07

Safety Report

July 2022

Injuries Reported

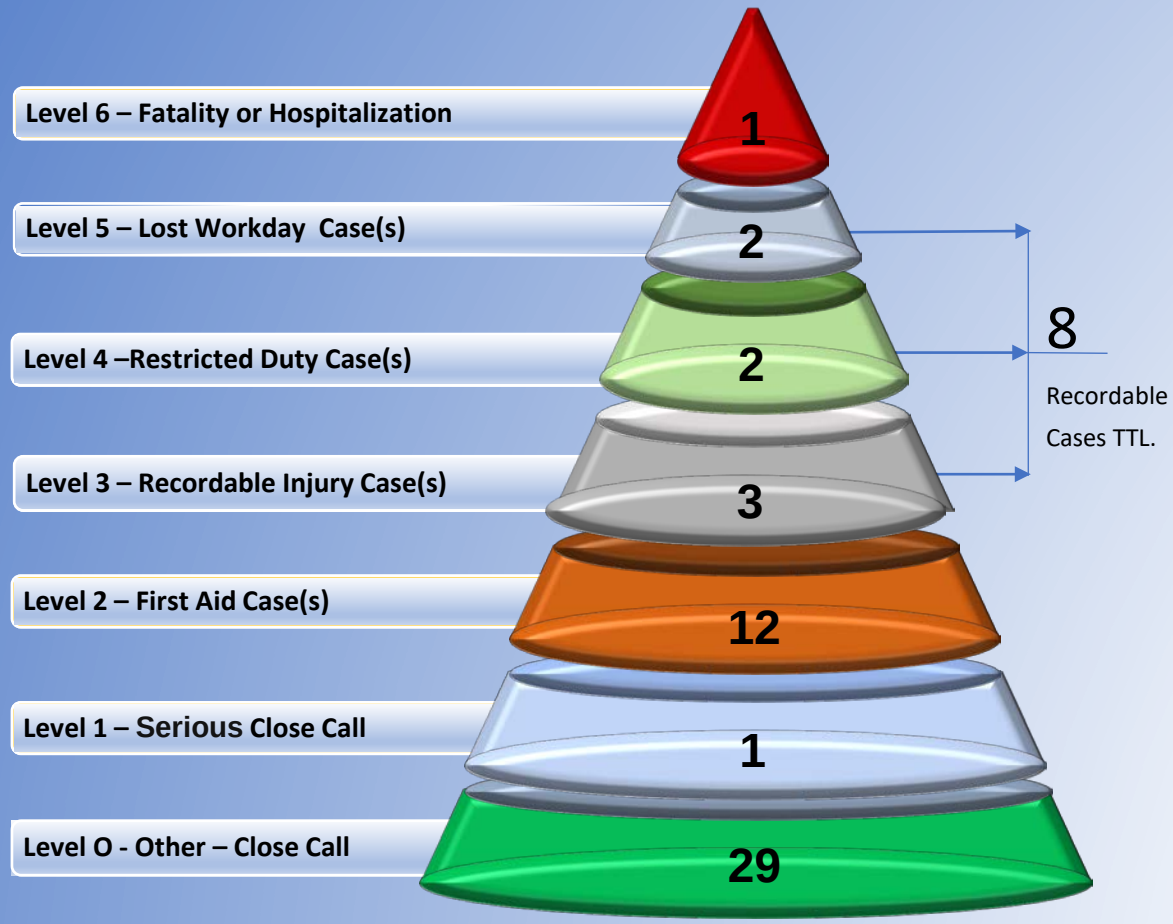
Date	Injury	Description
6/6/22	Struck by	**Struck by object** While emptying a trash can the rubber band that secures the bag in place was removed and sat on top of a cabinet next to the can, when grabbing the rubber band to reinstall it there was a piece of aluminum that the rubber band grabbed, it fell off the cabinet hitting left ring finger causing it to swell.
6/13/22	Overexertion	**Strained Back** When re-attaching a jumper with a hot stick the jumper was tight and strained my lower back.
6/14/22	Strain	**Back/Neck Strain** An employee was getting gear out of their vehicle while at the HOB and a gust of wind blew off their hat. As a reaction they turned quickly and later felt a soreness in the back and a little in the neck. The soreness developed over the course of the day. The following day the soreness subsided.
6/27/22	MSD	**Both Wrist and Heels** Over the years both wrists hurt and go numb, and after the many years working on concrete an employee is having pain in their heels.

Monthly and Year to Date

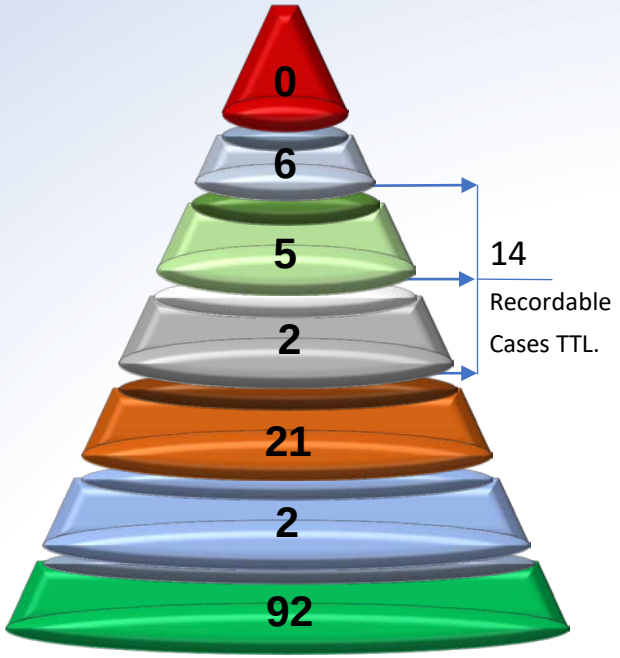
2022	Month	YTD
Total Incidents Reported	4	16
Recordable Case(s)	0	3
Restricted Duty Case(s)	0	2
Lost Workday Case(s)	0	3

2022 incidents Year to Date Summary

Employee Safety



2022



2021

Close Calls

Date	Location	Description
6/14/22	HOB	**Sharp Pain in shoulder** An employee scanned their badge at HOB front doors to enter the building, the automatic doors did not operate and would not fully open. The employee reached between the doors and pulled them open. Employee had recently undergone a shoulder surgery and had one arm in a sling, he felt a sharp pain in the injured shoulder while pulling the door open.
6/21/22	Quincy	**Power Hit** An employee was about 10 feet from the front of the transformer preparing to lay the conduit tail to the drop vault location. In doing so, the operator caught an unlocated secondary power line 10 feet from the vault on private property that is going to the homeowner's shop. The secondary line hit was 6 feet from the transformer. The crew did pothole and found the existing power line in gray conduit going to the house that had a locate mark. But was unaware of the second secondary going to the shop.
6/27/22	WMC	**WSCC Well Source #2 – Mouse Droppings Found** Mouse droppings were found in the indoor portion of the HVAC fan unit. There is the potential for exposure to Hantavirus. There is a sign posted on the door to keep out until further notice

Vehicle Incidents

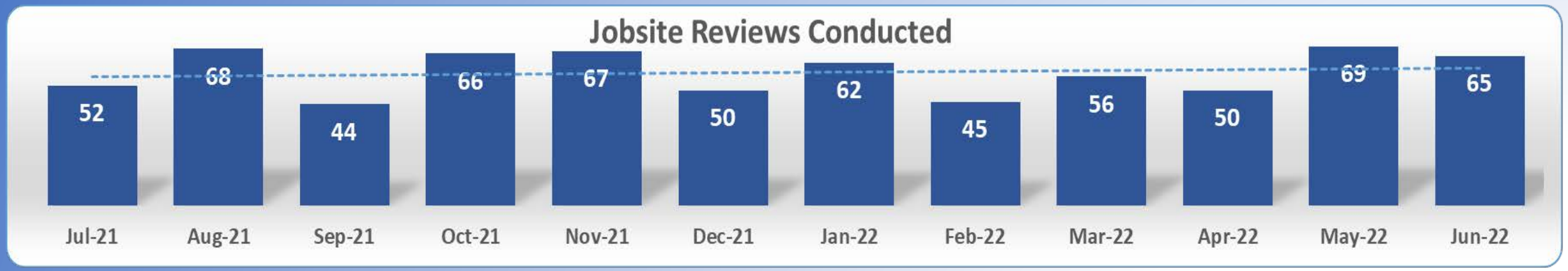
Date	Vehicle	Driver's Account:
6/8/22	V515	**Hit Mirror** While repositioning the truck to offload a pole an employee struck the mirror of #515; the top corner of bin package hit the bottom corner of the mirror breaking the plastic trim piece. All employees were either in the bucket, or on the line truck.
6/14/22	V425	**Rock Hit Windshield** An employee pulled between road and excavator that was digging a trench in Caliche to unload pipe. The operator started to swing to see where the vault stake was and stopped when he saw truck. When the momentum of the boom stopped, a chunk of Caliche fell off the knuckle above bucket and continued its momentum until it struck the window of #425. There was not much that could have been avoided, as our worksite was tight on space. Luckily the operator was aware of his surroundings and stopped. The window has a headache and will need replaced.
6/15/22	V518	**Vehicle Struck by Gate** When entering a substation gate the wind was blowing a little. It caused the gate to swing into the side of the truck. This left a scratch and dent in the side of the service truck.

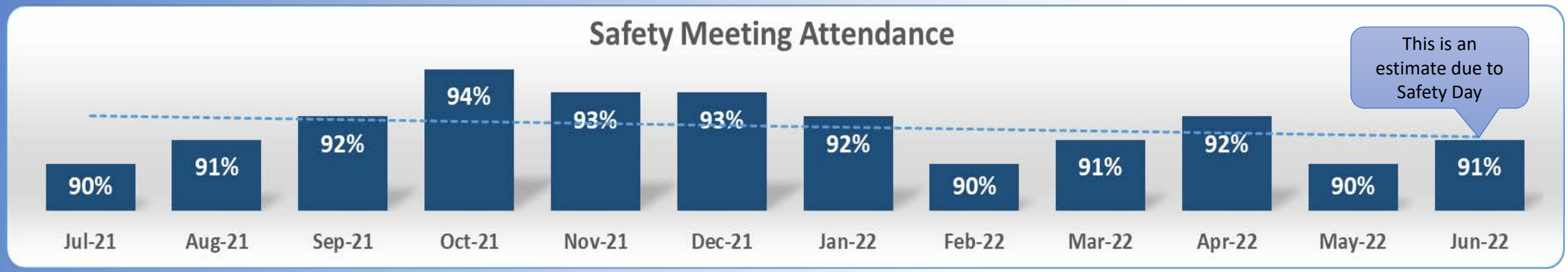
Contractor Injuries and Incidents

Date	Location	Description

Nothing to report…

Leading & Lagging Indicators





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Leading & Lagging Indicators

Leading & Lagging Indicators

Safety Action Item Critical Success Factors

Incident Reporting
• Number of Close Calls in June = **3**
• Number of Close Calls Reported on Time = **3**
Injuries
• Total Number of Injuries = **4**
• Total Number of Injuries Reported on Time = **2**
Mobile
• Total Number of Mobile Incidents = **3**
• Total Number of Mobile Incidents Reported on Time = **3**

Number of Open Action Items over 60 days old	
May 2022	As of **June** 2022
Year 2017 = 3	Year 2017 = 3
Year 2018 = 13	Year 2018 = 13
Year 2019 = 8	Year 2019 = 9
Year 2020 = 5	Year 2020 = 4
Year 2021 = 9	Year 2021 = 9
Year 2022 = 3	Year 2022 = 3
Month Total = **41**	Month Total = **41**

Net - June 2022 = 0

Are You Reporting All Injuries?

There are many reasons why people choose not to report a workplace incident including:

- Embarrassment
- Worry about being fired or not considered for future jobs
- Loss of respect from co-workers or being labelled a ‘complainer’
- Being unsure if the injury is work-related
- Belief that incident reporting is a waste of time

Not reporting an incident or injury can have ramifications for the employee as well as the employer.

What Could Happen if I Don’t Notify my Supervisor/Foreman of an Injury	
Employee	*Employer*
First Aid is not received when it was required	Does not know there is a safety issue in the workplace
Injury becomes worse. What was easily treatable becomes a serious condition	Safety issues are not addressed, and other employees are also at risk
May not be eligible for Workers Compensation	Does not notify the relevant Government Agency potentially leading to fines

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Thank You!

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Powering our way of life.

Power Production

Our People Driving Strong Performance

Quarterly Commission Briefing Q3 2022

Grant PUD

Powering our way of life.

Fulfilling Our Mission
Safe – Compliant - Reliable - Efficient

- Purpose: Provide **safe, secure, economical, reliable and compliant power generation** under the Priest Rapids Project Federal Energy Regulatory Commission (FERC) License Project No. 2114 while supporting the Wanapum relationship.

- Goal: Execute the aforementioned tasks while championing a **culture of safety and operational excellence** with continuous focus on the guiding values of safety, innovation, service, teamwork, respect, integrity, and heritage.

Acronym List
One Playbook

- PP – Power Production
- PRREIP – Priest Rapids Right Embankment Improvement Project
- JSR – Job Site Review (Safety)
- WMC – Wanapum Maintenance Center
- PR – Priest Rapids
- WAN – Wanapum
- PRP – Priest Rapids Project

2022 Q2 Business Report
Hitting the High Points

Key Operational Metrics

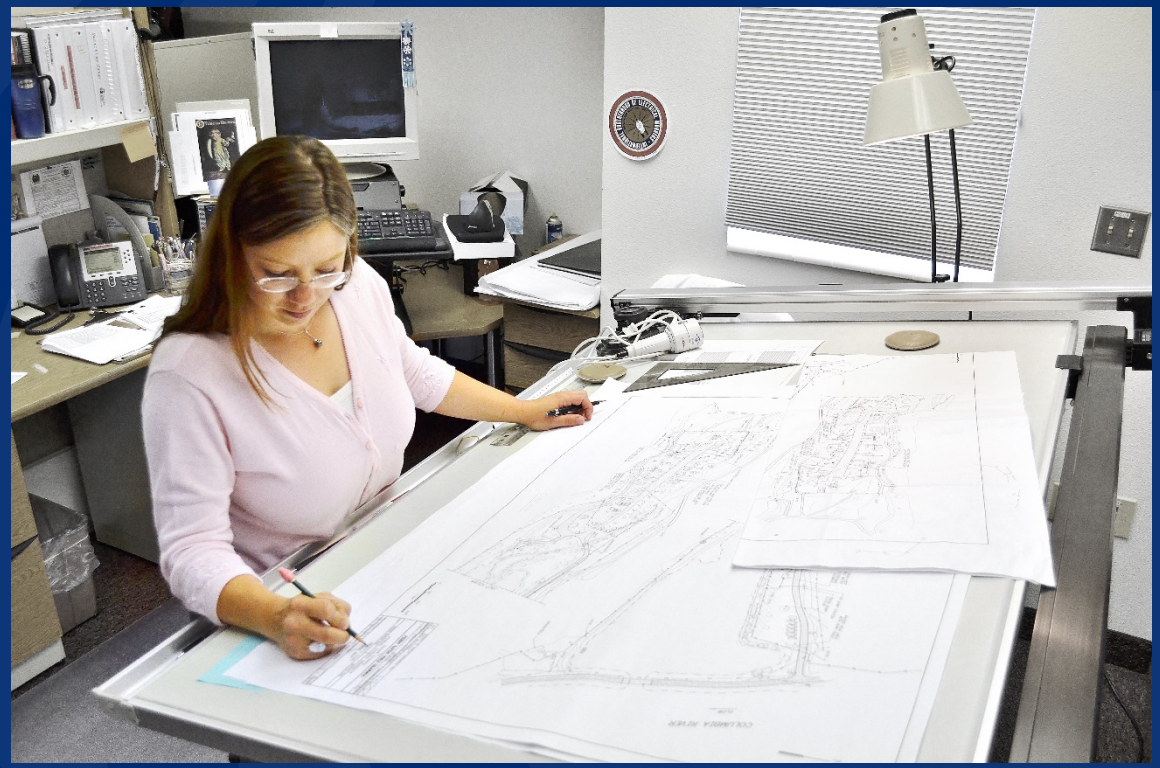
- Safety Performance
- Plant Performance
- Budget Analysis

Short & Long Term Focus

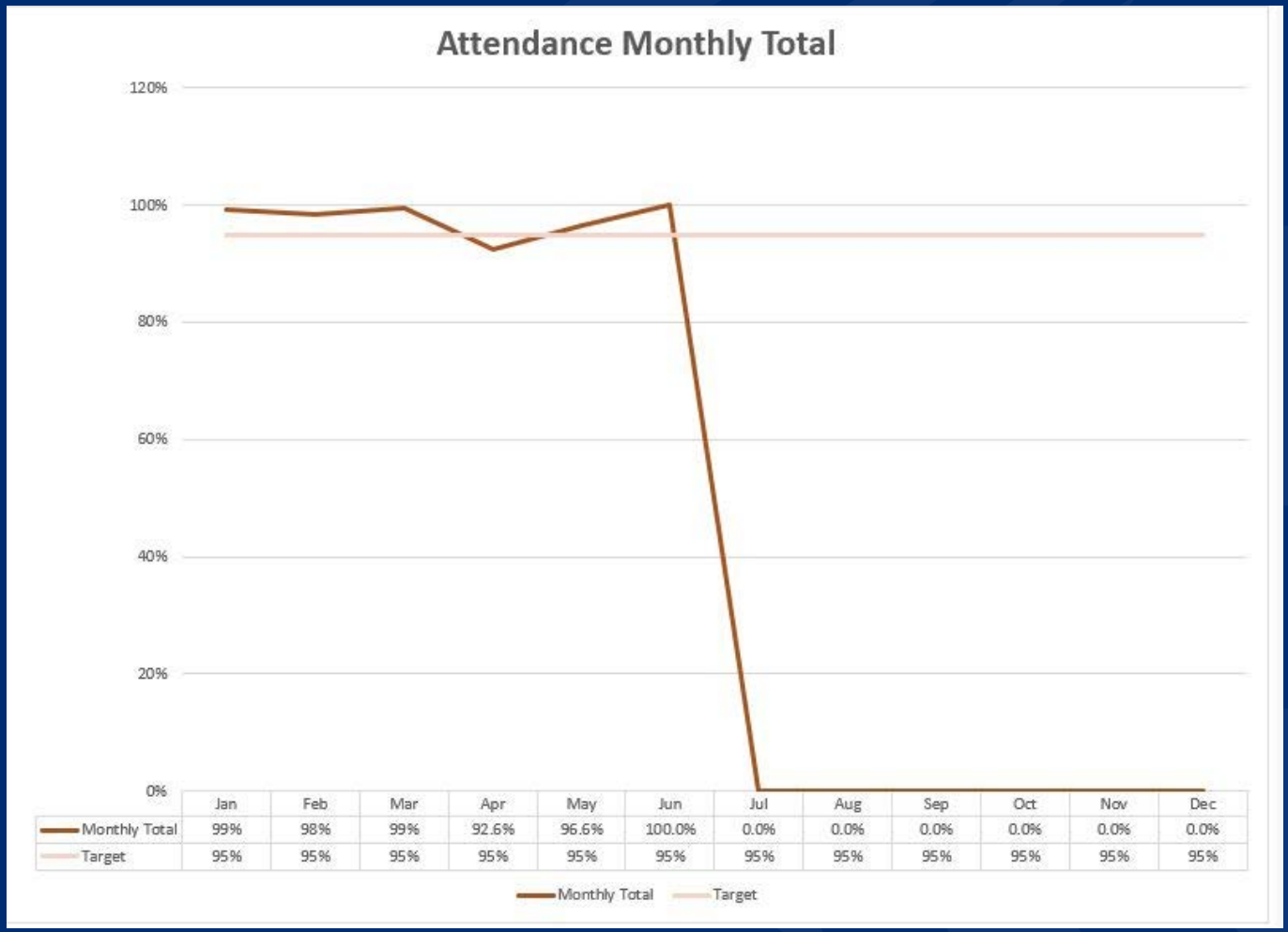
- Capital Projects
- Success Stories

Team & Next Quarter

- Personnel
- 2022 Q2 Forecast

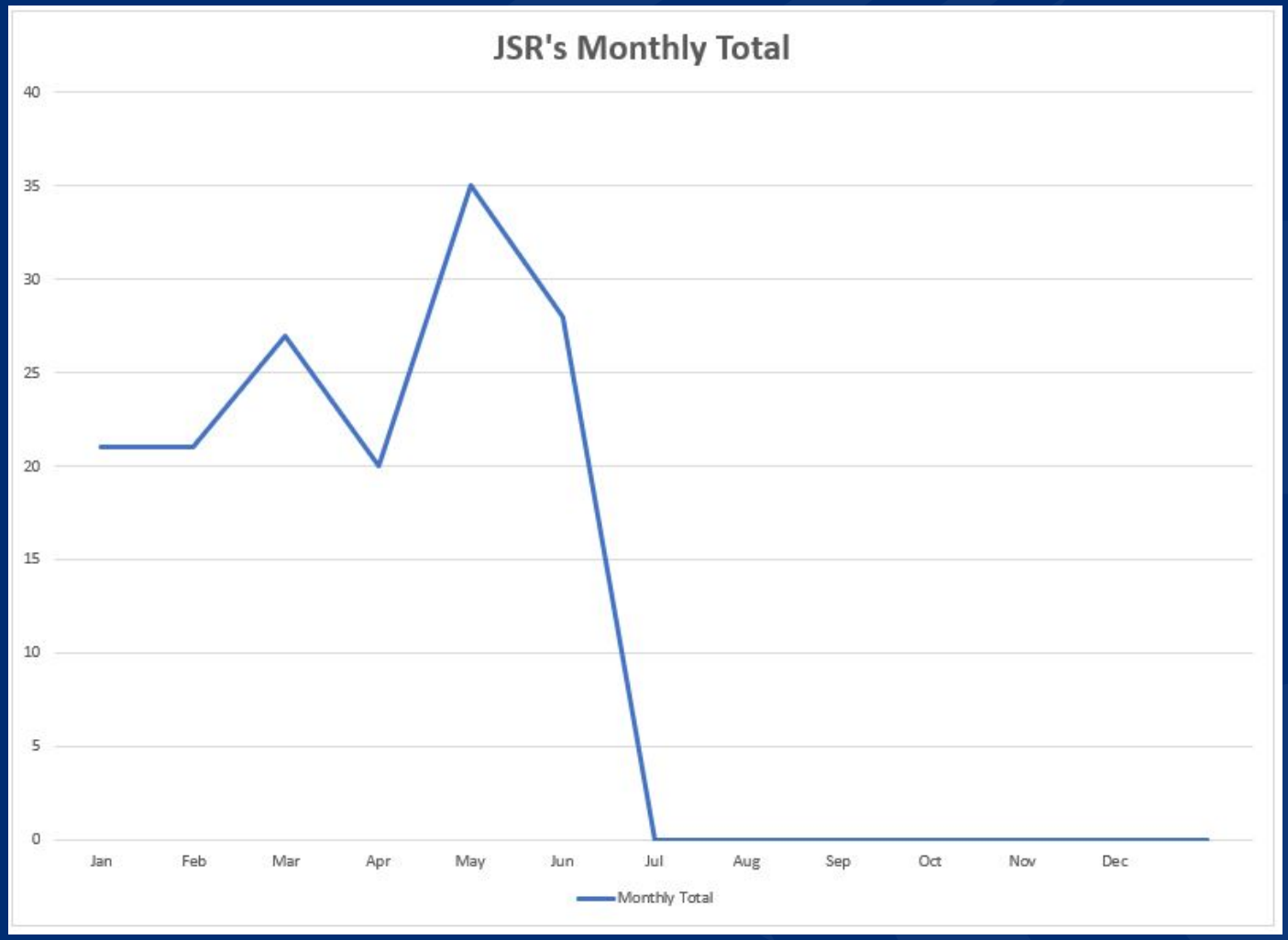


Safety Performance
Targeting Zero Harm

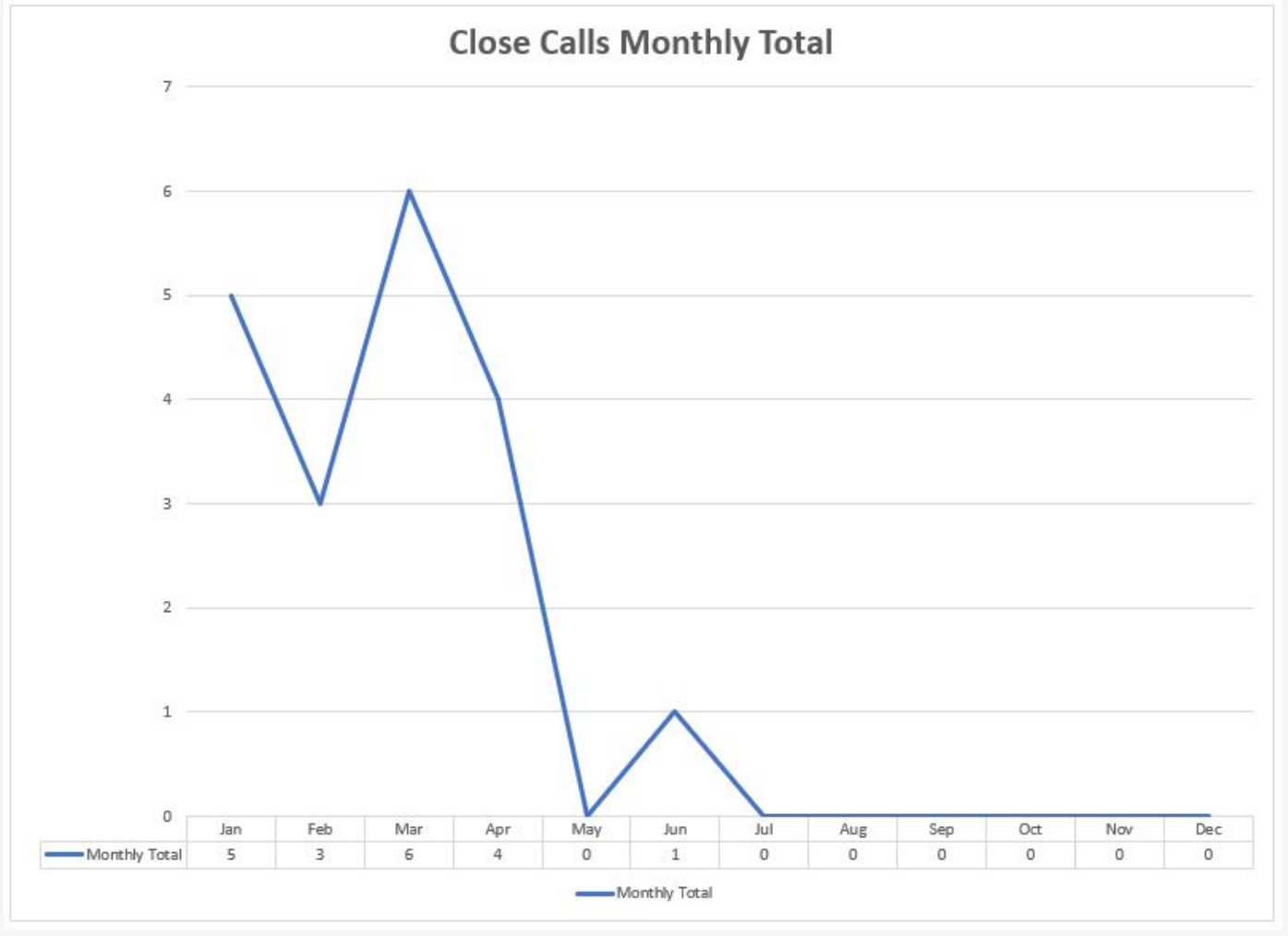


	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Monthly Total	99%	98%	99%	92.6%	96.6%	100.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Target	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%	95%

Safety Performance
Targeting Zero Harm



Safety Performance
Targeting Zero Harm



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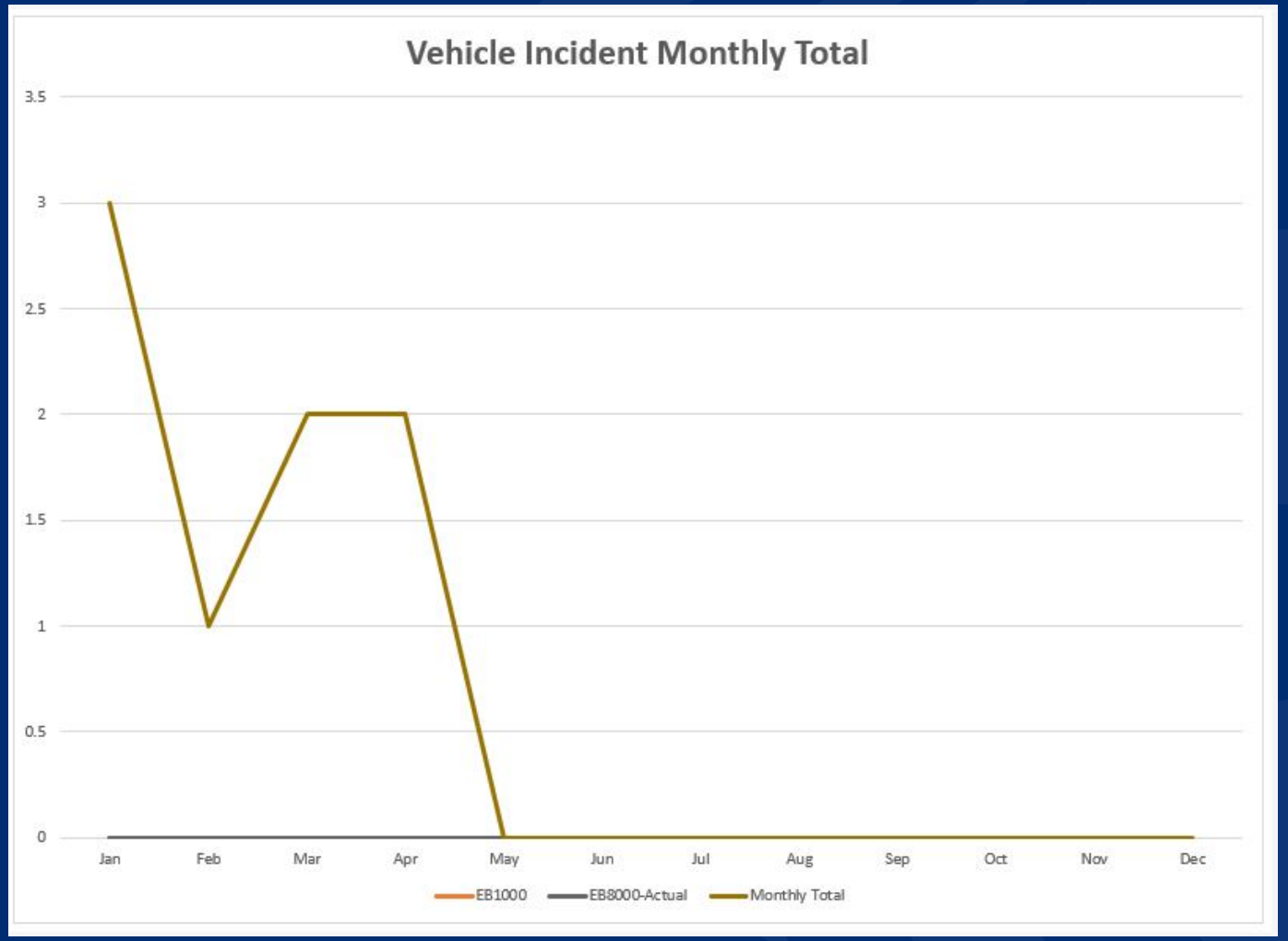
Targeting Zero Harm



