

# Lunch and Learn: Why Electricity Prices are Rising

Sept 11, 2024



**UTAH  
CLEAN  
ENERGY**



# OUR WORK: GETTING TO ZERO EMISSIONS



Transform our homes  
and buildings to be  
emission free



Electrifying our  
transportation to be  
emission free

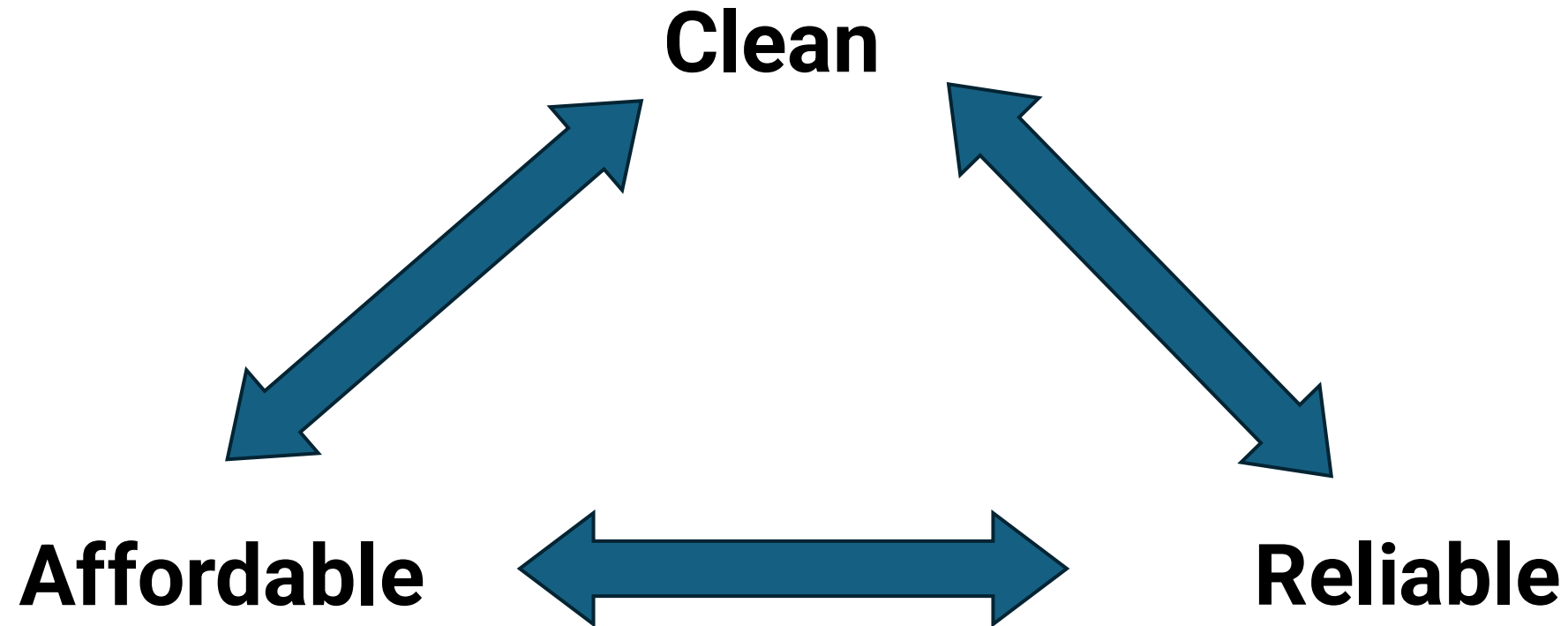


Modernize our electricity  
system to be innovative  
and primed for 100%  
clean energy



A critical mass of  
key influencers  
committed to achieving  
zero emissions

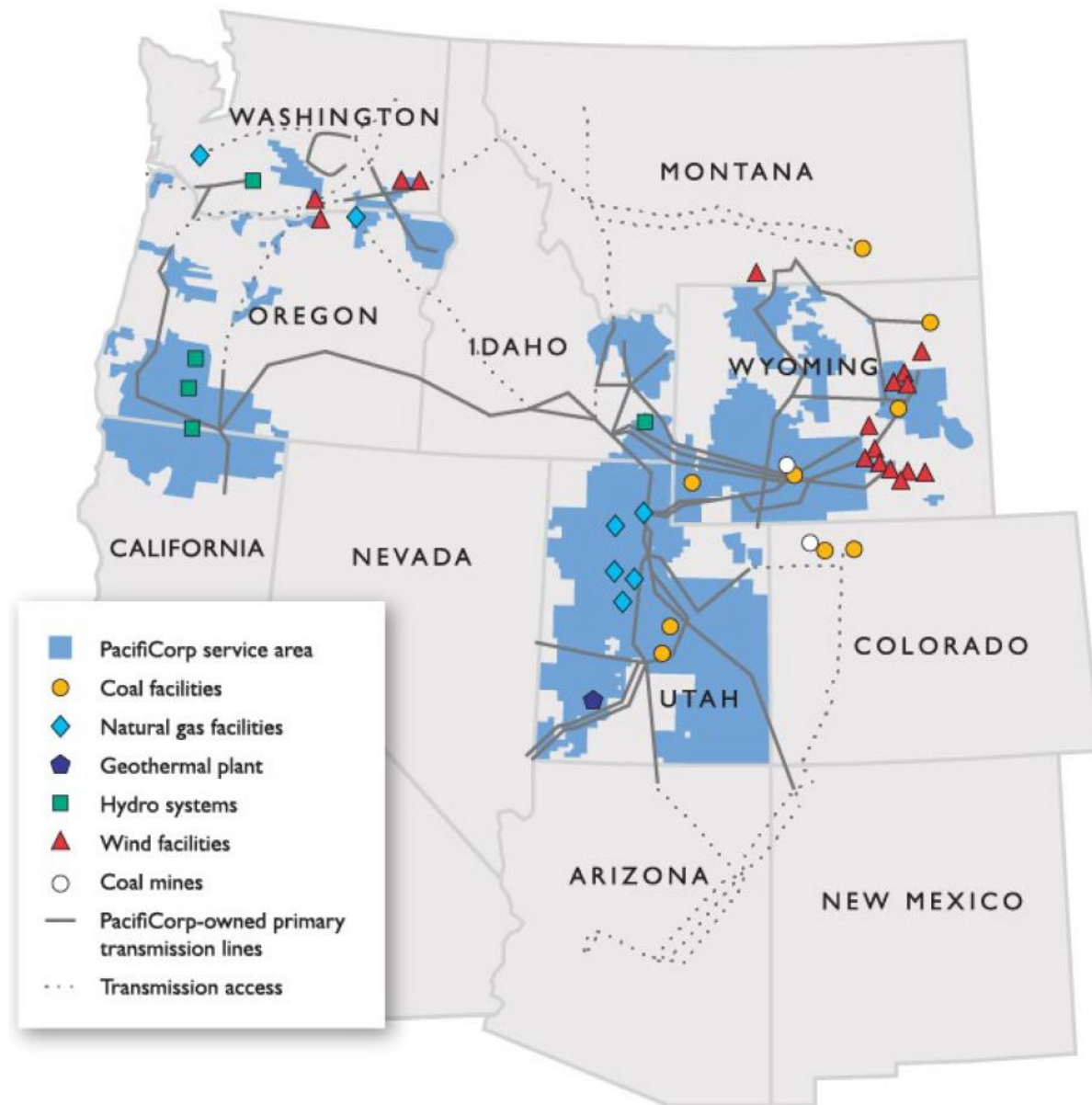
# Utah Clean Energy's Electricity Priorities



# Rocky Mountain Power and PacifiCorp

Rocky Mountain Power a regulated monopoly utility serving ~81% of Utah customers, and subsidiary of PacifiCorp, which is owned by Berkshire Hathaway

- Principal of regulated monopolies:  
Utilities provide affordable, reliable, and clean power to all customers who request service in exchange for a reasonable return on investment.
- All rate changes must be approved by the Utah Public Service Commission.



# Rocky Mountain Power's Proposed Significant Rate Hike

The initial proposal was a 30.6% increase in residential rates, from 10.96 to 14.31 Cents/kWh

- Also: increase the fixed customer charge from \$10 to \$15 for single family homes

Will increase a typical household electricity monthly bill by \$24.14

There's been an important recent update to the proposal, but we'll get to that later...



UTAH

## Rocky Mountain Power proposes a significant rate hike

Utility cites higher costs due to inflation, but what does it do to your wallet?



# Rocky Mountain Power's Proposed Significant Rate Hike

Here's a closer look at the initial proposal to increase rates in two steps

(Note: the rate % doesn't account for the increased customer charge)

There's been an important recent update to the proposal, more on that in a moment.

