

IRP COMMUNITY



WATER AND
POWER

MEETING #2: POWER SUPPLY UPDATE

July 13, 2023

Presented by:

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Manager

Power Supply Division, Burbank Water
and Power



Agenda

- IRP timeline
- Gas and energy price update
- Renewable procurement update

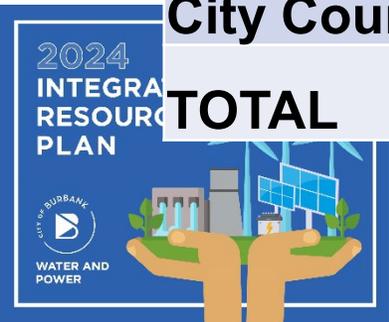


BURBANK WATER AND POWER

IRP Timeline

IRP Related Meetings

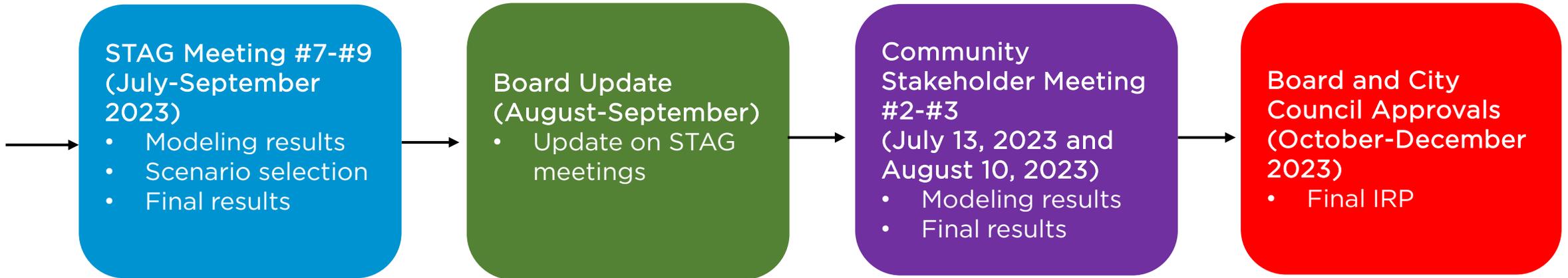
Type of meeting	Frequency	Meetings held to date	Future meetings planned	Total
BWP 2023 IRP stakeholder survey	Continuous	Available early 2023		Almost 900 responses
Stakeholder Technical Advisory Group meetings	Monthly	6	3	9
Stakeholder community meetings	Periodic	2	1	3
BWP Board meetings	Monthly	8	4	12
City Council meetings	Periodic	1	3	4
TOTAL		16	12	28