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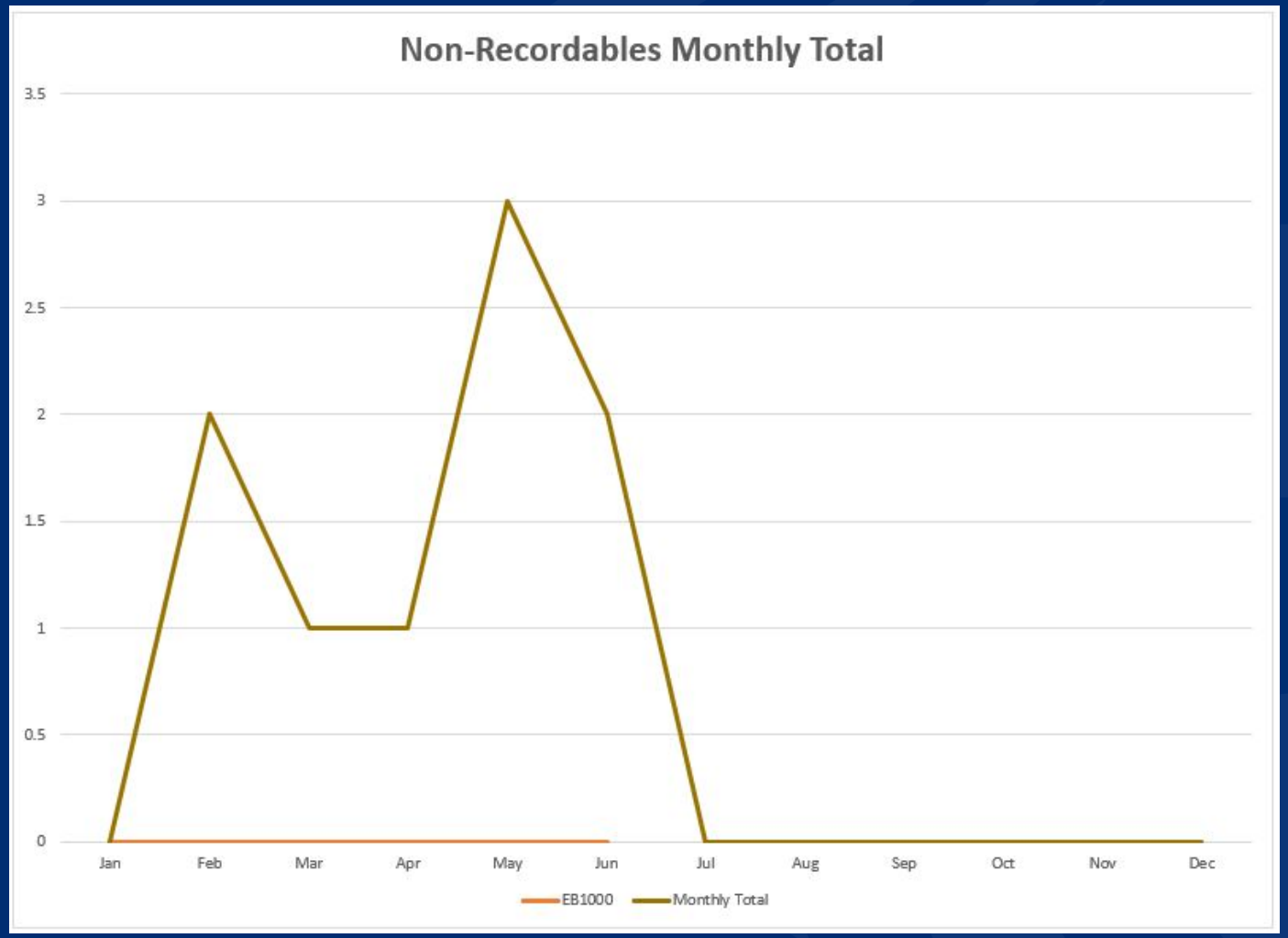
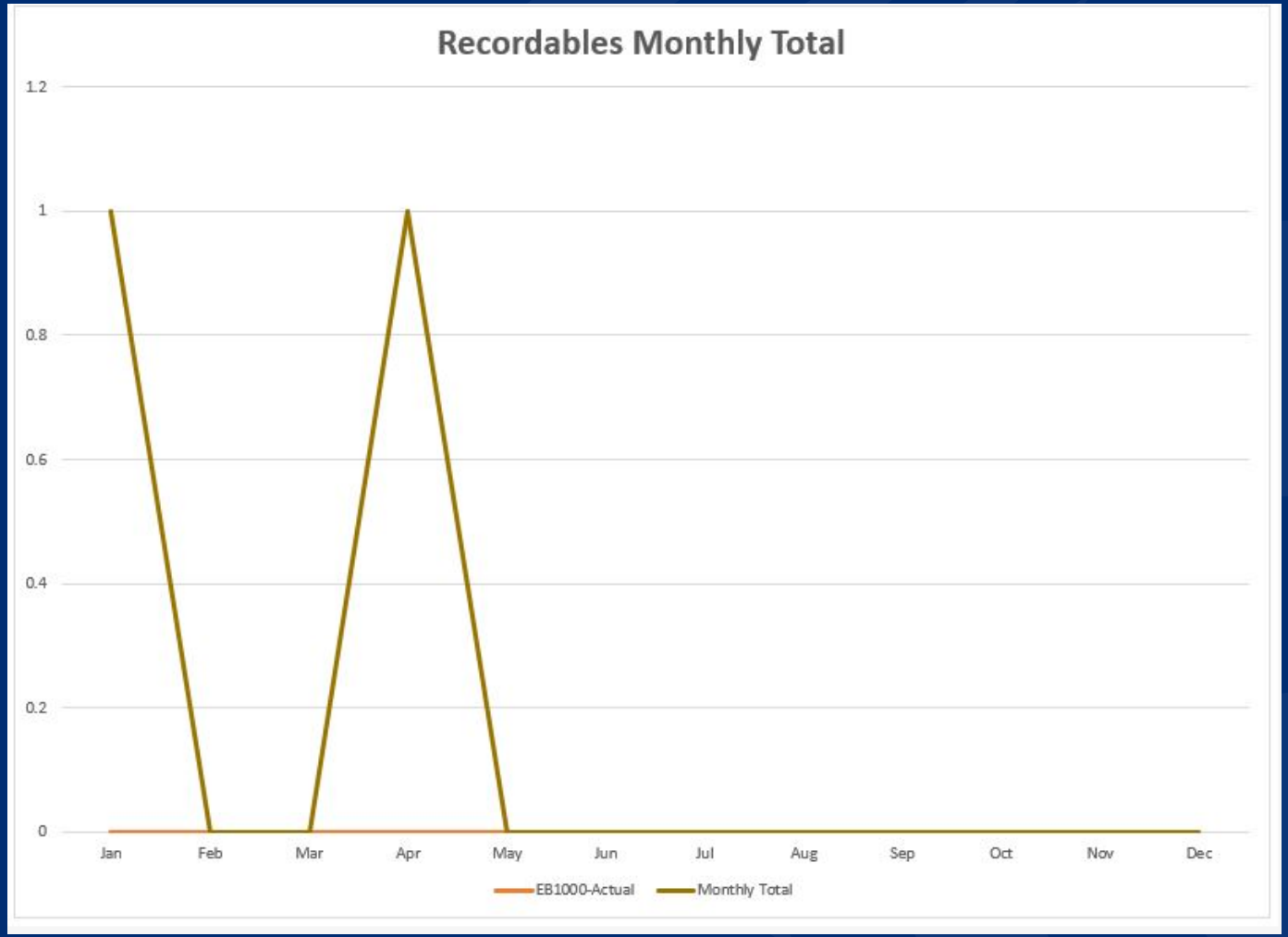
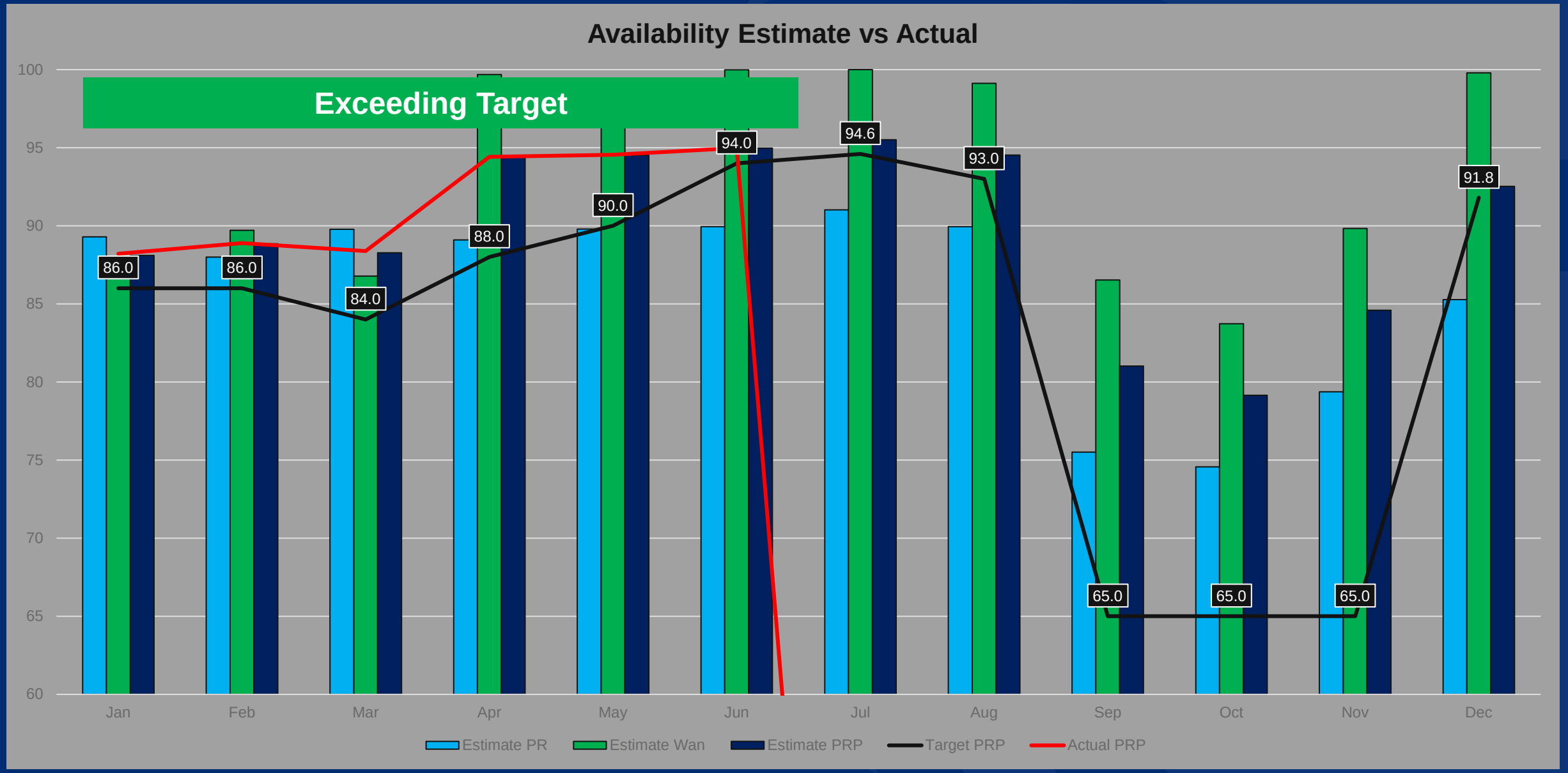
Targeting Zero Harm



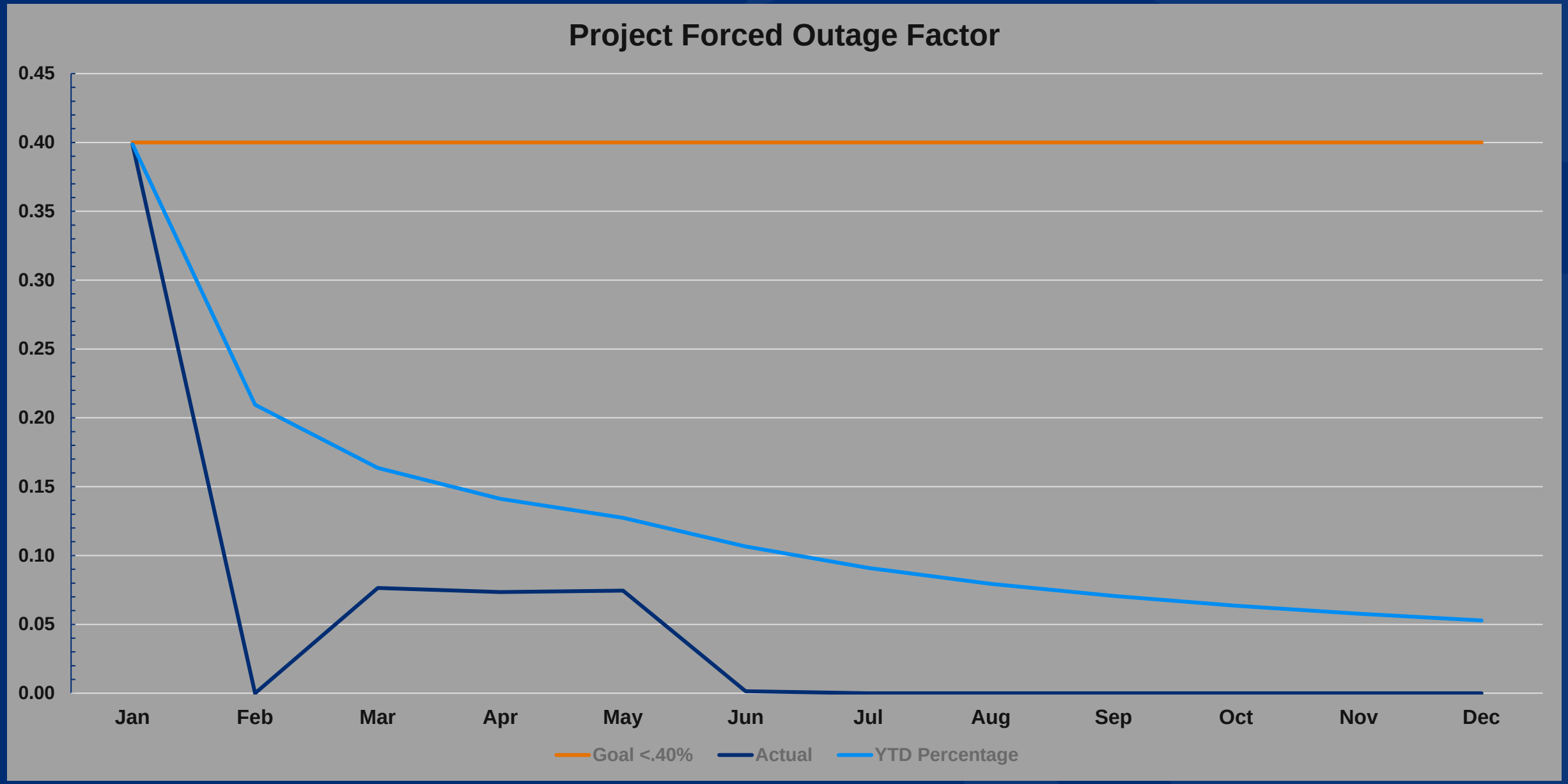
Safety Performance
Targeting Zero Harm



Plant Performance



Plant Performance



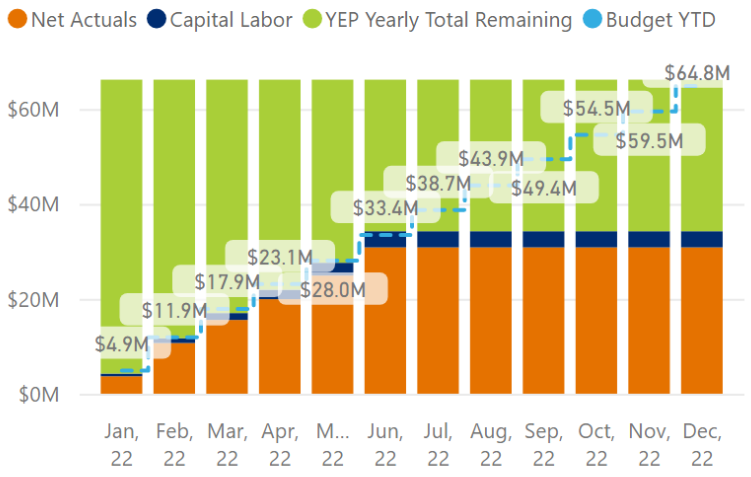
O&M Budget Versus Actuals

EB - Power Production QBR Year-to-Date June, 2022

Operating Unit

EB - Power Production

Capital Labor & Net Actuals YTD Vs. Year-End-Projections



Gross Actuals Vs. Budget

$34.2M +2.4%

Capital Labor Actuals Vs. Budget

$3.4M -12.4%

Net Actuals Vs. Budget

$30.8M +4.3%

O&M Budget vs Actuals (Including Cap Labor)

Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
Labor	**$20,195,762**	**$22,258,754**	**$2,062,992**	**10.2%**	**110.2%**
Salaries & Wages	$13,518,417	$13,236,578	-$281,839	-2.1%	97.9%
Benefits	$5,526,535	$7,539,164	$2,012,629	36.4%	136.4%
Overtime	$1,074,479	$1,192,531	$118,052	11.0%	111.0%
Other Labor	$76,331	$290,482	$214,151	280.6%	380.6%
Purchased Services	**$7,486,719**	**$5,876,215**	**-$1,610,503**	**-21.5%**	**78.5%**
G&A	**$4,357,257**	**$3,647,644**	**-$709,613**	**-16.3%**	**83.7%**
Operating Materials & Equipment	**$1,258,026**	**$2,257,847**	**$999,821**	**79.5%**	**179.5%**
Utilities	**$76,070**	**$118,902**	**$42,832**	**56.3%**	**156.3%**
IT	**$51,700**	**$53,971**	**$2,271**	**4.4%**	**104.4%**
		$130			
Transportation		**$8,947**			
Total	**$33,425,534**	**$34,222,411**	**$796,877**	**2.4%**	**102.4%**

- Capital Labor is a subset of the Labor above

- Net Actuals vs Budget = Gross Actuals minus Capital Labor

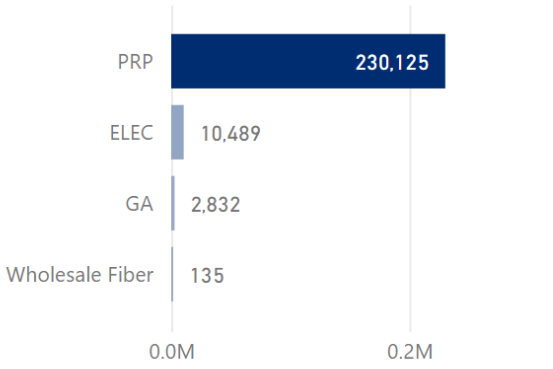
Employee Activity

EB - Power Production QBR Year-to-Date June, 2022

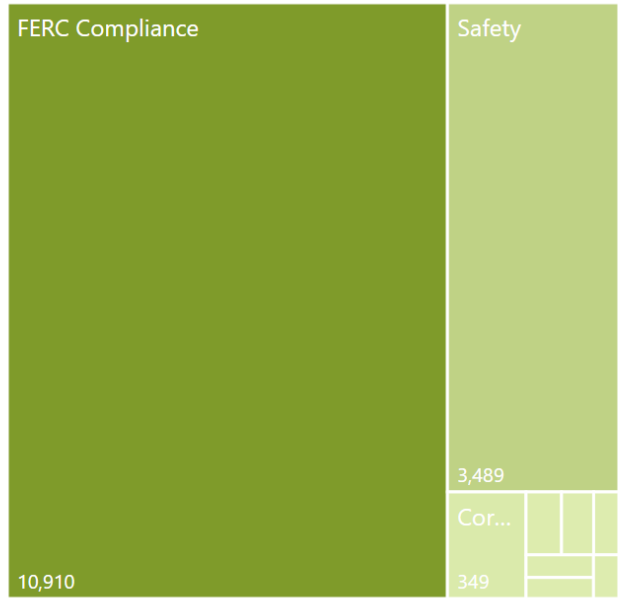
Operating Unit

EB - Power Production

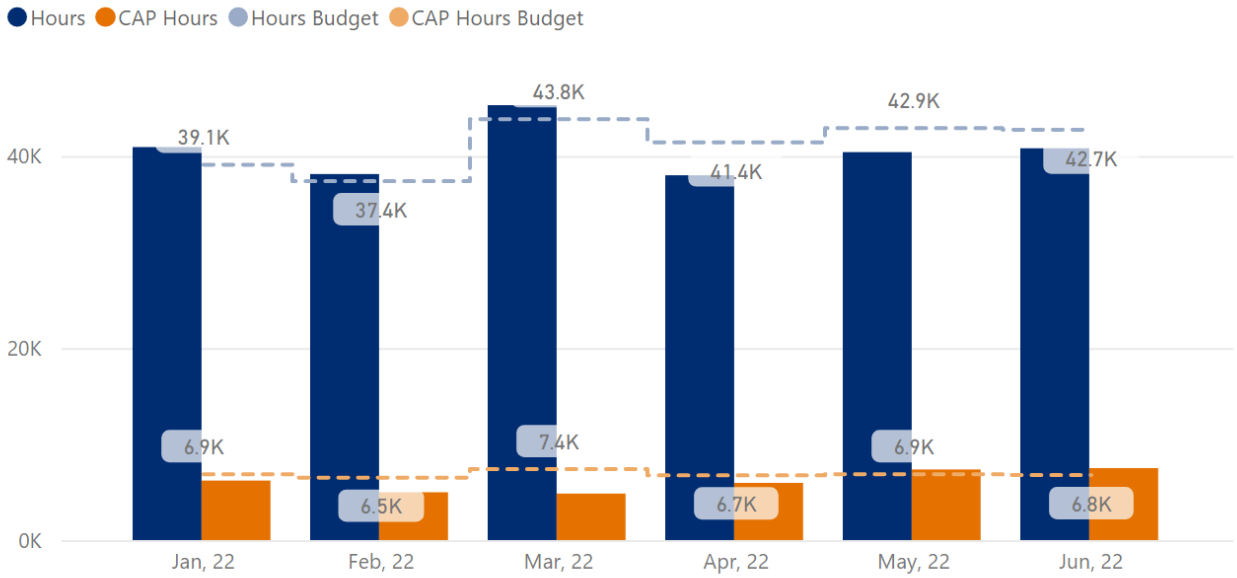
Hours by System



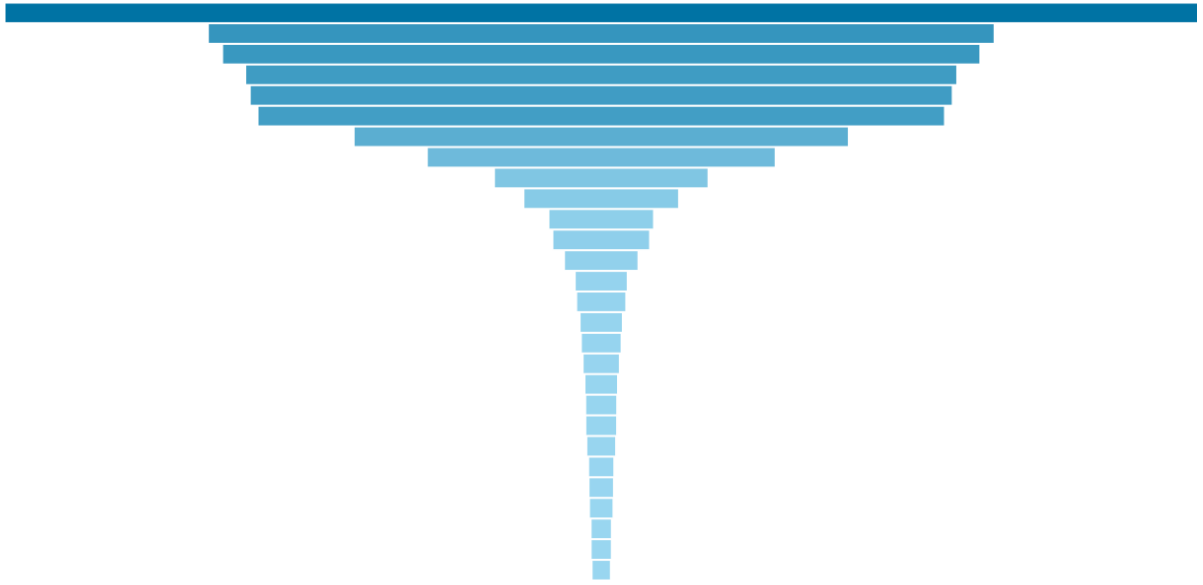
Hours by Program



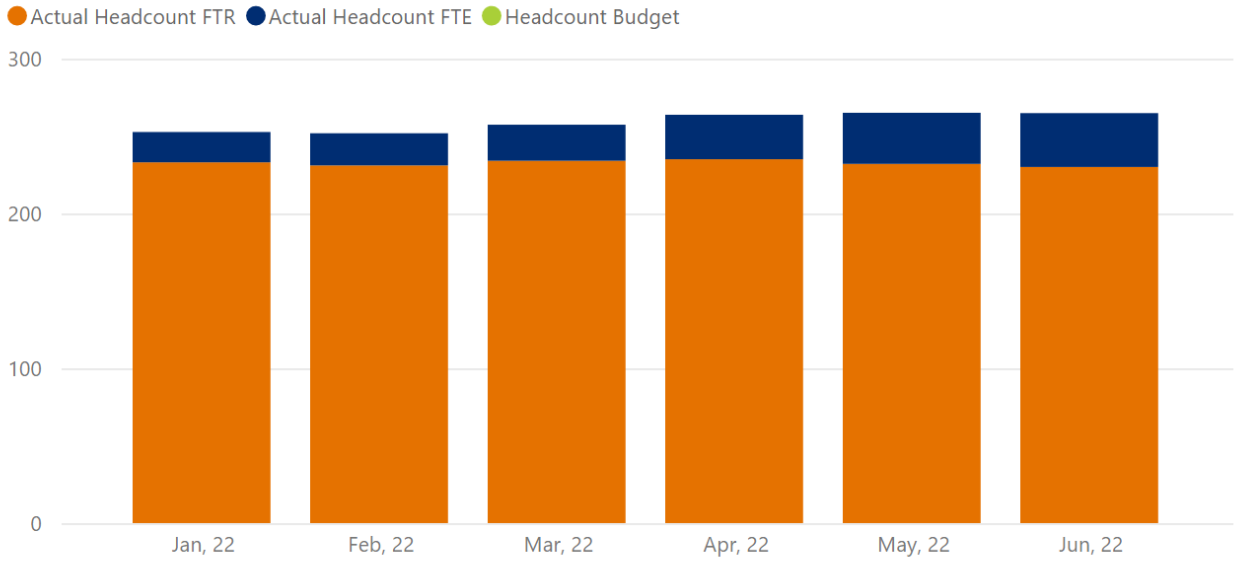
Hours and CAP Hours Vs. Budgets



Hours by Initiative



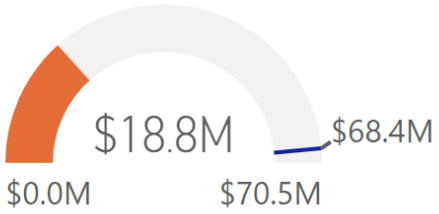
Headcount and Budget by Month & Year



Capital Budget Versus Actuals

PP - Power Production QBR Year-to-Date June, 2022

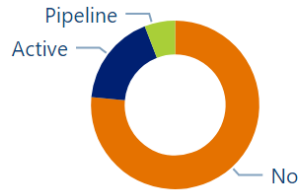
YTD Actuals



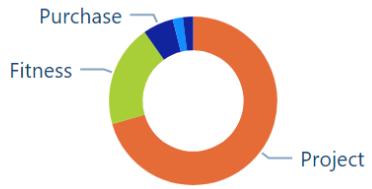
Total Projects

51

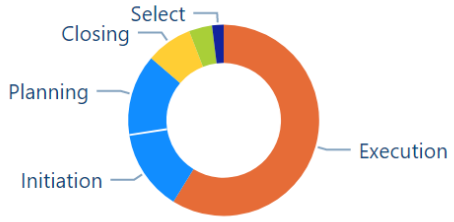
EPMO Management



Project Type



Project Phase



Budget vs Actuals (Capital Directs)

