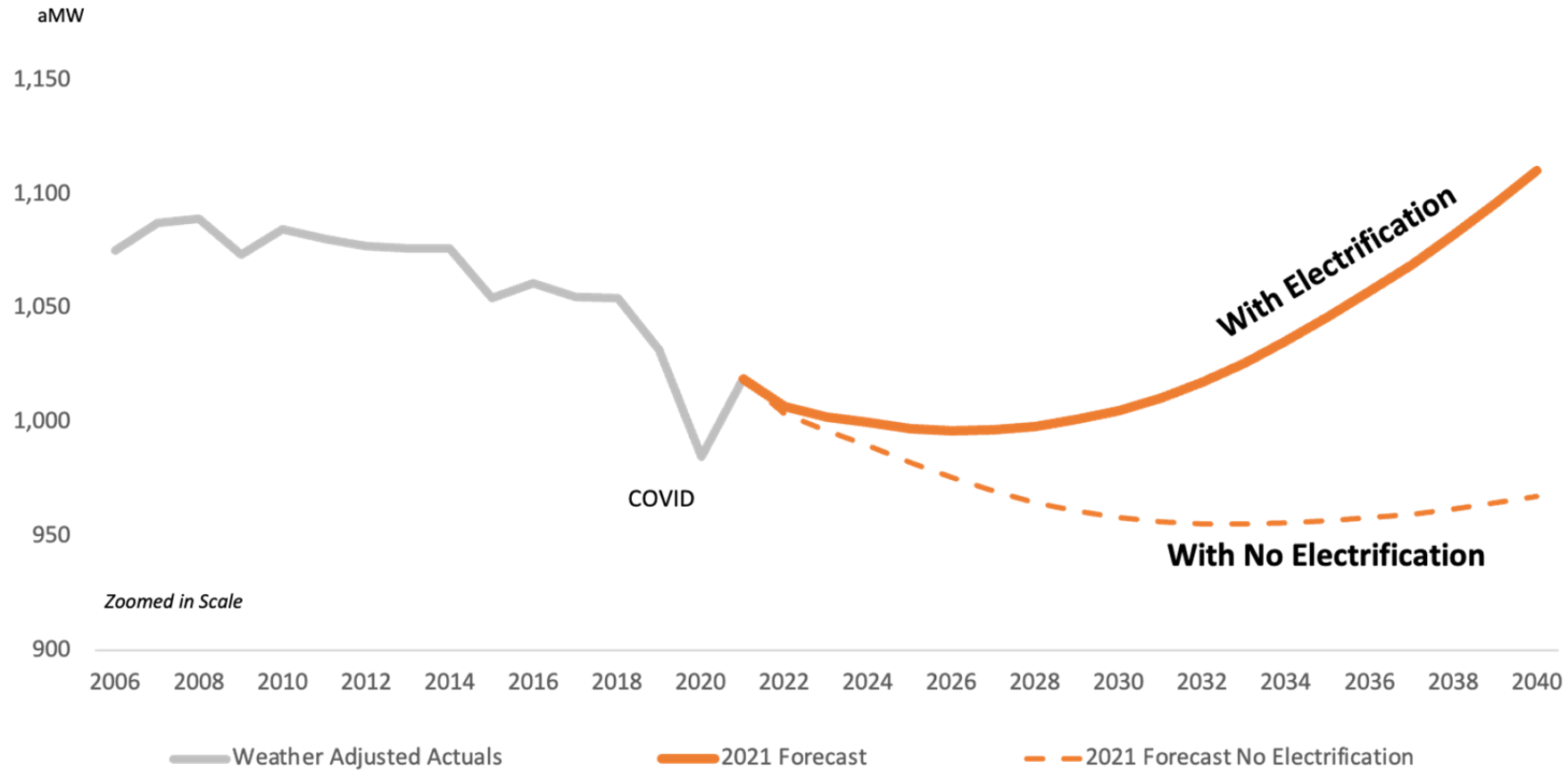
Past, Present and Future Load Growth

Investments made to prepare for future load growth should help contribute to coming electrification load