IRP Timeline



IRP Timeline



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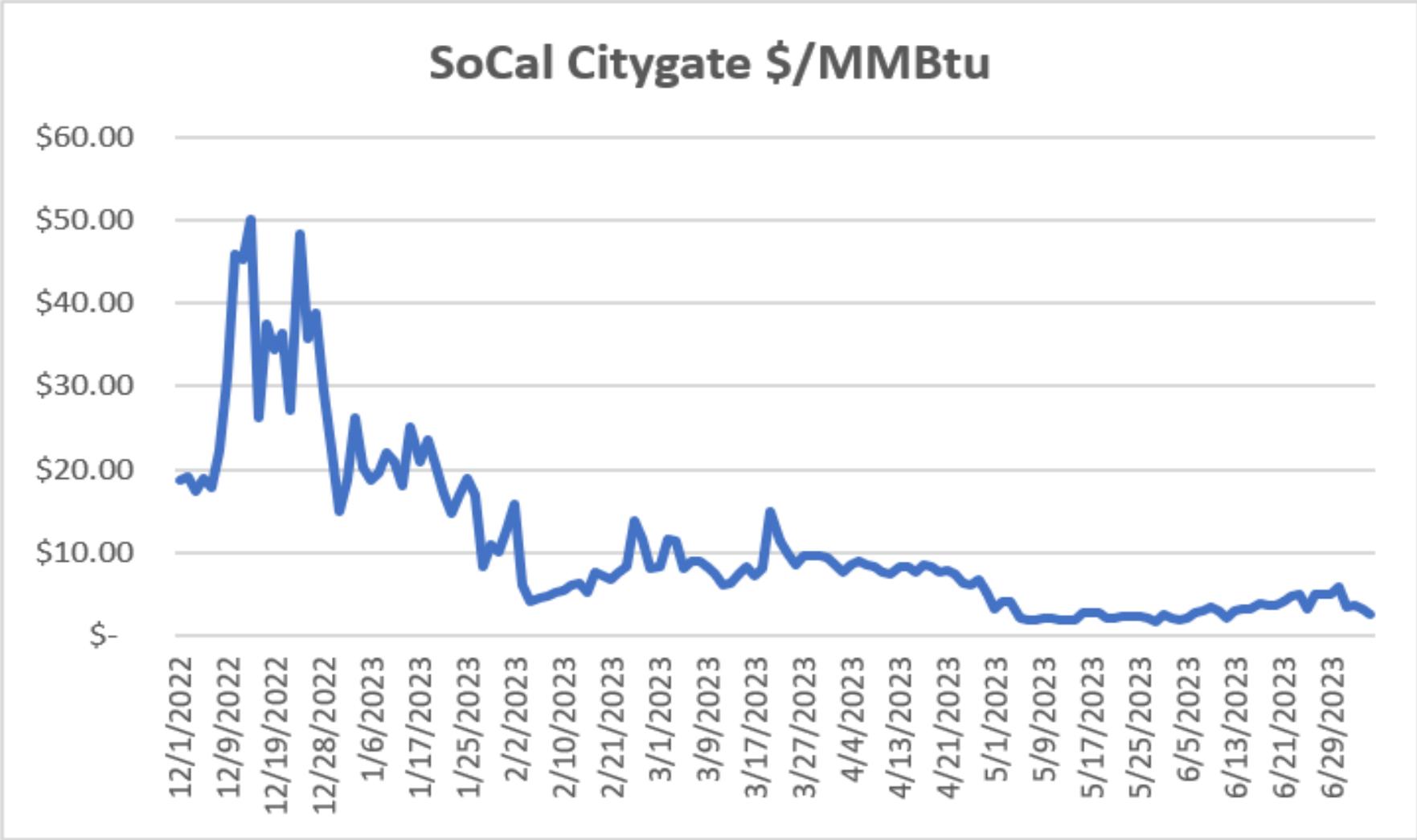
**Gas and Energy Price
Update**

