Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Board of directors regular meeting

2000 E. Horsetooth Road, Fort Collins, CO 80525
Thursday, March 28, 2024, 9 a.m.

Call to order

1. Consent agenda — *Motion to approve*
    a. Minutes of the annual and regular meeting of Feb. 29, 2024
    b. Budget contingency process — *Resolution 03-24*

Public comment

Committee reports

2. Defined Benefit Plan committee report

Board action items

3. Executive session – personnel matters — *Motion (2/3 vote required)*
    a. Annual review of general manager

    Reconvene regular session

    b. Discussion and any action resulting from review of general manager

Management presentations

4. Resource adequacy annual report
5. VPP series: Distributed energy storage update
6. Legislative session update

Management reports

7. Virtual Power Plant

Monthly informational reports - February

8. Legal, environmental and compliance report
9. Resource diversification report
10. Operating report
11. Financial report
12. General management report

Strategic discussions

Adjournment

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2024 board meeting planning calendar

Updated March 20, 2024

April 25, 2024

Board action items	Management presentations	Management reports	Monthly informational reports
2023 FORVIS financial audit report		Wholesale rate projections	Q1 performance dashboard
Acceptance of 2023 annual report		Joint Compensation Study update – informational purposes only	Legal, environmental and compliance report
		Draft 2024 Integrated Resource Plan	Resource diversification report
			Operating report
			Financial report
			General management report

May 30, 2024

Defined Benefit Plan committee meeting

Board action items	Management presentations	Management reports	Monthly informational reports
Revision to wholesale transmission service (Tariff WT-25)	Average wholesale rate projections and 2025 tariff schedule charges	Fiber management intergovernmental agreement amendment	Legal, environmental and compliance report
	Draft 2024 Integrated Resource Plan	Water resources reference document (updated version)	Resource diversification report
			Operating report
			Financial report
			General management report

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June 7-12, 2024

APPA National Conference (San Diego, CA)

July 25, 2024

Board action items	Management presentations	Management reports	Monthly informational reports
2024 Integrated Resource Plan	Fiber management intergovernmental agreement amendment	Legislative session recap	Q2 performance dashboard
	One-year WEIS participation (April 1, 2023 – March 31, 2024) & SPP RTO West update		Legal, environmental and compliance report
			Resource diversification report
			Operating report
Committee report			Financial report
Defined Benefit committee report			General management report

Aug. 29, 2024

Defined Benefit Plan committee meeting

Board action items	Management presentations	Management reports	Monthly informational reports
Fiber management intergovernmental agreement amendment	Rawhide transition plan update		Legal, environmental and compliance report
			Resource diversification report
			Operating report
			Financial report
			General management report

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Sept. 26, 2024

Board action items	Management presentations	Management reports	Monthly informational reports
	2025 proposed strategic budget work session	Staffing update (memo only)	Legal, environmental and compliance report
	2025 rate tariff schedules		Resource diversification report
			Operating report
Committee report			Financial report
Defined Benefit committee report			General management report

Oct. 31, 2024

Defined Benefit Plan committee meeting

Board action items	Management presentations	Management reports	Monthly informational reports
2024 FORVIS financial audit plan	2025 proposed strategic budget update – public hearing		Q3 performance dashboard
2025 rate tariff schedules	Long-term fuel supply strategy		Legal, environmental and compliance report
			Resource diversification report
			Operating report
			Financial report
			General management report

November 2024

No board of directors meeting

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Dec. 12, 2024

Board action items	Management presentations	Management reports	Monthly informational reports
2024 budget contingency appropriation transfer (if required)	Transmission rate design changes	Benefits update (memo only)	Legal, environmental and compliance report
2025 Strategic Budget review and adoption			Resource diversification report
2025 proposed board of directors regular meeting schedule			Operating report
			Financial report
Committee report			General management report
Defined Benefit committee report			

Topics to be scheduled:

-

This calendar is for planning purposes only and may change at management's discretion.

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2024 board of directors

Owner communities	Term expiration
Town of Estes Park	
P.O. Box 1200, Estes Park, Colorado 80517	
Mayor Wendy Koenig	April 2024
Reuben Bergsten—Chair, Board of Directors	December 2024
City of Fort Collins	
P.O. Box 580, Fort Collins, Colorado 80522	
Mayor Jeni Arndt	November 2025
Tyler Marr	December 2026
City of Longmont	
350 Kimbark Street, Longmont, Colorado 80501	
Mayor Joan Peck	November 2025
David Hornbacher	December 2026
City of Loveland	
500 East Third Street, Suite 330, Loveland, Colorado 80537	
Mayor Jacki Marsh	November 2025
Kevin Gertig—Vice Chair, Board of Directors	December 2025

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Our vision

To be a respected leader and responsible power provider improving the region's quality of life through a more efficient and sustainable energy future.

Our mission

While driving utility innovation, Platte River will safely provide reliable, environmentally responsible and financially sustainable energy and services to the owner communities of Estes Park, Fort Collins, Longmont and Loveland.

Our values

Safety
Without compromise, we will safeguard the public, our employees, contractors and assets we manage while fulfilling our mission.

Integrity
We will conduct business equitably, transparently and ethically while complying fully with all regulatory requirements.

Service
As a respected leader and responsible energy partner, we will empower our employees to provide energy and superior services to our owner communities.