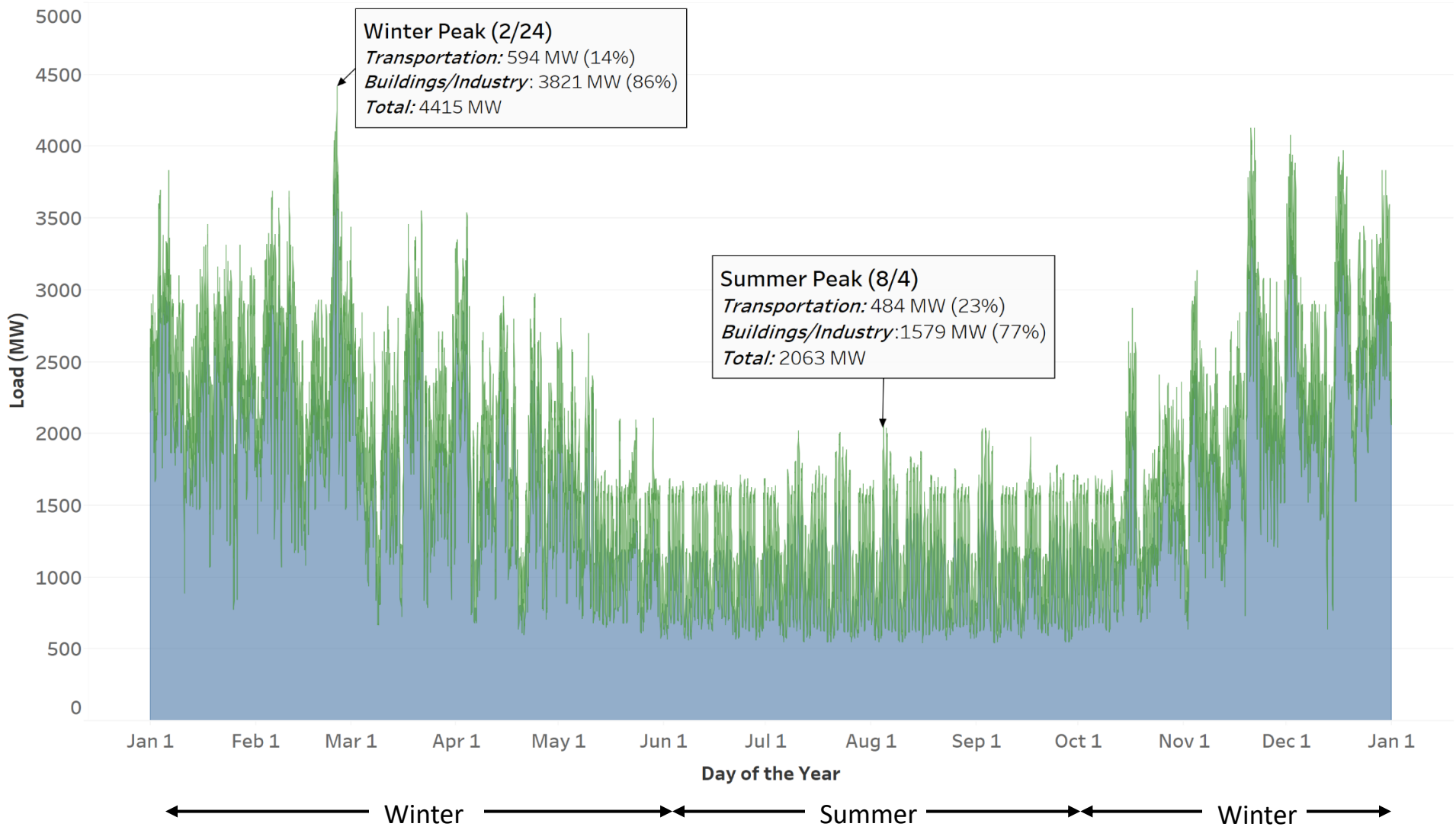
Seattle City Light

Electrification will Increase Loads

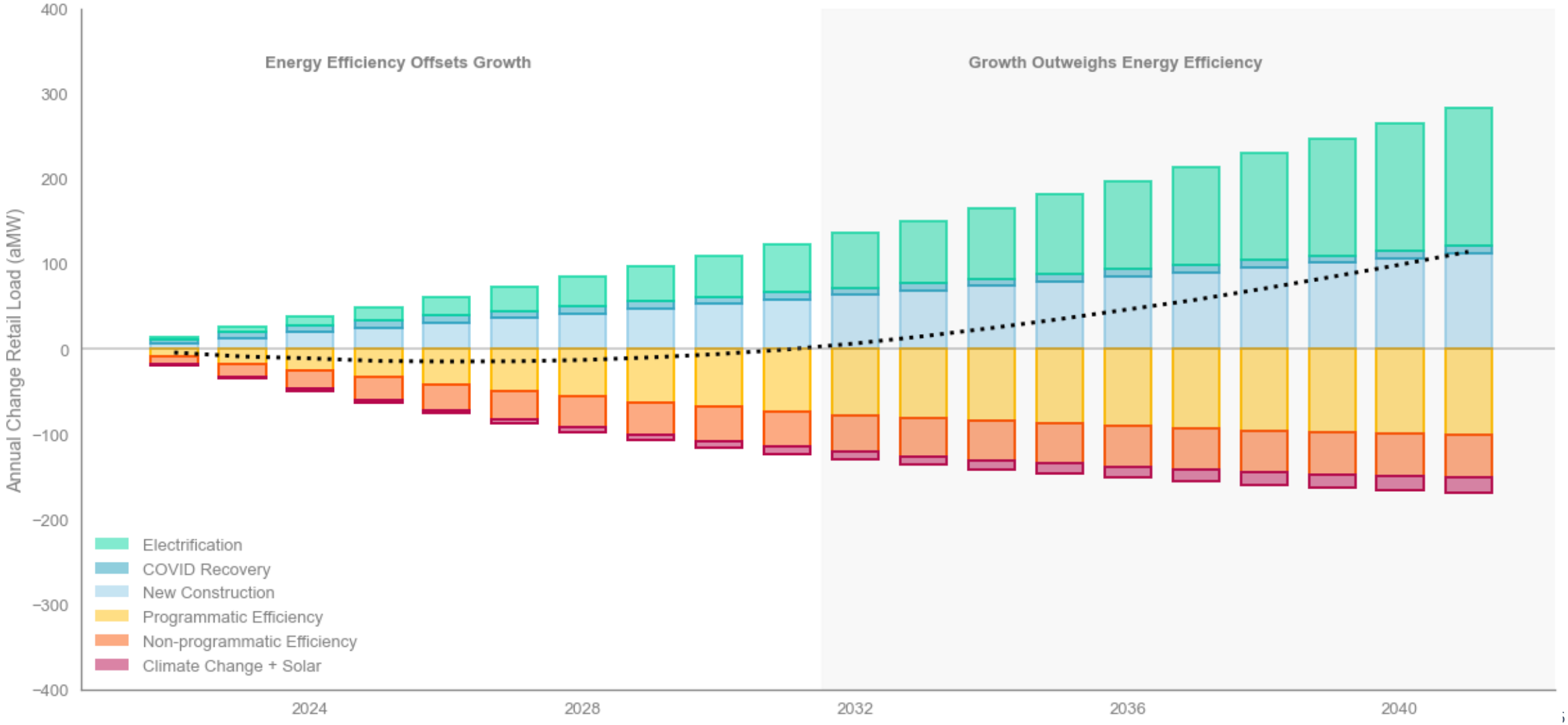
- Energy consumption has decreased by ≈0.7% per year recently
- Decarbonization → Electrification → load growth



2042 SCL yearly load: Rapid Market Advancement Scenario



SCL Corporate Load Forecast



Where do we go from here?

We should seek a balanced pathway that allows utilities to plan for the future, is aligned with regional and national policy goals, and results in equitable outcomes