**First, what's driving this significant rate increase??**

Table 1 – Proposed Two-Step Price Change

Customer Class	Proposed Percentage Change from Rates in Effect on the date of Application (Step 1 Effective February 23, 2025)	Proposed Percentage Change from Step 1 Rates (Step 2 Effective January 1, 2026)
<b>Residential</b>	17.6%	11.1%
<b>General Service</b>		
Schedule 23	18.6%	11.8%
Schedule 6	15.7%	9.9%
Schedule 8	15.1%	9.6%
Schedule 9	19.3%	12.6%
<b>Irrigation</b>	16.9%	10.7%
<b>Lighting Schedules</b>	10.1%	5.1%

# Rising Fuel Prices + Climate Costs Are Primary Drivers

According to Rocky Mountain Power filing:

- Largest driver of Net Power Costs (NPC) is "regional power and fuel prices"
- Climate change is posing financial risk by increasing the frequency & severity of wildfires, driving up insurance and mitigation expenses

billion. NPC has been trending upward for several reasons, but the largest drivers are the significant increases in regional power and fuel prices. The NPC increase is mitigated by the

13. With the increasing wildfire risk across the western United States, excess liability insurance premiums have significantly increased. Excess liability insurance protects the Company and customers against financial losses from third-party claims in Utah and other states in which the Company provides utility service. The Company requests recovery of these expenses and discusses new regulatory tools that would work in conjunction with the newly enacted law in Utah, Senate Bill 224, to better position the Company to respond to the financial risk posed by the increasing frequency and severity of wildfires impacting PacifiCorp's service territories.

# What's driving rising fuel prices?

## Fragile Fossil Fuel Supply Chains

### Russia's invasion of Ukraine

- Drove up global natural gas prices

### Lila Canyon coal mine fire

- Eliminated 25% of Utah's coal production



— The Lila Canyon Mine fire burning in East Carbon, Utah, in September. KSL

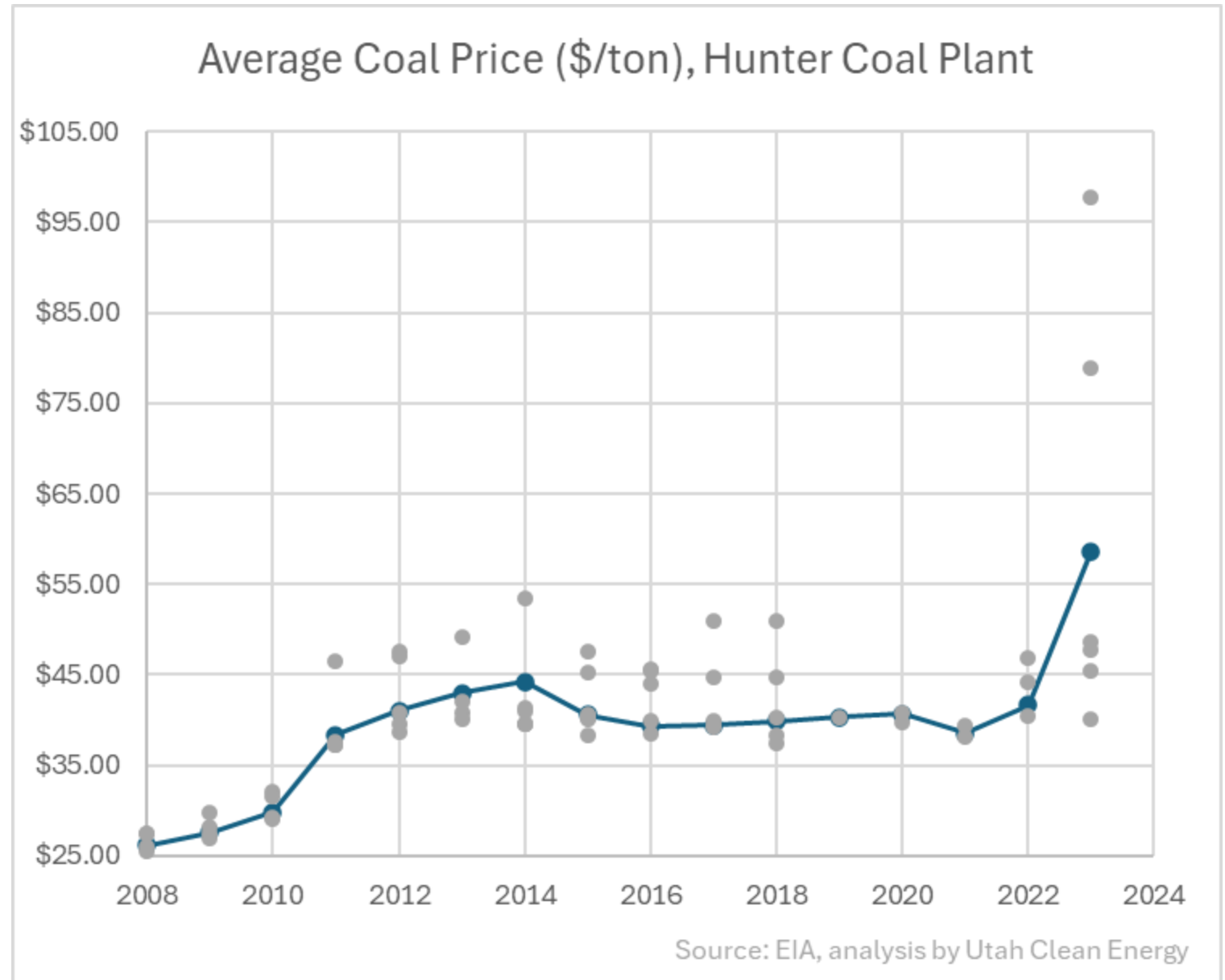


# Spiking coal prices

Coal prices increased 41% in 2023, with one of the contracts being 235% higher than prices in 2022

We expect these coal supply issues persist into the future as they face increased risk

- Mining issues, permitting, trucking/rail transportation, equipment shortages, and "limitations in availability of financing, which has put coal mines at an increased risk of becoming insolvent"



# Climate Change driving up costs

The changing climate is increasing costs in numerous ways

- Heat waves increasing peak power prices
- Drought reducing hydro generations availability
- Winter storms disrupting natural gas infrastructure

In calendar year 2022, like 2021, unforeseen weather events again drove increases in actual NPC, such as the multiple heat waves in the region during the summer of 2022 and ongoing drought conditions. These drivers increased peak period power prices and reduced hydro generation availability, respectively. Similarly, there was a historic cyclone event in the winter of 2022 that impacted power and natural gas prices. For

# Climate Change driving up costs: Wildfires

Wildfire impacts are a significant component of this rate increase & show up in several places

- Wildfire insurance and liability
- Wildfire mitigation activities
  - System hardening & upgrades, undergrounding, vegetation management, monitoring, weather stations, etc.

What are other impacts should we expect:

- Impacts on credit rating and borrowing costs affecting investment decisions
- Wildfire insurance premiums are skyrocketing
- PacifiCorp is facing significant liability for Oregon wildfires. Remains to be seen if/how that will affect us here in Utah



**So, fossil fuels and climate change are driving up rates**

**What is mitigating the rate increase?**

# Zero-fuel cost renewable energy + markets are mitigating costs

According to Rocky Mountain Power filing:

- Largest mitigating factor is investment in zero-fuel cost wind and transmission
- Costs further mitigated by regional markets

significant increases in regional power and fuel prices. The NPC increase is mitigated by the Company's investment in wind facilities and in the Gateway South transmission line, which

allows for the deployment of additional capacity from Wyoming wind and coal resources. The NPC increase is further mitigated by the Company's participation in Western Energy Imbalance Market.

# Zero Fuel Cost Resources are driving down costs

Wind facilities "with marginal costs of \$0/MWh...have driven Net Power Costs down by \$93 million"



**So, let's talk about the most recent  
update to the rate proposal**

# RMP's proposed rate increase is lowered\*\*

Latest update lowers the rate increase to 18.1%

That's welcome news!

\*\* But is there a catch? The details matter!

ENVIRONMENT GOV & POLITICS

### Rocky Mountain Power lowers its rate increase proposal to 18.1%, down from 30.5%

The change comes after harsh reactions from Utah leaders, including Gov. Spencer Cox

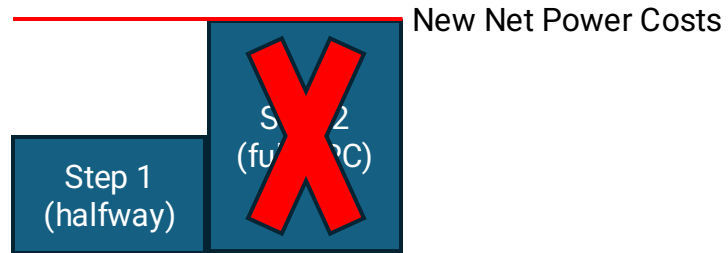
BY: ALIXEL CABRERA - AUGUST 29, 2024 1:34 PM





# RMP's proposed rate increase is lowered\*\*

RMP was planning to increase Net Power Costs to a halfway point after the first step and to their full costs in the 2nd step.



This update removes the second step.

Wait, does that mean RMP won't be collecting their full Net Power Costs?