Respect
We will embrace diversity and a culture of inclusion among employees, stakeholders and the public.

Operational excellence
We will strive for continuous improvement and superior performance in all we do.

Sustainability
We will help our owner communities thrive while working to protect the environment we all share.

Innovation
We will proactively deliver creative solutions to generate best-in-class products, services and practices.

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Memorandum

Date: 3/20/2024

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Angela Walsh, executive director of board and administration

Subject: **Consent agenda – March**

Staff requests approval of the following items on the consent agenda. The supporting documents are included for the items listed below. Approval of the consent agenda will approve all items unless a board member removes an item from consent for further discussion.

Attachments

- Minutes of the regular and annual meeting of Feb. 29, 2024
- Budget contingency process memorandum
- Resolution 03-24: Budget contingency appropriation

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Regular meeting minutes of the board of directors

2000 E. Horsetooth Road, Fort Collins, CO
Thursday, Feb. 29, 2024

Attendance

Board members
Representing Estes Park: Mayor Wendy Koenig and Reuben Bergsten
Representing Fort Collins: Mayor Jeni Arndt and Tyler Marr
Representing Longmont: Mayor Joan Peck and David Hornbacher
Representing Loveland: Mayor Jacki Marsh and Kevin Gertig

Platte River staff
Jason Frisbie (general manager/CEO)
Sarah Leonard (general counsel)
Dave Smalley (chief financial officer and deputy general manager)
Melie Vincent (chief operating officer, generation, transmission and markets)
Raj Singam Setti (chief operating officer, innovation and sustainable resource integration)
Eddie Gutiérrez (chief strategy officer)
Angela Walsh (executive director of board and administration, board secretary)
Esther Velasquez (sr. executive assistant)
Josh Pinsky (IT service desk technician II)
Shelley Nywall (director, finance)
Libby Clark (director, human services and safety)
Staci Sears (senior manager, human resource)
Daniel Daneshka (senior system electrical engineer)
Preston Johnson (senior plant mechanical engineer)
Jennifer Hammitt (director, legal affairs)
Travis Hunter (director, power generation)
Kendal Perez (manager, strategic communications and community relations)
Maia Jackson (senior communications and marketing specialist)
Izzy Smith (communications and marketing specialist)
Leigh Gibson (senior external affairs specialist)
Ash Mayfield (senior counsel, markets)
Brodie Griffin (manager, technical services)
Mark Siano (supervisor, system engineering design)
Peter Tatarko (compensation business partner)

Guests
none

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Call to order

Chair Bergsten called the meeting to order at 9:00 a.m. A quorum of board members was present via roll call. The meeting, having been duly convened, proceeded with the business on the agenda. Chair Bergsten welcomed Tyler Marr, Fort Collins deputy city manager, to the Platte River Board of Directors. Sarah Leonard, general counsel, and Melie Vincent, chief operating officer, generation, transmission and markets, introduced staff who would be presenting or attending the meeting.

Action items

1. Consent agenda

a. Approval of the regular meeting minutes of Dec. 7, 2023
b. Incorporation into record of Resolution 12-23: 2024 board of directors regular meeting schedule
c. Transfer of 2023 capital budget carryover to 2024 Strategic Budget

Director Koenig moved to approve the consent agenda as presented. Director Hornbacher seconded. The motion carried 8-0.

Public comment

Chair Bergsten opened the public comment section by reading instructions, noting that time to accommodate each speaker would be divided equitably by the number of in-person members of the public and callers wishing to speak at the start of public comment. Two members of the public addressed the board.

Annual meeting

2. Platte River Power Authority annual meeting

a. Annual election of officers

Chair Bergsten stated who the present elected officers are:

- Reuben Bergsten, chair
- Kevin Gertig, vice chair
- Angela Walsh, secretary
- Sarah Leonard, assistant secretary
- Dave Smalley, treasurer
- Jason Frisbie, general manager and chief executive officer

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Chair Bergsten reminded the directors that officers serve for one year and are elected by resolution. The term begins at the conclusion of this meeting. If the board receives multiple nominations for any office a roll call vote will be called for each office separately. The chair also noted, as set forth in the annual meeting memorandum, the Organic Contract requires the chair and vice chair to be members of the board. These were the two positions for which nominations would be received. The officer positions filled by management staff are traditionally retained and reaffirmed to meet the requirements of the Organic Contract. Chair Bergsten asked if the board wanted to have discussion prior to nominations.

Nominations: Chair Bergsten nominated director Kevin Gertig to serve as chair. There were no other nominations for chair. Director Marsh nominated director Jeni Arndt for vice chair. There were no other nominations for vice chair.

Chair Bergsten restated the nominations for clarity; Kevin Gertig for chair, Jeni Arndt for vice chair, and the staff members Angela Walsh for secretary, Sarah Leonard for assistant secretary, Dave Smalley for treasurer and Jason Frisbie for general manager/CEO.

Director Marsh moved to approve Resolution No. 01-24; Annual Election of Officers as nominated. Director Peck seconded. The motion carried 8-0.

b. Annual retirement committee appointments

Chair Bergsten stated the present Defined Benefit Plan (DB Plan) retirement committee consists of the following members:

- Directors: Reuben Bergsten, David Hornbacher, Jacki Marsh and Jeni Arndt
- Management: Jason Frisbie and Dave Smalley

For 2024, no changes were proposed for management members.