Summary

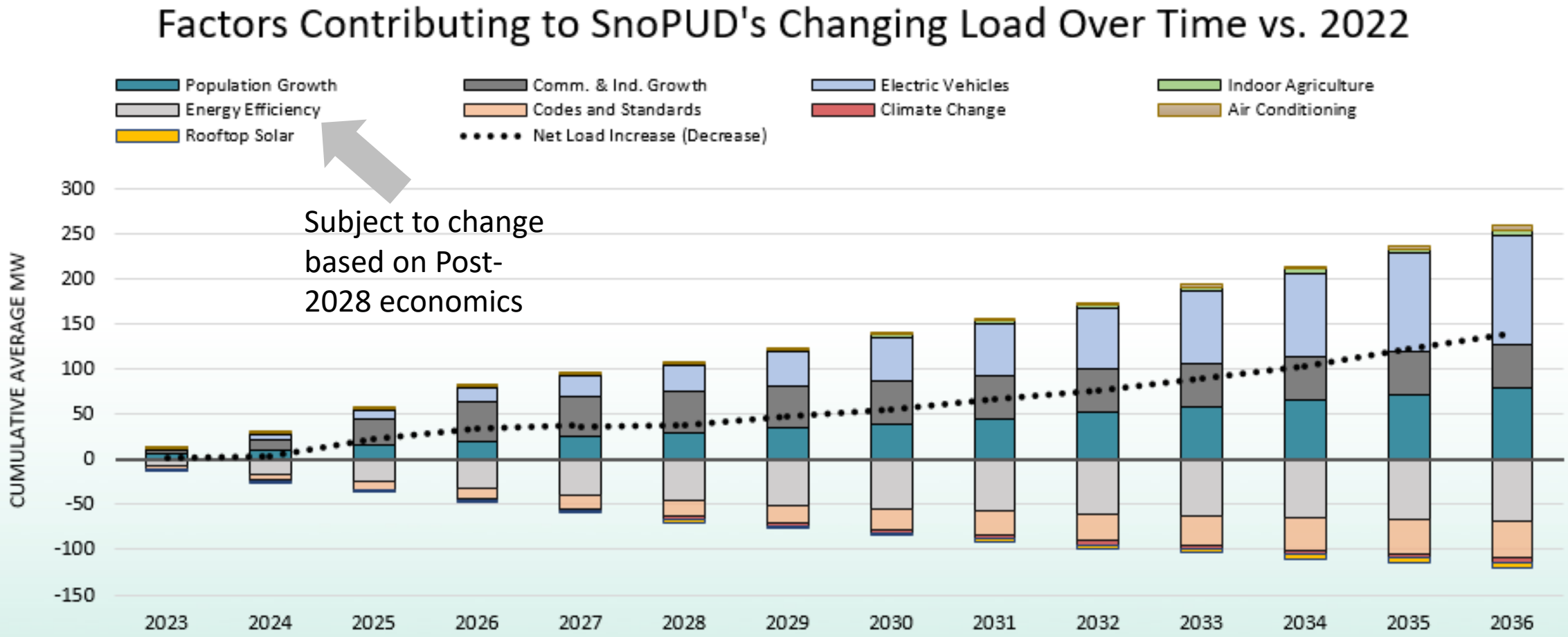
KEY MESSAGES:

- ✓ *A Balanced Approach to System Size and Allocation*
  - ✓ *Minimize cost shifts*
  - ✓ *Recognize good faith RD contract actions made to realize RD policy goals*
  - ✓ *Transitioning to new contract requires compromise*
- ✓ *Interest in Building off WPAG's No Worse Off Framework*
  - ✓ *Thoughtful framing of what equity means for three groups: Growing, Flat, Conserving*
- ✓ *Tiered Rates and marginal costs*
  - ✓ *Send proper price signals*
- ✓ *Non-Federal Resource development tools*
  - ✓ *Lots of interest in a fully subscribed system; little BPA risk of development displacing firm critical output subscription*
  - ✓ *We have been preparing for future load growth, we need to continue to have options*

- We have heard our peers: Lanes appear available to achieve a balanced proposal
  - Possibilities for allocation (CHWM) & System Size (potentially including augmentation)

Appendix

The Driving Factors



2010-2022 Energy Efficiency/Conservation Efforts at SCL

	Energy Savings		Expenditures	BPA Funding	Incremental MW Value
2010	141,581	MWh	$ 34,524,554	$10,000,000	16.16
2011	107,729	MWh	$ 32,672,296		12.30
2012	137,374	MWh	$ 29,800,000	$9,582,415	15.68
2013	138,159	MWh	$ 39,100,000		15.77
2014	186,516	MWh	$ 42,500,000	$8,947,094	21.29
2015	156,911	MWh	$ 43,700,000		17.91
2016	125,725	MWh	$ 44,872,776	$11,140,165	14.35
2017	145,336	MWh	$ 45,012,297		16.59
2018	150,828	MWh	$ 37,237,793	$10,486,079	17.22
2019	137,805	MWh	$ 32,920,361		15.73
2020	109,006	MWh	$ 26,771,878	$9,832,979	12.44
2021	116,721	MWh	$ 27,135,360		13.32
2022	N/A	MWh	N/A	$8,725,508	
Total			**$ 436,247,314**	**$68,714,240**	**188.78**

There's an awful lot we seem to agree on

- Tiered Rates Methodology as the core of the next contract
- Existing products seem to have core value propositions that endure
- Balanced Non-Federal Resource Treatment that recognizes unique need of resources developed for anticipated load growth in the RD contract
- Provide conducive framework to encourage or facilitate further Non-Federal Resource Development
- Providing a 100% clean option for those that need it
- Providing a Conservation Credit in CHWM calculation
- A One-Time Tier 2 Election could be hard for folks
- Fix size of Federal System to provide for planning certainty