



Platte River
Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Board of directors

July 25, 2019



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Windy Gap unit sales update

July 25, 2019

Windy Gap unit sales update

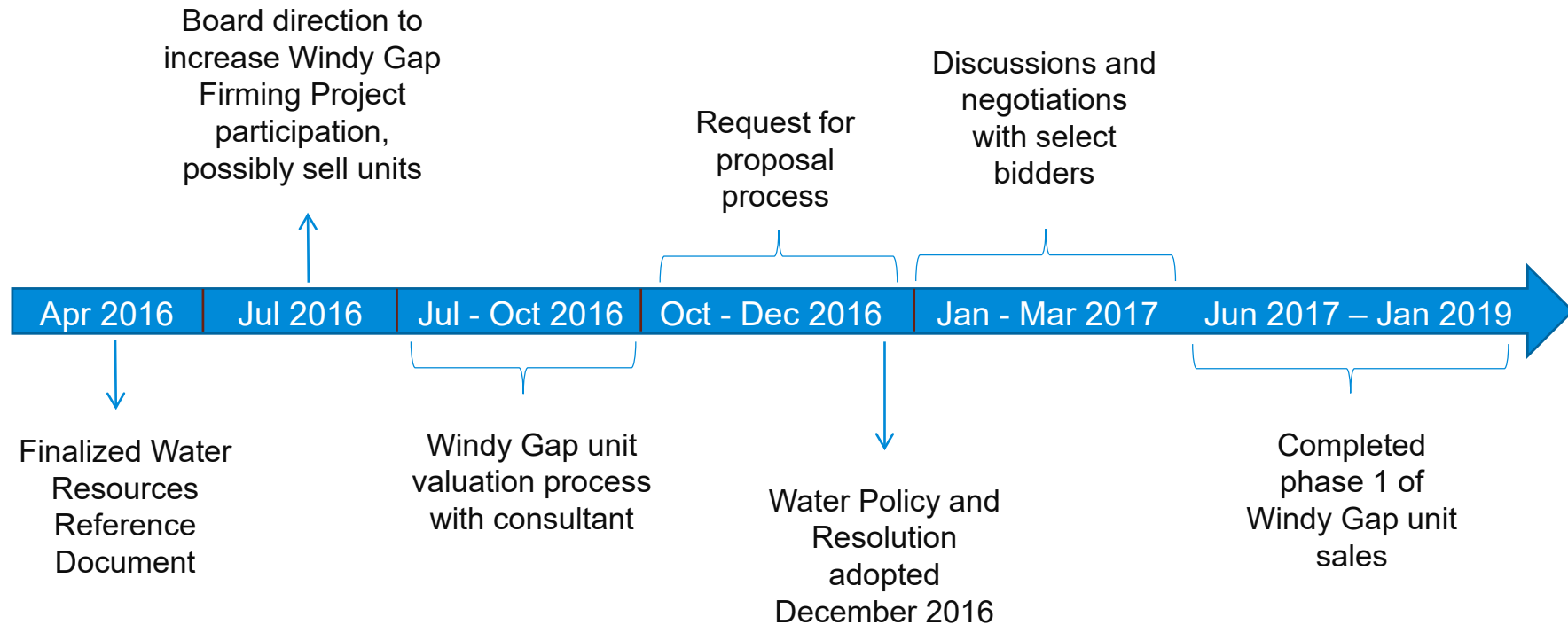
Agenda

- Background
- Results of the request for proposal (RFP) process
- Additional transactions
- Complete results of all transactions
- Next steps



Windy Gap unit sales update

Background



Windy Gap unit sales update

Background

- Windy Gap Project water is a fully consumable water source
 - A total of 480 units in the project
 - Platte River originally had 160 units which was the largest percentage of the project
 - Project is fully allocated
- Windy Gap water is a junior water right and currently does not have dedicated storage so the firm yield is zero
 - Only yields water in a “normal” water year



Windy Gap unit sales update

Background

- In a regular year, at full production, one Windy Gap unit yields 100 acre-feet of water
 - Compared to Colorado-Big Thompson water, in which one unit yields up to 1 acre-foot of water
- Unique water source with very few transactions and limited market data
 - Being fully consumable increases the value
 - Being non-firm provides challenges



Windy Gap unit sales update

Background

- Worked with a water consultant to determine the fair market value of a Windy Gap unit
- Results varied, based on different methodologies
- Determined that the best approach would be to submit a request for proposal