Chair Bergsten explained that the board needs to appoint four directors and two management members to the committee and opened the floor for nominations. If there were more than four nominations a roll call vote would be called for each of the individuals nominated.

Nominations: Director Arndt nominated the current committee members to remain in place.

Chair Bergsten restated the nominated DB Plan retirement committee members would consist of the four directors: Reuben Bergsten, David Hornbacher, Jacki Marsh and Jeni Arndt, and the two management members: Jason Frisbie and Dave Smalley.

Director Arndt moved to approve Resolution No. 02-24; Defined Benefit Plan Retirement Committee Appointments as nominated. Director Koenig seconded. The motion carried 8-0.

c. 2023 Platte River year in review and year-end operations and financial reports

Jason Frisbie, general manager/CEO, stated that the annual board meeting is his favorite

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meeting because it gives staff a chance to highlight the major accomplishments for the year representing the board's support and guidance throughout the year.

Eddie Gutiérrez, chief strategy officer, introduced the year in review presentation focusing on the Strategic Plan initiatives and core business highlights for the year.

- Ms. Vincent emphasized that everything presented today within the individual sections reflects cross-departmental coordination and partnership to accomplish the initiatives Platte River took on in 2023. She summarized the major milestone for Platte River entering into the Southwest Power Pool Western Energy Imbalance Service (SPP WEIS) market on April 1 and results for the year. She also presented highlights from the operations division including power production, fuels and water, system performance and maintenance, and summarized the December variance report and overall 2023 operational results.

- Raj Singam Setti, chief operating officer, innovation and sustainable resource integration, provided an overview of highlights for portfolio strategy activities, distributed energy resources integration planning efforts, distributed energy solutions transition program results, and the digital transition and cybersecurity enhancements. He also mentioned his personal highlight for 2023 was attending the COP28 conference in December.

- Mr. Gutiérrez presented celebrating the fiftieth anniversary of Platte River Power Authority throughout the year with internal staff celebrations, community events and a renewed marketing campaign. He also presented various highlights from the business strategies division, including items from human resources, safety, public and external affairs, and the strategic communications and marketing departments, as well as the owner community relations events that occurred throughout the year.

- Dave Smalley, chief financial officer and deputy general manager, presented the financial results for 2023 and summarized highlights from the finance division supporting organization-wide efforts to meet the Strategic Plan initiatives and core business operations, including entering into SPP WEIS, the enterprise risk management program and resource acquisitions.

  Mr. Frisbie discussed the board-approved revenue and expense deferral policy and how it impacts the year-end financial results. He also reviewed the coal generating resource unit results year-to-year and how they remain critical units within the resource portfolio and how their contributions support the market.

- Ms. Leonard discussed the significant highlights from the legal, environmental and compliance division supporting overall organizational efforts throughout the year.

  Mr. Frisbie commented on how the legal department supports the negotiation efforts for purchase power agreements and other core business agreements that requires significant legal staff attention.

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Ms. Leonard discussed the outreach coordination efforts with owner community legal representatives.

Director Koenig thanked the staff for all the accomplishments in 2023.

Director Peck asked whether the social cost of carbon was included in the request for proposal (RFP) recently released and if the requirements are listed for outside vendors to review. Mr. Singam Setti responded that many different factors go into considering who the selected vendor or developer will be and criteria are listed in the RFPs and on the RFP posting sites.

Chair Bergsten asked if virtual power plant entities would have to submit commitment letters for joining SPP Regional Transmission Organization West. Ms. Vincent responded that load serving entities or utilities are building the market in the west and had to submit commitment letters to join but mentioned that there may be opportunities down the road for other entities to join once the market is established. Chair Bergsten asked Mr. Singam Setti how Platte River could strategically work with vendors that target smaller utilities and how the board could support actions moving toward a fully integrated system. He also asked about risks tied to tax credits for long-duration energy storage. Mr. Singam Setti discussed the long-duration energy storage business model and how developers monetize investment tax credits. Discussion continued among directors and staff regarding how governmental entities have limitations using tax credits and counterparty credit reviews.

- Mr. Frisbie presented the awards and accolades Platte River received in 2023 and summarized the accomplished goals presented during the 2022 year in review presentation. He also outlined the goals for 2024.

  Director Arndt commented on the Just Transition Plan that was presented in 2023. Mr. Frisbie thanked the board for passing the resolution to support the Just Transition Plan and always doing the right thing for all our employees.

  Director Marsh thanked the staff for the presentation and asked to discuss the power supply agreements and the RFP timeline brought up in public comment. Ms. Leonard clarified that notices of intent for the all-dispatchable resource RFP were optional and explained the difference between submitting a notice of intent to respond versus submitting a response. Mr. Singam Setti further commented on the purpose of the notice of intent is for staff to plan resources for reviewing all responses once received. Discussion ensued among directors and staff regarding the power supply agreements, dispatchable capacity at a wholesale level, distributed energy storage and the distribution side of the system.

  Director Gertig thanked all staff at Platte River for their hard work throughout the year.

Chair Bergsten closed the annual meeting portion of the agenda.

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Break at 11:22 a.m.

Management presentations

3. Black Hollow Solar interconnection update (presenter: Daniel Daneshka)

Ms. Vincent introduced Daniel Daneshka, senior system electrical engineer, who gave a presentation to inform the board of progress on the new Severance Substation and the challenges staff has encountered with the project to date.