Cost Center	CY Approved Spend	CY Actuals	BOY Fx	CY YEP
EB1000	$6,924,052	$1,557,984	$5,684,129	$7,242,113
EB1100	$58,672,425	$16,160,351	$39,743,606	$55,753,958
EB1200	$1,741,535	$979,202	$1,506,642	$2,485,844
EB1300	$0	$0	$151,200	$151,200
EB4220	$2,755,263	$75,614	$2,350,065	$2,425,679
EB4320	$370,293	$14,385	$341,346	$355,731
Total	**$70,463,568**	**$18,787,537**	**$49,776,988**	**$68,414,525**

Capital Project Update
Investing in the Future

Priest Rapids Right Embankment Improvement Project

- First section RCC complete – June 2022
- Construction Complete – Jan 2024

- PR Unit Rehab
  - P04 – Delayed 1 month; complete July 2022
  - P06 – begins upon completion of P04
- Station Service Upgrades
  - Wan: Complete April 2023
  - PR: Sept 2023 – May 2024

PR Turbine & Generator Audit

Purpose: Ensure we are getting the best value from the Turbine/Generator project

Method: Seek input from industry experts on potential areas of improvement

PR Turbine & Generator Audit Scope of Work

- Review Reports and Information
- Project Site Visit
- Interviews of Staff
- Report and Presentation to Senior Management

PR Turbine & Generator Audit Schedule

Document Review started in May

Tentative Site Visit is in July

Final Report by end of End of September

Personnel
Matching Company Needs with Employee Skills

Environmental Affairs

- Tyler Lawrence – Lands Specialist

Engineering

- Tony Vader – Civil Engineer
- James Smith – Electrical Engineer

Retirements

- Jerri Mickle – License Implementation Supervisor (Aug 3)

Personnel
Matching Company Needs with Employee Skills

Temporary / Seasonal Employees

- Fish Counters
  - Shannon Hake
- Cultural Resources
  - Dreama Wyena
  - Heaven Wyena
  - Jordan Buck

- Lands and Recreation
  - Cody Slaughter
- Engineering
  - Jacob Boswell
  - Sebastian Cordero
  - Hannah Goodspeed

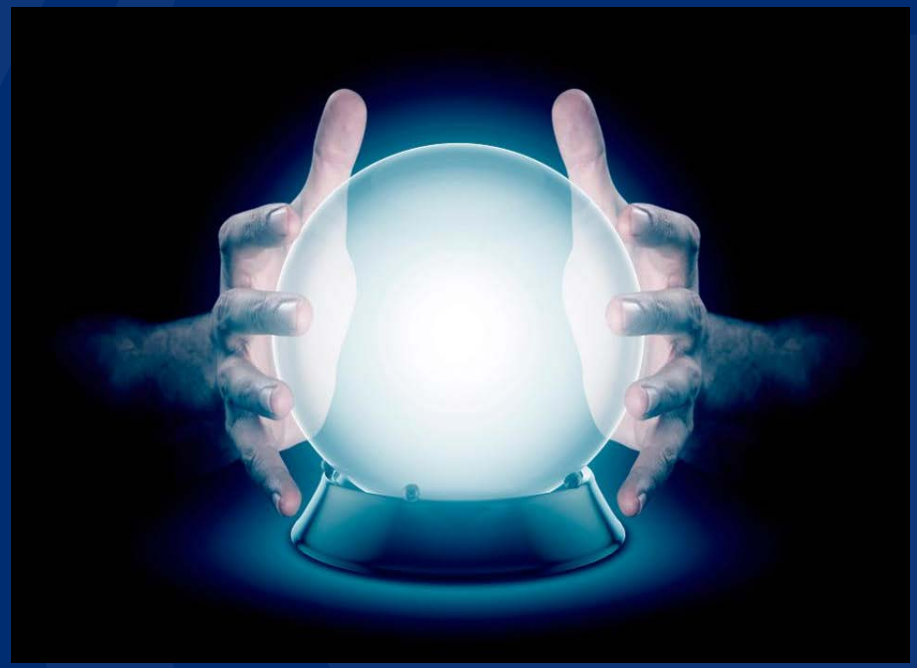
Personnel
Saying Goodbye to a Friend and Colleague

Jack Mizner – Wanapum Operations Supervisor

- Passed Away 7/12/2022
- Jack was a beloved friend, supervisor and peer
- He will be missed and his family will be in our thoughts and prayers

2022 Q2 Forecast
Staying Focused on Safety & Efficiency

- Strategic Initiatives
  - Communicate Top 3 in 2023 and Power Production strategy to employees
  - Work with other business units to align resources
  - Begin executing on 2022-27 strategic plan goals
  - Begin first asset strategy



Powering our way of life.

Q2 RETAIL LOAD VARIANCE REPORT

Contributor:

Amanpreet Singh, Rates & Pricing

July 26th, 2022

Grant PUD

Powering our way of life.

Q2 Summary – Budget Forecast vs. Actual

Load	Budget Forecast Load (aMW)	615
	Actual Load (aMW)	603
	Load Variance (aMW)	(12)
	Load Variance %	-2.0%

- Q2 Loads were **12 aMW**, or **2.0%**, **below** budgeted levels
- If we were to remove Rate Schedule 94, Q2 Loads were **3 aMW**, or **0.6%** **below** budgeted levels

YTD Summary – Budget Forecast vs. Actual

Load	Budget Forecast Load (aMW)	629
	Actual Load (aMW)	632
	Load Variance (aMW)	2
	Load Variance %	0.4%

- YTD Loads were **2 aMW**, or **0.4%**, above budgeted levels.

Rate Schedule Load Variances

Q2 Budget Forecast and Actuals Variance by Rate Schedule				
	2022 Q2 Budget Forecast and Actual Loads (aMW)			
	Forecast	Actual	Difference	Variance %
Residential (1)	69	74	6	8.5%
Commercial (2)	51	50	(2)	-3.1%
Irrigation (3)	81	58	(23)	-28.6%
Streetlights (6)	1	1	0	1.5%
Large General (7)	59	68	9	14.7%
Industrial (14)	34	36	2	5.3%
Industrial (15)	245	255	11	4.3%
Ag Food (16)	35	30	(6)	-15.8%
Evolving Industry (17)	-	-	-	N/A
Ag Food-Boiler (85)	-	-	-	N/A
New Large Load (94)	40	32	(9)	-22.0%
Totals	**615**	**603**	**(12)**	**-2.0%**

Q2 Rate Schedule 1 Residential Differences

Q2 **Residential (RS 1)** actual loads were **74 aMW, 8.5% higher** than budget forecast.

- Colder weather conditions led to Residential load being higher than it would have been given normal weather conditions
- Adjusted for the weather, actual load was **59 aMW**, Residential loads are **13.8% lower** than the budget forecast

Q2 Rate Schedule 2 General Service Differences

Q2 **General Service / Commercial (RS 2)** actual loads were **50 aMW, 3.1% lower** than budget forecast.

- The weather-normalized Commercial actual load is **50 aMW, 2.4% lower** than the budget forecast.
- The May 2022 unemployment rate for Grant County was **5.5%, or 11.3% lower** than in May 2021, which was **6.2%**
  - In February 2022, unemployment was **8.0%**

**Note: the unemployment figures are subject to revision on the website

*Source: St. Louis FED. https://fred.stlouisfed.org/series/WAGRAN5URN#0

Q2 Rate Schedule 3 Irrigation Differences

Q2 **Irrigation (RS 3)** actual loads were **58 aMW, 28.6% lower** than budget forecast.

- More precipitation led to Irrigation load being lower than it would have been given normal weather conditions
- Adjusted for the weather, actual load was **60 aMW**, Irrigation loads are **25.4% lower** than the budget forecast

Q2 Rate Schedule 7 Large General Service Differences

Q2 **Large General (RS 7)** actual loads were **68 aMW, 14.7% above** budget forecast.

- Large commercial growth is largely attributable to increased Cryptocurrency mining and one new customer in Moses Lake.

Q2 Rate Schedule 14 Industrial Differences

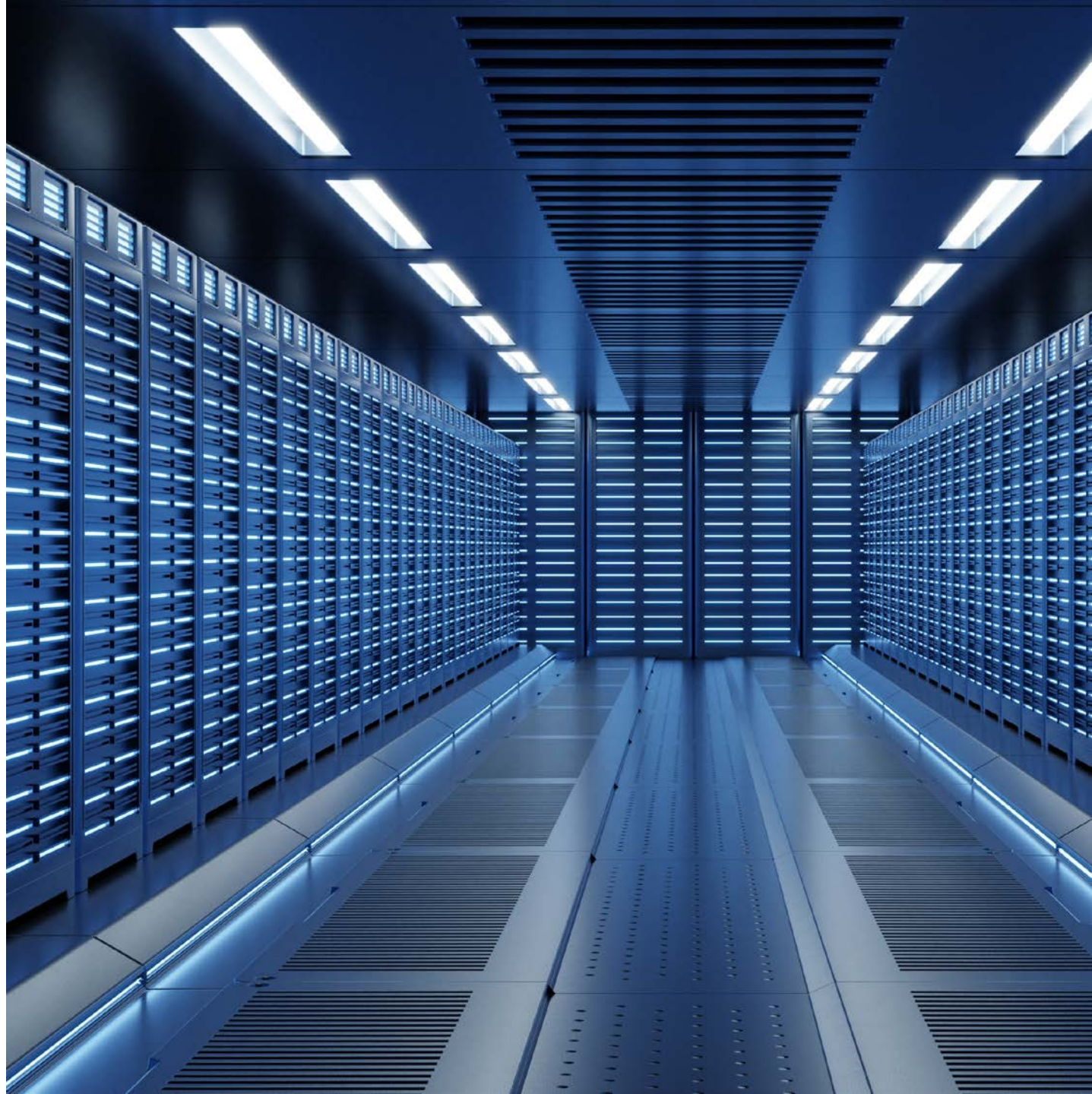
Q2 **Industrial (RS 14)** actual loads were **36 aMW, 5.3% above** budget forecast.

- 2 Data Centers grew faster than forecasted. We should continue to see them come in higher than forecasted for the remainder of the year.

Q2 Rate Schedule 15 Large Industrial Differences

Q2 **Large Industrial (RS 15)** actual loads were **255 aMW, 4.3% above** budget forecast.

- Data centers increasing loads faster than forecasted



Q2 Rate Schedule 16 Ag Food Processors Differences

Q2 **Ag Food Processors (RS 16)** actual loads **were 30 aMW, 15.8% below** budget forecast.

- An agriculture processing customer that had a facility incident is being billed in RS 7
- Few customers coming in lower than forecasted

Q2 Rate Schedule 94 New Large Load Differences

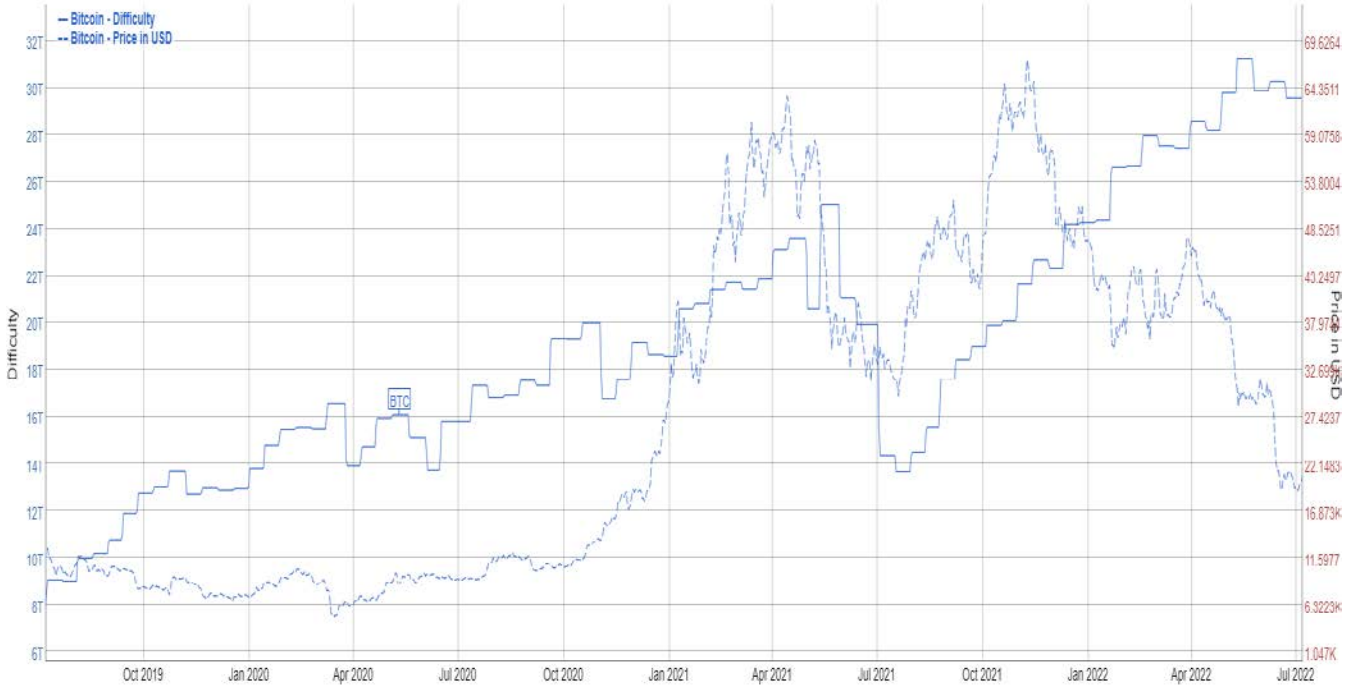
Q2 **New Large Load (RS 94)** actuals were **32 aMW, 22.0% below** budget forecast.

- Decrease in New Large Loads is arising from one customer growing slower than forecasted.

Q2 Cryptocurrency Update

Q2 **Cryptocurrency** actual loads were **~28 aMW**

- Bitcoin's price saw a close to 56% drop in Q2 of 2022
- The global crypto market cap and most of the top crypto assets saw significant pullbacks over the last three months



Source: Bitcoin Difficulty vs. Price in USD Chart (bitinfocharts.com)

Q2 2022 Takeaways

Residential, Commercial, and Irrigation loads are 13.8%, 2.4%, and 25.4% below budget respectively, on a weather adjusted basis.

Net Rate Schedule 7, 14, 15, 16, 85, & 94 actual loads are above the budget forecast by around 7 aMW; with Rate Schedule 7, 16 and 94 having the most variance.

Large Power Solutions and Rates & Pricing are reviewing evolving industries. We will be bringing new proposals this fall after the internal reviews are complete, as discussed in the workshop.

Thank You

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Service	Rate	Icon	Description
Residential Service	1		Single family dwelling, individual apartment or farmhouse for single-phase service.
General Service	2		Accounts with loads not exceeding 500 kW (as measured by Billing Demand) for general service, commercial, multi-residential and miscellaneous outbuilding lighting, heating and power (excepting irrigation service) requirements.
General Service	2F		Single-phase loads not exceeding 500 watts as determined from the equipment's UL listing.
Irrigation Service	3		Customers with irrigation, orchard temperature control or soil drainage loads not exceeding 2,500 horsepower and other miscellaneous power needs including lighting.
Street Lighting Service	6		Street lighting

Service	Rate	Icon	Description
Large General Service	7		Accounts with loads not less than 200 kW or more than 5,000 kW Billing Demand for general service lighting, heating and power requirements. Service will NOT be provided under this rate schedule to process heating or boiler service loads greater than 3,000 kW unless such loads were served on this rate schedule prior to January 1, 2001.
Industrial Service	14		Industrial customers whose Billing Demand is greater than 5 MW/MVA and less than 15 MW/MVA
Large Industrial Service	15		Industrial customers whose Billing Demand is greater than or equal to 15 MW/MVA
AG Food Processing Service	16		Customers whose Billing Demand is greater than 5 MW/MVA and less than 15 MW/MVA at plants where the primary purpose is processing, canning, freezing or the frozen storage of agricultural food crops (including livestock, poultry and fish)

Service	Rate	Icon	Description
Evolving Industry	17		Retail customers whose energy load activity and/or industry meets the requirements of the Evolving Industry definition as detailed in the rate document.
AG Food Processing Boiler Service	85		Electric boilers which are separately metered and are primarily used for the purpose of processing, canning, or freezing agricultural food crops (including livestock, poultry and fish)
New Large Load	94		All New Large Loads, as defined by the District's Customer Service Policies. Service to such loads will be in accordance with the terms of this rate schedule.

2023 Budget Forecast Commission Presentation

July 26th, 2022

Amanpreet Singh, Rates & Pricing

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Forecast Agenda

- Retail Sales Forecast
  - Total Retail
  - Residential Service Rate 1
  - General Service Rate 2
  - Irrigation Service Rate 3
  - Street Lighting Service Rate 6
  - Large General Service Rate 7
  - Total Industrial
  - Industrial Service Rate 14
  - Large Industrial Service Rate 15
  - Agricultural Food Processing Service Rate 16
  - New Large Load Service Rate 94
  - Q&A

Retail Sales Forecast

Retails Sales by Rate Class and Customer

Total Retail Sales

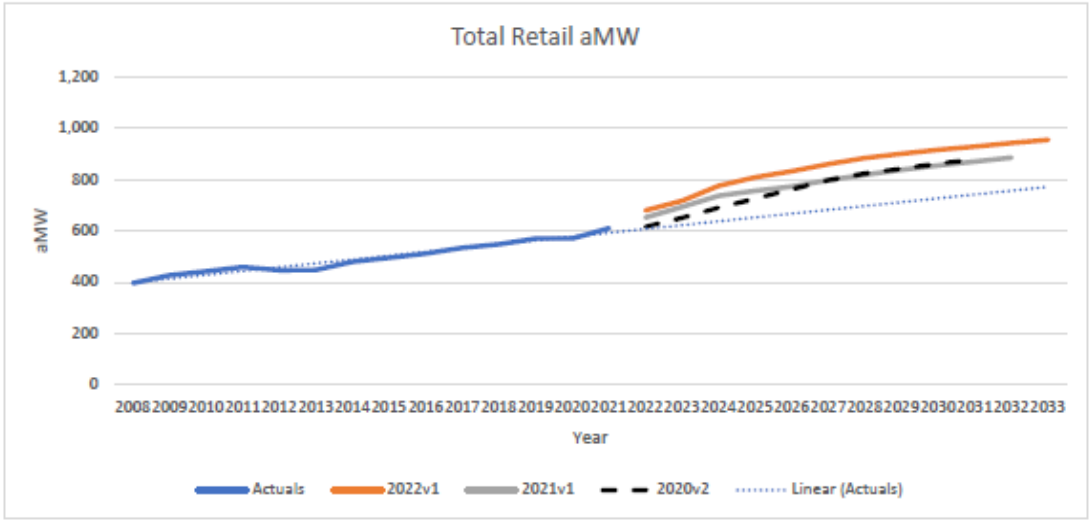
Year	Actuals	2022v1	YoY
2008	397		
2009	427		7.5%
2010	442		3.5%
2011	459		3.9%
2012	447		-2.7%
2013	448		0.3%
2014	480		7.2%
2015	495		3.2%
2016	512		3.4%
2017	534		4.2%
2018	547		2.5%
2019	571		4.4%
2020	570		-0.1%
2021	611		7.1%
2022		680	11.3%
2023		718	5.6%
2024		776	8.1%
2025		808	4.2%
2026		832	3.0%
2027		861	3.4%
2028		884	2.7%
2029		901	1.9%
2030		915	1.6%
2031		929	1.5%
2032		941	1.3%
2033		955	1.5%

CAGR	
3 Year (2023-2025)	4.0%
5 Year (2023-2027)	3.7%
10 Year (2023-2032)	2.8%

Year	Actuals	2021v1	YoY
2008	397		
2009	427		7.5%
2010	442		3.5%
2011	459		3.9%
2012	447		-2.7%
2013	448		0.3%
2014	480		7.2%
2015	495		3.2%
2016	512		3.4%
2017	534		4.2%
2018	547		2.5%
2019	571		4.4%
2020	570		-0.1%
2021	611	603	5.8%
2022		653	8.1%
2023		693	6.2%
2024		736	6.2%
2025		756	2.6%
2026		774	2.4%
2027		798	3.1%
2028		818	2.6%
2029		838	2.4%
2030		856	2.1%
2031		870	1.6%
2032		885	1.8%
2033		895	1.1%

CAGR	
3 Year (2023-2025)	2.9%
5 Year (2023-2027)	2.8%
10 Year (2023-2032)	2.5%

2022v1-2021v1	
Change	% Diff
27	4.2%
24	3.5%
39	5.4%
53	7.0%
59	7.6%
63	7.9%
65	8.0%
63	7.5%
60	7.0%
59	6.8%
56	6.3%
60	6.7%



Rate Schedule 1
Residential

Rate Schedule 1

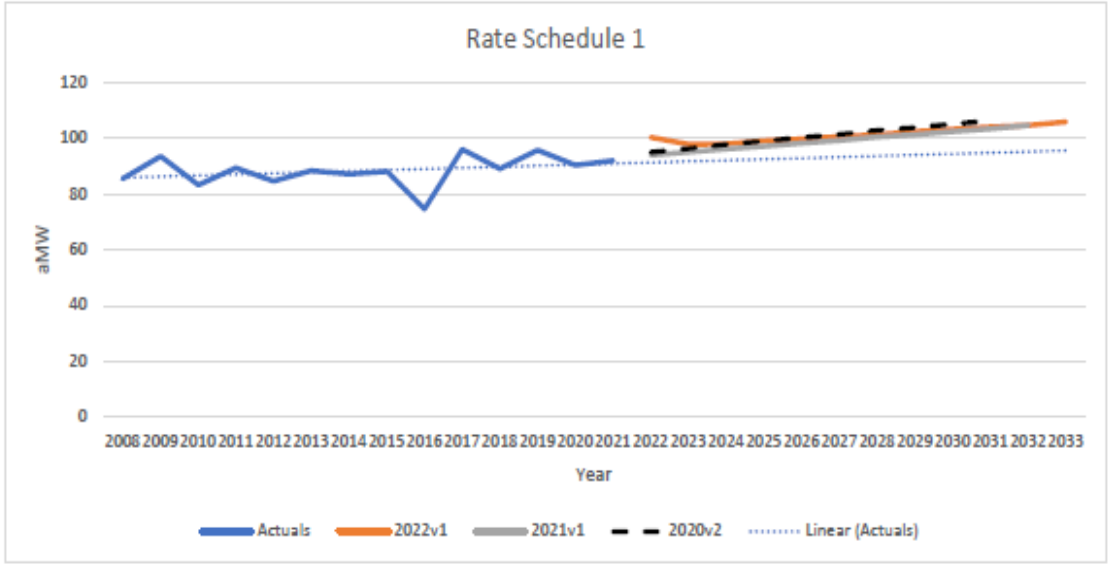
Year	Actuals	2022v1	YoY
2008	85		
2009	94		9.5%
2010	83		-11.0%
2011	89		7.3%
2012	85		-5.3%
2013	88		4.5%
2014	87		-1.3%
2015	88		1.0%
2016	75		-15.3%
2017	96		28.7%
2018	89		-7.2%
2019	96		7.5%
2020	90		-5.7%
2021	92		1.9%
2022		100	9.1%
2023		98	-2.5%
2024		98	0.2%
2025		99	1.0%
2026		100	0.8%
2027		101	0.9%
2028		101	0.6%
2029		102	1.1%
2030		103	0.9%
2031		104	0.8%
2032		105	0.6%
2033		106	1.1%

CAGR	
3 Year (2023-2025)	0.4%
5 Year (2023-2027)	0.6%
10 Year (2023-2032)	0.7%

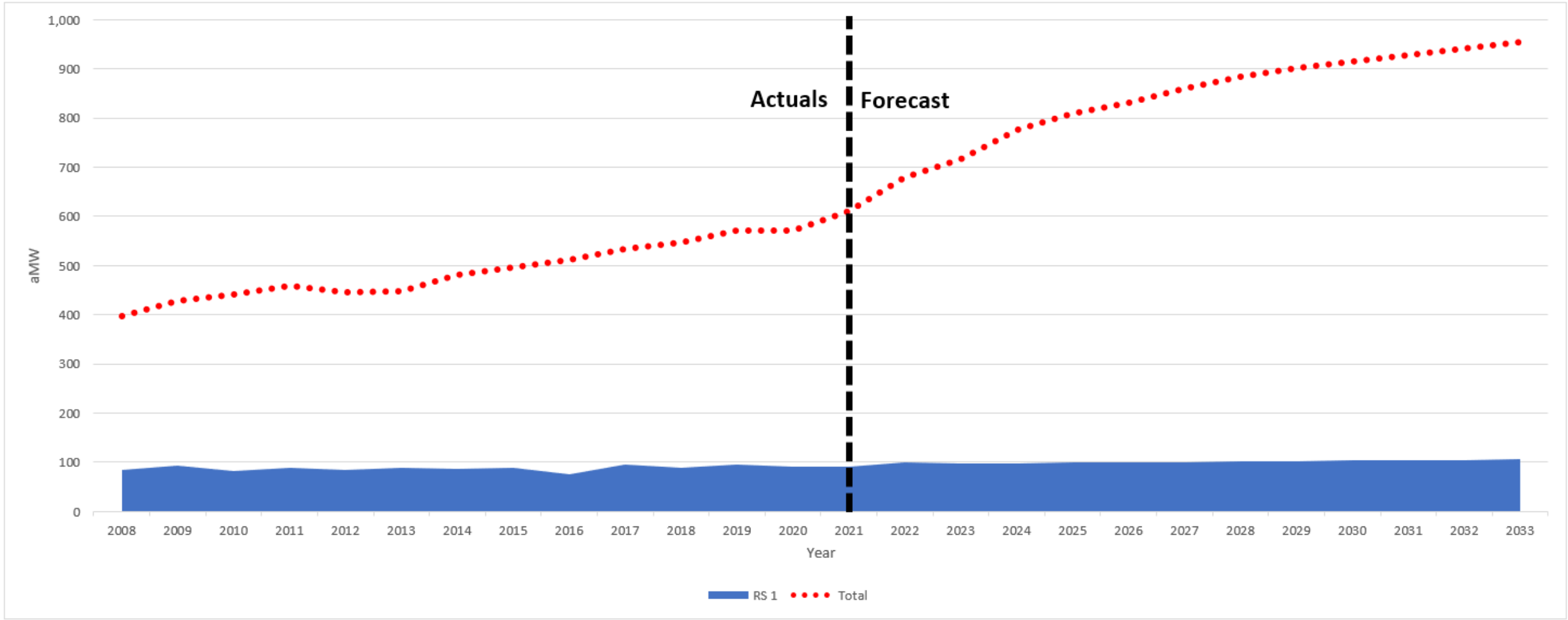
Year	Actuals	2021v1	YoY
2008	85		
2009	94		9.5%
2010	83		-11.0%
2011	89		7.3%
2012	85		-5.3%
2013	88		4.5%
2014	87		-1.3%
2015	88		1.0%
2016	75		-15.3%
2017	96		28.7%
2018	89		-7.2%
2019	96		7.5%
2020	90		-5.7%
2021	92	93	2.5%
2022		94	1.5%
2023		95	1.2%
2024		96	1.3%
2025		97	1.0%
2026		98	1.0%
2027		99	1.1%
2028		100	1.2%
2029		101	0.9%
2030		102	1.0%
2031		103	1.0%
2032		105	1.2%
2033		105	0.8%

CAGR	
3 Year (2023-2025)	0.8%
5 Year (2023-2027)	0.9%
10 Year (2023-2032)	1.0%

2022v1-2021v1	
Change	% Diff
6	6.8%
3	3.0%
2	1.8%
2	1.9%
2	1.6%
1	1.4%
1	0.8%
1	1.0%
1	0.9%
1	0.7%
0	0.1%
0	0.4%