Windy Gap unit sales update

Background

- Goals of the RFP:
 - Achieve a minimum target storage capacity in the Windy Gap Firming Project (Firming Project) of 14,000 acre-feet
 - Started at 12,000 acre-feet at the beginning of the process
 - Maximum target storage capacity was 16,000 acre-feet
 - Enable the Firming Project to be fully subscribed
 - Provide a source of water to those who need it
 - Generate a source of revenue to help fund Platte River projects
- Looking for a “package deal” to sell units, acquire storage, rental water options and other creative offerings



Windy Gap unit sales update

Request for proposal results

- Sent RFP to all existing Windy Gap Firming Project participants (11 entities)
- Received responses from six entities (some proposals had multiple offers)
- Offers ranged from \$26,000/unit to \$2,000,000/unit with varying quantities of firming project storage and other benefits included
- Selected four entities for negotiations



Windy Gap unit sales update

Request for proposal results

- In 2017/2018, we completed transactions with those four entities
 - Sold a total of 23 Windy Gap units for ≈\$39 million
 - Acquired an additional 1,534 acre-feet of Firming Project storage capacity
 - Went from 12,000 acre-feet to 13,534 acre-feet
 - Received an additional 602 acre-feet through the unsubscribed allocation process
 - Attained 14,136 acre-feet which met the minimum target
 - Secured a right of first refusal for rental water to help bridge the gap until the Firming Project is complete
- All of the goals of the RFP were met



Windy Gap unit sales update

Additional transactions

- After the first four transactions were complete, we had sold 23 units out of the authorized 60 units
- During this time, there was an opportunity to work with the City of Longmont to acquire additional Firming Project capacity which took us to our maximum target of 16,000 acre-feet
- Even though our Firming Project needs were met, there was still a significant need for Windy Gap water in the region
- Determined that we could sell another 17 units and still stay well above the minimum Windy Gap unit level set by the board



Windy Gap unit sales update

Additional transactions

- Entered into negotiations and subsequent agreements with four entities
 - Still looking for package offers
 - When pricing the units, we factored in the escalation in the water market over the past two years
- By January 2019, we completed four transactions with the following results:
 - Sold a total of 17 Windy Gap units for ≈\$37 million
 - Secured a right of first refusal for additional rental water over the next five to ten years
 - Sold surplus capacity from Carter Lake Outlet works for ≈\$400,000
 - Still retain 5 cubic feet per second (cfs) for future water needs on the southern end of system

Windy Gap unit sales update

Complete summary of transactions

- The Windy Gap unit sales transactions to date

Sold	Received
40 Windy Gap units	1,534 acre-feet of Firming Project capacity
13 cfs of Carter Lake Outlet capacity	Right of first refusal for some rental water
	New and/or enhanced water partnerships in the region
	\$76.4 million in revenue which will help offset Platte River project costs



Windy Gap unit sales update

Next steps

- There is still a strong regional need for Windy Gap water
- Decided it is prudent to pause on the sale of additional Windy Gap units until the Firming Project is further along in the construction process
- We will continue to monitor the situation over the next few years and re-evaluate as needed



Questions



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Roundhouse wind option

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Roundhouse option

- Exercised the additional 75 MW Roundhouse wind option, increasing the total power purchase agreement (PPA) amount of wind to 225 MW
- Sold 12 MW of Silver Sage and 60 MW of Spring Canyon wind to a regional utility
- The 60 MW sale takes effect on the Roundhouse project commercial start date:
 - Sale goes through May 31, 2030
 - Spring Canyon wind will return to our system on June 1, 2030



Roundhouse option

Benefit of the wind sale

- Exercises the 75 MW Roundhouse wind option
- Roundhouse option brings more renewables into Colorado
- Supports our Resource Diversification Policy
- Locks in low-cost renewables for a future date



Craig sales

- A minimum of 50 MW of Craig sales were necessary, in order to integrate the 225 MW of Roundhouse wind.
- Platte River was able to make two 25 MW sales:
 - The first 25 MW sale, a three year sale, was made in early May to a regional utility and starts on Jan. 1, 2020.
 - The second 25 MW sale was made to another regional utility, in late June, starting Sept. 1, 2019, and runs through June 30, 2024.