Mr. Daneshka explained the new Severance Substation was needed to interconnect the Black Hollow Solar project and reviewed associated details, timeline, progress, supply chain challenges and key cost drivers in the budget.

Director Marr thanked Mr. Daneshka for highlighting the operational details and complexities behind infrastructure advancements. Director Bergsten asked how lead times on equipment impact the target operational date. Mr. Daneshka clarified most of the equipment was purchased in early 2022 with shorter lead times, and the operational date was planned using delivery dates for all equipment. Mr. Frisbie discussed the possible new Loveland and Fort Collins substations and encouraged staff to keep the equipment lead times in mind when planning those projects for the future. He also commented on the planning it takes to keep energy flowing for system reliability when a critical line is out of service.

4. Existing combustion turbine upgrade (presenter: Preston Johnson)

Ms. Vincent introduced Preston Johnson, senior plant mechanical engineer, who described a recent gas turbine upgrade project that improves flexibility and fuel efficiency.

Mr. Johnson presented background information on the combustion turbine (CT) units A-F and how they will be used post 2030. He summarized the CT Unit D upgrade project from the evaluation phase through design and installation of the upgraded equipment. He explained the upgrade improves operational flexibility, reduces emission reduction and saves future outage costs.

Director Peck asked if the new aeroderivative units replace the current CT units. Mr. Singam Setti described the difference in how the CT units operate compared to how the aeroderivative units will be dispatched. Mr. Frisbie further explained how the CT units will be dispatched only as peaking units and the aeroderivative units will stabilize the system and will operate to follow the intermittency of renewable energy resources. Discussion ensued among directors and staff regarding replacing the coal facilities with renewable energy, how the aeroderivative units will stabilize the system and help Platte River comply with market requirements.

Director Gertig asked for staff to provide visuals to help communicate the planned resource portfolio to keep the system reliable. Chair Bergsten thanked Mr. Johnson for the presentation and expressed his excitement about the Unit D project results. Ms. Vincent added that the work

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did not change the heat rate on the unit.

5. Community engagement timeline (presenter: Eddie Gutiérrez)

Mr. Gutiérrez summarized the final 2024 Integrated Resource Plan (IRP) approval process and previewed the timeline for board approval, IRP submission to the Western Area Power Administration and city council community engagements.

Management reports

6. Resource adequacy report preview (presenters: Raj Singam Setti and Sarah Leonard)

Mr. Singam Setti previewed the information provided in the memorandum that will be presented at the March board meeting. Ms. Leonard noted the legislative requirement for the governing body (the board of directors) to submit the report to the Colorado Energy Office. In March, staff will request a motion authorizing Platte River staff to submit the report on behalf of the board.

7. Budget contingency process (presenter: Shelley Nywall)

Shelley Nywall, director of finance, described the current budget contingency process and its background, Staff proposes shifting to a simpler process with board oversight through staff reporting, because use of budgeted contingency funds does not require separate board approval. She noted the resolution to approve will be provided within the consent agenda during the March board meeting.

8. General manager annual review process (presenter: Libby Clark)

Libby Clark, director of human resources and safety, previewed the general manager performance review process to take place during the March board meeting. She noted a survey link and information packet will be sent to the board members following the February meeting.

Monthly informational reports for January

9. Q4 performance dashboard (presenter: Jason Frisbie)

Due to the lack of time, Mr. Frisbie summarized agenda items 9-14, highlighting the operational and financial results for January.

10. Legal, environmental and compliance report (presenter: Sarah Leonard)

11. Resource diversification report (presenter: Raj Singam Setti)

12. Operating report (presenter: Melie Vincent)

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13. Financial report (presenter: Dave Smalley)

14. General management report (presenter: Jason Frisbie)

Roundtable and strategic discussion topics

Directors provided updates from their individual communities.

Adjournment

With no further business, the meeting adjourned at 12:43 p.m. The next regular board meeting is scheduled for Thursday, March 28, 2024, at 9:00 a.m. either virtually or at Platte River Power Authority, 2000 E. Horsetooth Road, Fort Collins, Colorado.

AS WITNESS, I have executed my name as Secretary and have affixed the corporate seal of the Platte River Power Authority this _____ day of_____, 2024.

_____
Secretary

Platte River Power Authority

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Memorandum

Date: 3/20/2024

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Dave Smalley, chief financial officer and deputy general manager
Shelley Nywall, director of finance
Jason Harris, senior manager of financial reporting and budget

Subject: **Formal board approval of use of budgeted and appropriated contingency funds**

As discussed at the February board meeting, staff is requesting to remove the practice of formal board approval of contingency transfers since there is no legal or policy requirement for the board to separately approve use of contingency funding.

Staff will continue regular updates on anticipated contingency fund transfers and report on actual contingency fund transfers for the completed fiscal year at the first board meeting of the following year, explaining how much contingency funding Platte River used and for what purposes. These regular updates will be in a “contingency appropriation” section of the financial report.

Staff has provided the attached resolution to document board approval to shift to this simpler oversight process and staff recommends board approval.

Attachment

- Resolution – budget contingency transfer process

RESOLUTION NO. 03-24

Background

A. For many years, Platte River Power Authority (Platte River) staff has asked the board of directors (board) for formal approval to transfer budgeted contingency funds when anticipated year-end expenses (operations and maintenance, capital, debt, or any combination) exceed budget estimates.