Table 1 – Proposed Two-Step Price Change

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<b>General Service</b>		
Schedule 23	18.6%	
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<b>Irrigation</b>	16.9%	10.7%
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Table 1 – Proposed Revised Price Change

Customer Class	Proposed Percentage Change from Rates in Effect on the date of Application (Step 1 Effective February 23, 2025)
<b>Residential</b>	18.1%
<b>General Service</b>	
Schedule 23	19.2%
Schedule 6	16.2%
Schedule 8	15.6%
Schedule 9	19.9%
<b>Irrigation</b>	17.4%
<b>Lighting Schedules</b>	10.6%

# RMP's proposed rate increase is lowered\*\*

RMP is planning to recover the second half of their Net Power Costs through the "Energy Balancing Account" (EBA) instead of in the Rate Case.

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Schedule 9	19.9%

The Company continues to request that the base NPC be increased to the mid-point from the current level in rates to the new base, for an increase of \$285.2 million on February 23, 2025 related to NPC. However, the Company amends its application to remove its request to implement the second increase of \$285.2 million on January 1, 2026. The Company would continue to recover the differences between the level of base NPC and actual NPC through the EBA.

# RMP's proposed rate increase is lowered\*\*

You can find the Energy Balancing Account as a line item on your monthly bill

The Energy Balancing Account changes every year and is determined in a separate regulatory process from a Rate Case

On July 1 this year the EBA increased rates by 10.11%

PacifiCorp/Rocky Mountain Power Rate Changes 1992-2024;								
Average Residential Customer Using 700kWh/Month								
Tariff No.	Effective Date	Docket No.	Filing Type	Company Request (\$)	Commission Approval (\$)	Ann. Bill <sup>9</sup>	Average Cents /kWh	Percent Change
51	7/1/2023	23-035-01	EBA-Sch. 94	\$175,029,819	\$175,029,819	\$955.96	11.38	4.02%
51	6/1/2024	24-035-12	REC-Sch. 98	(\$2,171,495)	(\$2,171,495)	\$954.96	11.37	-0.10%
51	7/1/2024	24-035-01	EBA-Sch. 94 <sup>12</sup>	\$454,953,425	\$431,578,182	\$1,051.48	12.52	10.11%

## Detailed Account Activity

### ITEM 1 - ELECTRIC SERVICE

METER NUMBER	SERVICE PERIOD		ELAPSED DAYS	METER READINGS		METER MULTIPLIER	AMOUNT USED THIS MONTH
	From	To		Previous	Current		
[REDACTED]	Jun 13, 2024	Jul 15, 2024	32	6127	7042	1.0	915 kwh
[REDACTED]	Jun 13, 2024	Jul 15, 2024		12303	13259	1.0	-956 kwh
<b>Total</b>							<b>-41 kwh</b>

M = Main Meter S = Subordinate Meter

Next scheduled read date: 08-14. Date may vary due to scheduling or weather.

NEW CHARGES - 07/24	UNITS	COST PER UNIT	CHARGE
Basic Charge - Single Phase			10.00
( Net Energy To Cust Meter )	892 kwh		
( Net Customer Generation )	932 kwh		
Energy Charge Summer Block 1	400 kwh	0.0902790	36.11
Energy Charge Summer Block 2	492 kwh	0.1172100	57.67
(Beginning Credits Balance \$143.60)			
(Credits Earned This Period \$85.74)			
Transition Export Credit			-93.78
(Ending Credits Balance \$135.56)			
Renewable Energy Adjustment		-0.0018000	-0.17

Rate Case

Energy Balancing Account	July	June
for 15 day(s)	0.1988000	8.74
for 17 day(s)	0.0806000	4.02

Customer Efficiency Services	0.0384000	4.08
Elec Vehicle Infrastructure	0.0030000	0.32
Home Electric Lifeline Program		0.16
Paperless Bill Credit		-0.50
Municipal Energy Sales/use Tax	0.0600000	1.59
Utah Sales Tax	0.0490000	1.30
<b>Total New Charges</b>		<b>29.54</b>

Rate Case

## Bottom Line:

- RMP's initial rate increase proposal was 30% in two steps
- The 2nd step of 11% to recover the full amount of Net Power Costs has been dropped
- But, Utah's rates went up 10% in July from the Energy Balancing Account
- So, we're still facing an overall rate increase of 28% by next March

# Diversifying our Energy Supply Can Protect Utahns Against Rising Costs

Fuel costs are rising, whether they're in the Rate Case or EBA, we pay them regardless

Clean energy sources such as wind, solar, and geothermal have zero fuel costs, so they don't have volatile price changes subject to global factors

Clean energy can ensure secure, stable energy prices for customers

Utah needs to get back on track with faster adoption of clean energy!



# Take Away Points

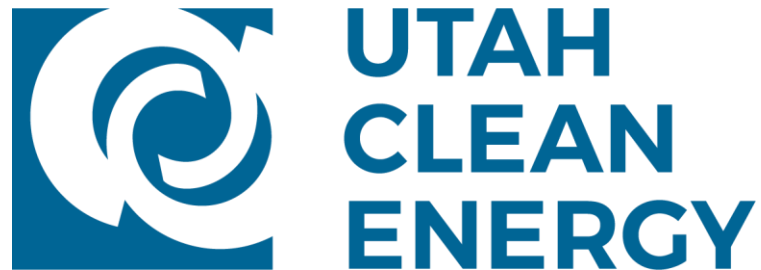
- 1. Fuel prices and climate change are driving increasing electricity costs**
- 2. Zero-fuel cost resources (wind, solar, geothermal) and regional markets not only save money, but also reduce emissions, support a healthier climate and healthy communities**
- 3. Building new clean energy, transmission, and storage resources is a No Regrets Path for Utah's future**

## **We need your voice at Utah's energy policy table**

- Talk to your family, friends, co-workers, networks. We're in this together
- Talk to your state representatives
- Submit comments to the PSC
- Write Letters to the Editor

# THANKS, AND QUESTIONS

- Logan Mitchell | Climate Scientist & Energy Analyst | [logan@utahcleanenergy.org](mailto:logan@utahcleanenergy.org)
- Sarah Puzzo | Regulatory Associate | [spuzzo@utahcleanenergy.org](mailto:spuzzo@utahcleanenergy.org)
- Josh Craft | Director of Government Relations | [josh@utahcleanenergy.org](mailto:josh@utahcleanenergy.org)