Craig sales

Benefits of the Craig sales

- Sales support the integration of more renewables in a cost-effective and reliable manner
- Allow for the full use of Craig's operating flexibility of 50 MW to 151 MW
- Will generate additional revenue, offsetting municipal costs
- Assist in decreasing the Craig coal stockpile



Summary

- The 60 MW sale of Spring Canyon wind will return to serve Platte River's load in 10 years, increasing our non-carbon goal from 50% to 57%
- The wind and Craig sales help us to better manage and integrate renewables on our system



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Potential solar project

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Background

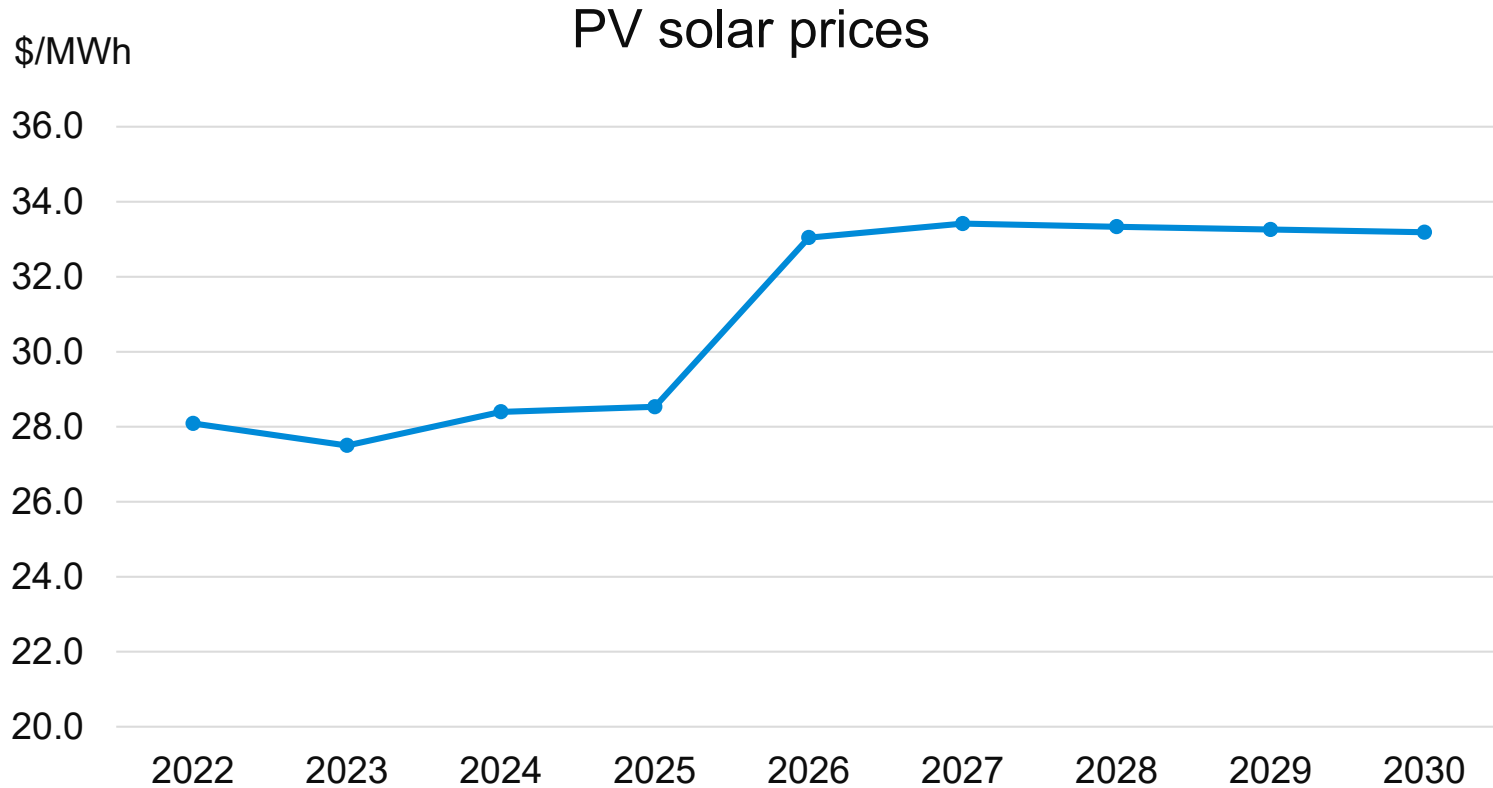
- Increased the purchase of Roundhouse wind from 165 MW to 225 MW, by making a 10-year sale to a regional utility
- Existing committed renewables:

Renewables	2020	2030
Wind	231 MW	291 MW
Solar PV	50 MW	50 MW
Total	281 MW	341 MW

- 30% investment tax credit (ITC) will remain in place through 2023, using the four-year safe harboring provisions
- In the next subsequent three years, the ITC decreases to 26%, 22% and 10%, respectively
- Current government-imposed tariffs on solar modules decrease from 15%, in 2021, to 0%, in 2022