B. Under Colorado's Local Government Budget Law (C.R.S. § 29-1-101 et. seq.), as well as Platte River's Fiscal Resolution (25-16), the board must separately authorize any Platte River expenditures that exceed appropriated funding.

C. Because Platte River's practice in recent years has been to include contingency funding in board-approved strategic budgets and appropriation resolutions, transfers of budgeted contingency funds do not exceed appropriated funding.

D. Given the broad powers and responsibilities the Fiscal Resolution already confers on Platte River's general manager and treasurer, and the budget oversight provided through staff's ongoing and year-end budget status reports to the board, the board would like to simplify the contingency fund transfer process.

Resolution

The board of directors of Platte River Power Authority therefore formally expresses its support for a modified contingency fund transfer process, as follows:

- staff will continue to provide budget status reports at each annual and regular board meeting, including, as year-end approaches, estimates of any anticipated contingency fund transfers;
- the general manager and treasurer have authority, under the Fiscal Resolution, to approve contingency fund transfers when necessary to cover unanticipated expenses, up to the maximum contingency funding included in the board resolution approving and appropriating funds for the then-current budget; and
- at the next board meeting after the general manager or the treasurer has approved any contingency fund transfer, staff will report to the board the amounts and purposes of the approved transfers.

RESOLUTION NO. 03-24

AS WITNESS, I have executed my name as secretary and have affixed the corporate seal of the Platte River Power Authority this _____ day of March, 2024.

_____

Secretary

Adopted:
Vote:

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Memorandum

Date: 3/20/2024

To: Board of directors

From: David Hornbacher, board member, retirement committee chair
Jason Frisbie, general manager and chief executive officer

Subject: **Defined Benefit Plan committee report**

The retirement committee held its quarterly meeting on Feb. 29, 2024. The minutes of the meeting are included in the board packet. At the board meeting, committee chair Dave Hornbacher will provide a summary of the February retirement committee meeting.

Attachment

- Feb. 29, 2024 defined benefit plan committee minutes - DRAFT

Platte River Power Authority

Regular meeting minutes of the defined benefit plan committee

2000 E. Horsetooth Road, Fort Collins, CO and virtually via Microsoft Teams
Thursday, February 29, 2024

Attendance

Committee members
David Hornbacher, chair
Jason Frisbie (plan administrator)
Jeni Arndt
Reuben Bergsten
Jacki Marsh
Dave Smalley

Committee members – absent
None

Platte River staff
Libby Clark (director, human resources and safety)
Julie Depperman (director, treasury services)
Shelley Nywall (director, finance)
Caroline Schmiedt (senior counsel)
Angela Walsh (executive director of board and administration)

Guests
Julie Canna of 50 South Capital (virtual)
Jason Palmer of Northern Trust Asset Management (Northern Trust)
Jim Hayes of Northern Trust
Dan Phillips of Northern Trust

Call to order

The meeting was called to order at 1:18 p.m. A quorum was present and the meeting, having been duly convened, was ready to proceed with business. Committee Chair Dave Hornbacher led the meeting.

Action items

(1) Review minutes of Oct. 26, 2023, meeting. Chair David Hornbacher asked for a motion to approve the minutes from the Oct. 26, 2023, meeting. Reuben Bergsten moved to approve the minutes as submitted. Jacki Marsh seconded, and the motion carried 6-0.

(2) Fourth quarter and annual investment performance. Jason Palmer of Northern Trust reviewed fourth quarter and annual performance and highlighted Defined Benefit Plan (plan) performance relative to its benchmarks (included in the meeting materials). Dan Phillips

summarized key market developments, economic indicators, and significant events that impacted the market.

Mr. Palmer provided a brief portfolio overview, highlighting that inception to date the portfolio returned 6.6%, slightly underperforming the benchmark of 6.7%. Year-to-date, through December 31, the plan returned 9.8%, significantly below the benchmark return of 15.9%. The long-term return goal is 7.5%.

Mr. Palmer reviewed the plan's portfolio position for the fourth quarter and recapped his firm's asset allocation process. The portfolio consists of risk control and risk assets. For the quarter, the plan was slightly underweight in risk assets and overweight in high yield.

For the quarter, the plan assets increased from $105.7 million to $112.9 million, which accounts for contributions, income, appreciation, depreciation and benefit payments.

Mr. Palmer reviewed the plan's key performance drivers for the quarter. Global equities, fixed income and real assets all gained during the quarter. Overweight cash and natural resources and a slight underweight allocation to global equities weighed on overall performance. Tactical positioning detracted from results by an estimated 0.33%. Investment manager selection was negative during the quarter. All the quality, low-volatility equity strategies underperformed their benchmarks. Overall, investment manager selection hurt performance.

Page 17 of the quarterly investment report provides rationales for the portfolio's positioning in each asset class.

(3) Investment portfolio update & investment policy review. Jason Palmer reported that the investment portfolio's performance has been below the benchmark and expectations over the last four years. The portfolio's allocations to quality, low-volatility equities have protected the portfolio well in down markets but has lagged significantly in rising markets since inception. Tactical performance has also detracted from results.

To address the underperformance, Northern Trust evaluated several investment portfolios and investment funds to help better position the portfolio to meet the plan's long-term objectives. Northern Trust recommended keeping the portfolio's broad asset allocation relatively unchanged.