Retail Sales Add Rate Schedule 1



Rate Schedule 2
General Service

Rate Schedule 2

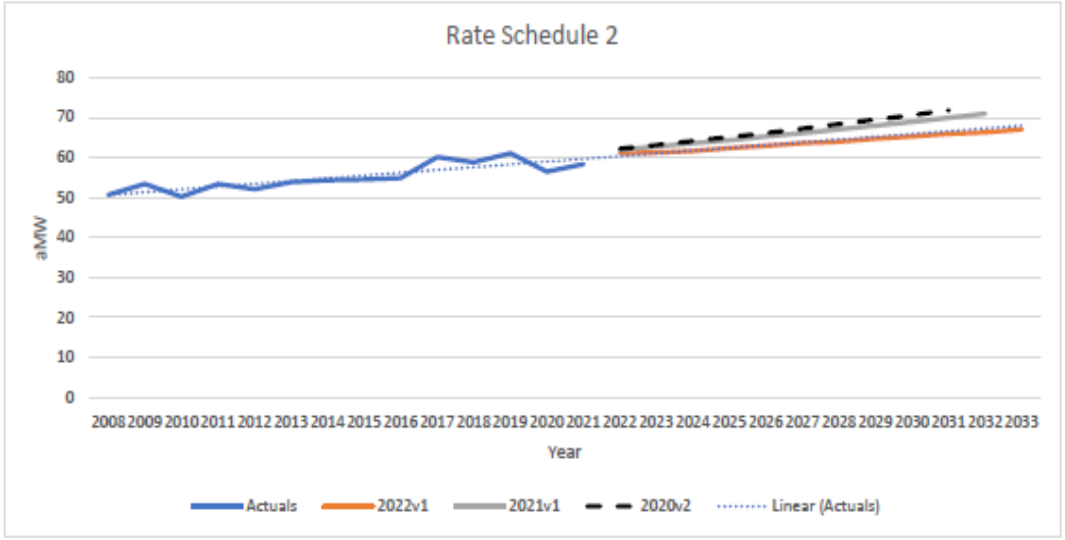
Year	Actuals	2022v1	YoY
2008	51		
2009	53		5.4%
2010	50		-5.8%
2011	53		6.2%
2012	52		-2.4%
2013	54		3.4%
2014	54		0.9%
2015	55		0.5%
2016	55		0.6%
2017	60		9.5%
2018	59		-2.2%
2019	61		3.8%
2020	57		-7.4%
2021	58		3.2%
2022		61	4.7%
2023		61	0.3%
2024		62	0.6%
2025		62	1.2%
2026		63	0.9%
2027		64	0.9%
2028		64	0.7%
2029		65	1.2%
2030		65	0.9%
2031		66	0.9%
2032		66	0.6%
2033		67	1.1%

CAGR	
3 Year (2023-2025)	0.6%
5 Year (2023-2027)	0.7%
10 Year (2023-2032)	0.8%

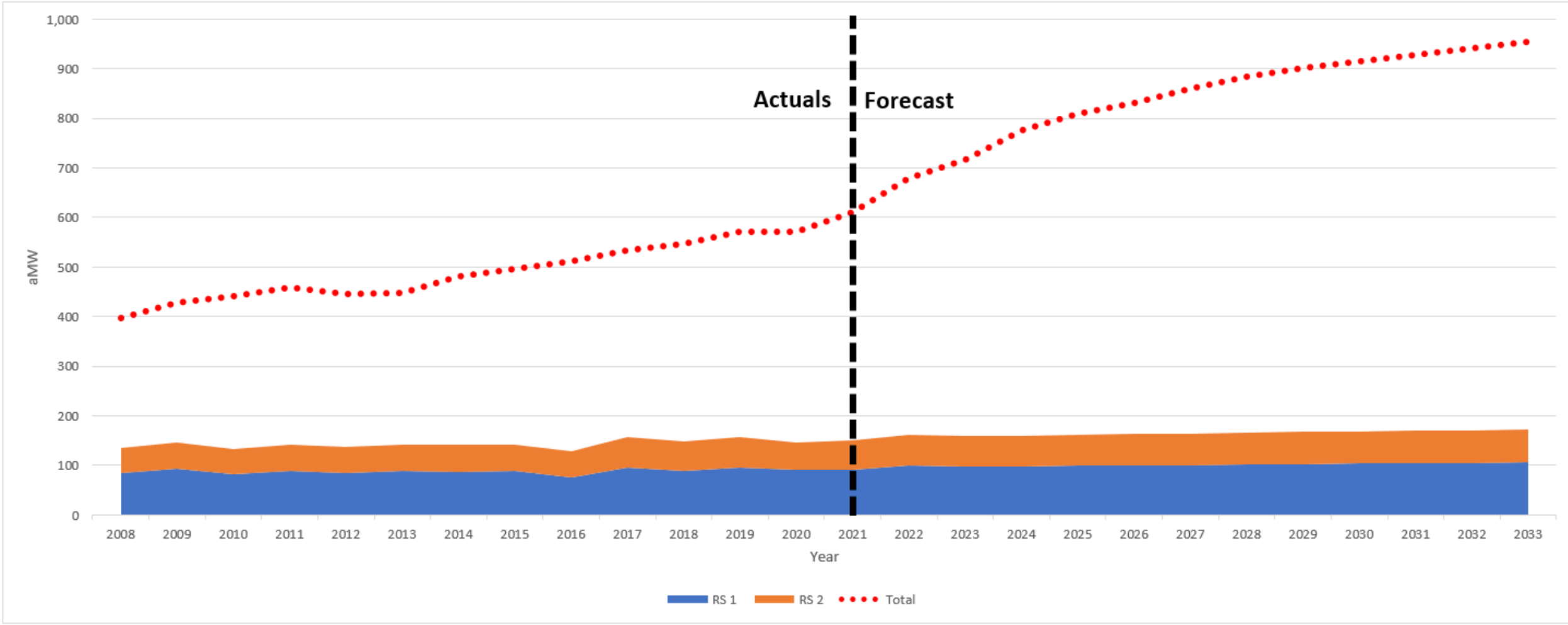
Year	Actuals	2021v1	YoY
2008	51		
2009	53		5.4%
2010	50		-5.8%
2011	53		6.2%
2012	52		-2.4%
2013	54		3.4%
2014	54		0.9%
2015	55		0.5%
2016	55		0.6%
2017	60		9.5%
2018	59		-2.2%
2019	61		3.8%
2020	57		-7.4%
2021	58	59	4.6%
2022		62	4.7%
2023		63	1.3%
2024		64	1.4%
2025		64	1.2%
2026		65	1.3%
2027		66	1.3%
2028		67	1.5%
2029		68	1.3%
2030		69	1.4%
2031		70	1.4%
2032		71	1.5%
2033		72	1.3%

CAGR	
3 Year (2023-2025)	0.9%
5 Year (2023-2027)	1.1%
10 Year (2023-2032)	1.2%

2022v1-2021v1	
Change	% Diff
-1	-1.3%
-1	-2.3%
-2	-3.1%
-2	-3.1%
-2	-3.5%
-3	-3.9%
-3	-4.6%
-3	-4.7%
-4	-5.2%
-4	-5.7%
-5	-6.5%
-5	-6.7%



Retail Sales Add Rate Schedule 2



Rate Schedule 3
Irrigation

Rate Schedule 3

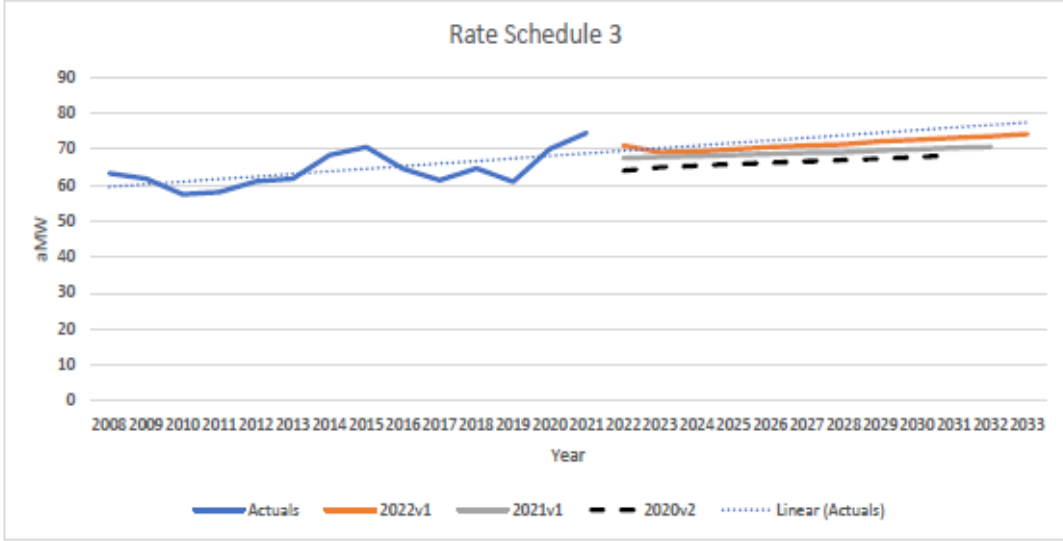
Year	Actuals	2022v1	YoY
2008	63		
2009	62		-2.2%
2010	58		-7.1%
2011	58		1.1%
2012	61		5.1%
2013	62		1.3%
2014	68		10.7%
2015	71		3.2%
2016	65		-8.6%
2017	61		-4.9%
2018	65		5.4%
2019	61		-5.9%
2020	70		15.0%
2021	75		6.3%
2022		71	-4.6%
2023		69	-2.8%
2024		69	0.4%
2025		70	1.0%
2026		71	0.7%
2027		71	0.7%
2028		71	0.5%
2029		72	1.0%
2030		73	0.7%
2031		73	0.7%
2032		74	0.4%
2033		74	1.0%

CAGR	
3 Year (2023-2025)	0.5%
5 Year (2023-2027)	0.6%
10 Year (2023-2032)	0.6%

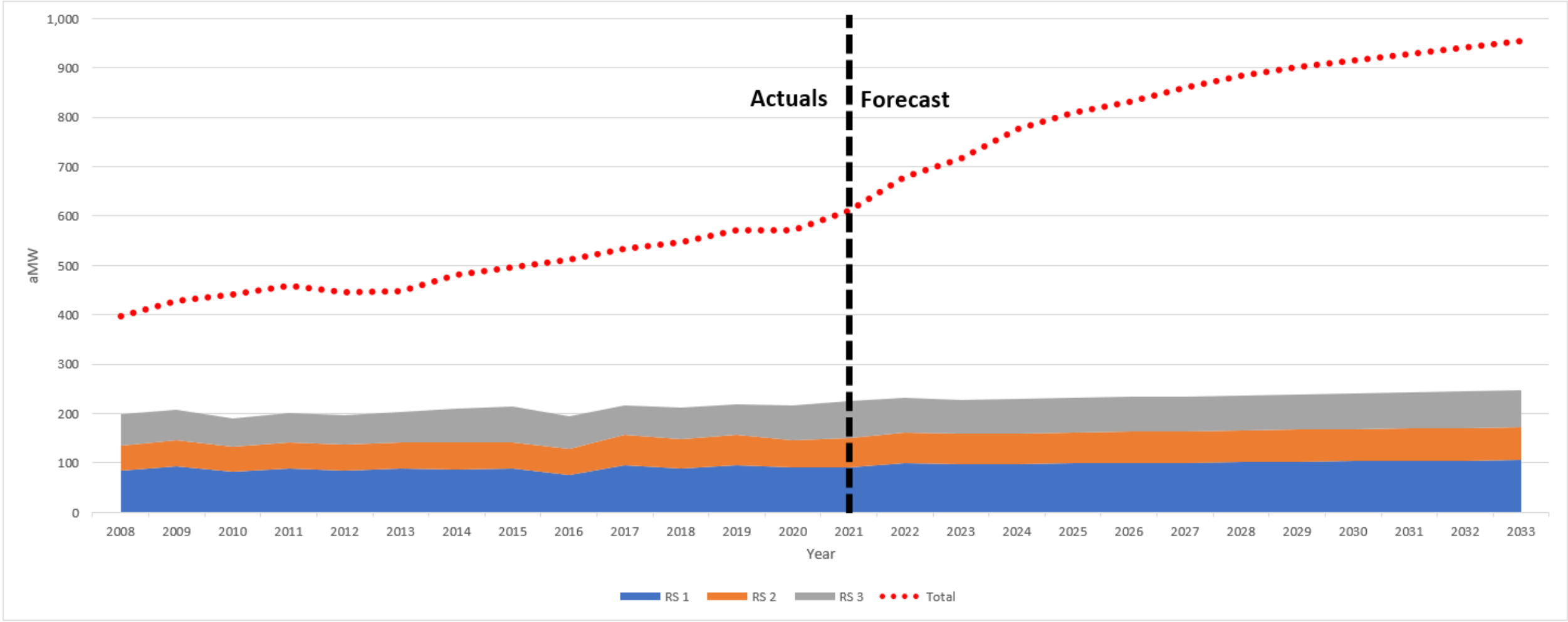
Year	Actuals	2021v1	YoY
2008	63		
2009	62		-2.2%
2010	58		-7.1%
2011	58		1.1%
2012	61		5.1%
2013	62		1.3%
2014	68		10.7%
2015	71		3.2%
2016	65		-8.6%
2017	61		-4.9%
2018	65		5.4%
2019	61		-5.9%
2020	70		15.0%
2021	75	66	-5.5%
2022		68	2.0%
2023		68	0.5%
2024		68	0.2%
2025		68	0.7%
2026		69	0.4%
2027		69	0.4%
2028		69	0.2%
2029		70	0.8%
2030		70	0.5%
2031		70	0.5%
2032		71	0.2%
2033		71	0.7%

CAGR	
3 Year (2023-2025)	0.3%
5 Year (2023-2027)	0.3%
10 Year (2023-2032)	0.4%

2022v1-2021v1	
Change	% Diff
3	5.1%
1	1.7%
1	2.0%
2	2.3%
2	2.7%
2	3.0%
2	3.3%
2	3.5%
3	3.8%
3	4.0%
3	4.2%
3	4.5%



Retail Sales Add Rate Schedule 3



Rate Schedule 6

Street Lights

Rate Schedule 6

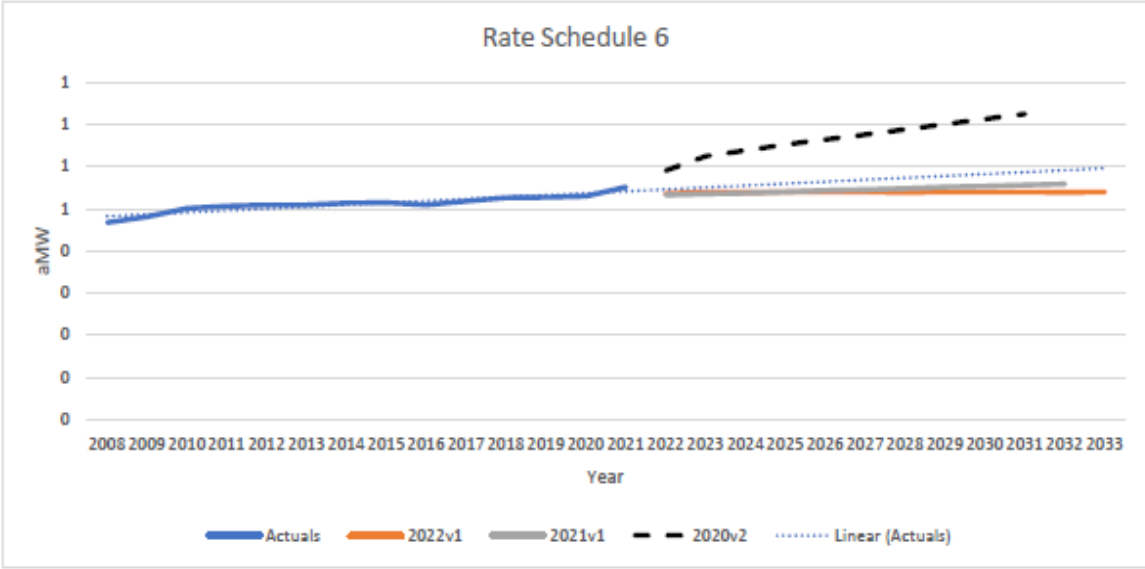
Year	Actuals	2022v1	YoY
2008	0.47		
2009	0.48		2.8%
2010	0.50		4.3%
2011	0.51		1.0%
2012	0.51		0.6%
2013	0.51		0.0%
2014	0.51		0.9%
2015	0.52		0.2%
2016	0.51		-1.0%
2017	0.52		1.6%
2018	0.53		1.6%
2019	0.53		0.2%
2020	0.53		0.4%
2021	0.55		4.2%
2022		0.54	-2.9%
2023		0.54	0.8%
2024		0.54	-0.3%
2025		0.54	0.3%
2026		0.54	0.0%
2027		0.54	0.0%
2028		0.54	-0.3%
2029		0.54	0.3%
2030		0.54	0.0%
2031		0.54	0.0%
2032		0.54	-0.3%
2033		0.54	0.3%

CAGR	
3 Year (2023-2025)	0.0%
5 Year (2023-2027)	0.0%
10 Year (2023-2032)	0.0%

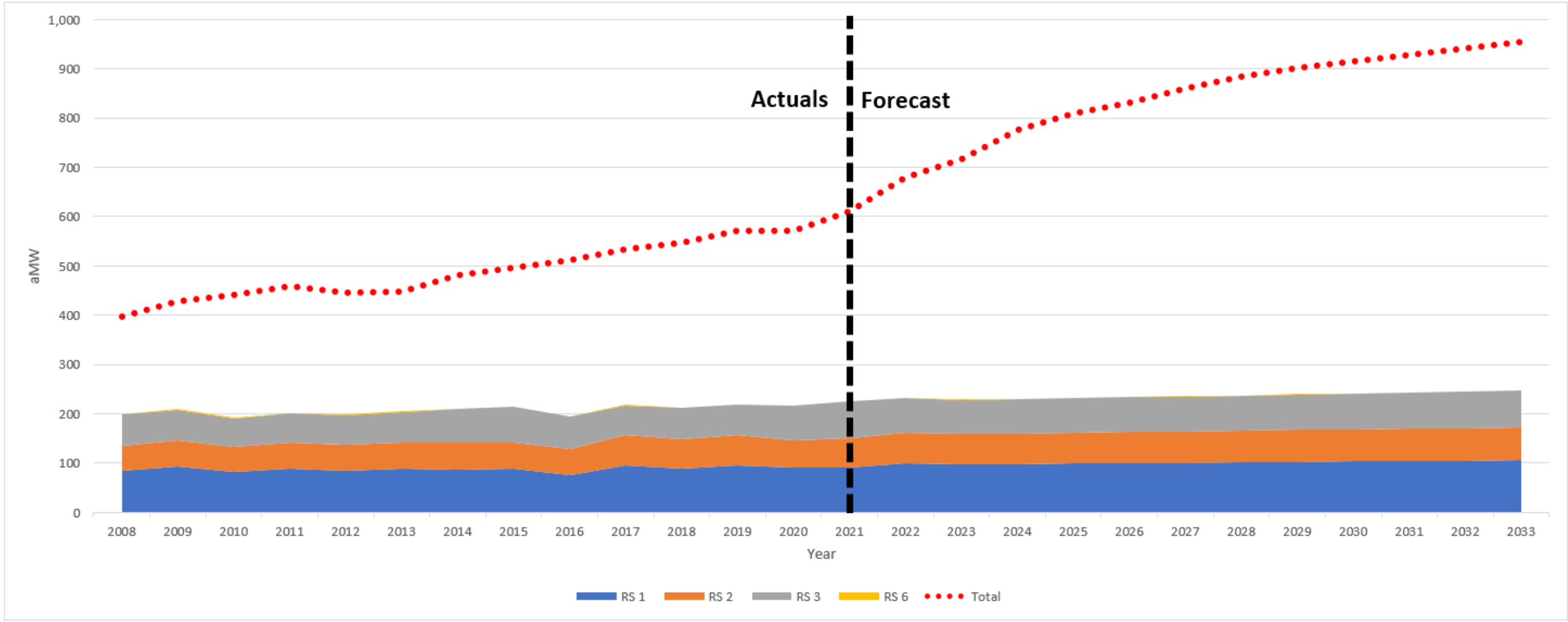
Year	Actuals	2021v1	YoY
2008	0.47		
2009	0.48		2.8%
2010	0.50		4.3%
2011	0.51		1.0%
2012	0.51		0.6%
2013	0.51		0.0%
2014	0.51		0.9%
2015	0.52		0.2%
2016	0.51		-1.0%
2017	0.52		1.6%
2018	0.53		1.6%
2019	0.53		0.2%
2020	0.53		0.4%
2021	0.55	0.51	-4.2%
2022		0.53	4.9%
2023		0.54	0.5%
2024		0.54	0.5%
2025		0.54	0.5%
2026		0.54	0.5%
2027		0.55	0.5%
2028		0.55	0.5%
2029		0.55	0.5%
2030		0.55	0.5%
2031		0.56	0.5%
2032		0.56	0.5%
2033		0.56	0.5%

CAGR	
3 Year (2023-2025)	0.3%
5 Year (2023-2027)	0.4%
10 Year (2023-2032)	0.4%

2022v1-2021v1	
Change	% Diff
0	0.7%
0	0.9%
0	0.2%
0	-0.1%
0	-0.5%
0	-1.0%
0	-1.8%
0	-2.0%
0	-2.5%
0	-2.9%
0	-3.7%
0	-3.9%



Retail Sales Add Rate Schedule 6



Rate Schedule 7

Large General Service

Rate Schedule 7

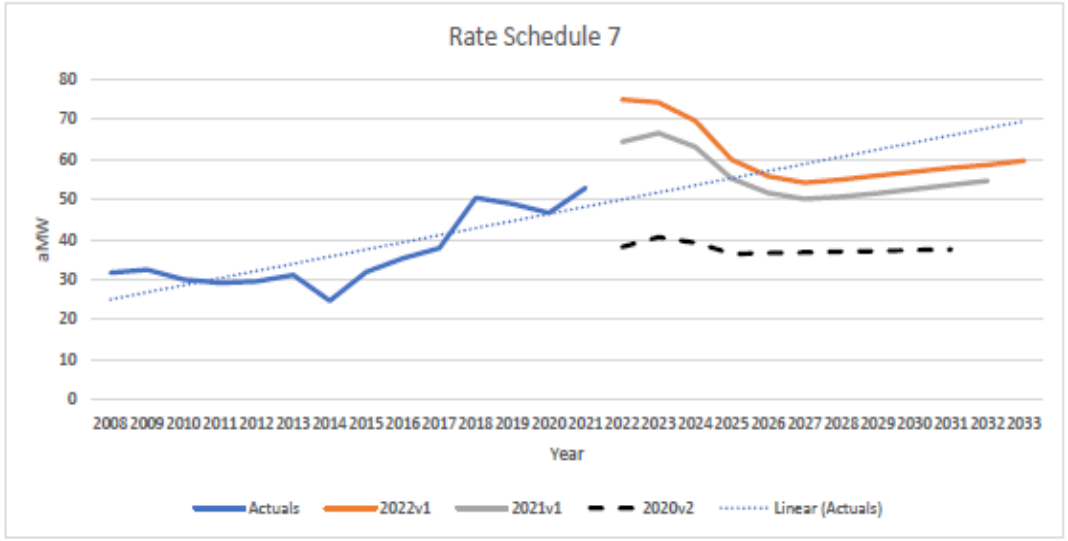
Year	Actuals	2022v1	YoY
2008	32		
2009	32		2.3%
2010	30		-7.4%
2011	29		-3.0%
2012	30		1.4%
2013	31		5.4%
2014	25		-20.7%
2015	32		29.3%
2016	35		10.5%
2017	38		7.4%
2018	50		33.0%
2019	49		-3.0%
2020	47		-4.7%
2021	53		13.5%
2022		75	41.8%
2023		74	-1.1%
2024		70	-6.1%
2025		60	-14.0%
2026		56	-6.8%
2027		54	-3.0%
2028		55	1.4%
2029		56	1.9%
2030		57	1.6%
2031		58	1.6%
2032		59	1.4%
2033		60	1.8%

CAGR	
3 Year (2023-2025)	-6.9%
5 Year (2023-2027)	-6.1%
10 Year (2023-2032)	-2.3%

Year	Actuals	2021v1	YoY
2008	32		
2009	32		2.3%
2010	30		-7.4%
2011	29		-3.0%
2012	30		1.4%
2013	31		5.4%
2014	25		-20.7%
2015	32		29.3%
2016	35		10.5%
2017	38		7.4%
2018	50		33.0%
2019	49		-3.0%
2020	47		-4.7%
2021	53	54	15.2%
2022		64	20.0%
2023		67	3.4%
2024		63	-5.2%
2025		55	-12.5%
2026		52	-6.4%
2027		50	-2.9%
2028		51	1.2%
2029		52	1.6%
2030		53	1.9%
2031		54	2.2%
2032		55	1.8%
2033		55	1.2%

CAGR	
3 Year (2023-2025)	-6.1%
5 Year (2023-2027)	-5.5%
10 Year (2023-2032)	-2.0%

2022v1-2021v1	
Change	% Diff
11	16.4%
8	11.4%
7	10.4%
5	8.6%
4	8.1%
4	8.1%
4	8.3%
4	8.6%
4	8.3%
4	7.7%
4	7.2%
4	7.9%



Rate Schedule 7 No Cryptocurrency

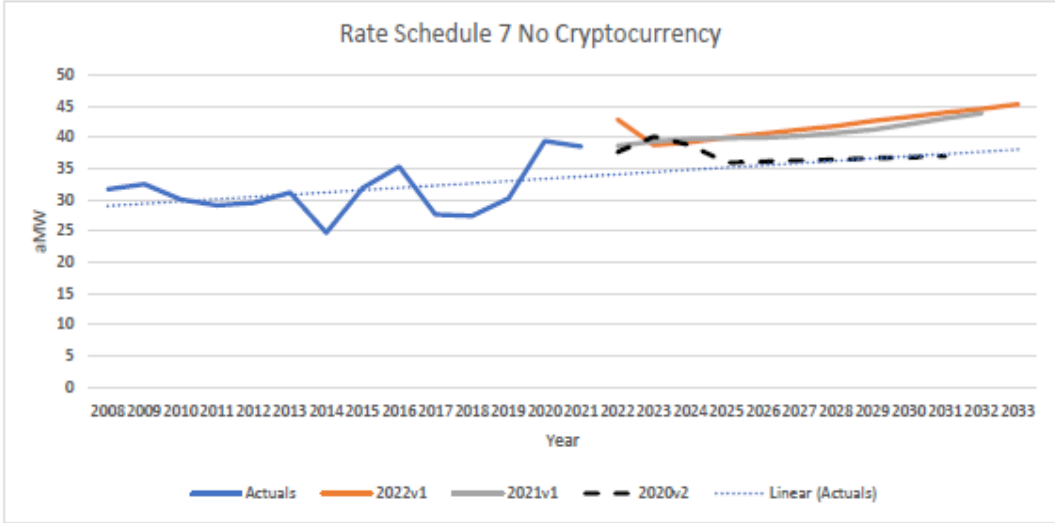
Year	Actuals	2022v1	YoY
2008	32		
2009	32		2.3%
2010	30		-7.4%
2011	29		-3.0%
2012	30		1.4%
2013	31		5.4%
2014	25		-20.7%
2015	32		29.3%
2016	35		10.5%
2017	28		-21.7%
2018	27		-0.9%
2019	30		10.3%
2020	39		30.3%
2021	39		-2.1%
2022		43	11.1%
2023		39	-9.5%
2024		39	1.3%
2025		40	1.8%
2026		41	1.6%
2027		41	1.6%
2028		42	1.3%
2029		43	1.9%
2030		43	1.6%
2031		44	1.6%
2032		45	1.2%
2033		45	1.8%

CAGR	
3 Year (2023-2025)	1.0%
5 Year (2023-2027)	1.3%
10 Year (2023-2032)	1.4%

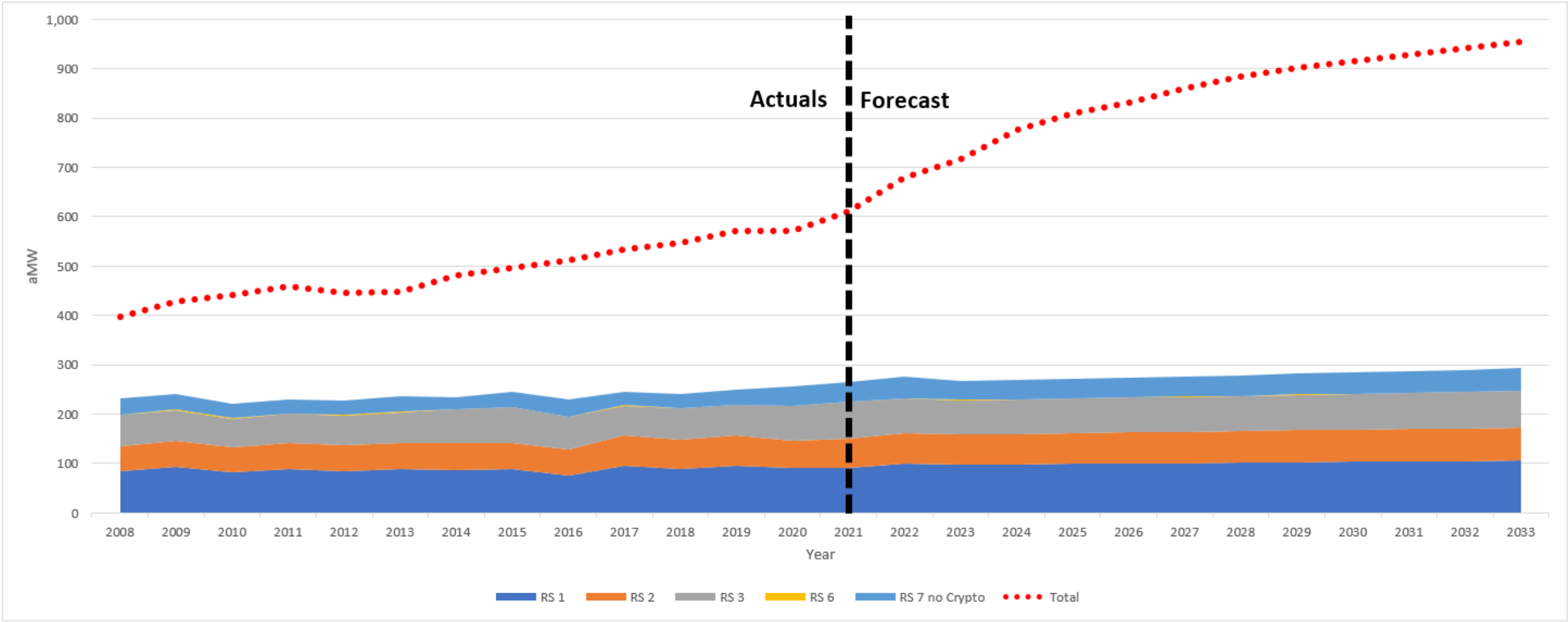
Year	Actuals	2021v1	YoY
2008	32		
2009	32		2.3%
2010	30		-7.4%
2011	29		-3.0%
2012	30		1.4%
2013	31		5.4%
2014	25		-20.7%
2015	32		29.3%
2016	35		10.5%
2017	28		-21.7%
2018	27		-0.9%
2019	30		10.3%
2020	39		30.3%
2021	39	39	-0.5%
2022		39	-1.4%
2023		39	1.9%
2024		40	1.0%
2025		40	0.3%
2026		40	0.2%
2027		40	0.7%
2028		41	1.1%
2029		41	1.5%
2030		42	2.0%
2031		43	2.3%
2032		44	1.8%
2033		44	1.0%