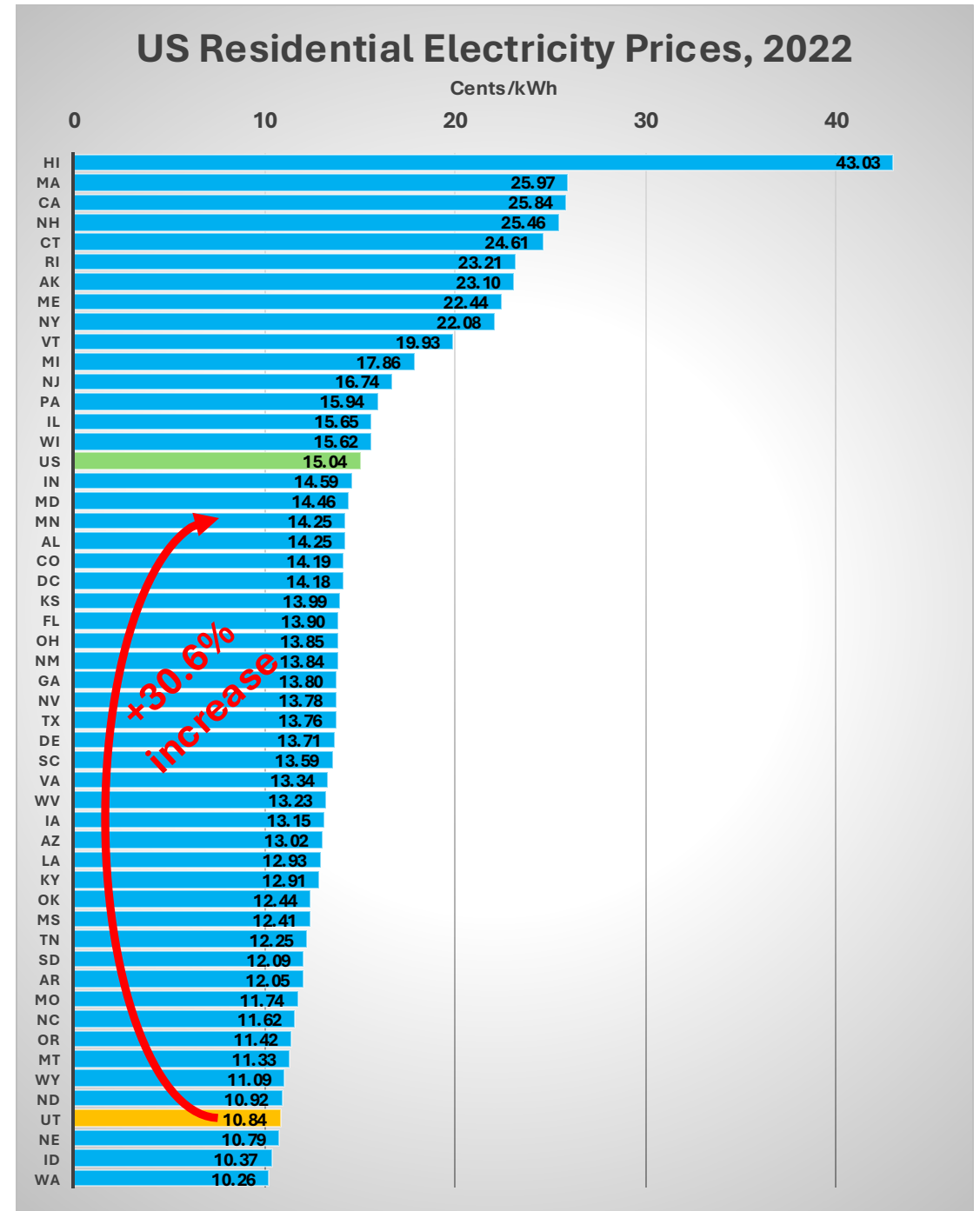


# Extra Slides



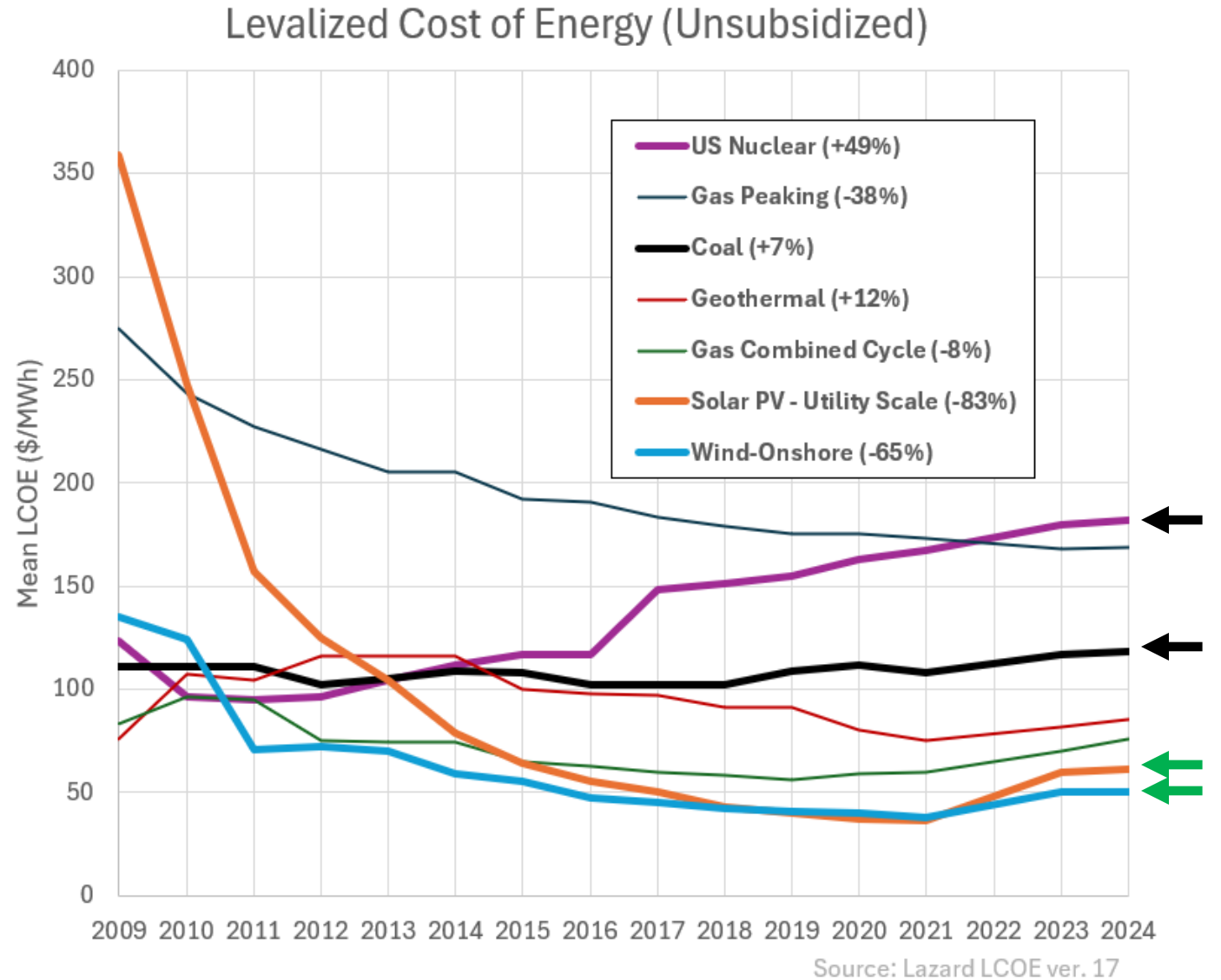
# Rising Fuel Prices + Climate Costs Are Primary Drivers

- Utah has historically had some of the lowest electricity rates in the US
- This rate increase will substantially increase Utah's ranking
- This data is for 2022 and there has been upward price pressure facing utilities across the country, but Utah's ranking will undoubtedly increase by 2025/2026



# Solar and Wind Energy are Economic Winners

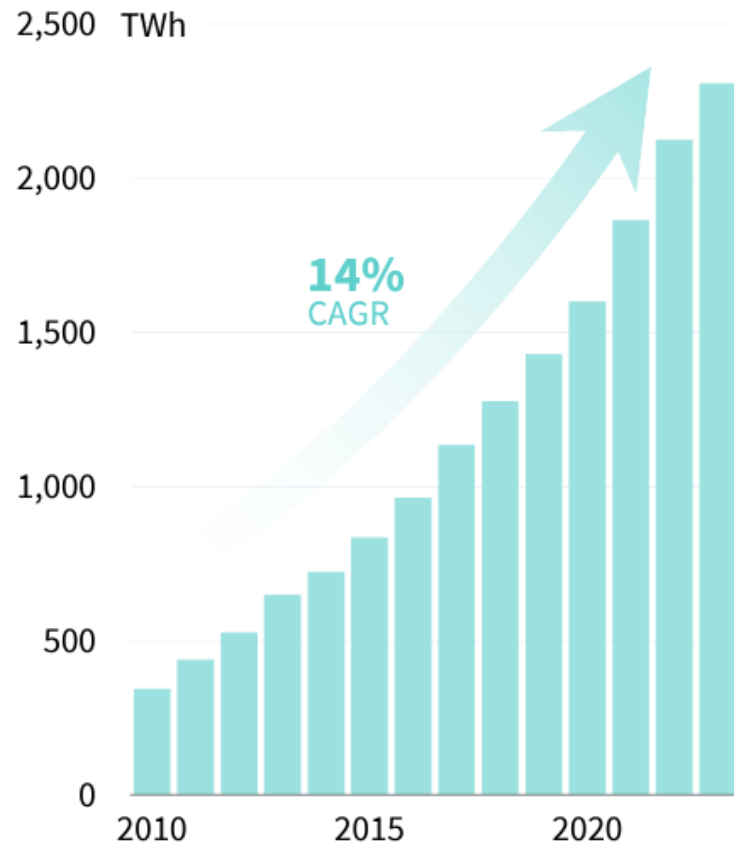
- Coal & Nuclear are expensive with rising costs
- Solar & Wind are the cheapest with falling costs
- Fundamentally, technologies beat commodities



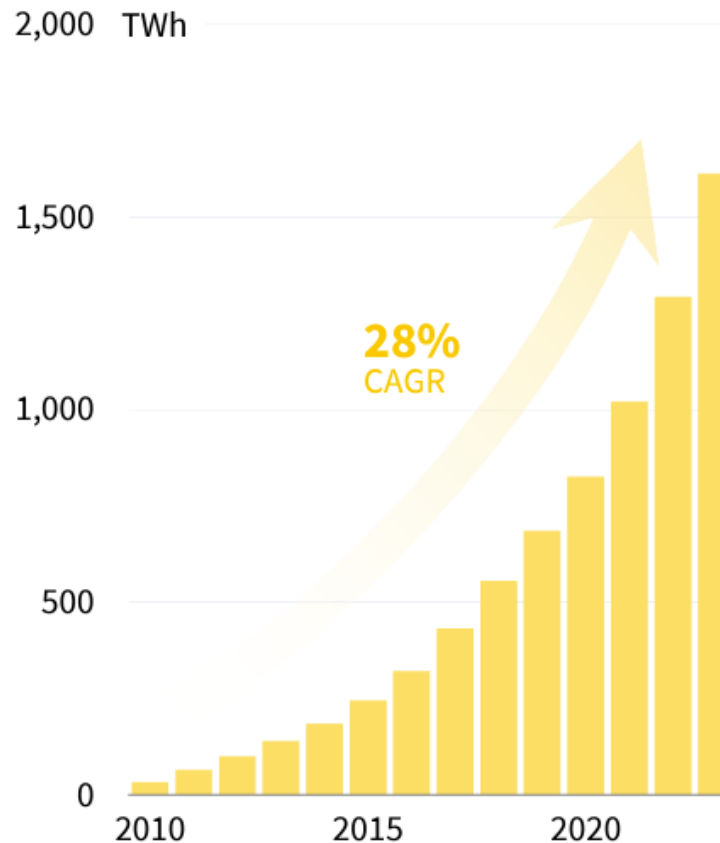
# The Market is Choosing Renewables

Global solar generation has been doubling every 2–3 years, and battery storage capacity every year