The recommendation includes eliminating the portfolio's exposure to quality, low-volatility equity strategies and accessing traditional investment strategies to help drive higher long-term returns. Northern Trust recommended establishing distinct allocations to large cap and small cap equities, slight adjustments within real assets to better balance strategic exposures and restructuring fixed income allocations with inclusion of long-duration fixed income. The proposed portfolio is projected to enhance returns with lower volatility than the current portfolio. The combination of strategic asset allocation positioning, manager alpha (net of fees) and tactical investment decisions are all designed to help meet the plan's long-term return target. The committee requested and Northern Trust agreed to provide (via email) historical returns on the recommended portfolio.

Chair David Hornbacher asked for a motion to approve the revised investment policy statement, amended by replacing the strikethrough on page 5 with "vehicles may only be utilized in coordination with Platte River staff" and adding an "*" next to Russell 1000 on Exhibit 3. Once the large cap vehicle is selected, the performance benchmark and other language will be

revised. The preference is for the benchmark and large cap index fund selected to match in order to minimize performance tracking error. Jeni Arndt moved to approve the motion. Dave Smalley seconded, and the motion carried 6-0.

(4) Alternatives allocation update. Julie Canna of 50 South Capital provided an alternatives allocation update on private credit (sponsor backed credit fund II) and private equity (private equity core fund X). As of Sept. 30, 2023, the private credit fund is 76% funded with an annualized yield of 11.6% and a 0% realized loss rate. Ms. Canna indicated that capital calls should be completed by the end of 2024 or early 2025. The fund also began distributing quarterly yields. The private equity fund has called 13.9% of capital with an expectation that capital call activity will increase in 2024.

(5) Fiduciary review. Northern Trust provided a copy of the 2023 fiduciary review (included in the committee packets). The review summarizes accomplishments over the previous 12 months. Due to time constraints, the committee agreed to review the materials outside the meeting and reach out to Northern Trust with any questions.

(6) Investment consultant review. Due to time constraints, this topic was postponed. The committee agreed to meet virtually at a later date to discuss.

(7) Other business. None.

The next regular committee meeting is scheduled for May 30, 2024, at 12:30 p.m. in the Platte River board room or virtually via Microsoft Teams.

The meeting adjourned at 2:28 p.m.

_____

Chair David Hornbacher

Platte River Power Authority

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Memorandum

Date: 3/20/2024

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer

Subject: **Executive session – personnel matters**

Consistent with Colorado law governing open meetings, the Platte River Board of Directors may convene an executive session to discuss, among other things, non-public personnel matters. Staff therefore recommends the board convene an executive session for the general manager's performance review (which is a non-public personnel matter). Convening an executive session to discuss this matter is permitted by section 24-6-402(4)(f)(I) of the Colorado Revised Statutes.

The board will take no action during executive session.

There is no documentation for public use.

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Memorandum

Date: 3/20/2024

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Raj Singam Setti, chief operating officer, innovation and sustainable resource integration
Sarah Leonard, general counsel

Subject: **Resource adequacy annual report**

Platte River staff will present the Resource Adequacy Annual Report at the March board meeting. HB23-1039 requires Platte River Power Authority to submit an annual Resource Adequacy Report to its board by April 1 each year, starting in 2024, and to the Colorado Energy Office by April 30.

This presentation will outline the native load forecast, details on nameplate and accredited capacity for each resource (including renewables and storage), accredited capacity from distributed generation, demand response activities, target and forecasted planning reserve margins, total accredited capacity calculations, and plans addressing excess capacity or shortages.

After presenting the report, staff with ask the board for a motion authorizing staff to submit the 2024 report to the Colorado Energy Office on behalf of the board.

Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Memorandum

Date: 3/20/2024

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Raj Singam Setti, chief operating officer, innovation and sustainable resource integration
Paul Davis, manager, distributed energy resources
Zach Borton, distributed energy resources services manager

Subject: **VPP series: Distributed energy storage update**

Platte River requires dispatchable capacity to maintain reliability, and energy storage capacity is a critical element in the clean energy resource plan.

The distributed energy storage project, consisting of 5 MW in each owner community and aggregating up to 20 MW, plays a crucial role in achieving this objective. Battery energy storage within the distribution system serves as a strategic initiative, acting as both a testing ground for Distributed Energy Resources (DER) and a platform for exploring joint dispatch concepts across distribution and transmission systems. Platte River and coordinated with owner community staff to conduct a Request for Proposals (RFP) and select a vendor to lead deployment of battery energy storage systems across the communities. This investment enables experimentation with joint dispatch methodologies essential for a DER-driven future and diversifies Platte River's energy portfolio.

This initiative also positions Platte River and its owner communities alongside industry leaders in battery storage technology. Benchmarking against other utilities provides invaluable insights, enabling continuous refinement of strategies to leverage energy storage as a catalyst for a greener, more resilient future. Staff will present at the March board meeting a comprehensive overview of the benefits of distributed energy storage and address safety and risk considerations. Additionally, the presentation will discuss Platte River's overall storage goal and compare to other utilities with similar noncarbon objectives.

This presentation is for informational purposes only and does not require board action.

Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Memorandum

Date: 3/20/2024

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Javier C. Camacho, director of public and external affairs, strategic communications and social marketing

Subject: **2024 Legislative session update**

This presentation will provide an update on the 2024 Colorado legislative session, including the current composition of the Colorado General Assembly, anticipated energy- and environment-related bills and overall legislative priorities for the 2024 session. The presentation will also provide an overview of Platte River's state-level legislative priorities and strategy for the 2024 session.

This presentation is informational purposes only and does not require board action.

Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Memorandum

Date: 3/20/2024

To: Board of directors

From: Jason Frisbie, general manager and chief executive officer
Raj Singam Setti, chief operating officer, innovation and sustainable resource integration
Paul Davis, manager, distributed energy resources

Subject: **Virtual Power Plant**

Platte River needs dispatchable capacity to support a future electric system that will rely heavily on nondispatchable wind and solar generation. Virtual power plants (VPPs) can provide a growing portion of this capacity. A VPP consists of integrated and aggregated distributed energy resources, including distributed generation, distributed storage and flexible loads like electric vehicles and air conditioning, that can be controlled through advanced software to provide capacity and energy services to the grid, much like a conventional power plant.

The success of VPPs relies on their ability to perform effectively and reliably through integration into the electric system. Platte River and the owner communities have been working together to develop plans for the technology systems needed to support this integration. With much of the advanced planning complete, attention is turning to implementation.

The attached white paper describes how a VPP can provide benefits, summarizes the planning that has taken place and provides a roadmap for developing a VPP.

Attachment

- Achieving Dispatchable Capacity with Virtual Power Plants white paper

Platte River Power Authority

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Achieving dispatchable capacity with virtual power plants

Platte River Power Authority white paper

March 2024

Overview

Platte River needs dispatchable capacity to support a future electric system that relies heavily on nondispatchable wind and solar generation. Virtual power plants (VPP) can provide a growing portion of this capacity. A VPP consists of integrated and aggregated distributed energy resources (DERs), including distributed generation, distributed storage and flexible loads like electric vehicles and air conditioning, that can be controlled through advanced software to provide capacity and energy services to the grid, much like a conventional power plant. DERs included in the VPP can be located on the distribution system or within customer premises and can be owned by customers, the owner communities, Platte River or third parties. VPPs are an emerging new capacity solution. Though still in development stages, they offer many promising solutions.

VPPs are being developed using a variety of approaches. In some cases, utilities develop a VPP that they can dispatch. In other cases, third parties may develop them and sell VPP services to utilities. And, under Federal Energy Regulatory Commission (FERC) Order 2222, third parties may aggregate DERs within a utility's service territory, bypass the utility and sell grid services directly to organized energy markets. Platte River and its owner communities wish to enable the value that VPPs can provide and be prepared for any model that enables customers to provide services that support a reliable, financially sustainable noncarbon electric system.

The success of VPPs relies on their ability to perform effectively through integration into the electric system. Platte River and the owner communities have been working toward improved DER integration since the board approved the Resource Diversification Policy (RDP) in December 2018. The policy includes several advancements required to achieve the policy's goals, several of which point toward the need to improve use and management of DERs. Following the policy, Platte River and the owner communities developed a DER strategy in 2021. The DER strategy provides a clear vision and guiding principles for DER integration and identified the importance of a collaborative approach to integration. It reflects the different perspectives gained through collaboration and the expertise of staff from Platte River and the owner communities. With the help of a consultant, Utilicast, Platte River and the owner

communities have developed a plan for a common VPP that can provide grid services to Platte River and the owner communities. Note that a VPP is not synonymous with DER integration, but it is one important outcome of it, and is the subject of this paper.

With much of the advanced planning complete, attention is turning to implementation. This paper describes how a VPP can provide benefits, summarizes the planning that has taken place and provides a roadmap for developing a VPP.

Benefits of a VPP

The VPP, like any power plant, should be capable of providing multiple grid services. The following are grid services the VPP may be able to provide. Note that the ability to provide these services depends on customer willingness to participate, the technical capabilities of the VPP and its DER, and requirements of local and regional grid operators, including the owner communities, Platte River and the Southwest Power Pool RTO West (SPP RTO West).

- **Resource adequacy.** To provide reliable electric service and to participate in the market, Platte River must have resources equal to its highest load plus a reserve margin. A VPP may support resource adequacy if it can demonstrate an ability to achieve demand reduction or output. The longer the VPP can provide capacity, the higher the probability the VPP will provide a capacity benefit.
- **Transmission benefits.** VPP capacity may help manage transmission costs, subject to the requirements of the market.
- **Energy market.** VPP capacity may provide energy resources during times of high energy prices (which typically correspond to times with low renewable availability) through load reduction or storage discharge. The VPP may also take advantage of times of low energy prices (and correspondingly high renewable availability) in the market by increasing load or charging storage. Operating the VPP in the energy market will require telemetry that meets Platte River's and the market's requirements to respond to market signals in a timely fashion and to demonstrate performance (i.e., measurement and verification).
- **Operating and regulating reserves.** The VPP may, in some cases, deliver spinning reserves, supplemental reserves and regulation services to the market. As previously noted, this will require telemetry, capabilities, and performance that meet market requirements.
- **Distribution system benefits.** The VPP should be capable of grouping and managing DER based on distribution network topology and operational status to achieve the following benefits:
    - Preventing negative system impacts from increasing DER penetration levels and from DER dispatch by the VPP. In some cases, high penetration of DER or efforts to coordinate VPP dispatch could pose reliability challenges for the distribution system.
    - Supporting the owner communities' operations of the distribution system, including load management and improving voltage and reactive power control.