Gas and Energy Average Market Prices-Daily

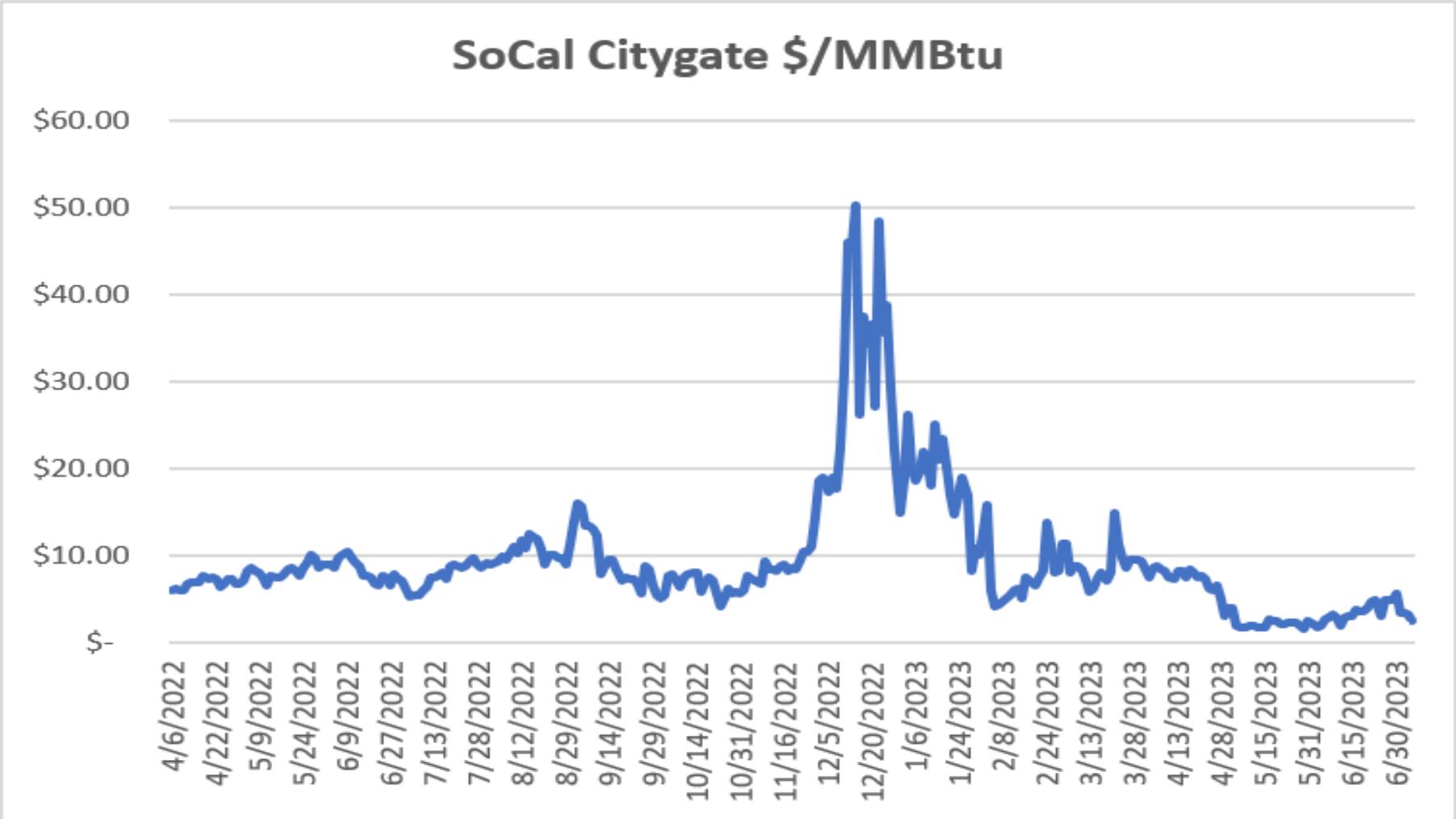
CALENDAR YEAR	GAS (\$/MMBTU)	ENERGY (\$/MWH)
2017	\$3.41	\$32.77
2018	\$5.14	\$41.93
2019	\$4.08	\$32.50
2020	\$3.01	\$47.61
2021	\$6.99	\$61.81
2022	\$9.27	\$96.28
2023 (AS OF JUNE END)	\$7.93	\$67.32
GROWTH 2020 TO 2023	2.6X	1.4X



Natural Gas Market Historical Prices



Natural Gas Market Historical Prices



Natural Gas Market Future Prices

SoCal Citygate Natural Gas Future Annual Price \$/MMBtu

2024	\$	6.67
2025	\$	6.52
2026	\$	6.46
2027	\$	6.41
2028	\$	6.46
2029	\$	6.52
2030	\$	6.62
2031	\$	6.73
2032	\$	6.86
2033	\$	6.99
2034	\$	7.14
Avg	\$	6.67



BURBANK WATER AND POWER

**Renewable Procurement
Update**

Renewable Portfolio Standard

Law	Details
Senate Bill (SB) X1-2 (2011)	33% Renewable Portfolio Standard (RPS) by 2020
SB 350 (2015)	33% RPS by 2020 50% RPS by 2030 IRP Requirement
SB 100 (2018)	60% RPS by 2030 100% zero carbon resources by 2045

Penalties for BWP non-compliance are estimated at \$147 million





SENATE BILL (SB) 100

SB 100 signed into law on September 10, 2018

	Compliance Period 3		Compliance Period 4	Compliance Period 5	Compliance Period 6	Compliance Period 7+
California RPS mandatory procurement requirement (% of net retail sales)	YEAR	%	Calendar year (CY): 2021-2024 44% by 12/31/2024	CY: 2025-2027 52% by 12/31/2027	CY: 2028-2030 60% by 12/31/2030	CY: 2031+ (3-year blocks) 60% post 2030
	2017	27.0%				
	2018	29.0%				
	2019	31.0%				
	2020	33.0%				
Portfolio content category (PCC) 1 minimum:	75% or more of net procurement requirement					
PCC 2 maximum:	25% or less of net procurement requirement (note in order to maximize PCC 3 use, BWP would use a maximum of 15% PCC 2.)					
PCC 3 maximum:	10% or less of net procurement requirement					
Long-term contract requirement:	N/A		At least 65% of contracts must be long-term contracts (at least 10 years or more in duration).			