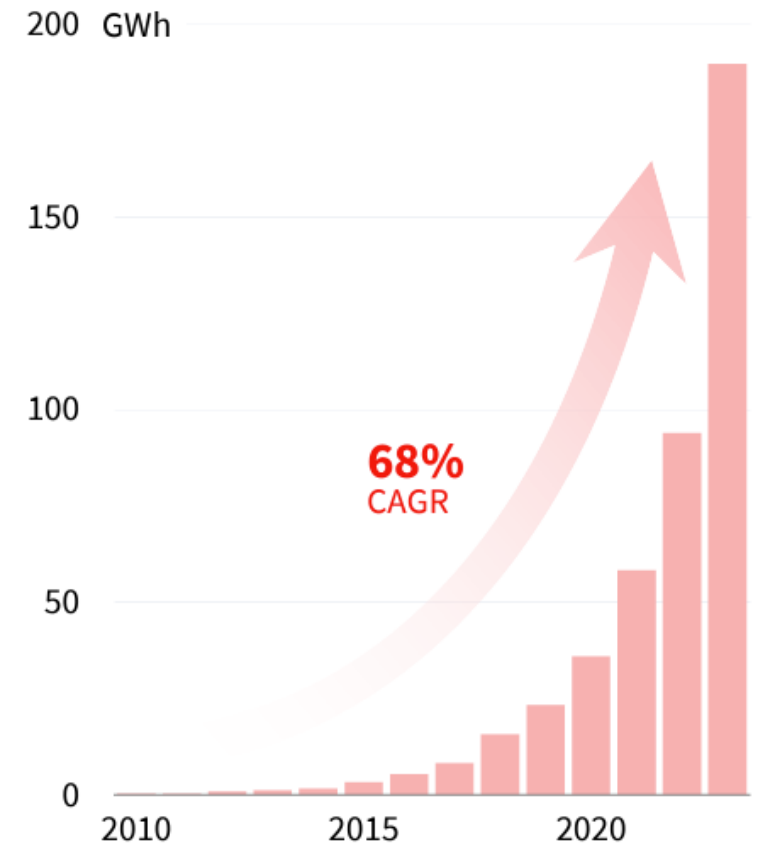
## Wind generation



## Solar generation

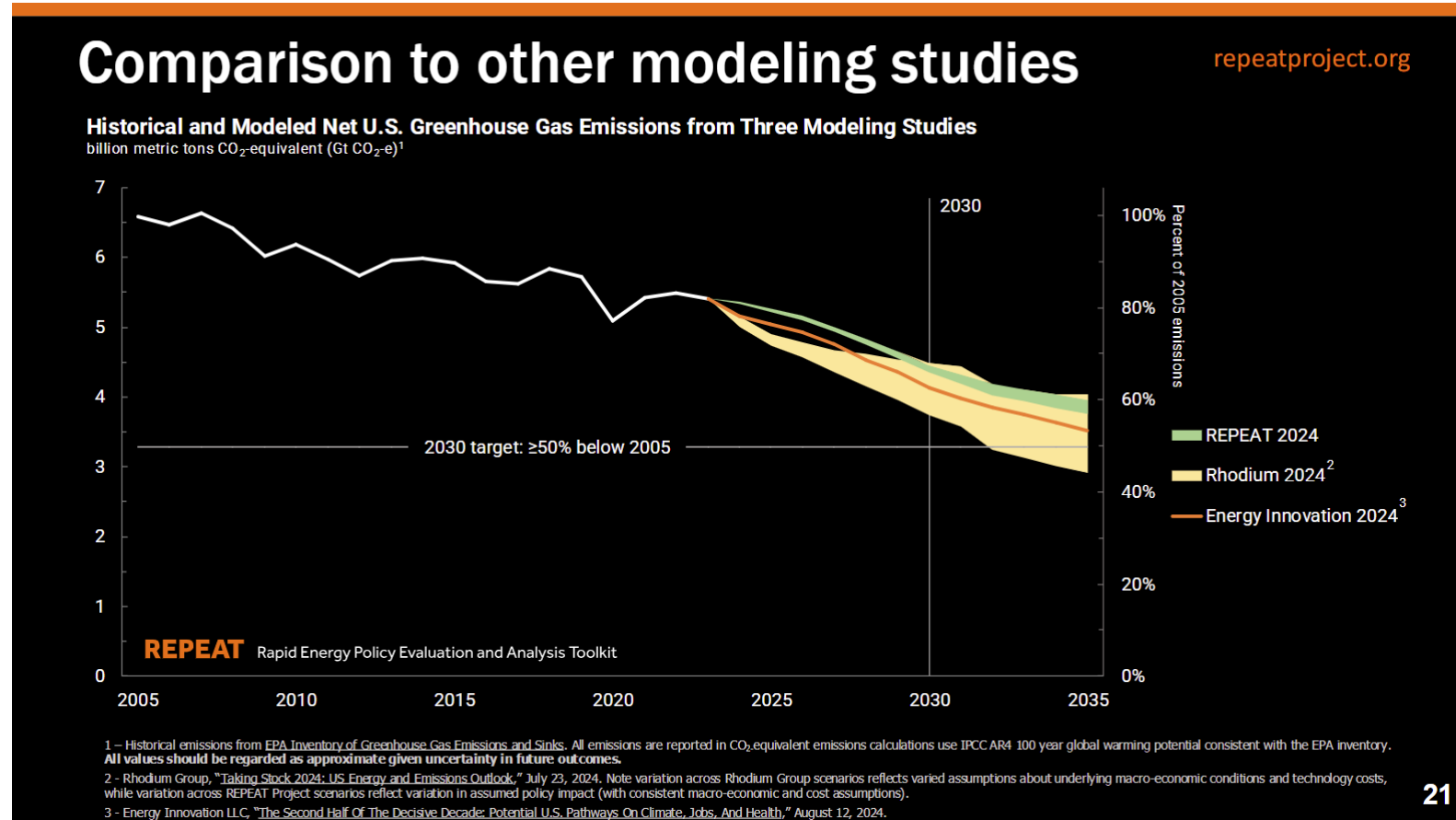


## Battery storage



# Context: Utility Decarbonization 80% by 2030

- The US's Paris Agreement target is 50-52% economy wide GHG emission reduction by 2030
- Current US policies don't reach our 2030 target
- We need to be increasing ambition

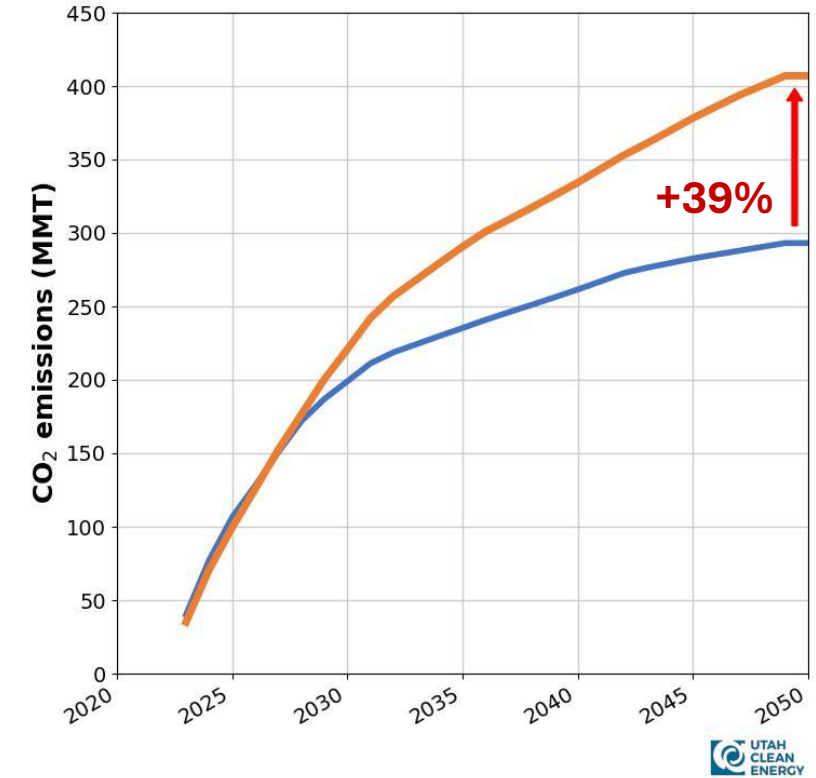
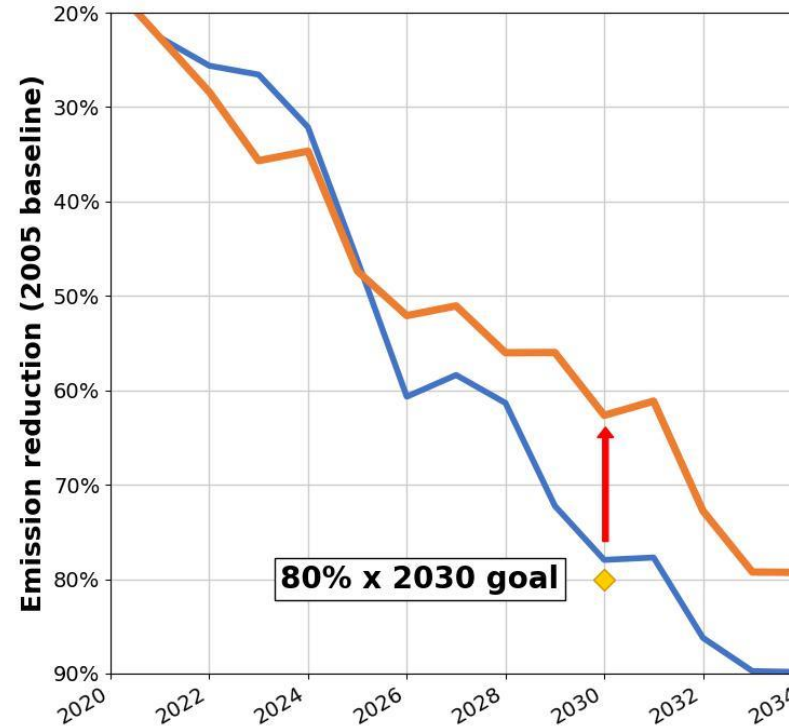