Estimated future prices of solar PV



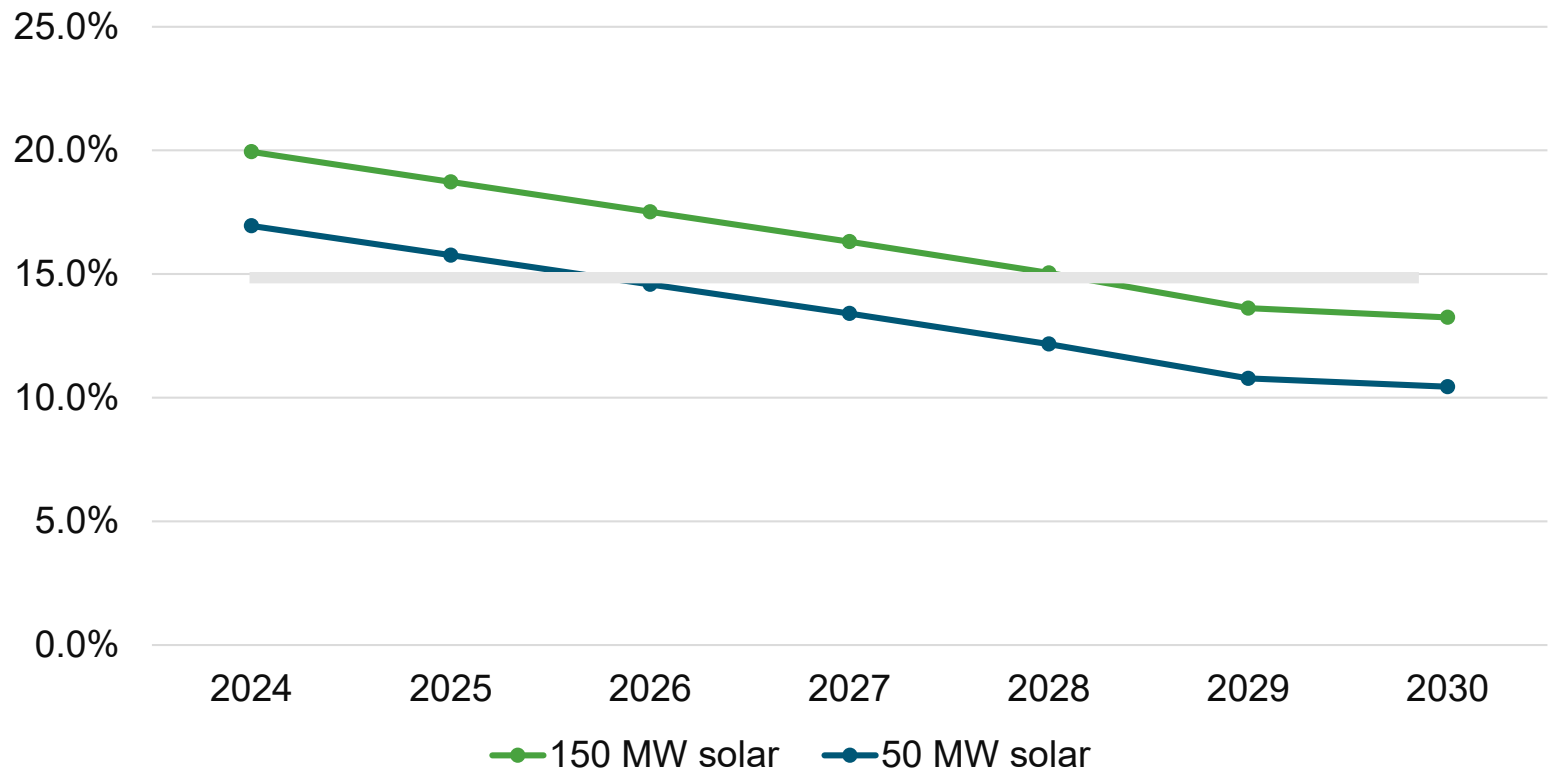
Assumptions used in analysis

- Baseload sale of 50 MW, until both Craig Units 1 and 2 are retired
- Minimum operating limit for Rawhide Unit 1 is 100 MW
- Platte River's 2024 forecasted load
- In-service renewables serving Platte River's load in 2024:
 - 225 MW Roundhouse wind
 - 6 MW Medicine Bow wind
 - 30 MW Rawhide Solar Flats
 - 20 MW Rawhide Prairie Solar



Capacity requirements without Craig Unit 1 or 2

Reserve margin



Load served by non-carbon resources in 2024

Additional solar	Non-carbon
MW	Percent
0	49%
50	53%
100	57%
150	60%

Note: 50% of Platte River's member load will be served by non-carbon resources in December 2020