Renewable Projects

2 Projects

Negotiations of Term Sheet has started

Each has challenges

- Start date delayed, multiple parties, etc.



Renewable Projects

Solar project in Utah

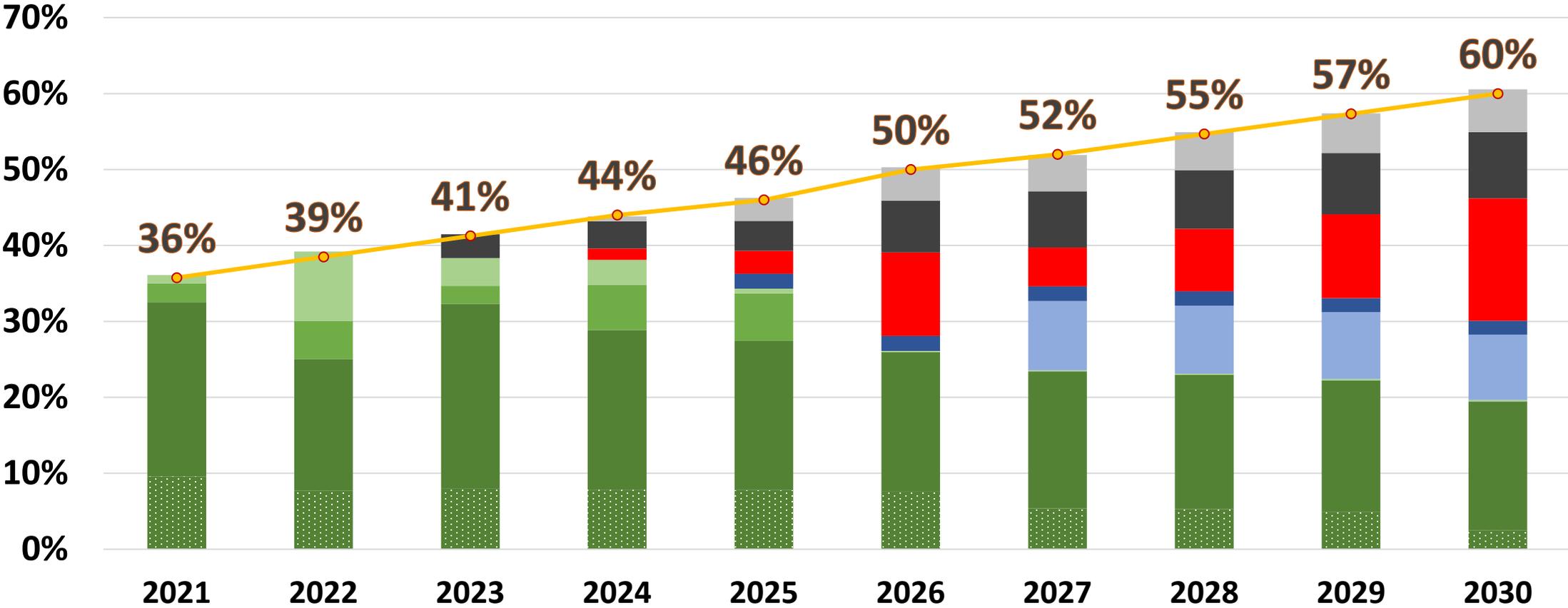
- 40 MW BWP (about 10% RPS equivalent)
- 2 other cities
- Start date 2027

Small Hydro in California

- 6 MW (about 2% RPS equivalent)
- Start date 2024



RPS Projections-Including Solar and Hydro



- PCC0
- PCC1
- PCC2
- PCC3
- Solar (Pending)
- Small Hydro (Pending)
- PLANNED PCC1
- PLANNED PCC2
- Target