# 2023 IRP Update

The **2023 IRP Update** takes Utah off track

- Carbon emissions not falling fast enough (63% instead of 78% by 2030)
- Increase in cumulative emissions of 114 Million Metric Tons (+39% increase)

**Rocky Mountain Power's 2023 IRP Update**  
slashing renewables, propping up coal



# 2023 IRP Update

Comparing the 2023 IRP vs IRP Update (In 2030):

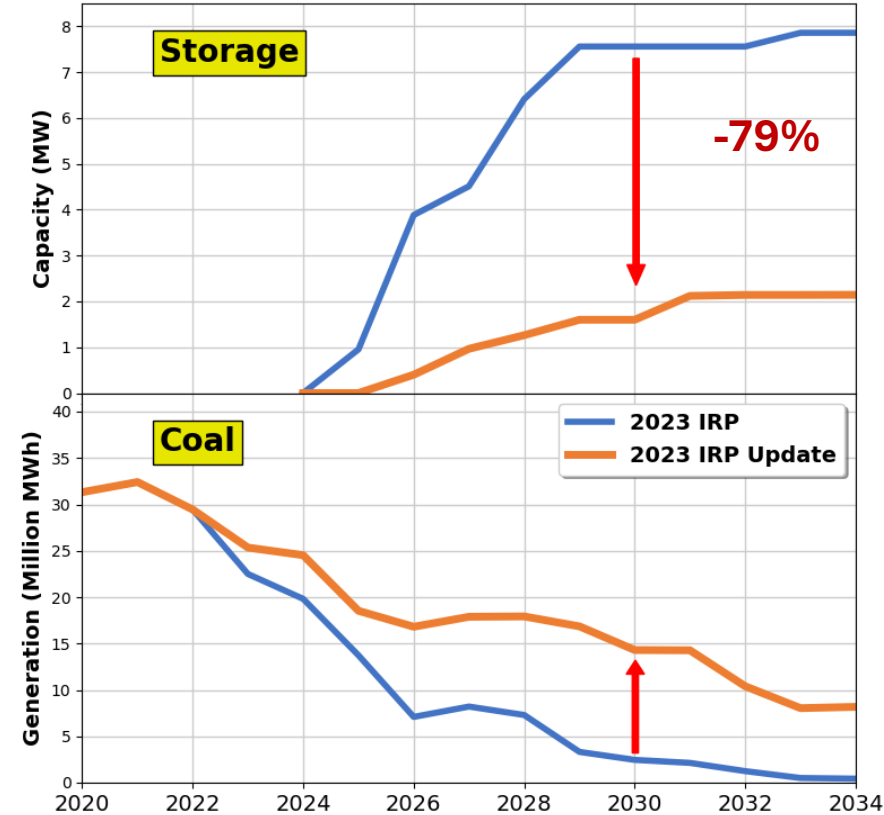
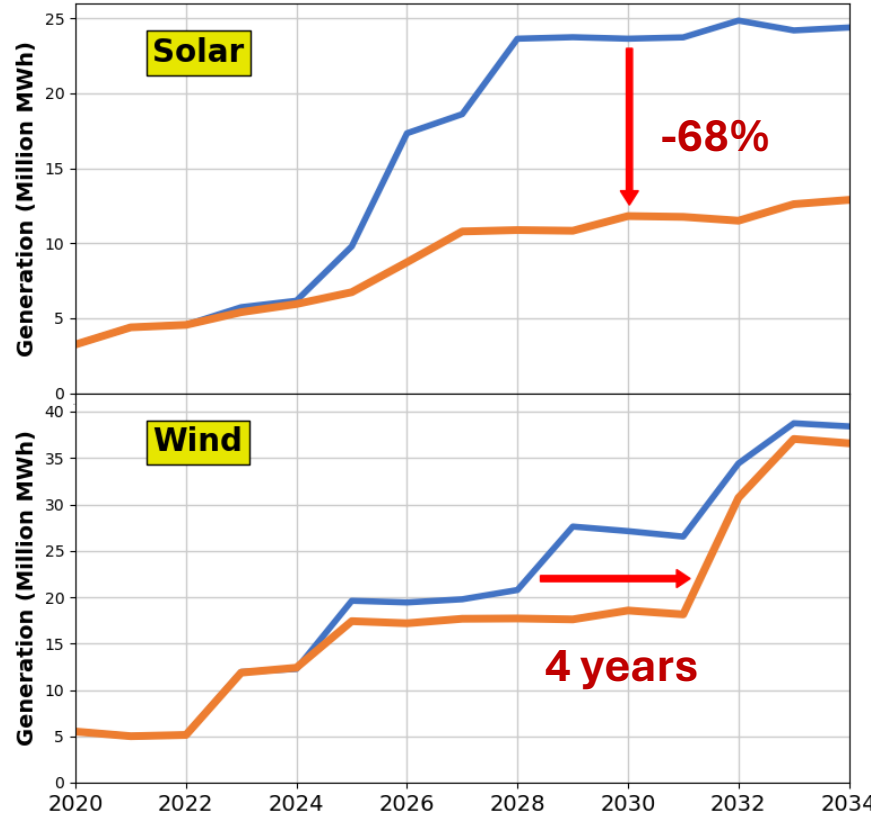
- Solar **decrease** of 68%
- Storage **decrease** of 79%
- Wind **delayed** 4 years

Replaced by:

- Coal **increase** of ~6x

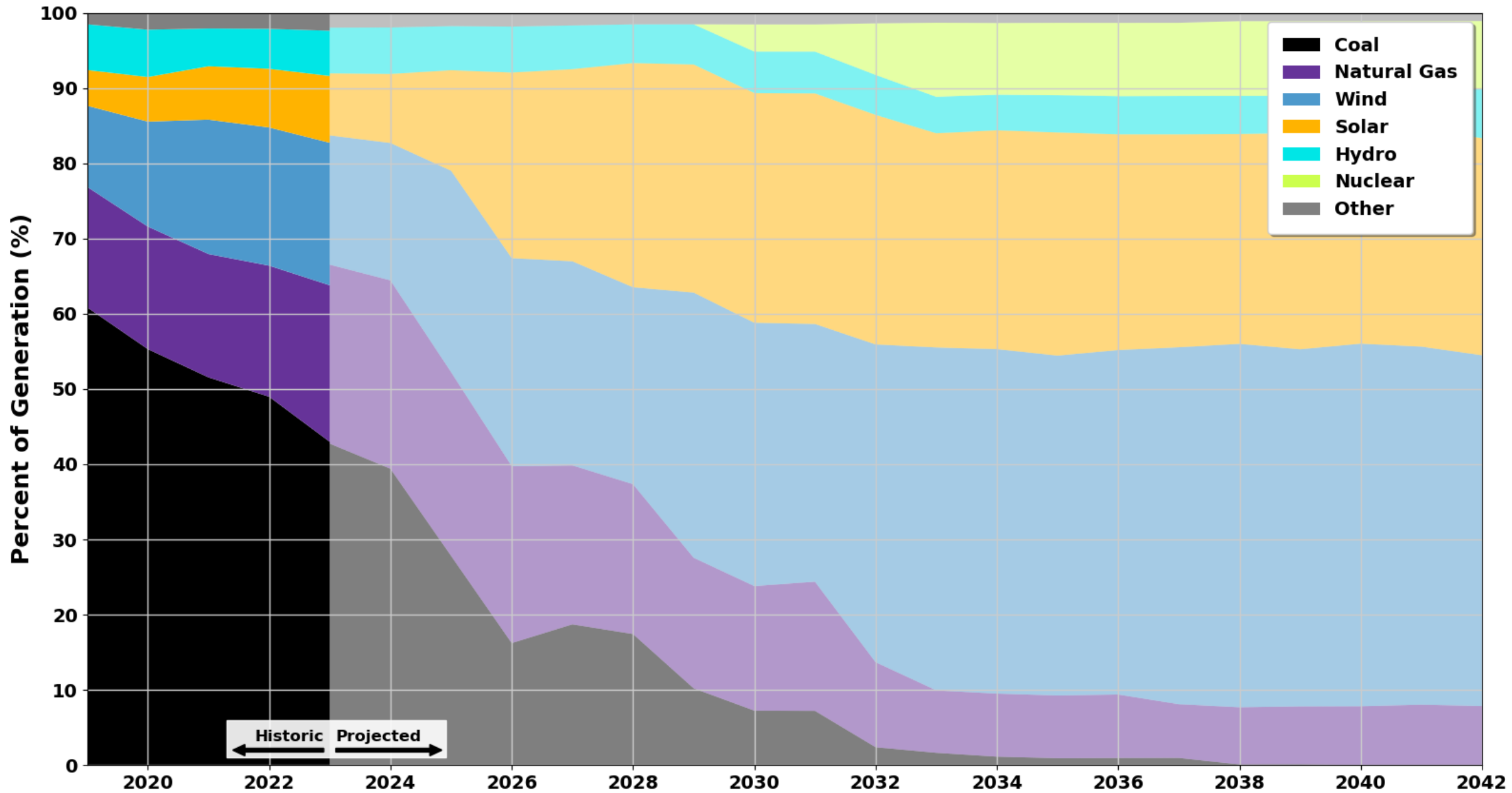
PacifiCorp fixed IRP resources through 2027