CAGR	
3 Year (2023-2025)	0.4%
5 Year (2023-2027)	0.4%
10 Year (2023-2032)	1.1%

2022v1-2021v1	
Change	% Diff
4	10.8%
-1	-1.6%
0	-1.3%
0	0.2%
1	1.7%
1	2.6%
1	2.9%
1	3.3%
1	2.9%
1	2.1%
1	1.5%
1	2.3%



Retail Sales Add Rate Schedule 7 No Cryptocurrency



Rate Schedule 7 Cryptocurrency

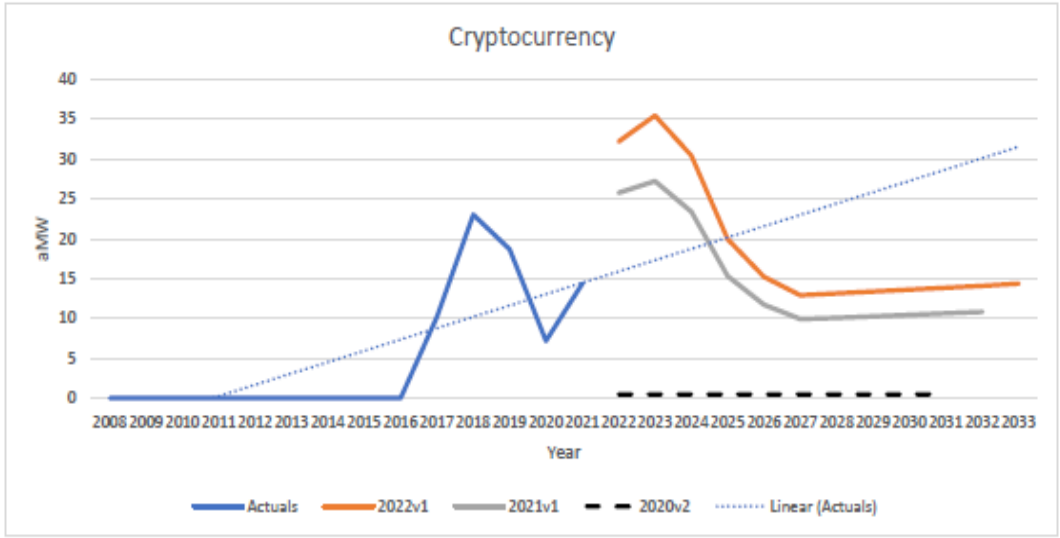
Year	Actuals	2022v1	YoY
2008	0		
2009	0		
2010	0		
2011	0		
2012	0		
2013	0		
2014	0		
2015	0		
2016	0		
2017	10		
2018	23		124.6%
2019	19		-19.0%
2020	7		-61.3%
2021	14		98.9%
2022		32	124.3%
2023		35	10.2%
2024		30	-14.1%
2025		20	-34.4%
2026		15	-23.7%
2027		13	-15.2%
2028		13	1.8%
2029		13	1.8%
2030		14	1.8%
2031		14	1.8%
2032		14	1.8%
2033		14	1.8%

CAGR	
3 Year (2023-2025)	-17.4%
5 Year (2023-2027)	-18.3%
10 Year (2023-2032)	-8.8%

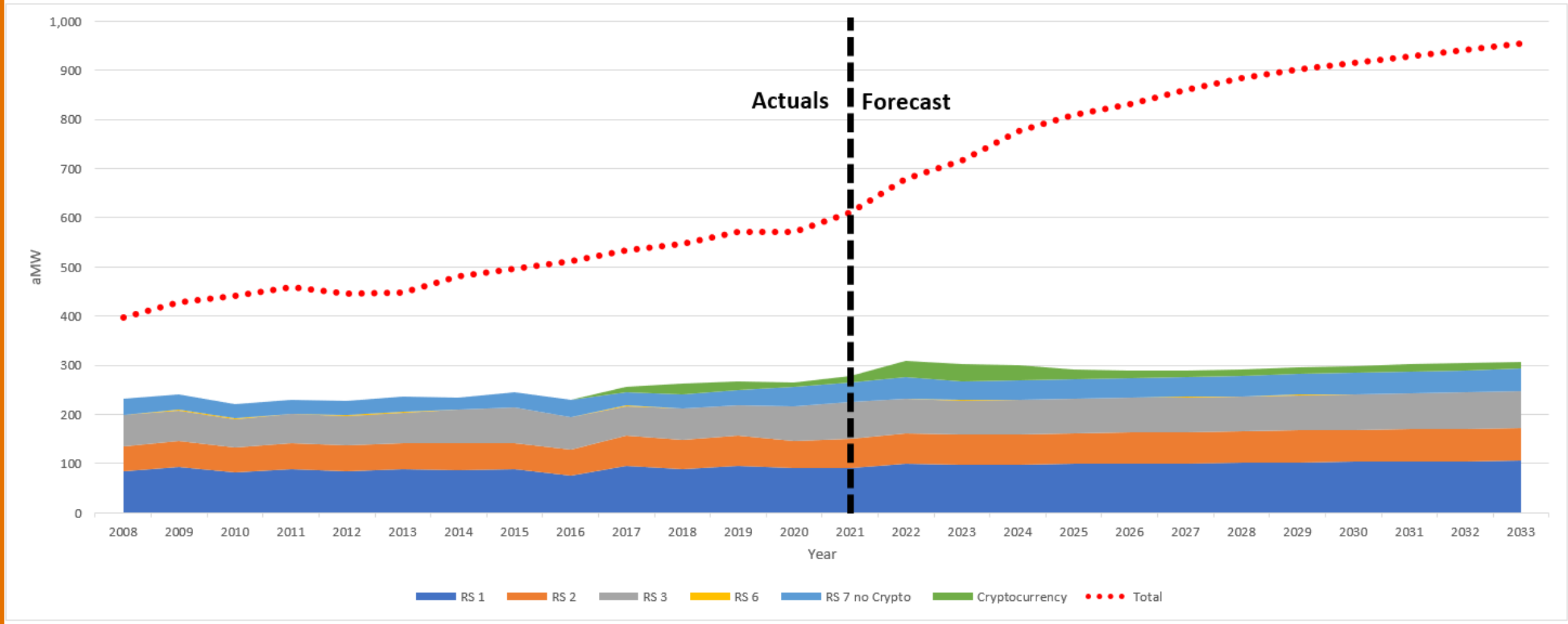
Year	Actuals	2021v1	YoY
2008	0		
2009	0		
2010	0		
2011	0		
2012	0		
2013	0		
2014	0		
2015	0		
2016	0		
2017	10		
2018	23		124.6%
2019	19		-19.0%
2020	7		-61.3%
2021	14	14	100.6%
2022		26	78.2%
2023		27	5.6%
2024		23	-14.1%
2025		15	-34.4%
2026		12	-23.7%
2027		10	-15.2%
2028		10	1.8%
2029		10	1.8%
2030		10	1.8%
2031		11	1.8%
2032		11	1.8%
2033		11	1.8%

CAGR	
3 Year (2023-2025)	-17.4%
5 Year (2023-2027)	-18.3%
10 Year (2023-2032)	-8.8%

2022v1-2021v1	
Change	% Diff
6	24.8%
8	30.2%
7	30.2%
5	30.2%
4	30.2%
3	30.2%
3	30.2%
3	30.2%
3	30.2%
3	30.2%
3	30.2%
3	30.2%
3	30.2%



Retail Sales Add Rate Schedule 7 Cryptocurrency



Rate Schedule 14, 15, 16, and 94

Total Industrial

Total Industrial

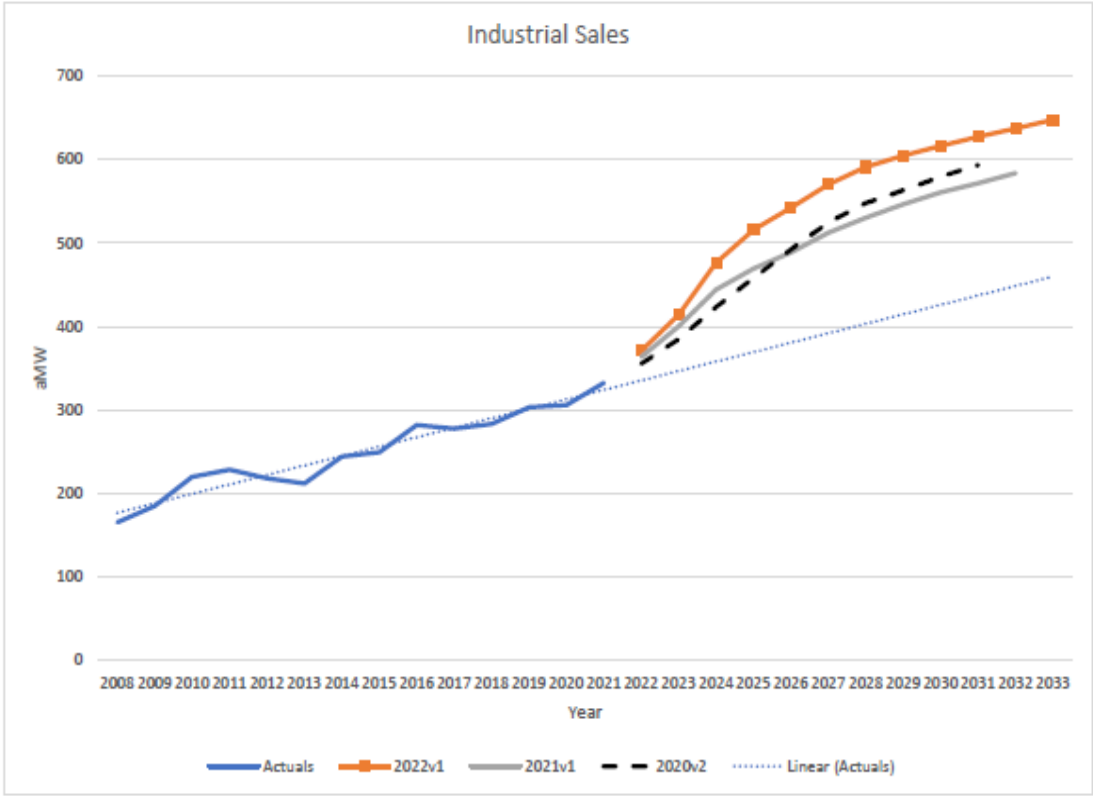
Year	Actuals	2022v1	YoY
2008	166		
2009	185		11.9%
2010	220		18.9%
2011	229		3.8%
2012	219		-4.3%
2013	212		-3.0%
2014	245		15.4%
2015	249		1.9%
2016	282		13.2%
2017	278		-1.6%
2018	284		2.1%
2019	304		7.1%
2020	306		0.8%
2021	333		8.6%
2022		372	11.7%
2023		415	11.6%
2024		477	14.9%
2025		516	8.4%
2026		543	5.1%
2027		571	5.2%
2028		592	3.6%
2029		605	2.3%
2030		617	1.9%
2031		627	1.7%
2032		638	1.6%
2033		648	1.6%

CAGR	
3 Year (2023-2025)	7.6%
5 Year (2023-2027)	6.6%
10 Year (2023-2032)	4.4%

Year	Actuals	2021v1	YoY
2008	166		
2009	185		11.9%
2010	220		18.9%
2011	229		3.8%
2012	219		-4.3%
2013	212		-3.0%
2014	245		15.4%
2015	249		1.9%
2016	282		13.2%
2017	278		-1.6%
2018	284		2.1%
2019	304		7.1%
2020	306		0.8%
2021	333	331	8.1%
2022		364	9.9%
2023		401	10.0%
2024		445	11.1%
2025		470	5.6%
2026		489	4.1%
2027		513	4.8%
2028		530	3.5%
2029		547	3.1%
2030		561	2.6%
2031		572	1.9%
2032		584	2.1%
2033		591	1.1%

CAGR	
3 Year (2023-2025)	5.5%
5 Year (2023-2027)	5.1%
10 Year (2023-2032)	3.8%

2022v1-2021v1	
Change	% Diff
7	2.0%
14	3.5%
32	7.1%
47	9.9%
53	10.9%
58	11.4%
61	11.5%
58	10.6%
55	9.9%
56	9.7%
54	9.2%
57	9.7%



Rate Schedule 14

Industrial

Rate Schedule 14

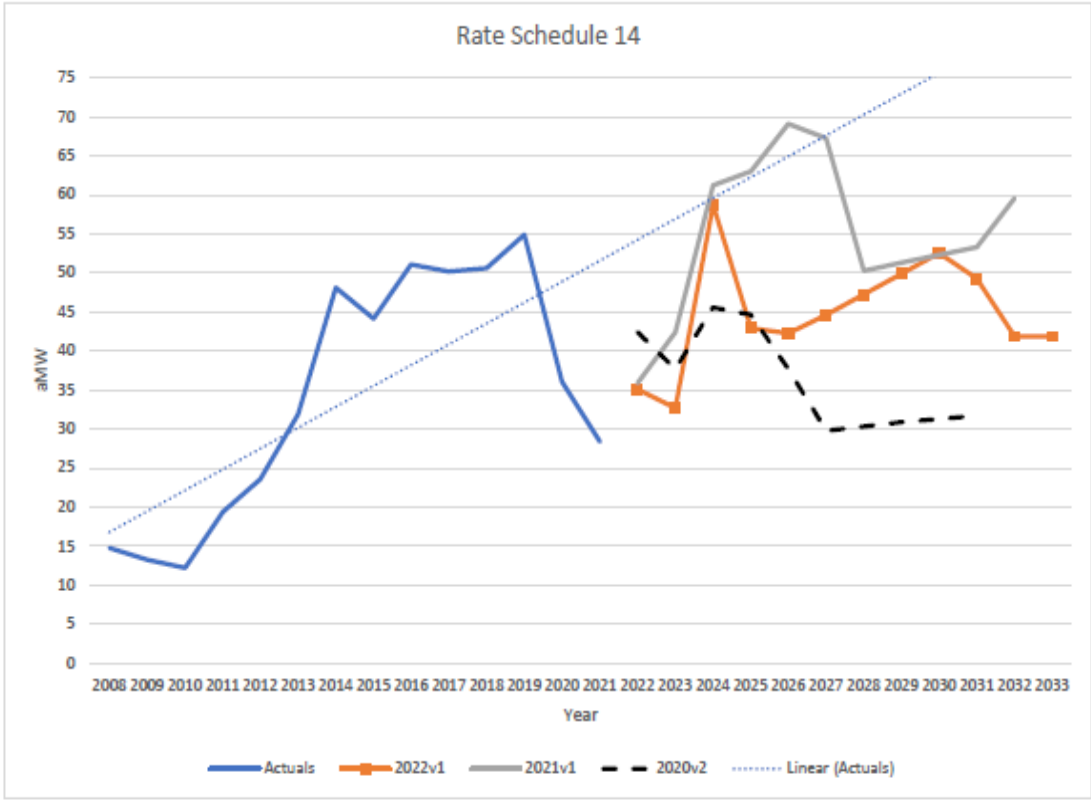
Year	Actuals	2022v1	YoY
2008	15		
2009	13		-10.2%
2010	12		-7.7%
2011	19		58.3%
2012	24		21.7%
2013	32		35.0%
2014	48		50.9%
2015	44		-8.1%
2016	51		15.6%
2017	50		-1.8%
2018	51		0.8%
2019	55		8.5%
2020	36		-34.3%
2021	28		-21.2%
2022		35	23.5%
2023		33	-6.8%
2024		59	79.6%
2025		43	-26.9%
2026		42	-1.6%
2027		45	5.6%
2028		47	5.9%
2029		50	5.6%
2030		53	5.3%
2031		49	-6.2%
2032		42	-15.0%
2033		42	0.0%

CAGR	
3 Year (2023-2025)	9.5%
5 Year (2023-2027)	6.4%
10 Year (2023-2032)	2.5%

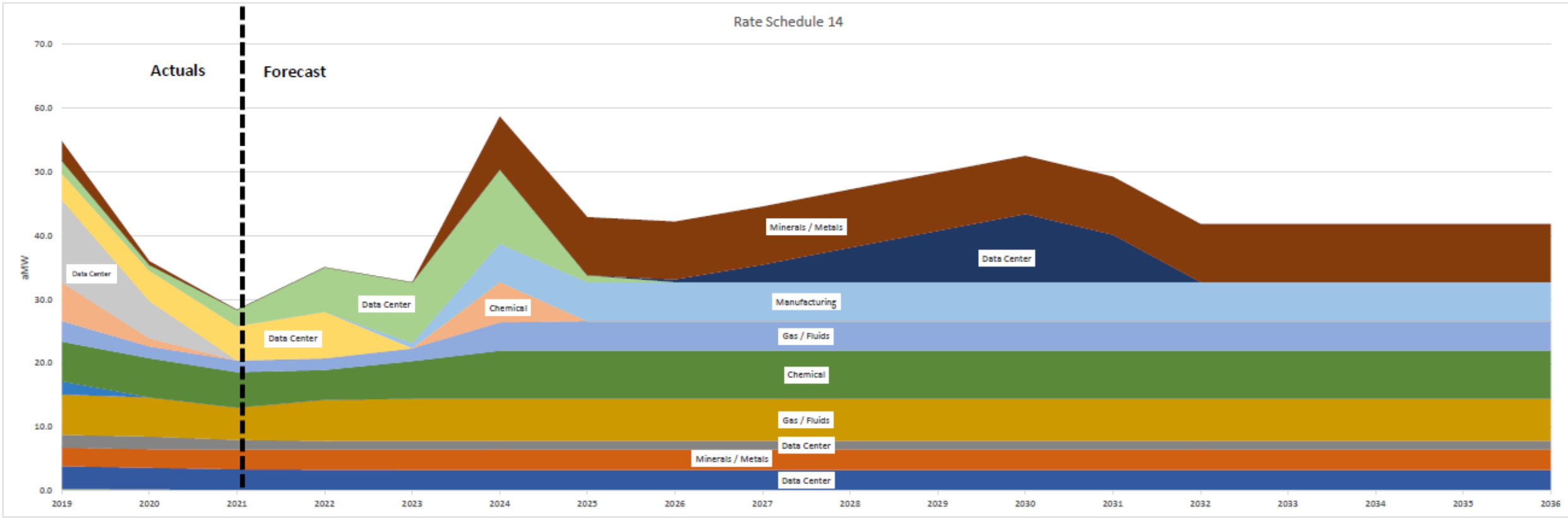
Year	Actuals	2021v1	YoY
2008	15		
2009	13		-10.2%
2010	12		-7.7%
2011	19		58.3%
2012	24		21.7%
2013	32		35.0%
2014	48		50.9%
2015	44		-8.1%
2016	51		15.6%
2017	50		-1.8%
2018	51		0.8%
2019	55		8.5%
2020	36		-34.3%
2021	28	27	-24.9%
2022		36	32.6%
2023		42	18.1%
2024		61	44.4%
2025		63	2.9%
2026		69	9.6%
2027		67	-2.6%
2028		50	-25.2%
2029		51	2.0%
2030		52	1.9%
2031		53	1.9%
2032		60	11.7%
2033		61	2.5%

CAGR	
3 Year (2023-2025)	14.1%
5 Year (2023-2027)	9.7%
10 Year (2023-2032)	3.5%

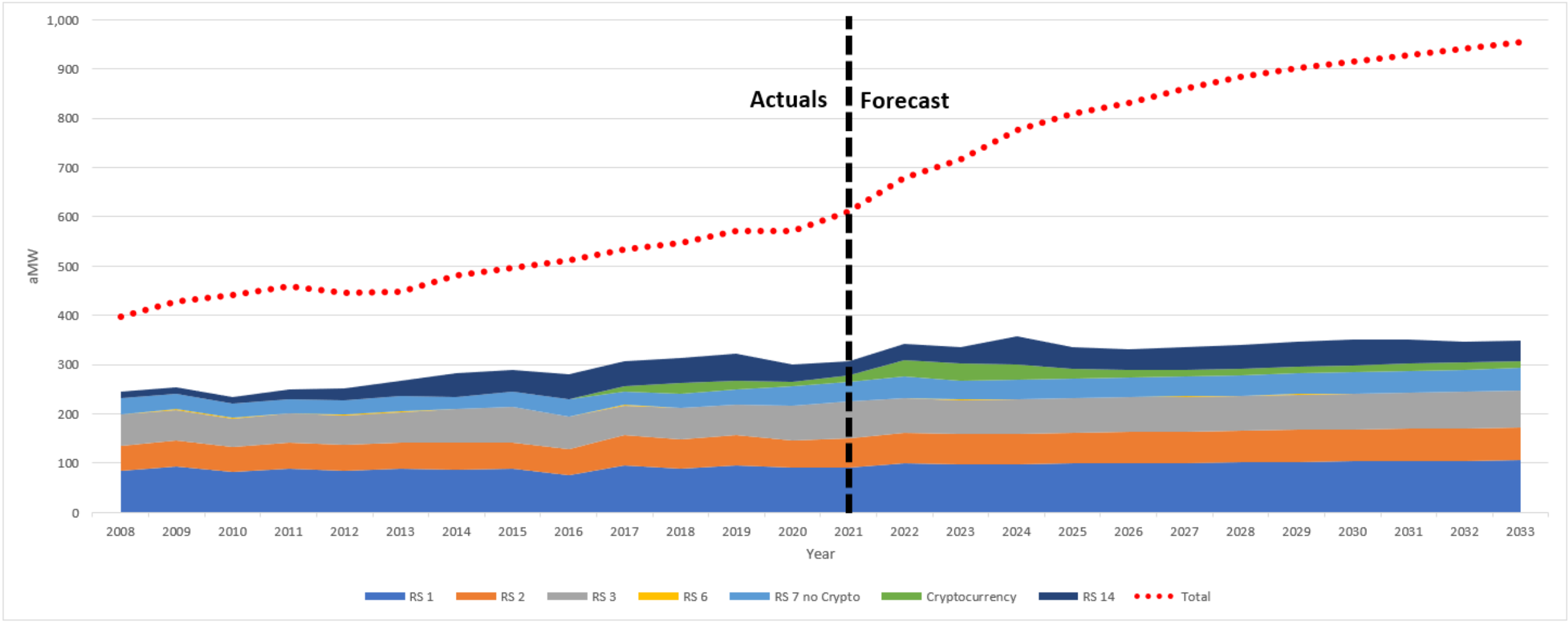
2022v1-2021v1	
Change	% Diff
-1	-2.3%
-10	-22.9%
-3	-4.1%
-20	-31.8%
-27	-38.8%
-23	-33.6%
-3	-6.0%
-1	-2.7%
0	0.5%
-4	-7.5%
-18	-29.7%
-19	-31.4%



Rate Schedule 14 Customers



Retail Sales Add Rate Schedule 14



Rate Schedule 15

Large Industrial

Rate Schedule 15

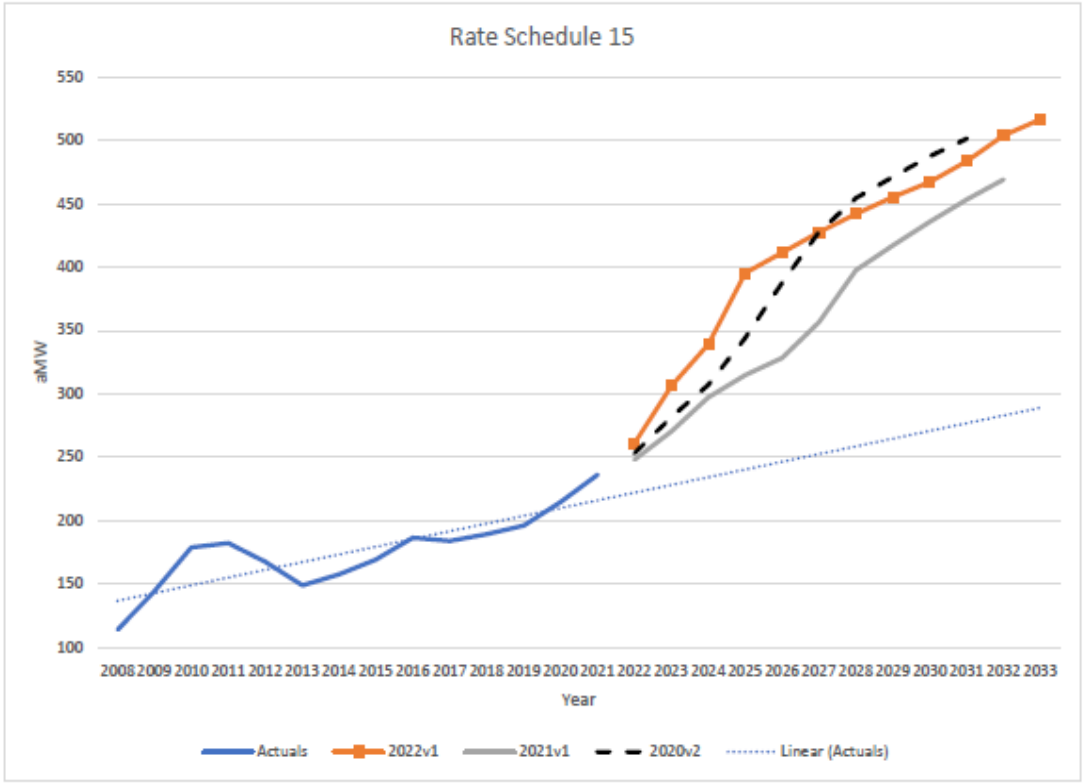
Year	Actuals	2022v1	YoY
2008	114		
2009	145		26.6%
2010	179		23.9%
2011	183		2.0%
2012	168		-8.1%
2013	149		-11.2%
2014	158		5.8%
2015	170		7.4%
2016	187		10.2%
2017	184		-1.5%
2018	190		3.0%
2019	196		3.5%
2020	215		9.5%
2021	236		10.0%
2022		261	10.6%
2023		307	17.3%
2024		339	10.6%
2025		396	16.6%
2026		412	4.0%
2027		427	3.9%
2028		442	3.4%
2029		455	3.0%
2030		467	2.6%
2031		483	3.5%
2032		504	4.2%
2033		516	2.5%

CAGR	
3 Year (2023-2025)	8.9%
5 Year (2023-2027)	6.9%
10 Year (2023-2032)	5.1%

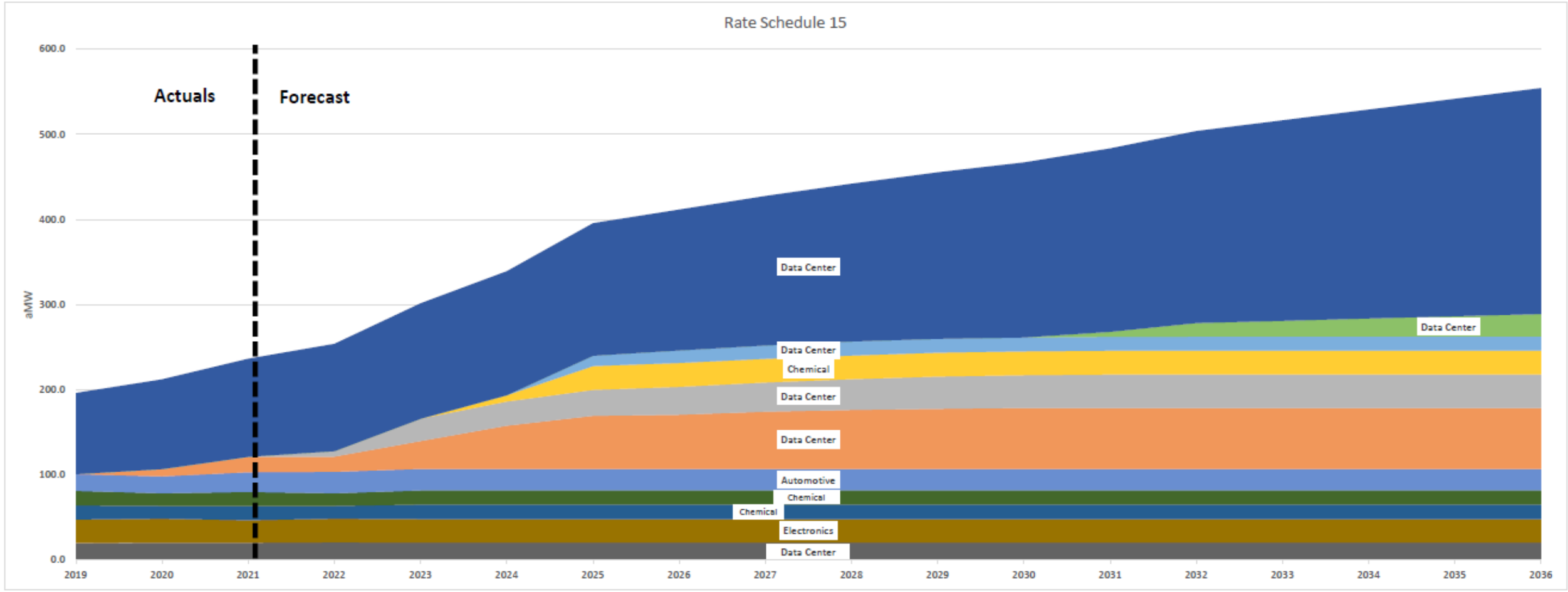
Year	Actuals	2021v1	YoY
2008	114		
2009	145		26.6%
2010	179		23.9%
2011	183		2.0%
2012	168		-8.1%
2013	149		-11.2%
2014	158		5.8%
2015	170		7.4%
2016	187		10.2%
2017	184		-1.5%
2018	190		3.0%
2019	196		3.5%
2020	215		9.5%
2021	236	233	8.5%
2022		248	6.5%
2023		271	9.0%
2024		297	9.9%
2025		315	5.9%
2026		328	4.3%
2027		357	8.6%
2028		398	11.5%
2029		417	4.9%
2030		436	4.5%
2031		453	4.0%
2032		469	3.5%
2033		484	3.2%