“Must-sell” energy comparison in 2024

Additional solar	Annual output	Must-sell energy	
		MWh	Percent
50	131,285	17,312	13.2%
100	262,570	43,799	16.7%
150	393,855	84,162	21.4%



Benefits/risks of additional solar

Benefits

- Platte River submitted an interconnection request and appears to have a favorable queue position
- Possibly the last opportunity to obtain full 30% investment tax credit
- Solar has a better correlation to Platte River's load than wind

Risks

- Additional solar purchases will increase Platte River's must-sell energy
- Balancing additional resources to load, during a partly cloudy day, could be a challenge and may result in additional costs
- If no opportunity to sell energy is available, solar energy curtailments will cost approximately \$25/MWh (approximately one-half the cost of wind curtailments)

“Must-sell” energy

Additional Renewables		Annual output	Must-sell energy		Maximum curtailment cost
MW	Type	MWh	MWh	Percent	(\$ in millions)
50	Solar PV	131,285	17,312	13.2%	\$0.4 M
100	Solar PV	262,570	43,799	16.7%	\$1.1 M
150	Solar PV	393,855	84,162	21.4%	\$2.1 M



Recommendation

- Platte River staff should issue a request for proposals (RFP) to purchase 50 to 150 MW of utility-scale solar under a 20-25 year term with an in-service date in late 2023
- Platte River staff should continue to review the costs and risks of entering into a long-term power purchase agreement for additional solar
- Possibility of participating in joint Colorado utility solar project



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Board appointments policy discussion

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Historic practices

- 1975 Organic Contract provided for a 4-member board, with the original board consisting of utility directors from Fort Collins, Longmont and Estes Park, and the Loveland city manager
- 1976 Organic Contract increased the size of the board to 8, including the mayors of the owner communities and 4 appointed members with “judgment, experience and expertise which makes them particularly qualified to serve as the director of an electric utility”
- 2019 Organic Contract provides that appointed directors have “judgment, experience, and expertise which makes them qualified to serve on the Board of Directors of the Authority”



Underlying policies

- The intent to balance political representation with technical expertise on the board is clear from the Organic Contract
- It is equally clear that it was not intended that the appointed board members be utility directors of an owner community or any community



The role of the board is key

- In the past, Platte River's board was very involved in technical decision-making processes for the organization, requiring a high level of technical expertise
- In more recent years, the board has served more in the role of policy maker, setting goals and direction for the organization that requires more foresight and business judgment



What qualifications are most helpful to you?

- Technical or utilities background or experience (e.g., engineering, project development, utilities director)?
- General industry or business acumen (e.g., financial, strategic planning, economics, etc.)?
- Experience with unique issues (e.g., energy markets, renewable energy, legal, etc.)?
- Best general qualifications (prior leadership or board experience, ethics, integrity, etc.)?



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May and June operational results

Category	May Variance		June Variance		YTD Variance	
Municipal Demand	(9.6%)	■	(8.4%)	■	(5.7%)	■
Municipal Energy	(1.4%)	◆	(9.3%)	■	(3.4%)	■
Baseload Generation	(16.7%)	■	(29.8%)	■	(9.9%)	■
Wind Generation	(6.7%)	■	(16.2%)	■	(12.6%)	■
Solar Generation	(21.7%)	■	(19.8%)	■	(12.2%)	■
Surplus Sales Volume	(59.9%)	■	(42.3%)	■	(4.7%)	■
Surplus Sales Price	(3.4%)	■	(5.3%)	■	33.4%	●
Dispatch Cost	11.2%	■	4.4%	■	(0.9%)	◆

Variance key: Favorable: ● >2% | Near budget: ◆ +/- 2% | Unfavorable: ■ <-2%





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Financial summary

Category	May variance from budget (\$ in millions)	June variance from budget (\$ in millions)	Year to date variance from budget (\$ in millions)
Net income	(\$0.1) ◆	\$ - ◆	\$7.1 ●
Fixed obligation charge coverage	(.28x) ■	(.22x) ■	.64x ●
Revenues	(\$1.5) ■	(\$2.3) ■	(\$0.7) ◆
Operating expenses	\$0.9 ●	\$1.9 ●	\$6.4 ●
Capital additions	\$1.3 ●	\$0.8 ●	\$5.7 ●

> 2% ● Favorable | 2% to -2% ◆ At or near budget | < -2% ■ Unfavorable



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[Fort Collins PGM Final v4.mp4](#)





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