Rocky Mountain Powers 2023 IRP Update  
slashing renewables, propping up coal



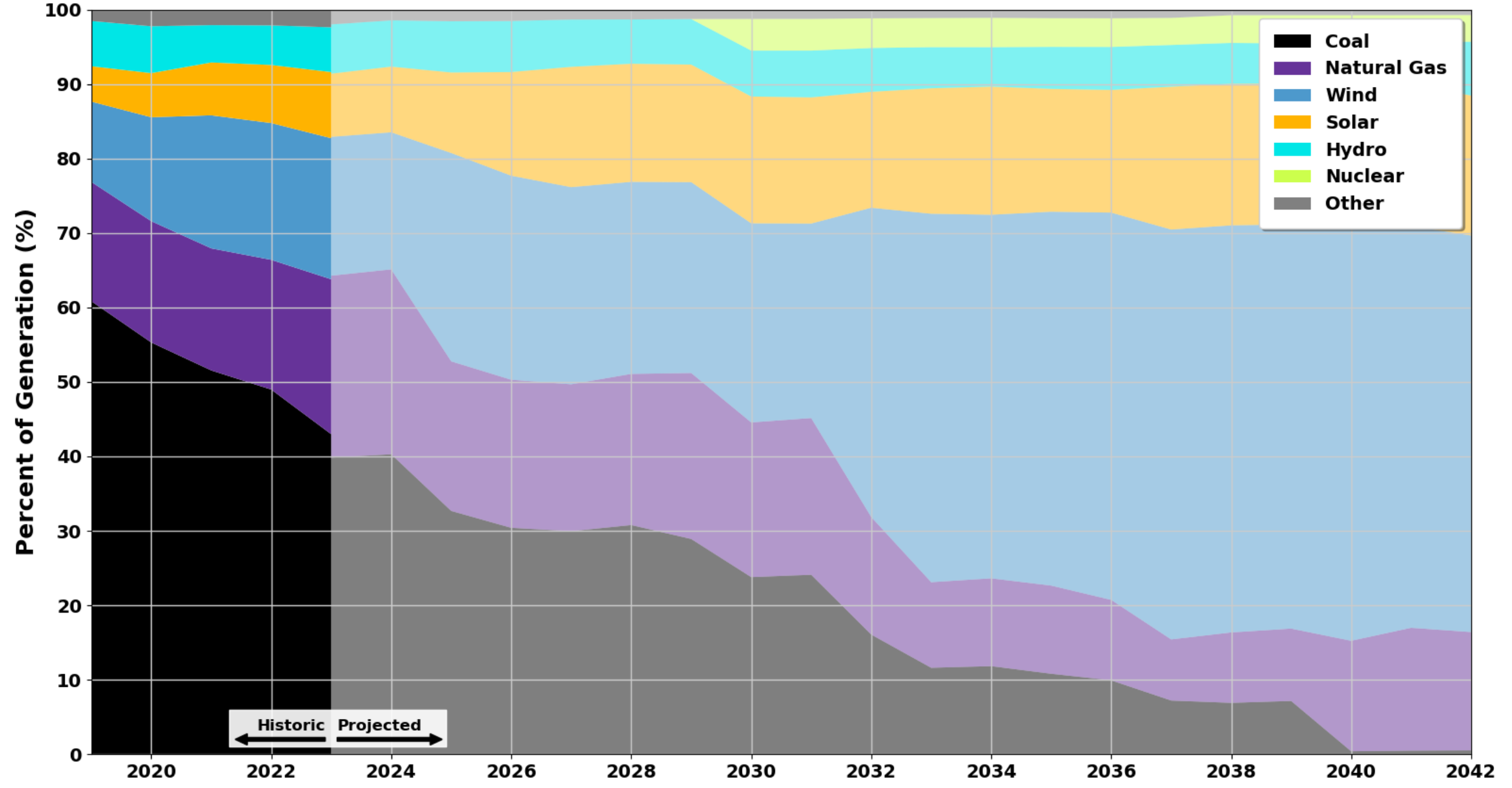
Last year...

# PacifiCorp Generation (2023 IRP)



This year's IRP Update swaps coal &

# PacifiCorp Generation (2023 IRP Update)





# **A Note (or a few) on Dispatchable and Firm Electricity Resources**

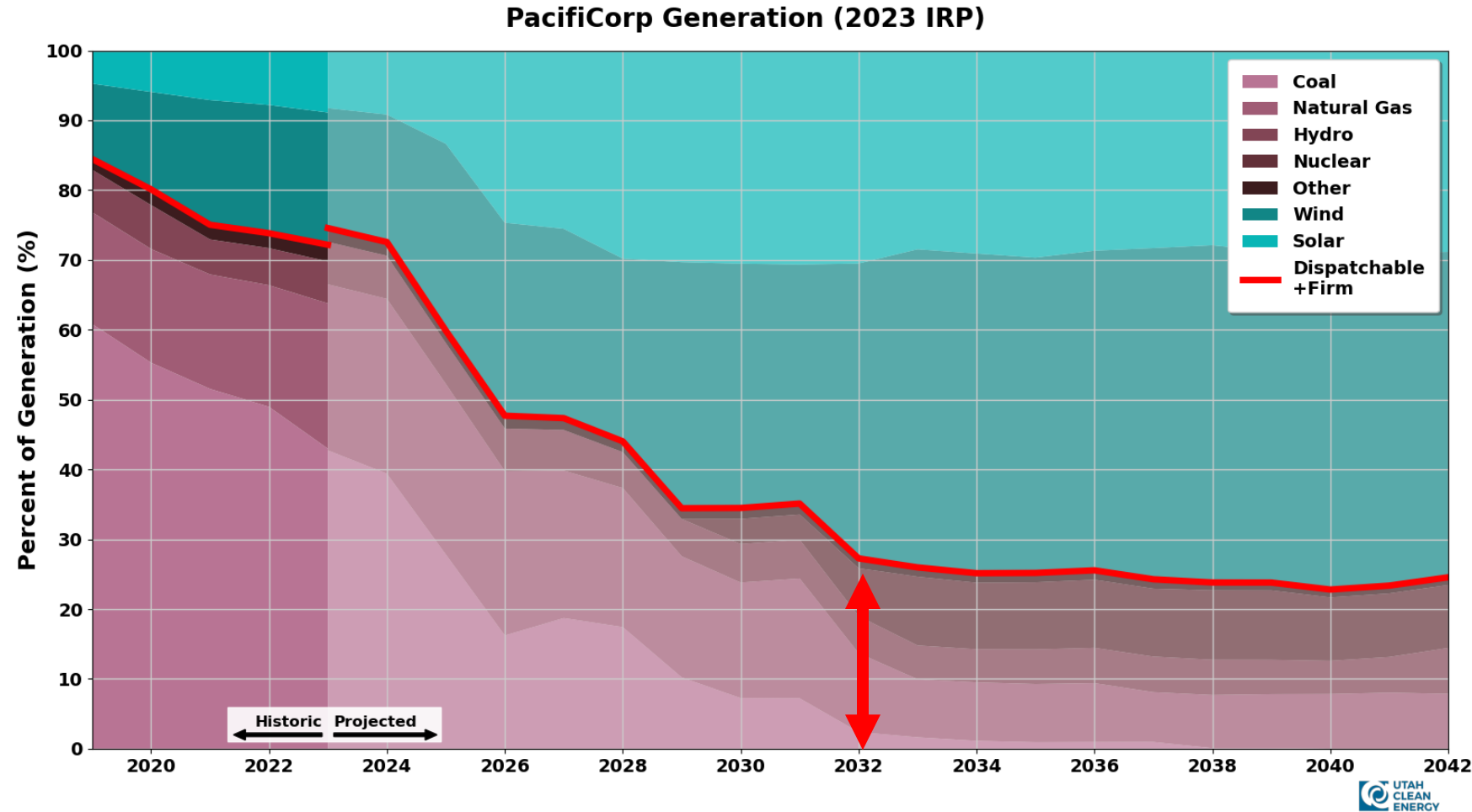
# How Much Dispatchable Resources Do We Need?