CAGR	
3 Year (2023-2025)	5.2%
5 Year (2023-2027)	5.7%
10 Year (2023-2032)	5.7%

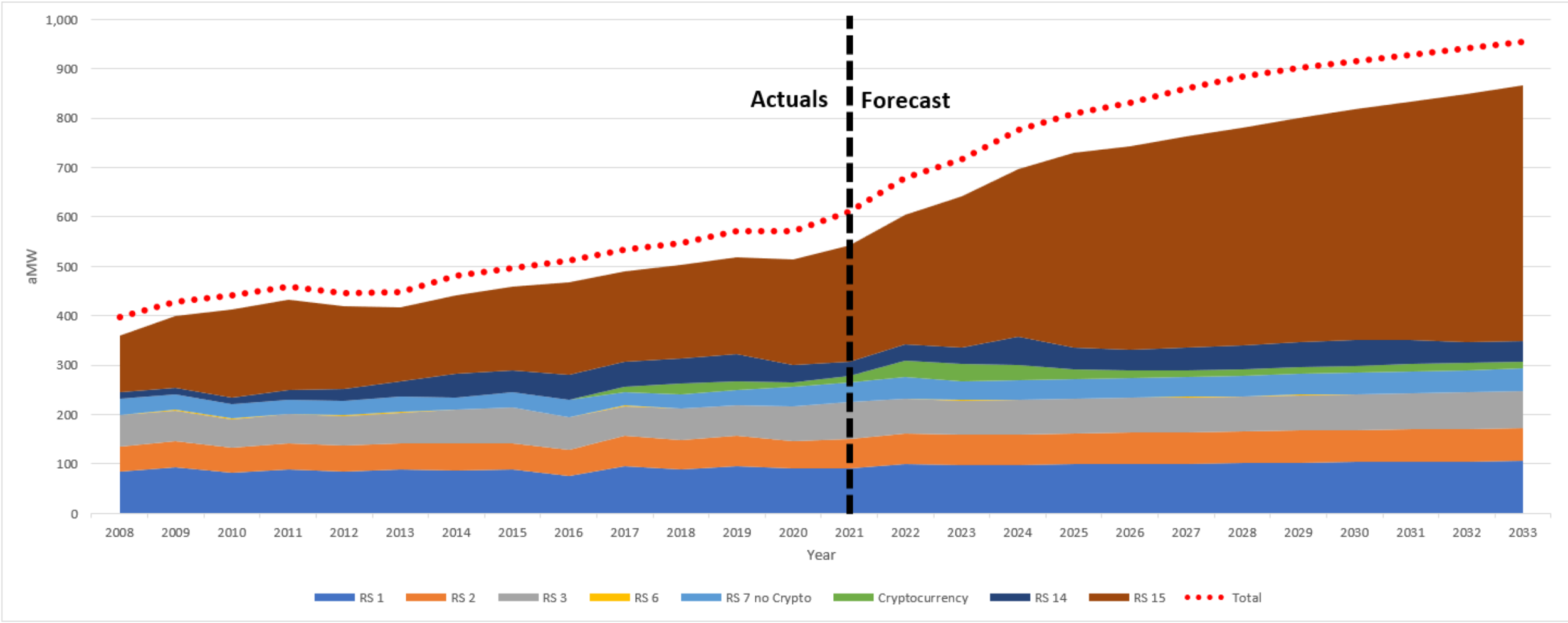
2022v1-2021v1	
Change	% Diff
13	5.2%
36	13.3%
42	14.0%
81	25.6%
83	25.3%
71	19.8%
44	11.2%
38	9.2%
31	7.2%
30	6.7%
35	7.4%
32	6.6%



Rate Schedule 15 Customers



Retail Sales Add Rate Schedule 15



Rate Schedule 16

Agricultural Food Processing

Rate Schedule 16

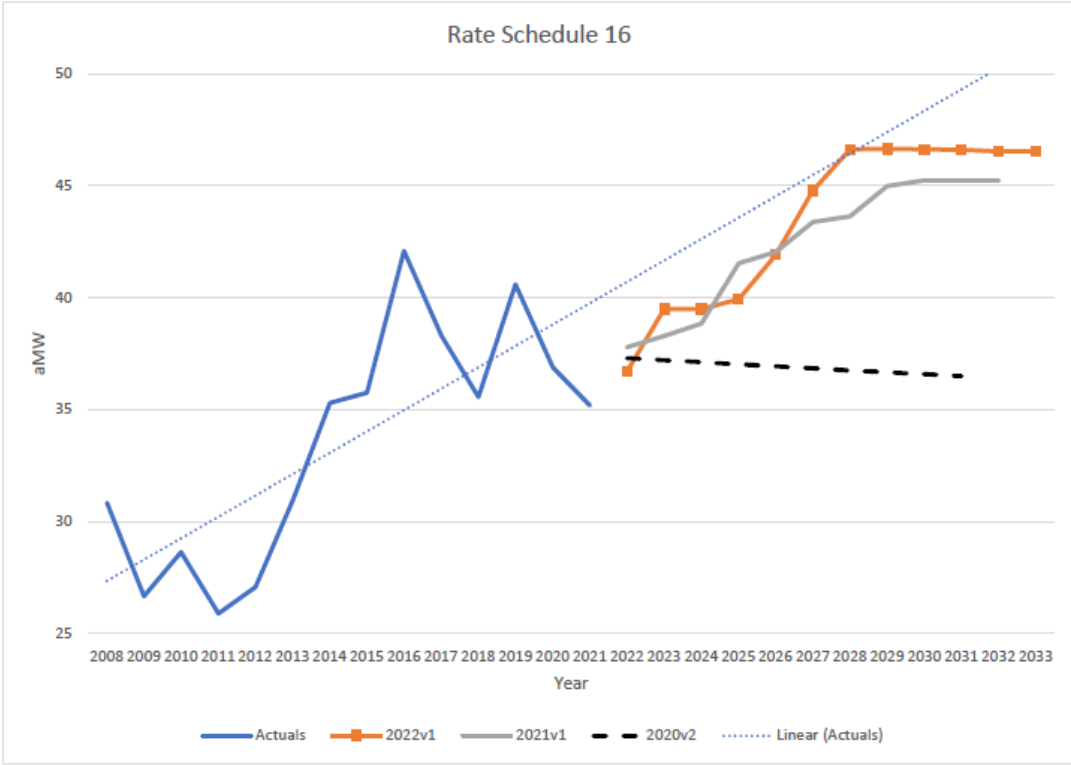
Year	Actuals	2022v1	YoY
2008	31		
2009	27		-13.5%
2010	29		7.4%
2011	26		-9.6%
2012	27		4.5%
2013	31		14.2%
2014	35		14.2%
2015	36		1.3%
2016	42		17.7%
2017	38		-9.0%
2018	36		-7.1%
2019	41		14.1%
2020	37		-9.1%
2021	35		-4.6%
2022		37	4.3%
2023		40	7.7%
2024		39	0.0%
2025		40	1.1%
2026		42	5.0%
2027		45	6.8%
2028		47	4.1%
2029		47	0.0%
2030		47	-0.1%
2031		47	0.0%
2032		47	-0.2%
2033		47	0.0%

CAGR	
3 Year (2023-2025)	0.4%
5 Year (2023-2027)	2.5%
10 Year (2023-2032)	1.7%

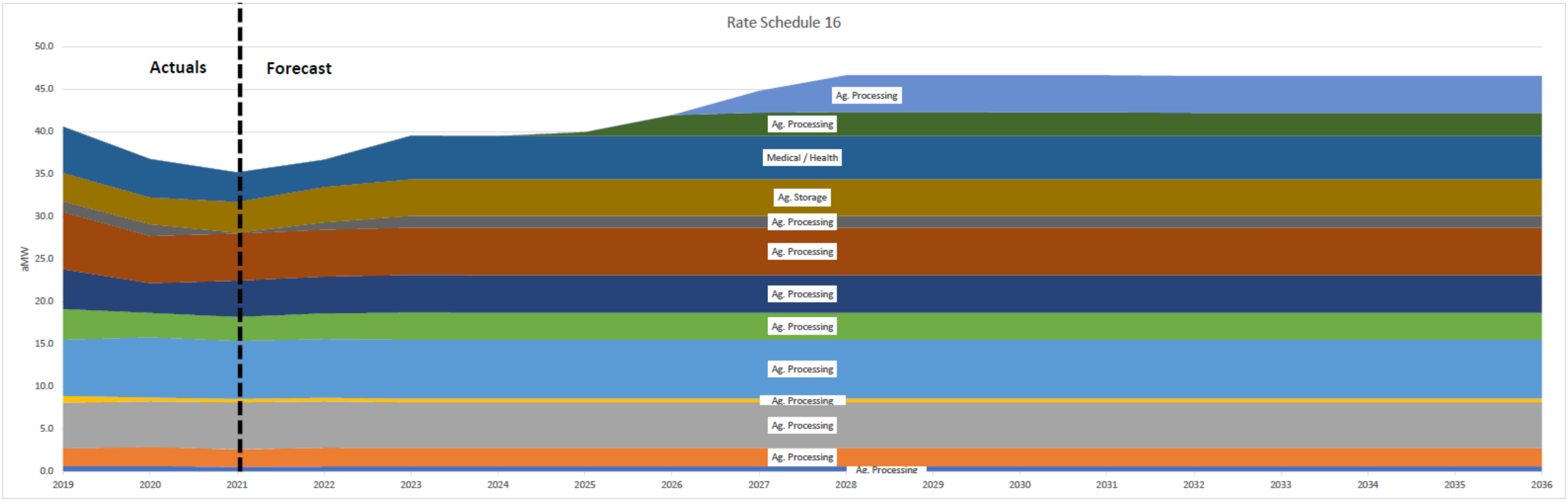
Year	Actuals	2021v1	YoY
2008	31		
2009	27		-13.5%
2010	29		7.4%
2011	26		-9.6%
2012	27		4.5%
2013	31		14.2%
2014	35		14.2%
2015	36		1.3%
2016	42		17.7%
2017	38		-9.0%
2018	36		-7.1%
2019	41		14.1%
2020	37		-9.1%
2021	35	37	-0.4%
2022		38	2.9%
2023		38	1.3%
2024		39	1.4%
2025		42	6.9%
2026		42	1.2%
2027		43	3.2%
2028		44	0.6%
2029		45	3.1%
2030		45	0.6%
2031		45	0.0%
2032		45	0.0%
2033		45	0.0%

CAGR	
3 Year (2023-2025)	2.7%
5 Year (2023-2027)	2.5%
10 Year (2023-2032)	1.7%

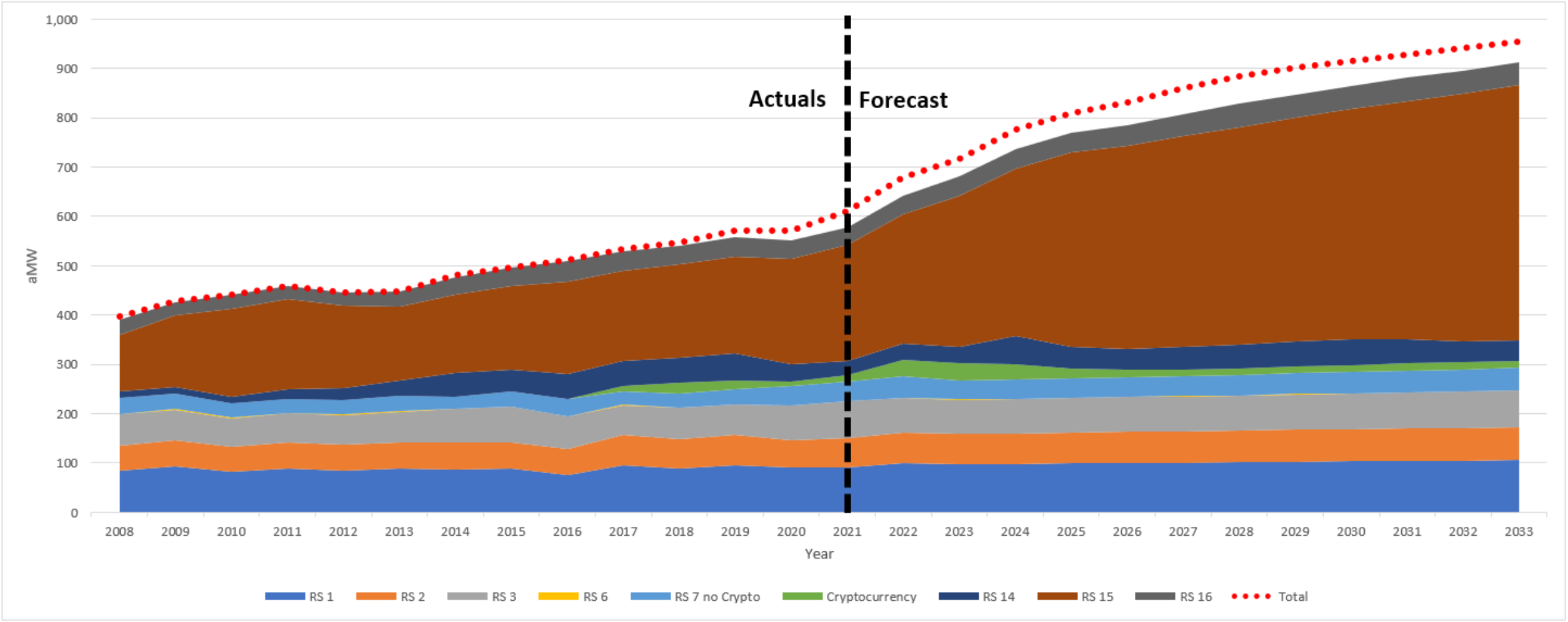
2022v1-2021v1	
Change	% Diff
-1	-2.9%
1	3.2%
1	1.7%
-2	-3.8%
0	-0.3%
1	3.2%
3	6.9%
2	3.7%
1	3.0%
1	3.0%
1	2.9%
1	2.9%



Rate Schedule 16 Customers



Retail Sales Add Rate Schedule 16



Rate Schedule 94

New Large Load

Rate Schedule 94

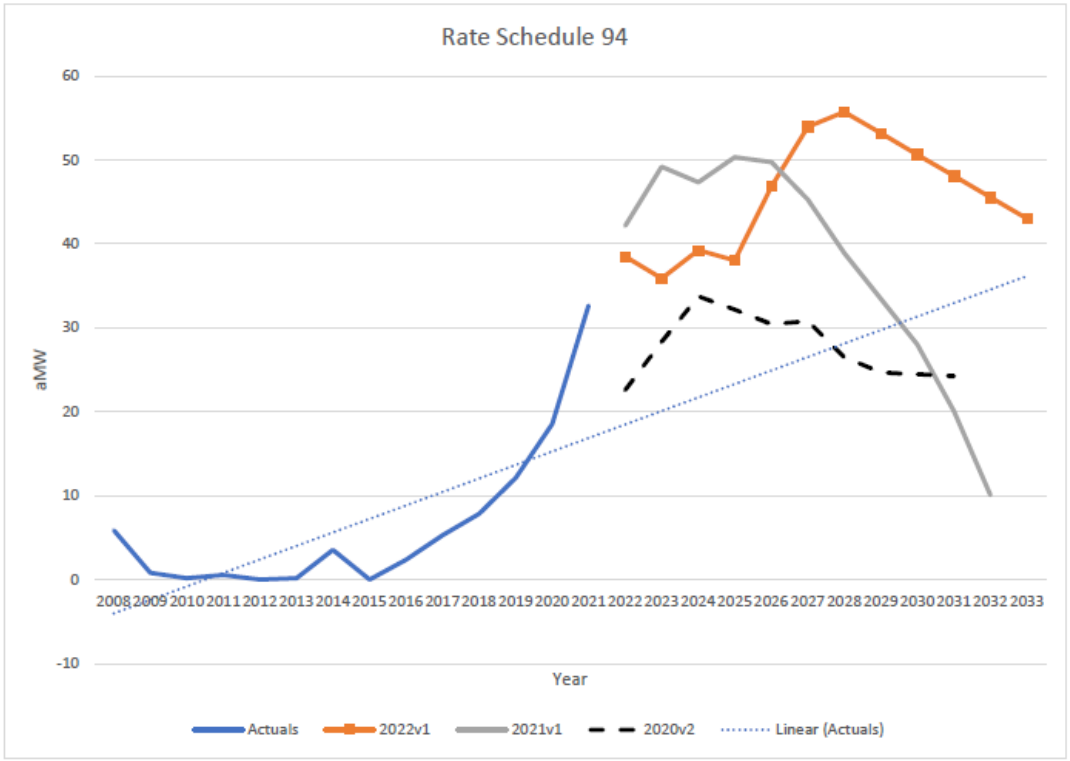
Year	Actuals	2022v1	YoY
2008	6		
2009	1		-86.2%
2010	0		-75.6%
2011	1		174.5%
2012	0		-100.0%
2013	0		
2014	4		1926.2%
2015	0		-100.0%
2016	2		
2017	5		121.7%
2018	8		49.1%
2019	12		54.4%
2020	19		53.0%
2021	33		76.0%
2022		38	17.9%
2023		36	-6.8%
2024		39	9.4%
2025		38	-3.0%
2026		47	23.1%
2027		54	15.3%
2028		56	3.2%
2029		53	-4.5%
2030		51	-4.8%
2031		48	-5.0%
2032		46	-5.3%
2033		43	-5.6%

CAGR	
3 Year (2023-2025)	2.0%
5 Year (2023-2027)	8.5%
10 Year (2023-2032)	2.4%

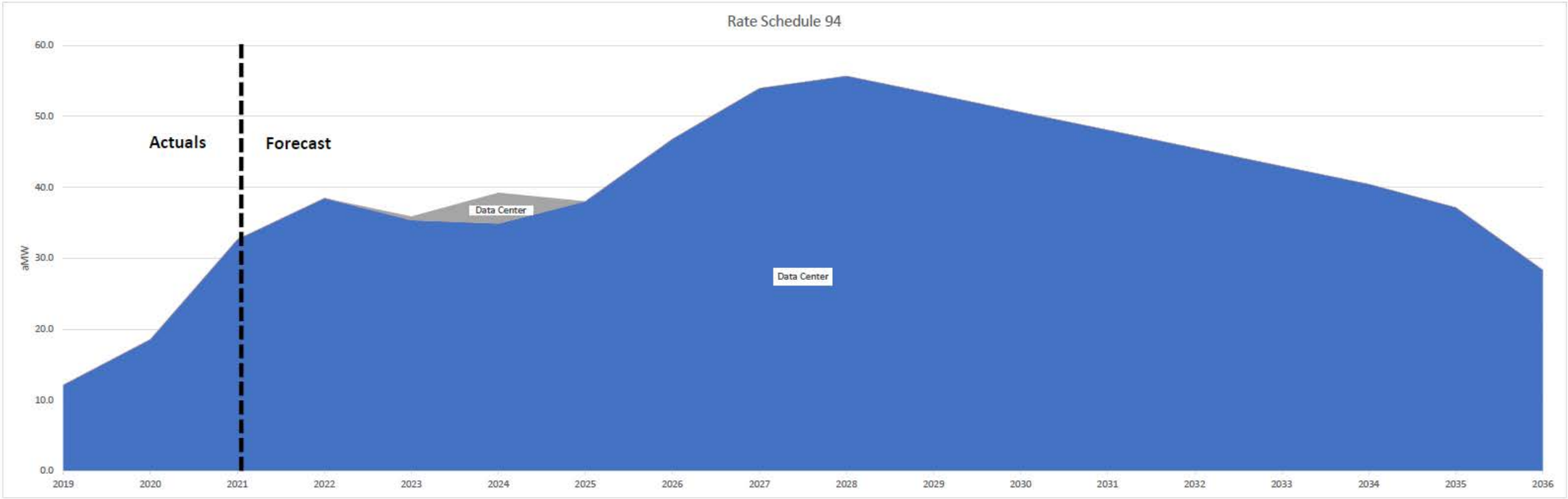
Year	Actuals	2021v1	YoY
2008	6		
2009	1		-86.2%
2010	0		-75.6%
2011	1		174.5%
2012	0		-100.0%
2013	0		
2014	4		1926.2%
2015	0		-100.0%
2016	2		
2017	5		121.7%
2018	8		49.1%
2019	12		54.4%
2020	19		53.0%
2021	33	34	84.9%
2022		42	22.8%
2023		49	16.7%
2024		47	-3.7%
2025		50	6.3%
2026		50	-1.2%
2027		45	-8.9%
2028		39	-14.1%
2029		33	-14.0%
2030		28	-16.3%
2031		20	-28.3%
2032		10	-49.9%
2033		0	-99.4%

CAGR	
3 Year (2023-2025)	0.8%
5 Year (2023-2027)	-1.6%
10 Year (2023-2032)	-14.7%

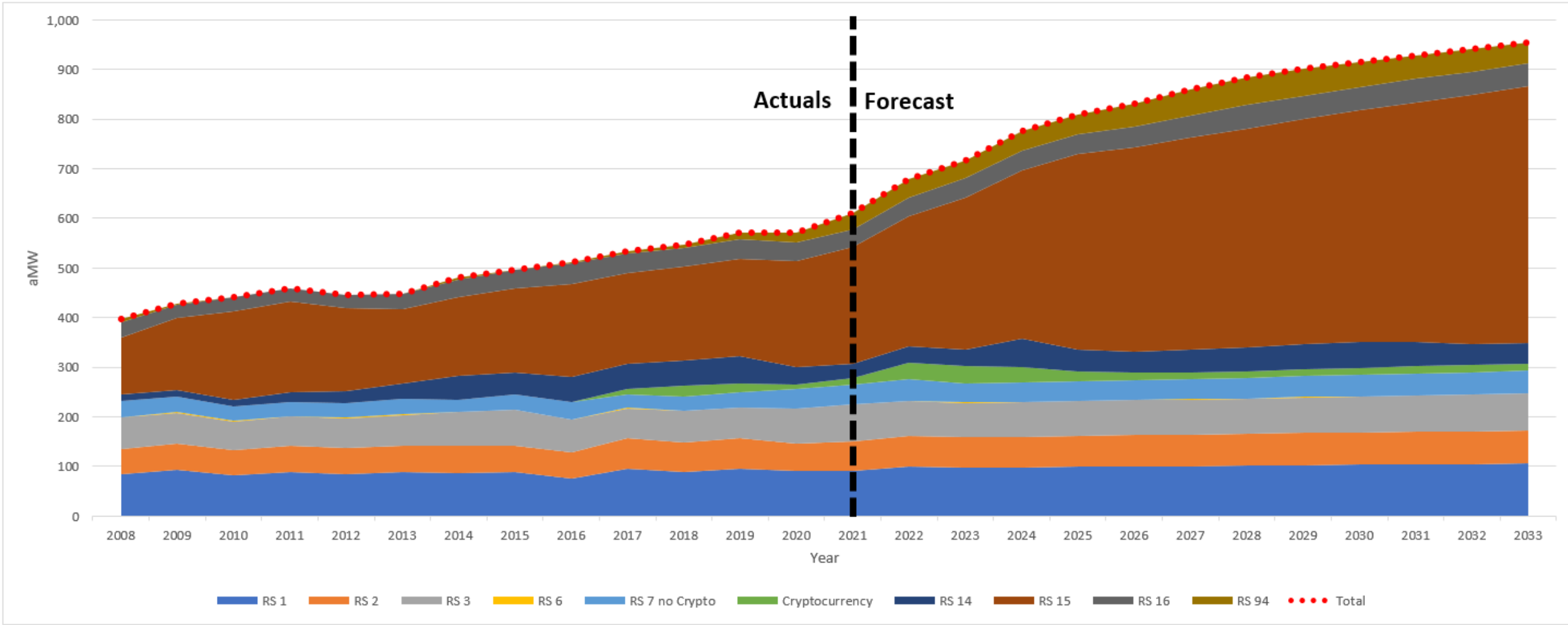
2022v1-2021v1	
Change	% Diff
-4	-8.7%
-13	-27.1%
-8	-17.2%
-12	-24.4%
-3	-5.8%
9	19.2%
17	43.2%
20	59.0%
23	80.9%
28	139.7%
35	352.7%
43	76399.4%



Rate Schedule 94 Customers



Retail Sales Add Rate Schedule 94



Powering our way of life.

Power Delivery

Q2 2022 Business Report

July, 2022

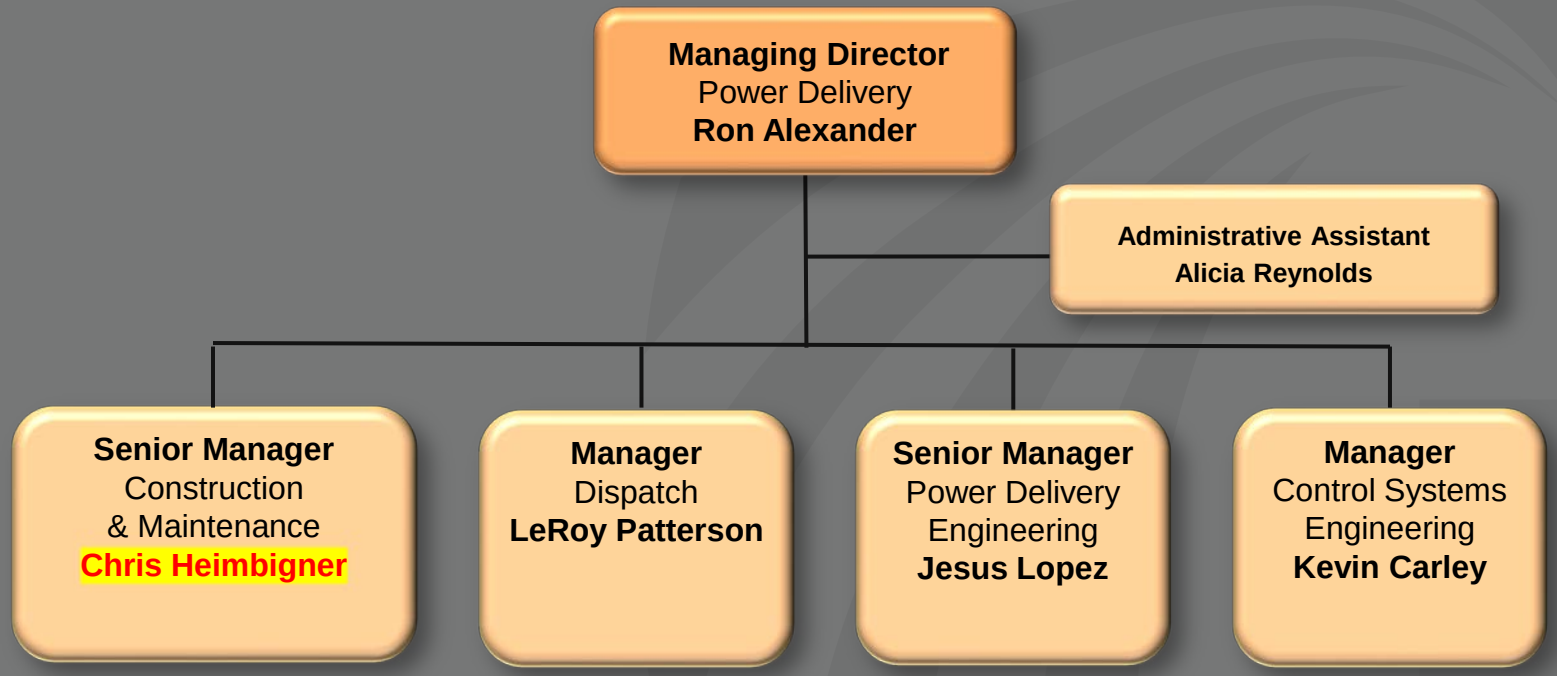
Grant County
PUBLIC UTILITY DISTRICT

Purpose and Goal

Purpose: **Provide our customers with safe, reliable electric and communication services by effectively planning, designing, constructing, maintaining and operating our transmission, substation, distribution, and fiber assets and their associated control systems.**

Goal: **Achieve our purpose while championing a culture of safety and operational excellence with continual focus on our values of safety, innovation, service, teamwork, respect, integrity and heritage.**

Structure and Personnel



- Line Department – Tyler Delong
- Electric Shop
- Meter/Relay Shop
- Fiber & Electronics

- Dispatch

- Systems Planning & Standards
- Transmission, Substation & Automation
- Customer & Distribution Engineering

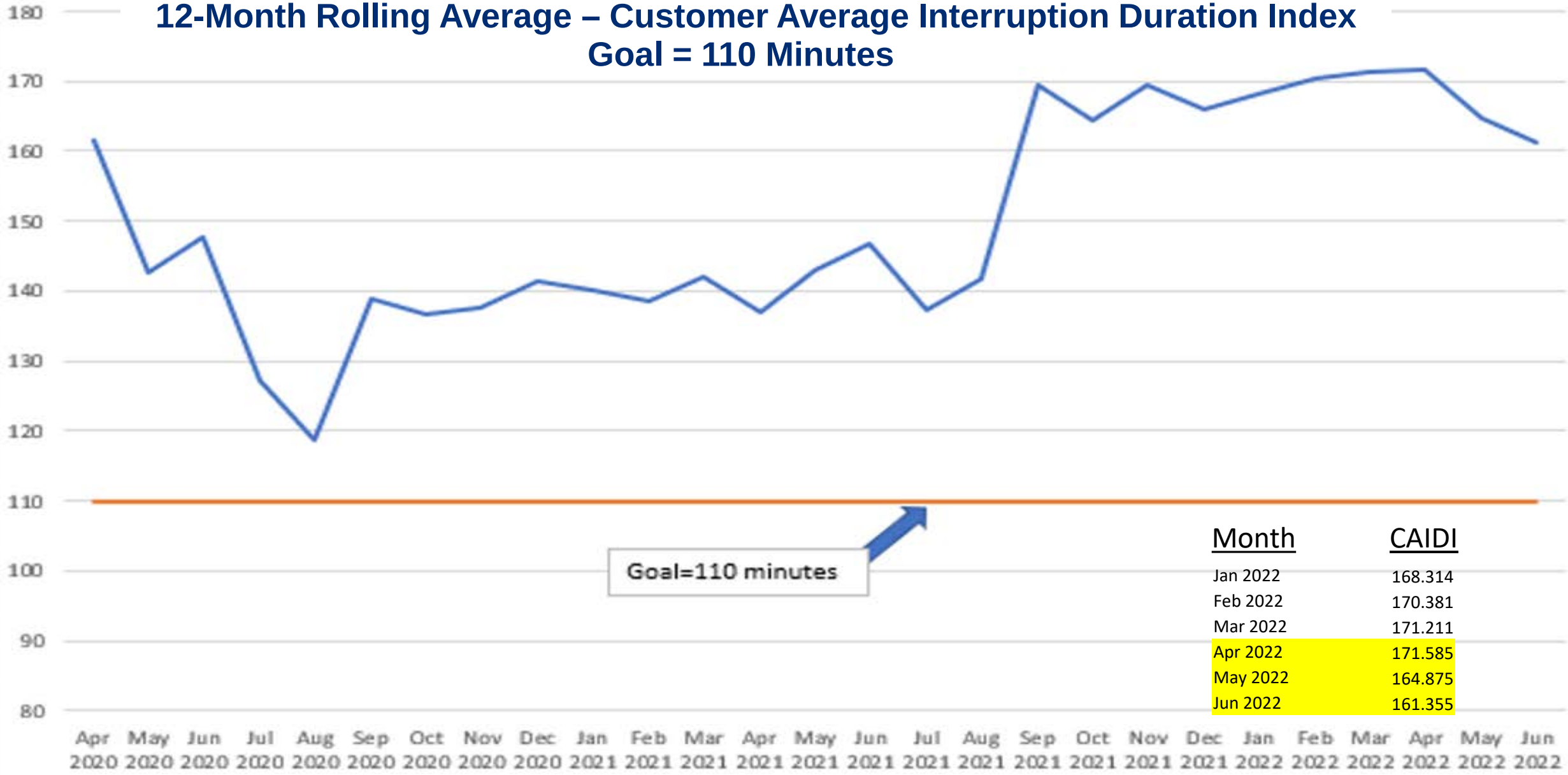
- Control Systems

Safety Performance

	Jan	Feb	Mar	April	May	June	2022 Total
Injuries	1	0	0	1	1	0	3
Recordable Injuries	1	2	0	1	0	0	4
Vehicle Incidents	1	1	0	0	1	3	6
Close Calls	0	2	0	2	1	1	6
Safety Mtg Att%	96%	98%	96%	86%	96%	Safety Days - Unknown attendance	94%

Operational Performance - CAIDI

12-Month Rolling Average – Customer Average Interruption Duration Index
Goal = 110 Minutes

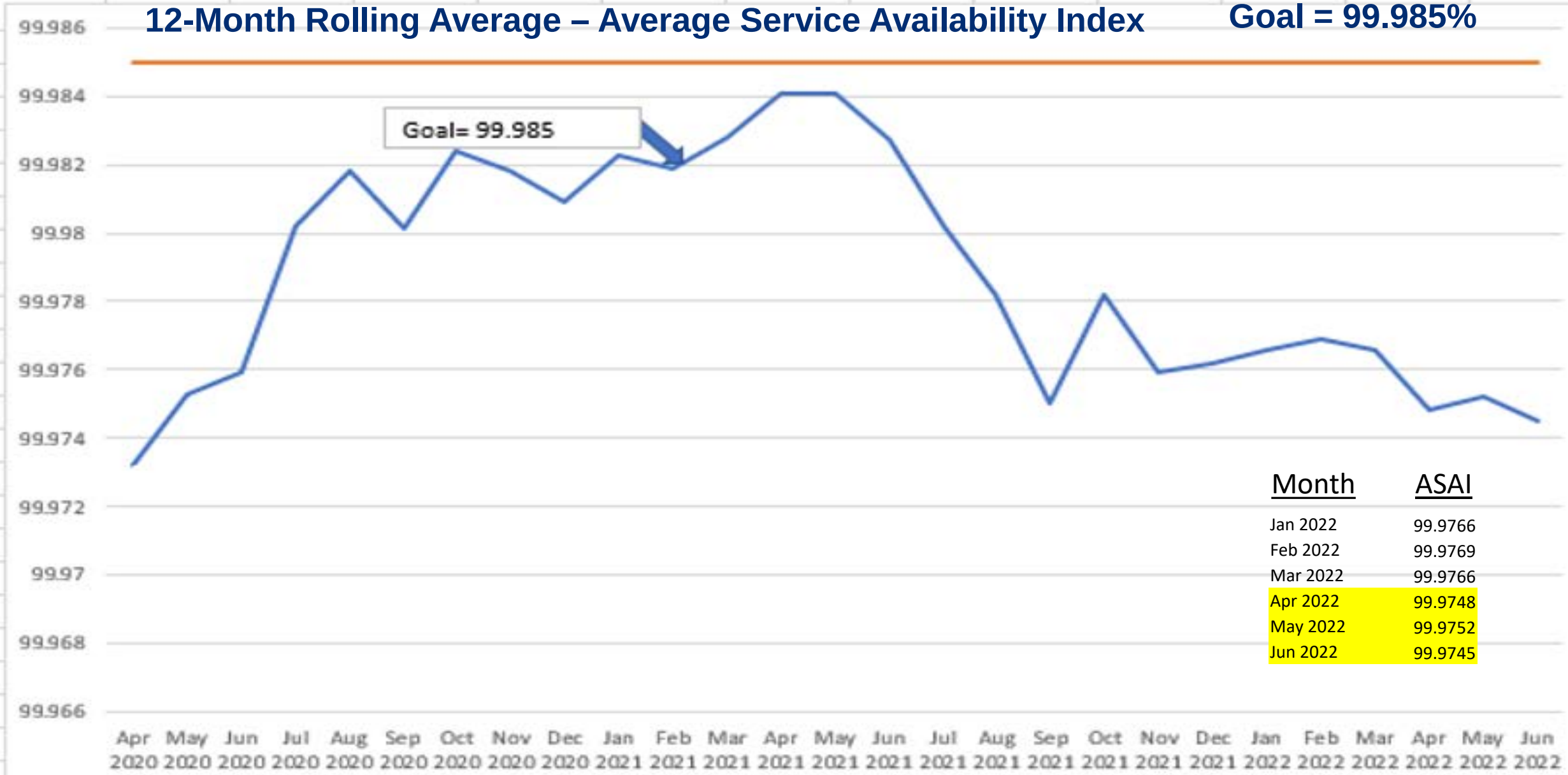


Month	CAIDI
Jan 2022	168.314
Feb 2022	170.381
Mar 2022	171.211
Apr 2022	171.585
May 2022	164.875
Jun 2022	161.355

Operational Performance - ASAI

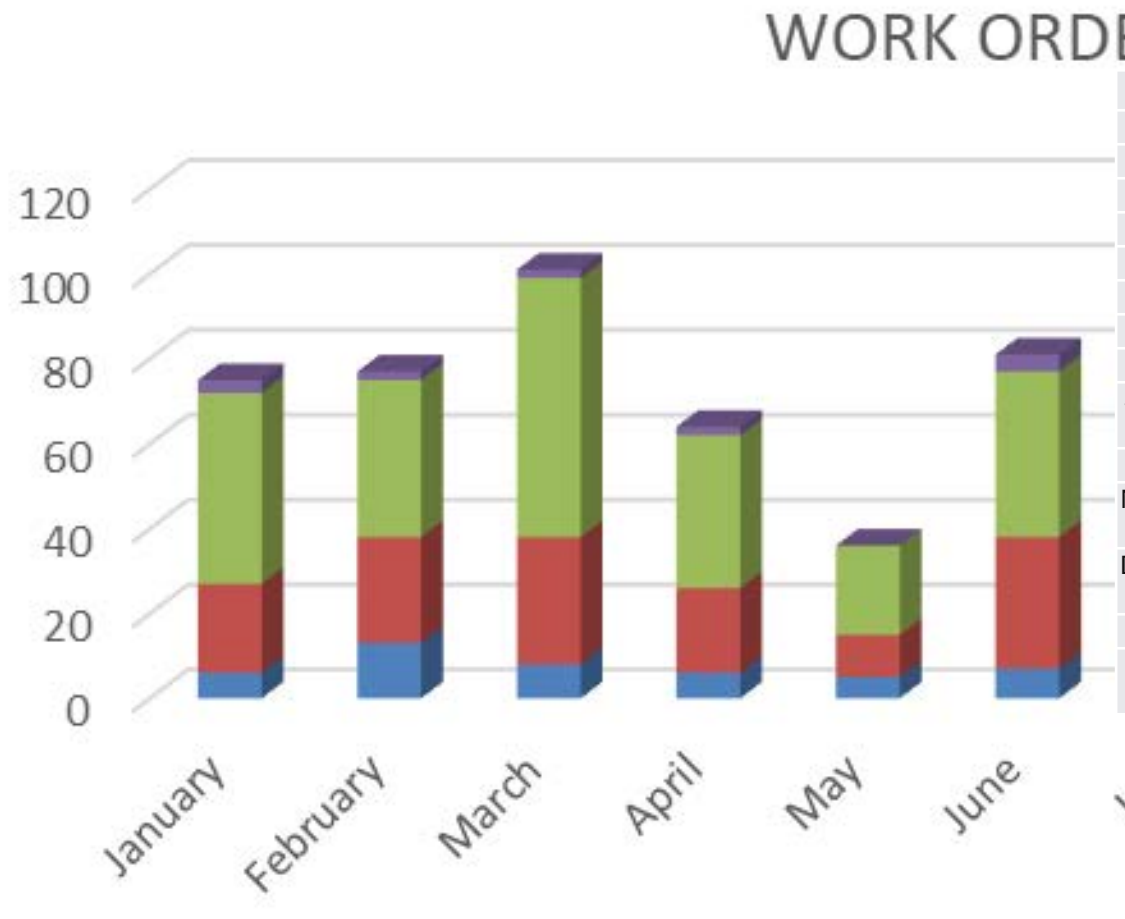
12-Month Rolling Average – Average Service Availability Index

Goal = 99.985%



Month	ASAI
Jan 2022	99.9766
Feb 2022	99.9769
Mar 2022	99.9766
Apr 2022	99.9748
May 2022	99.9752
Jun 2022	99.9745

Operational Performance – 2022 Work Orders Rec'd



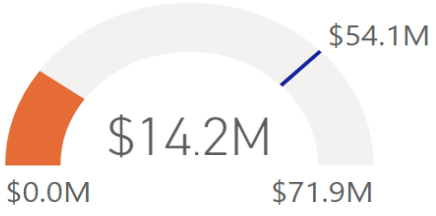
2022	Simple/Temp	Simple	Unique	Plats	Total	Quarterly Total
January	6	21	45	3	75	
February	13	25	37	2	77	
March	8	30	61	2	101	253
April	6	20	36	2	64	
May	5	10	21	0	36	
June	7	31	39	4	81	181
July	0	0	0	0	0	
August	0	0	0	0	0	
September	0	0	0	0	0	0
October	0	0	0	0	0	
November	0	0	0	0	0	
December	0	0	0	0	0	0
	45	137	239	13		
					Yearly Total:	434

2022 Capital

Capital Budget Versus Actuals

PD - Power Delivery QBR Year-to-Date June, 2022

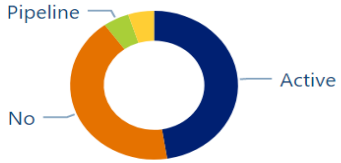
YTD Actuals



Total Projects

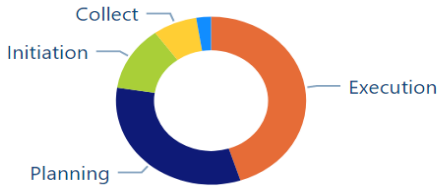
40

EPMO Management



Project Type

Project Phase



Budget vs Actuals (Capital Directs)

Cost Center	CY Approved Spend	CY Actuals	BOY Fx	CY YEP
⊞ EC1000	$3,122,433	$501,468	$2,150,768	$2,652,236
⊞ EC4100	$68,773,377	$13,721,687	$37,678,866	$51,400,553
Total	**$71,895,810**	**$14,223,156**	**$39,829,634**	**$54,052,789**

2022 O&M Budget

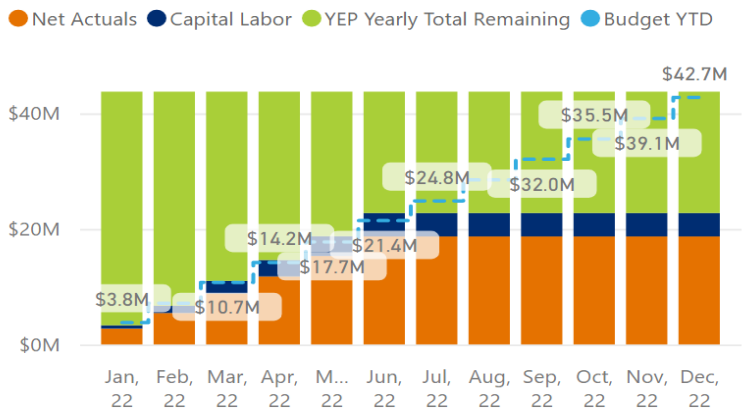
O&M Budget Versus Actuals

EC - Power Delivery QBR Year-to-Date June, 2022

Operating Unit

EC - Power Delivery

Capital Labor & Net Actuals YTD Vs. Year-End-Projections

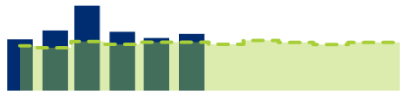


Gross Actuals Vs. Budget

$22.7M +6.1%

Capital Labor Actuals Vs. Budget

$4.1M +30.3%



Net Actuals Vs. Budget

$18.7M +2.0%

O&M Budget vs Actuals (Including Cap Labor)

Cost Category Type/Cost Category	Budgeted	Actuals	Budget Var	Budget Var %	Consumed %
Labor	**$17,325,465**	**$19,016,322**	**$1,690,857**	**9.8%**	**109.8%**
Salaries & Wages	$10,702,340	$10,025,746	-$676,594	-6.3%	93.7%
Benefits	$4,598,854	$6,599,607	$2,000,753	43.5%	143.5%
Overtime	$1,846,393	$2,137,075	$290,681	15.7%	115.7%
Other Labor	$177,878	$253,895	$76,016	42.7%	142.7%
Purchased Services	**$1,939,656**	**$1,438,885**	**-$500,771**	**-25.8%**	**74.2%**
Operating Materials & Equipment	**$1,862,884**	**$2,023,644**	**$160,761**	**8.6%**	**108.6%**
G&A	**$236,888**	**$134,496**	**-$102,392**	**-43.2%**	**56.8%**
IT	**$56,940**	**$64,773**	**$7,833**	**13.8%**	**113.8%**
Risk		**$3,328**			
Transportation		**$19,450**			
Utilities		**$31,938**			
Total	**$21,421,833**	**$22,732,837**	**$1,311,004**	**6.1%**	**106.1%**

- Capital Labor is a subset of the Labor above

- Net Actuals vs Budget = Gross Actuals minus Capital Labor

2022 O&M Budget

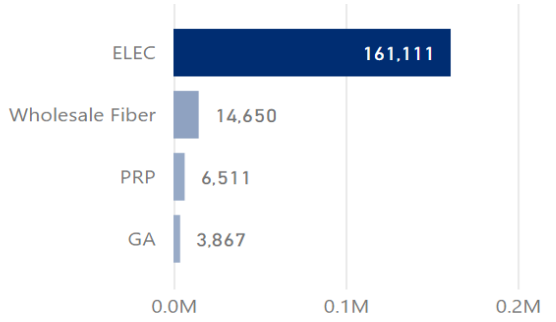
Grant PUD | Employee Activity

EC - Power Delivery QBR Year-to-Date June, 2022

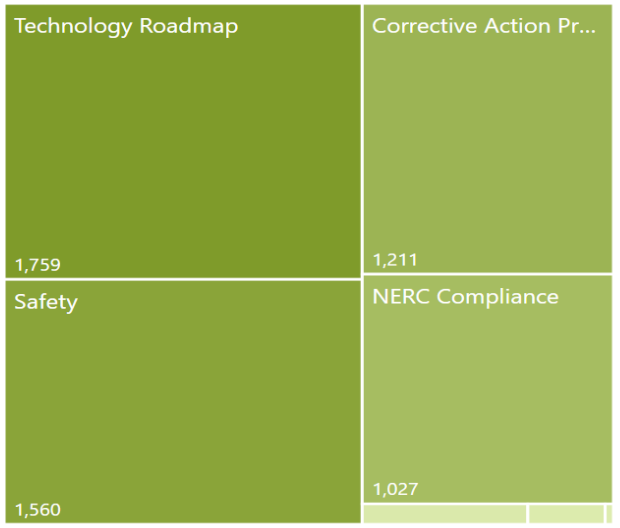
Operating Unit

EC - Power Delivery

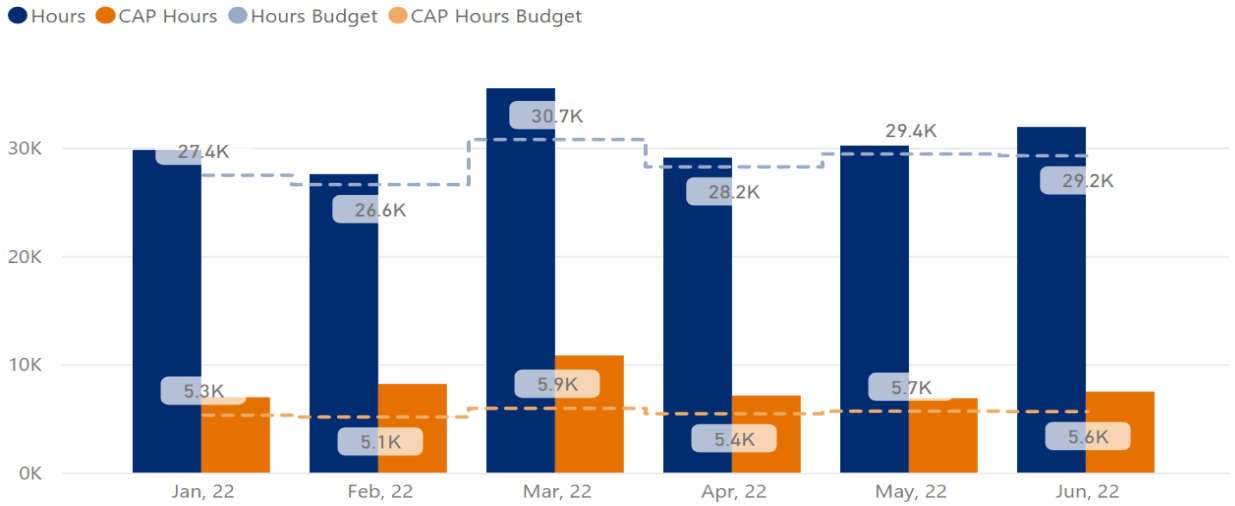
Hours by System



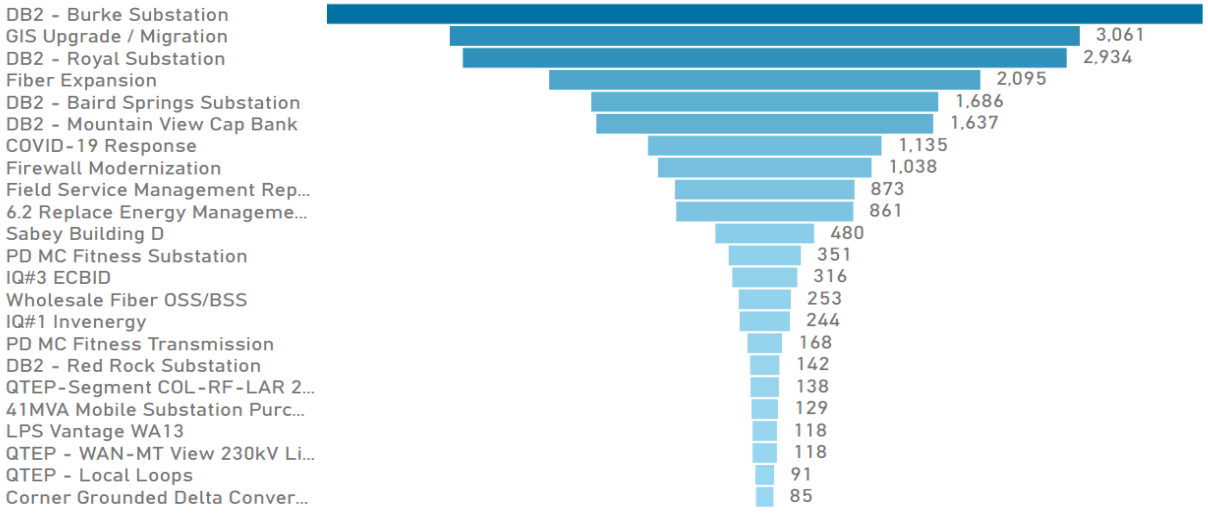
Hours by Program



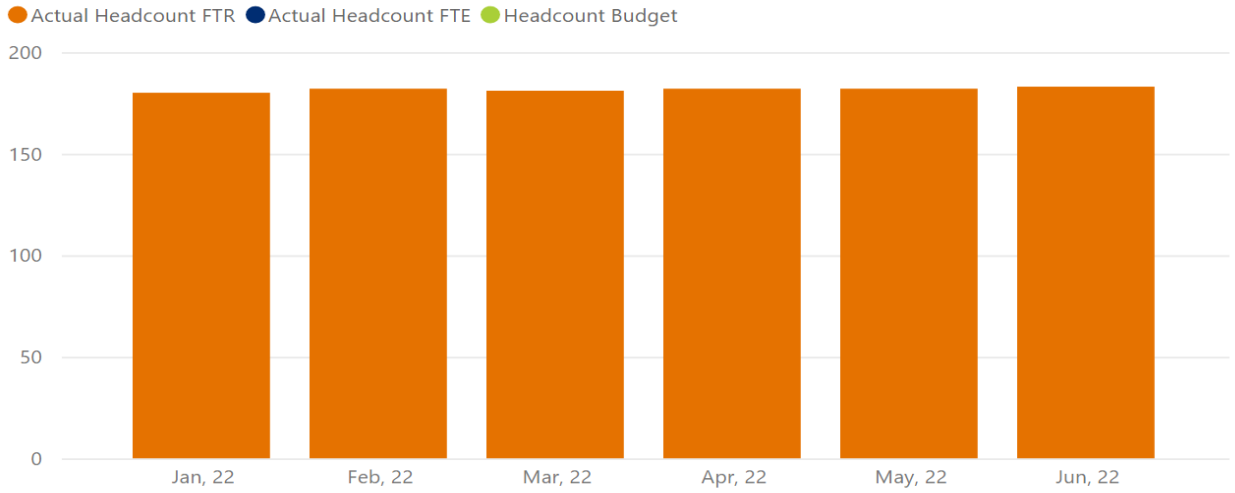
Hours and CAP Hours Vs. Budgets



Hours by Initiative



Headcount and Budget by Month & Year



2022 Highlights

- Construction and Maintenance

Maintenance Engineering – Will Coe lead.

Includes PQ, 2 new engineers, 2 on site construction inspectors.

Apprenticeships:

Interviews conducted for a 4th electrician apprentice

Union agreed to Fiber Network Technician apprenticeship

Working with development of Relay Tech training program

2022 Highlights

- PD Engineering
  - Internally designing Vantage (Quincy Foothills) and Sabey (West Canal) from 30% forward on substation electrical – saved scheduled to reduce financial risk of projects
  - New Engineer onboard:

    Luis Navarro (transferred from Intern to Engineer)

    Justin Heilman (EE from BPA to PUD)
- Control Systems Engineering

  Energy Management System (EMS) Upgrade
  Contract approved by Commission on 4/12

  Update: Initial Administration training completed for 3 CSE staff members
  Have started initial detail design with the vendor

Q2 2022 Highlights

PD Asset Management

Accomplishments

- **Wood Pole Sustain Program** – *4 of 8 Build Areas*
- **Power Transformer Strategy** – *Mobile Sub Readiness*
- **Substation and Fiber Hub Audits** – *Field Work Complete*
- **Aerial Fiber Strategy** – *Squirrel Guarding Pilot*
- **Clevest Mobile Work** – *Excellent Product, Go Live After ESRI*

Staffing

- *Tom Schwiesow Retirement in Q4 – Seeking Backfill*
- *GIS Analysts Moving to Asset Management in 2023*
- *PDE Transfer – Full Time Maximo Lead 2023*

Smyrna Pole Replacement

Thank You For Your Ongoing Support
Grant County
PUBLIC UTILITY DISTRICT

2022 Integrated Resource Plan Public Hearing

07.26.22

Rich Flanigan, Lisa Stites, and Wesley Cole

Wholesale Marketing and Supply

Grant PUD

Powering our way of life.