We need some dispatchable resources to complement variable renewable resources & maintain reliability

Dispatchable resources are more expensive than variable resources (due to fuel & maintenance)

## So how much?

- PacifiCorp's IRP forecast is one indicator
- With current technology, we need around **25-30% dispatchable resources in a reliable system**



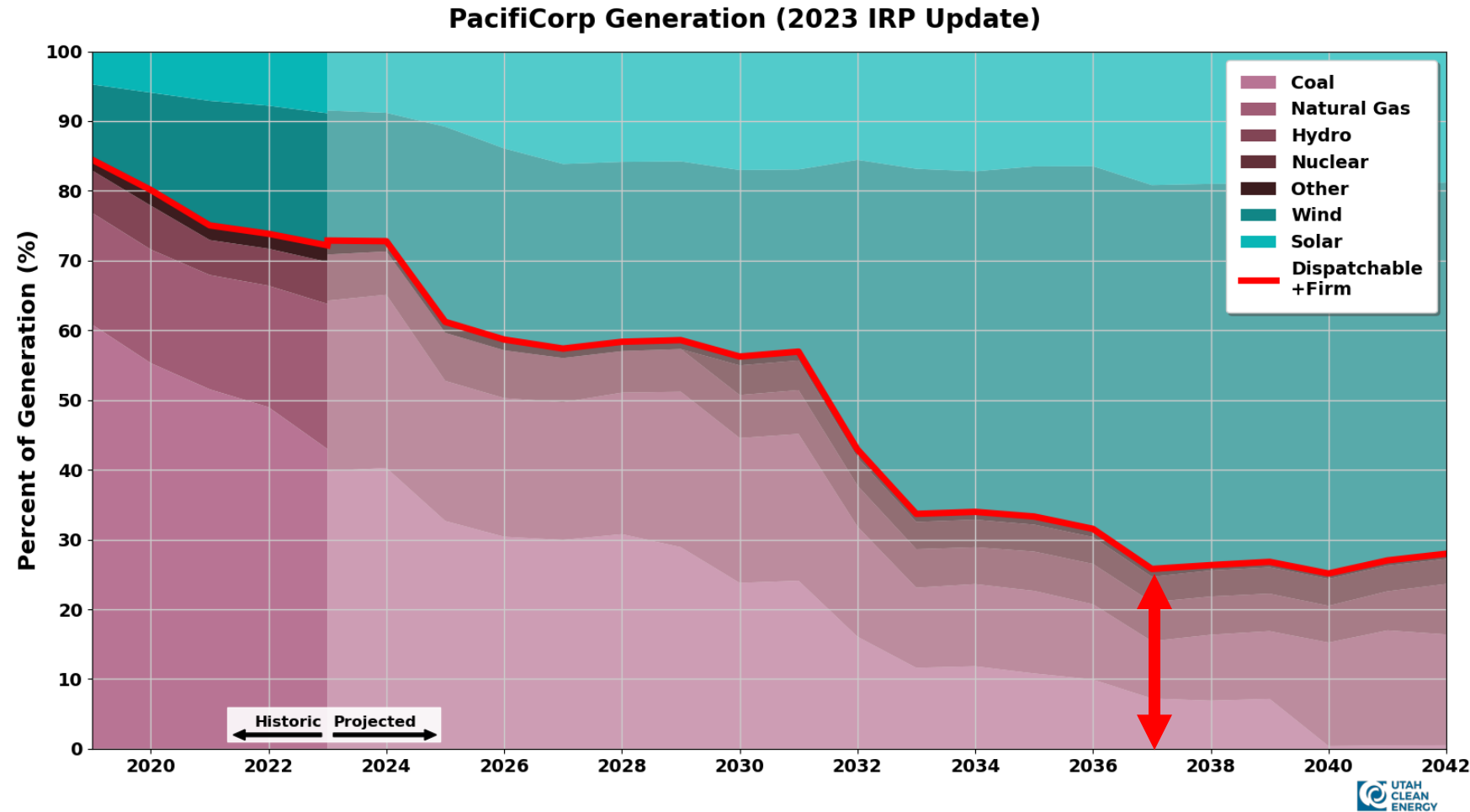
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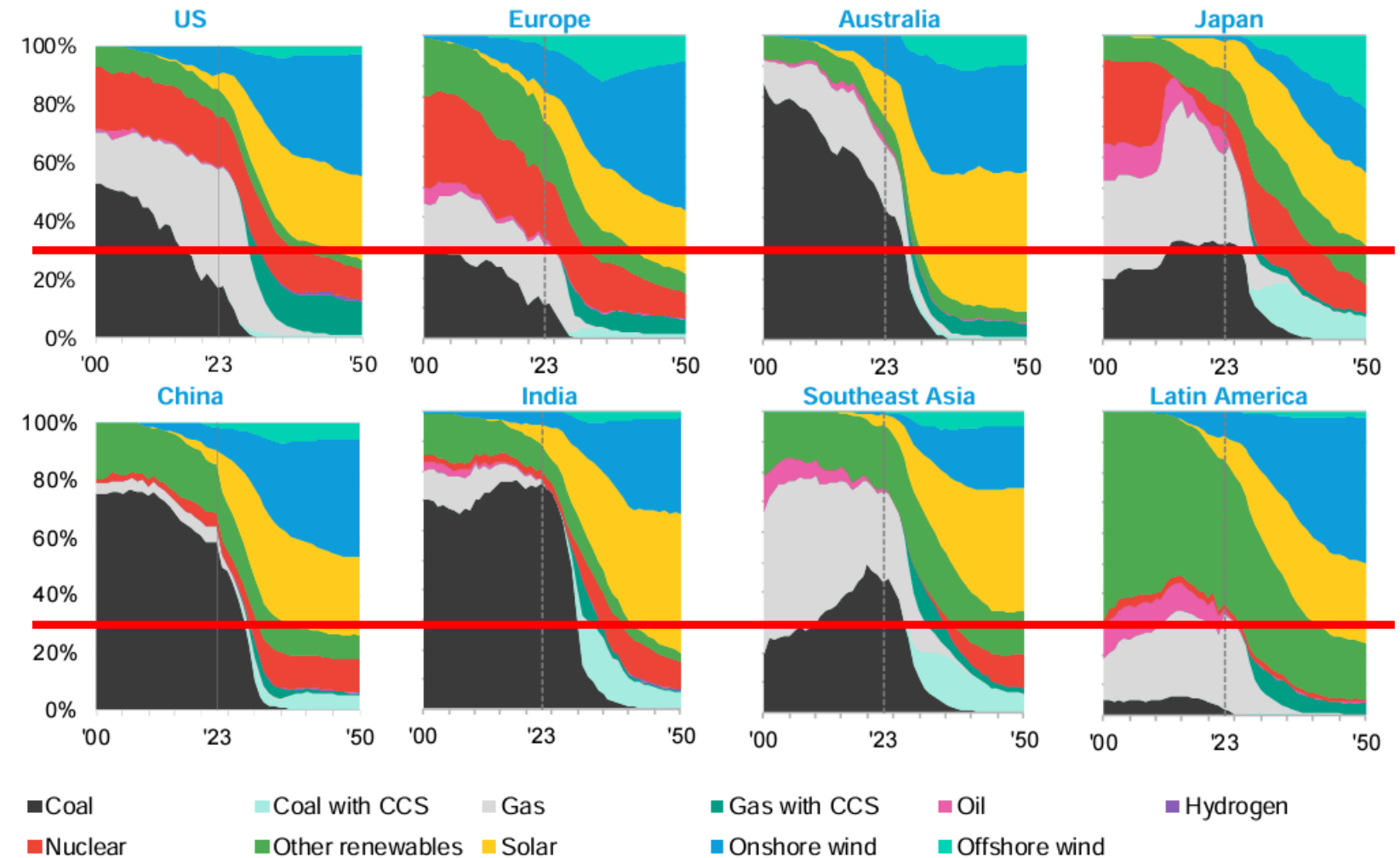
2023 IRP Update reaches 25-30% dispatchable resources also, just **delayed 5 years**

# How Much Dispatchable Resources Do We Need?

This trend holds for every region of the world:

- Wind & solar will provide ~70% of electricity generation

Figure 10: Electricity generation by source under the Net Zero Scenario, by country/region, 2000-2050



Source: BloombergNEF. Note: '00' is 2000, '23' is 2023, '50' is 2050. Includes electricity generation needed for hydrogen production via electrolysis. 'Other renewables' includes all other non-combustible renewable energy in electricity generation, such as hydro, geothermal and solar thermal. CCS is carbon capture and storage

# No Regrets Pathway For Near Term Action

- The path is clear: Reliable, Affordable & Clean
- This is the Deployment Decade, waiting leaves us behind
  - Costs are competitive
  - We need to capture Federal incentives while they're available
  - Aim is 70% of energy from wind, solar, batteries this decade
- We're in a Race to Deploy
  - Best sites regionally will be developed first
  - Deployment is essential for Utah's economic prosperity

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