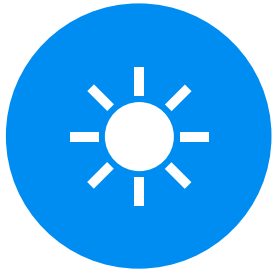
Introduction

- This Hearing follows the public workshop on June 28
- No public feedback has been received to date
- The work presented here provides additional opportunity for input and complies with state requirements per RCW 19.280

Key Considerations for the 2022 IRP

Load Growth and Uncertainty

Clean Energy Transformation Act

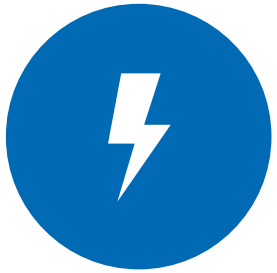


Renewable Portfolio Standard

Water Risk

Changing Power Markets

Resource Adequacy



Transmission and Deliverability

Least-Cost Robust Solution

Existing Resources

- Priest Rapids Project
  - Wanapum and Priest Rapids dams
  - 63.31% share of combined 2171 MW nameplate rating
  - Estimated Unmet District Load (EUDL) financial resource; up to approx. 30% of market value of PRP output
  - Canadian Entitlement treaty obligation of 99 MW of clean energy during high load hours
  - Rock Island encroachment obligation, 60-70 MW range based on river conditions
  - Slice contracts
    - Sell counterparties 30% slice of PRP through Dec 31, 2023; 10% portion through Dec 31, 2024
    - Receive revenues to purchase firm, unspecified-source power from the same counterparties
  - Pooling agreement
    - Counterparty receives 33.31% of PRP output until Sep 29, 2025
    - We receive firm, unspecified-source power to meet load
    - Counterparty provides certain scheduling services

Existing Resources

- Quincy Chute Project
  - 9.4 MW hydroelectric generating facility
  - Agreement through Oct 1, 2025
  - Operates March through October
- Potholes East Canal Project
  - 6.5 MW hydroelectric generating facility
  - Agreement through Sep 1, 2030
  - Operates March through October
- Nine Canyon Wind Project(through July 1, 2030)
  - 12.54% share of 95.5 MW facility
  - Agreement through Jul 1, 2030
- BPA resource for load in Grand Coulee city area
  - Approx. 5 aMW of load not connected to our transmission system

Policies Represented

- Resource Adequacy
  - 15% capacity margin above peak forecast load
  - Resource capacity assumed as estimate of effective load carrying capability
- Energy Independence Act/I-937
  - 15% Renewable Portfolio Standard (RPS)
  - Only incremental hydro portion of PRP is eligible to be counted toward RPS compliance
- Clean Energy Transformation Act (CETA)
  - 80% clean energy for retail load by 2030
  - Application of the Social Cost of Carbon in modeling and planning
- Federal tax credits
  - Credits for wind assumed to expire after 2025
  - Credits for solar assumed to step down after 2025

Resource Additions Considered

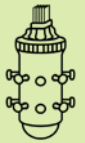
- **Standalone Solar**
  - Local 25% capacity factor, no wheel; Close 29% capacity factor BPA wheel; Far 33% capacity factor, BPA + additional wheel

- **Solar Plus Storage**
  - Solar with 4-hour storage at a ratio of 50% capacity
  - Solar generation profile would be the same as standalone and battery is restricted from grid charging

- **Standalone Storage**
  - Two resources: short duration (4 hours) and long duration storage (8 hours)
  - Lithium-ion batteries, roundtrip efficiency of 85% and 0% leakage rate, cycle constraint 365 cycles/year

- **Wind**
  - Local 26% capacity factor, no wheel; Close 37% capacity factor, BPA wheel; Far 42% capacity factor, BPA + additional wheel

- **Small Modular Reactors (SMRs)**
  - Characteristics and cost based on NuScale non-proprietary information
  - Assumed minimum 30% share of 6 module plant

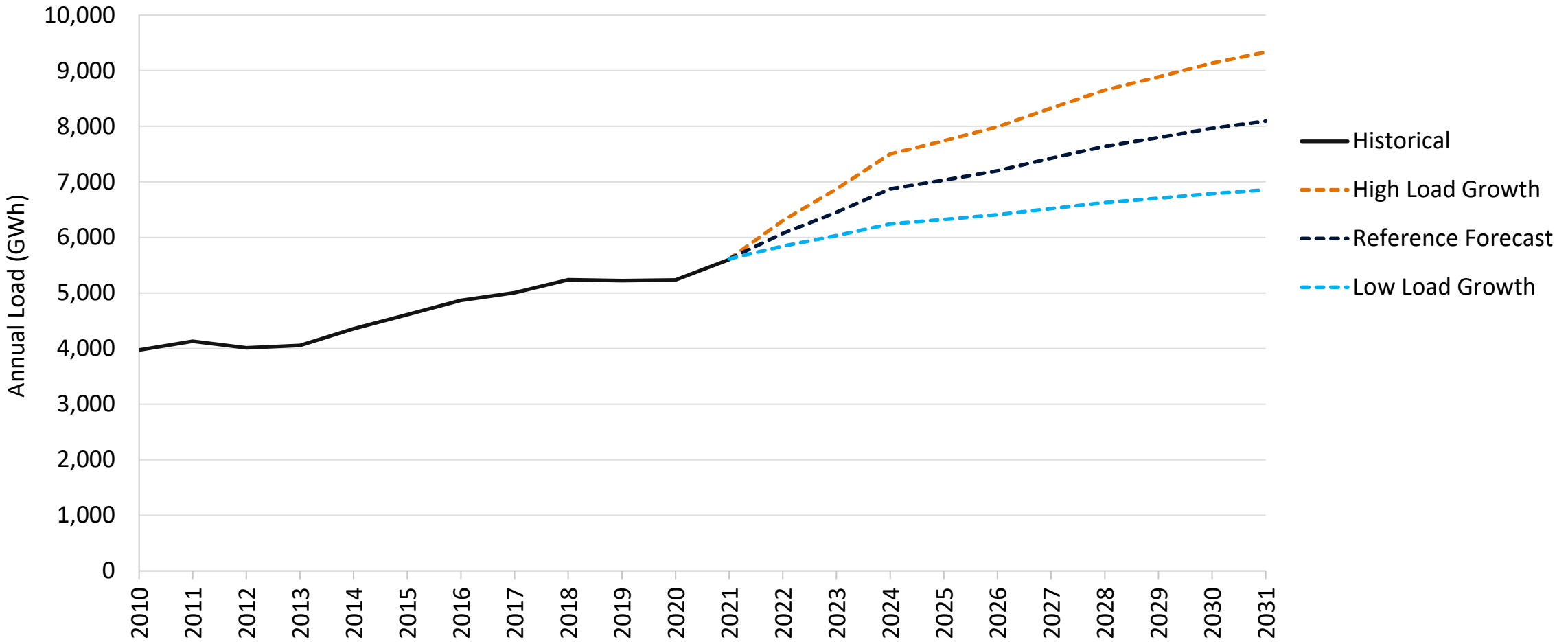


- **Gas Turbines and Reciprocating Engines**
  - Aeroderivative and Reciprocating Internal Combustion Engines (RICE)

Other Resource Considerations

- Resources could be obtained through purchase agreements or built by Grant PUD
  - Additional work with Finance and others is needed to determine options for the Commission to consider
- Bonneville Power Administration (BPA)
  - Statutory right to apply for priority power from BPA post-2028
  - Actively working with region's preference customers and participating in BPA's Provider of Choice process
- Market purchases
  - Market purchases modeled as energy only, no capacity component
  - Grant PUD will continue to participate in wholesale trading activity

Consideration of Range of Load Growth



The high and low load growth cases are not forecasts, but are intended to explore the impacts of higher and lower load growth on portfolio selection

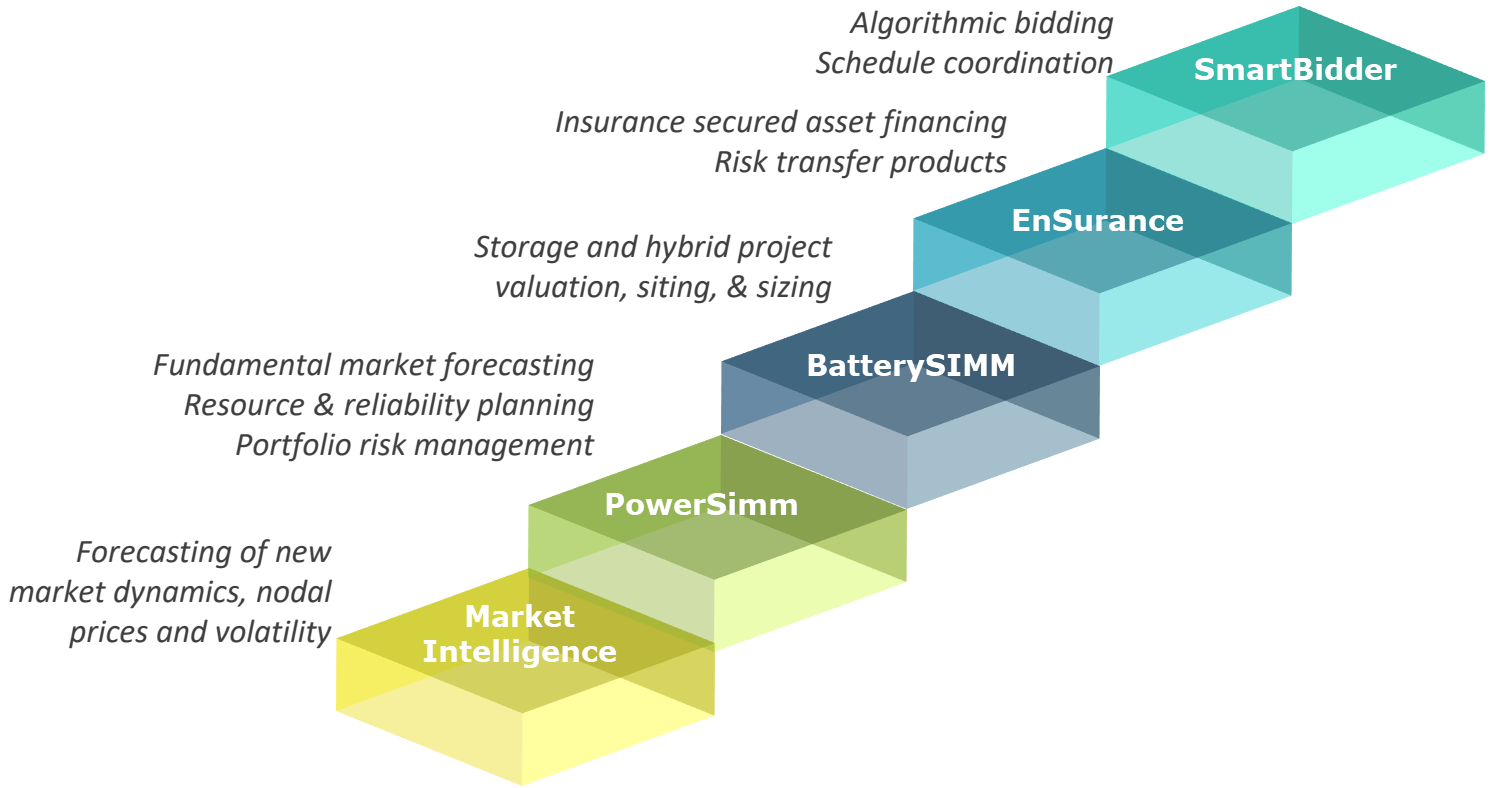
The high load condition may not be feasible from an infrastructure standpoint

Our Modeling Consultant - Ascend Analytics

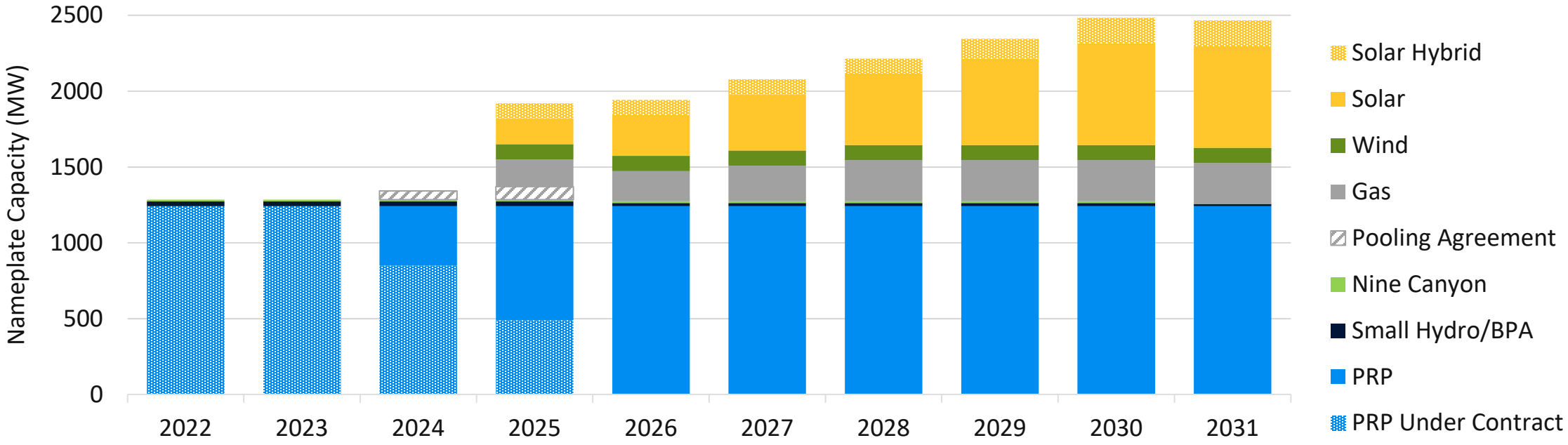
- Ascend Analytics is an innovative software service company focused on energy analytics
- Founded in 2002 with 85 employees in Boulder, Oakland, and Bozeman
- Five integrated service lines for operations, portfolio analytics, and planning
- Custom analytical solutions and consulting

Proven & Broadly Adopted

EDF renewables, DUKE ENERGY, NEXTera ENERGY, TERRA-GEN, aypa, New York Power Authority, ABLE GRID, STRATA SOLAR, AMERICAN ELECTRIC POWER, 8minutenergy, REU Redding Electric Utility, TID WATER & POWER, nrg, AUSTIN ENERGY, Ameren, SILICON VALLEY CLEAN ENERGY, BWL, LA DWP Los Angeles Department of Water & Power, Shell, City of Glendale Water & Power GWP Your Trusted Community Utility



Nameplate Capacity of Selected Portfolio



Selected Portfolio (Nameplate Capacity)	2025	2026	2027	2028	2029	2030	2031
Capacity of Existing Portfolio (MW)	1,370	1,275	1,275	1,275	1,275	1,275	1,256
Capacity of Portfolio Additions (MW)	550	668	804	940	1,070	1,210	1,210
Total Selected Portfolio Capacity (MW)	1,920	1,943	2,079	2,215	2,345	2,485	2,466

Selected Resource Additions

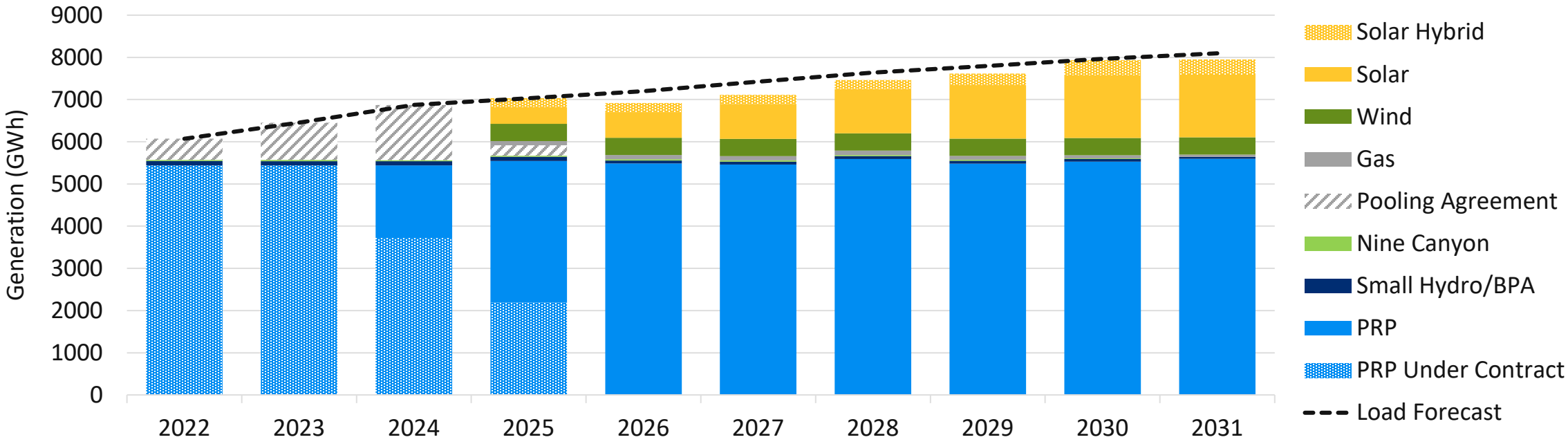
Nameplate Capacity (MW)

Technology	Now-2025	2026-2028	2029-2031	Total
Solar	170	300	200	670
Solar Hybrid	100	0	70	170
Wind	100	0	0	100
Gas	180	90	0	270
Total	550	390	270	1210

Firm Capacity (MW)

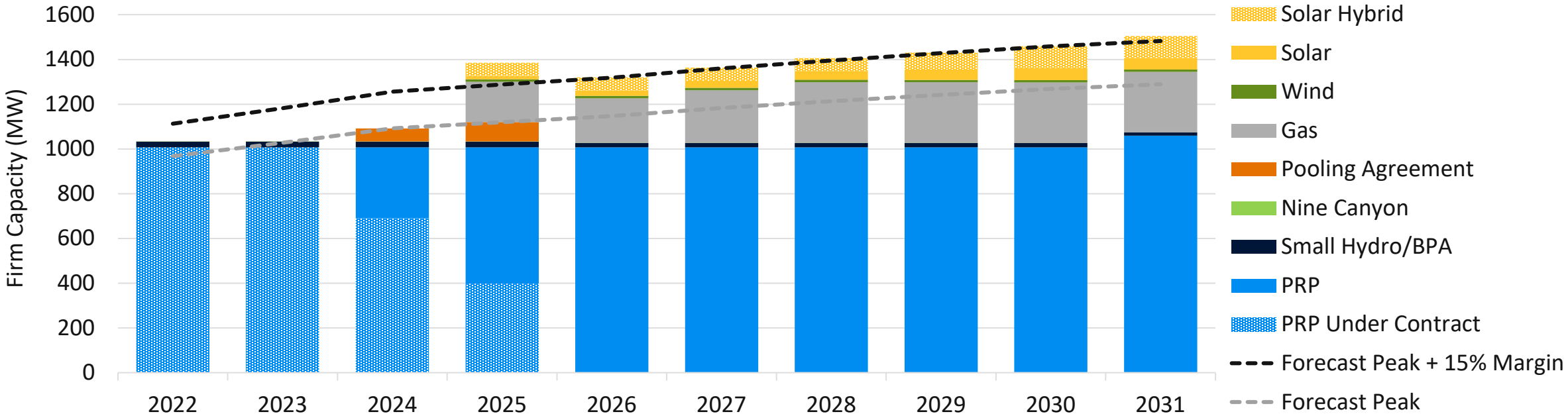
Technology	Now-2025	2026-2028	2029-2031	Total
Solar	15	24	12	52
Solar Hybrid	59	0	39	98
Wind	12	0	0	12
Gas	180	90	0	270
Total	266	113	51	430

Expected Energy Generation



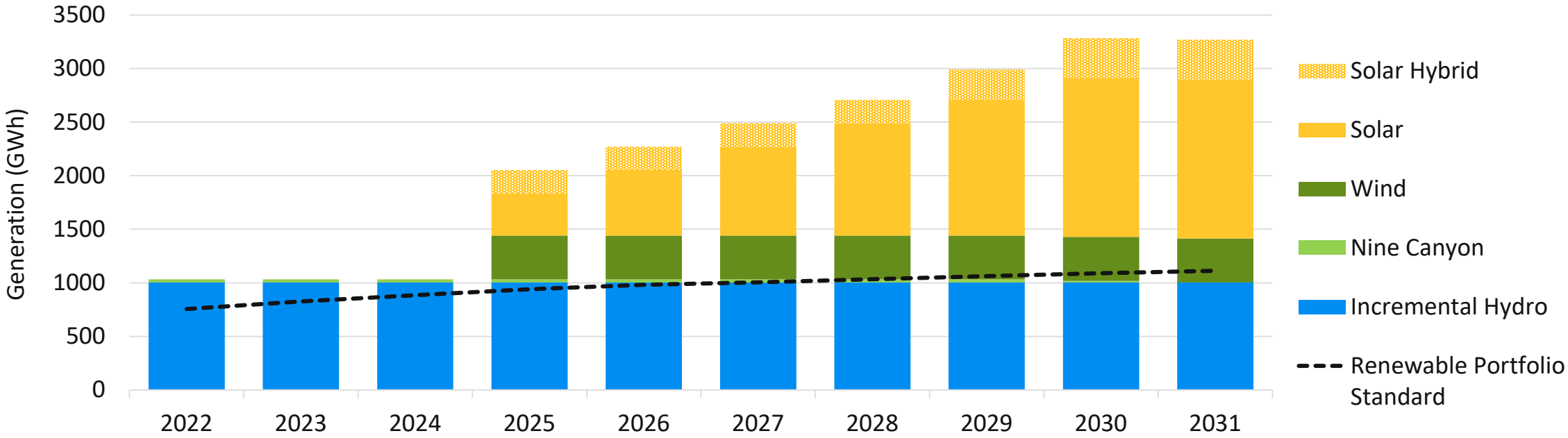
Selected Portfolio (Energy)	2025	2026	2027	2028	2029	2030	2031
From Existing Portfolio (aMW)	675	637	634	647	637	640	644
From Portfolio Additions (aMW)	127	152	177	202	233	266	263
Total from Selected Portfolio (aMW)	803	790	812	849	869	906	908
Additional Needs for Load (aMW)	28	32	36	20	21	3	16

Firm Capacity - Effective Load Carrying Capability



Selected Portfolio (Firm Capacity)	2025	2026	2027	2028	2029	2030	2031
From Existing Portfolio (MW)	1020	1028	1028	1028	1028	1027	1075
From Portfolio Additions (MW)	266	292	335	379	403	432	430
Total from Selected Portfolio (MW)	1386	1320	1363	1407	1431	1459	1505
Capacity Margin of Selected Portfolio	24%	15%	15%	16%	15%	15%	17%

Potential Route to RPS Compliance

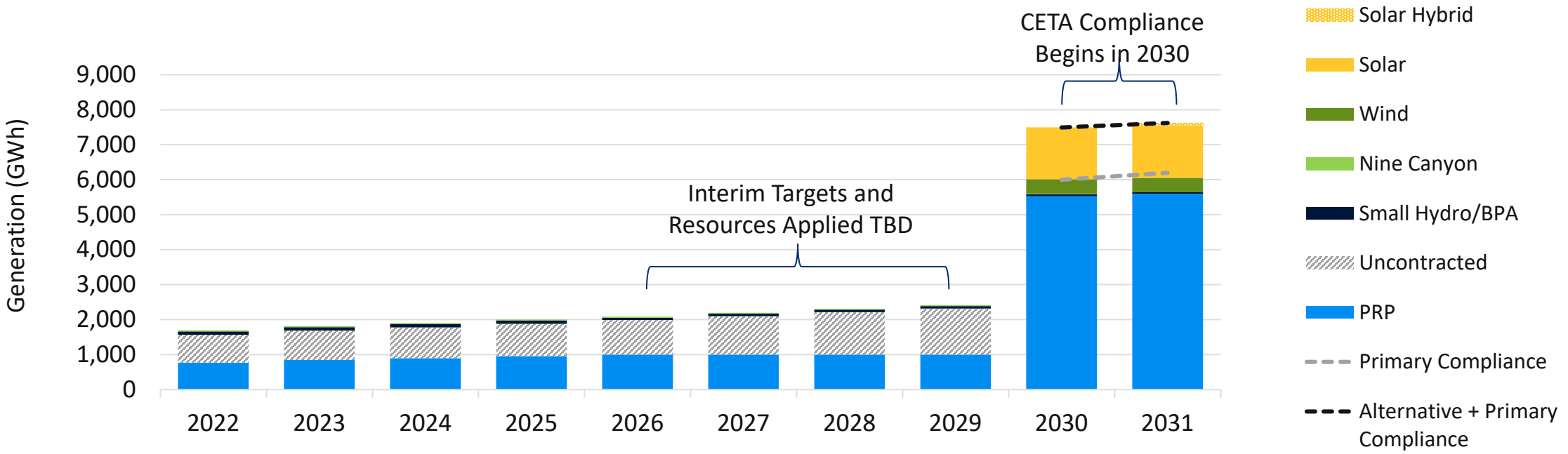


Selected Portfolio and EIA/I-937	2025	2026	2027	2028	2029	2030	2031
RPS Met by Portfolio	100%	100%	100%	100%	100%	100%	100%
Additional Renewable Needs (GWh)	0	0	0	0	0	0	0

Clean Energy Action Plan

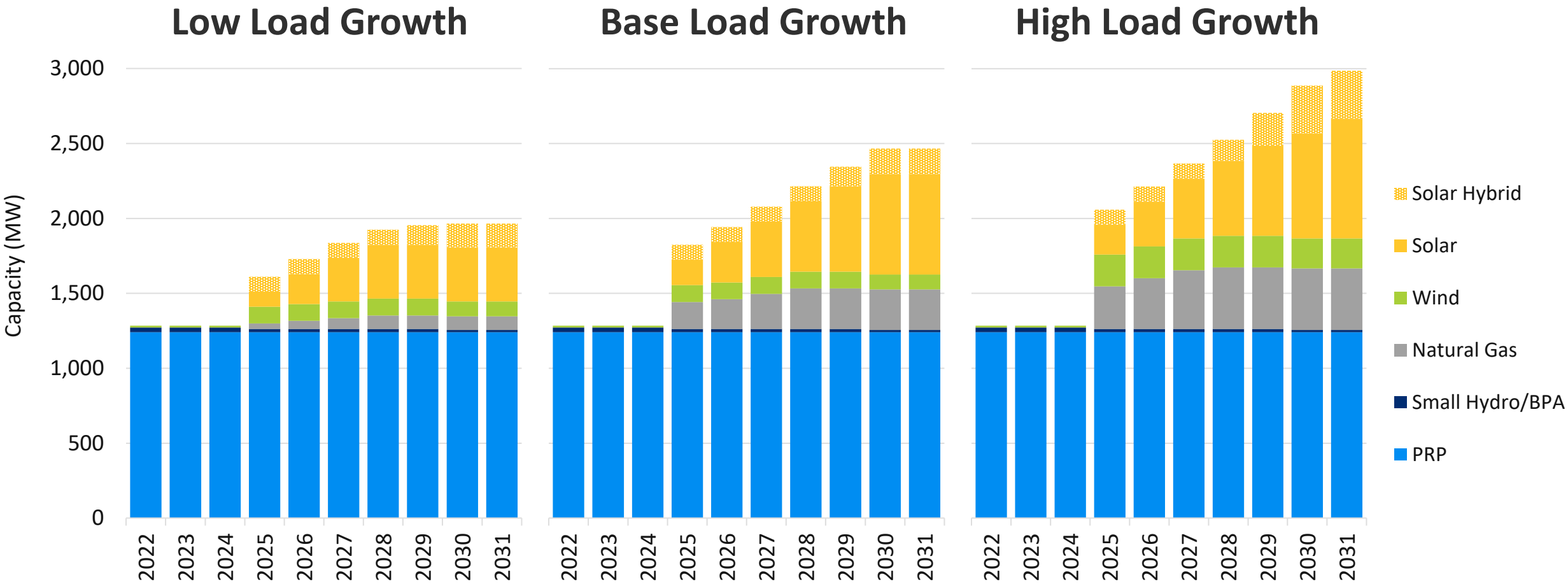
- Eliminate coal-fired resources from energy allocation by Dec 31, 2025
- All sales to retail customers greenhouse gas neutral by Jan 1, 2030
  - Primary (80%) compliance in 2030 - 2031 through combination of current portfolio, RECs, resource acquisition, investments in energy infrastructure projects
- Clean energy for all sales to retail customers by Jan 1, 2045
  - Modeled portfolio, through 2031, is aligned with 2045 compliance targets
- Pursue cost effective conservation and efficiency from 2021 Conservation Potential Assessment
  - Resolution No. 8974 in November of 2021, established a ten-year conservation potential of 161,272 MWh and a two-year conservation target of 40,033 MWh
- Equitable transition:
  - Reduction of burden through energy efficiency
  - Access to assistance
  - Energy audits

Potential Route to CETA Compliance



Selected Portfolio and CETA	2025	2026	2027	2028	2029	2030	2031
Primary Compliance Met by Portfolio	28%	TBD	TBD	TBD	TBD	100%	100%
Additional Needs for Primary (GWh)	0	TBD	TBD	TBD	TBD	0	0
Additional for Alt + Primary (GWh)	0	TBD	TBD	TBD	TBD	0	0

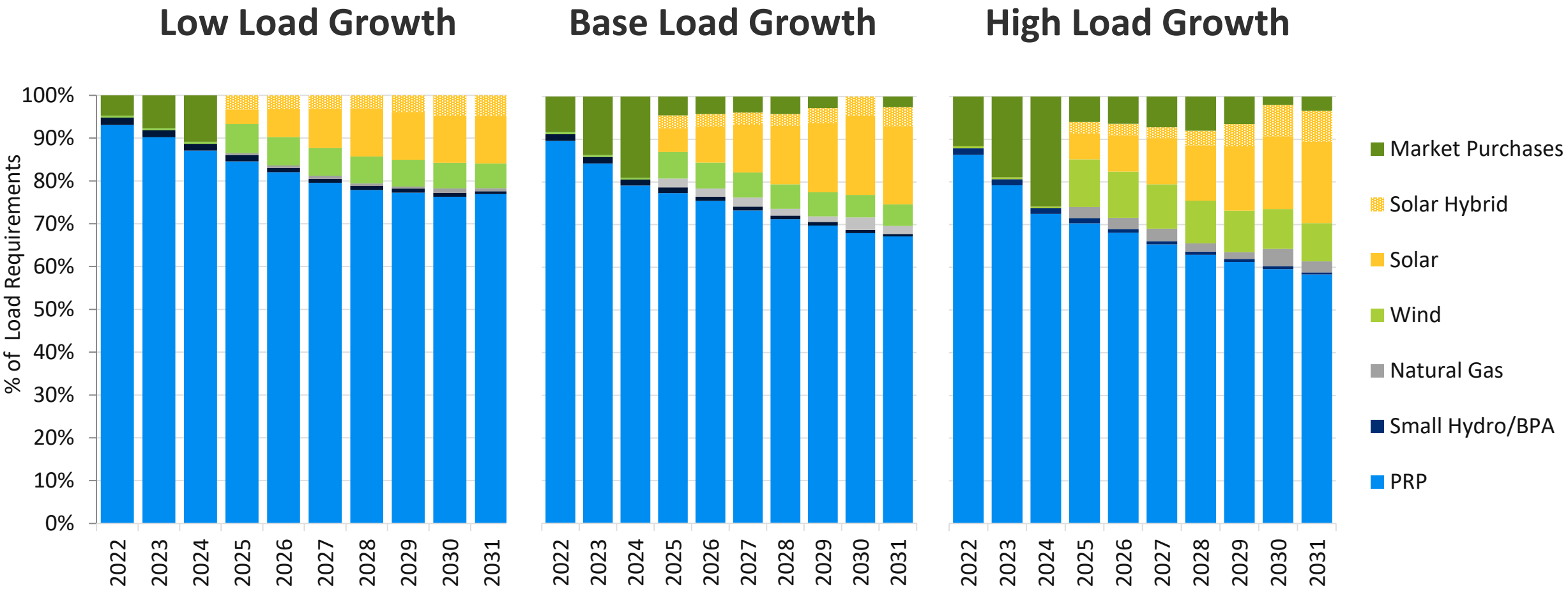
Capacity Buildouts – Range of Load Growth



The high and low load growth cases are not forecasts, but are intended to explore the impacts of higher and lower load growth on portfolio selection

The high load condition may not be feasible from an infrastructure standpoint

Generation Mix – Range of Load Growth



The high and low load growth cases are not forecasts, but are intended to explore the impacts of higher and lower load growth on portfolio selection

The high load condition may not be feasible from an infrastructure standpoint

Action Plan

- Enhance capabilities to assess future load growth
- Develop the tools and capabilities needed to evaluate potential long-term resource solutions
- Continue to monitor and assess the availability, cost-effectiveness and portfolio fit of the plan, and other resources, prior to procurement (including post-2028 BPA contracts, capacity purchases, SMR, etc.)
- Continue to investigate and implement demand-side resource options
- Remain actively engaged in market development activities
- Continue participating in regional resource adequacy program design
- Implement plans to meet requirements of the Energy Independence Act/I-937 and the Clean Energy Transformation Act

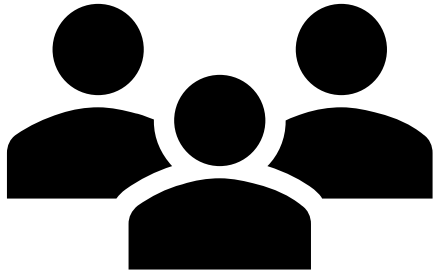
Next Steps

- July 26 - IRP Public Hearing at Commission Meeting
- August 9 - Resolution to Commission for review
- August 23 - Commission action on Resolution
- September 1 - File IRP with Department of Commerce

Feedback

CETA Comments:
CETA@gcpud.org

IRP Comments:
IRP@gcpud.org



CETA Information:
www.grantpud.org/CETA

Questions

Thank You

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