The VPP can also provide customer benefits. Customers with DERs who participate in the VPP can receive financial benefits based on the grid services their DERs can provide. And all customers—whether participants or not—receive the benefits of a VPP that supports a noncarbon electric system that is reliable and financially sustainable.

The VPP ecosystem

While Platte River and the owner communities are the lead architects, builders and operators of our common VPP, achieving a significant VPP resource also relies on cooperation among a number of other stakeholders, including the following:

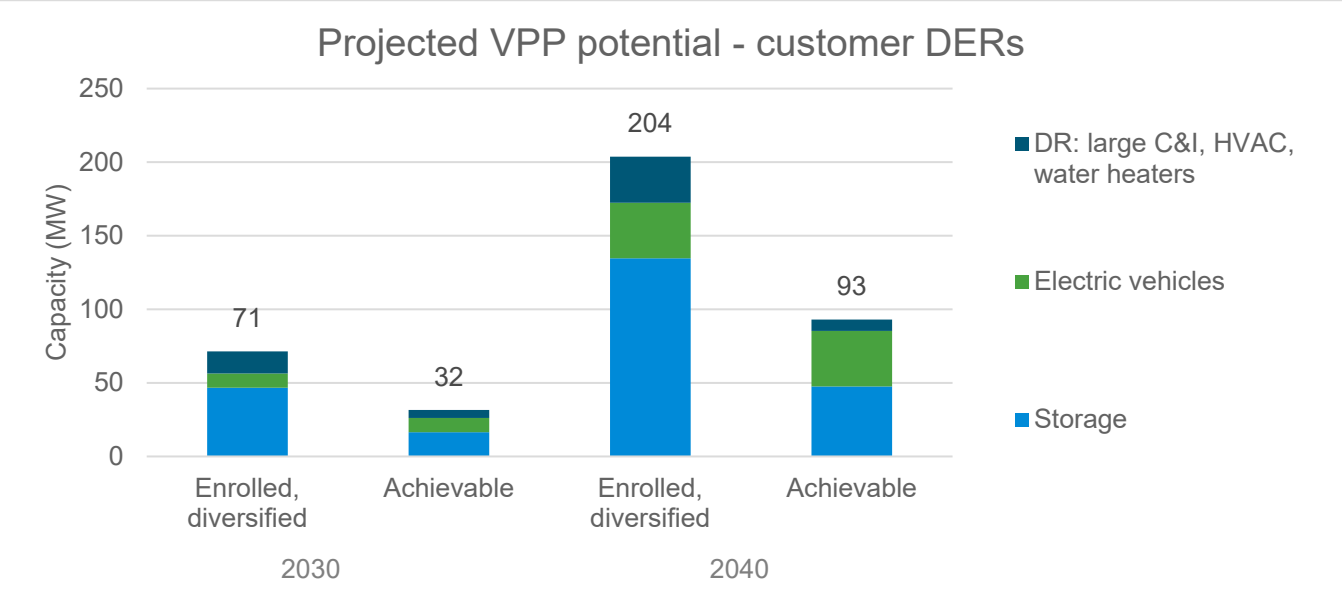
- **Customers with DERs.** Many customers already have DERs or will adopt them in the years to come. The VPP is primarily based on customers who volunteer to allow their DERs to be controlled, within agreed limits, by Platte River and the owner communities to achieve grid benefits. We expect that many customers will be willing to participate in the VPP as we explain the value proposition and when their participation is facilitated by technologies and programs that make participation easy and rewarding.
- **DER original equipment manufacturers (OEMs).** The VPP is based on DERs that can readily communicate with and respond to utility control requests responding to grid needs. National and global DER OEMs, such as manufacturers of electric vehicles (EVs), EV smart chargers, batteries and battery control systems, and smart thermostats, have a role in making DER operation simple, reliable and responsive to the needs of customers and the grid. Many DER OEMs are long established in their respective markets. However, some of them are relatively new to providing flexible grid services and their business models are evolving rapidly, presenting a challenge to utilities seeking to build a VPP today.
- **DER aggregators.** DER aggregators are businesses that enroll customers and register their DERs and aggregate, or group, them together into a “DER aggregation” that can provide grid services. Some DER OEMs may act as an aggregator of their own DER devices, while other aggregators may aggregate devices from multiple DER OEMs. DER aggregators may be hired by utilities to provide grid services to the utility or may, in some circumstances, provide services directly to an energy market. See the section on FERC Order 2222 below for more information on how DER aggregations may be able to participate in markets directly, with limited involvement by the local utility.
- **Independent system operators (ISOs) and regional transmission organizations (RTOs).** ISOs and RTOs are responsible for facilitating reliable supplies of power, adequate transmission and competitive electricity rates for their participants. As a result, ISOs and RTOs, like SPP RTO West, are responsible for establishing policies and performance requirements for DERs, in part driven by their participants’ interest in using DERs to provide market services and by the requirements of FERC Order 2222. Rapid evolution of DER technology and business models drive evolution in ISO and RTO policies and requirements, creating a moving target for VPP planning.
- **Local service providers.** Local service providers may be retailers, contractors or consultants involved in the sale or implementation of DERs installed in customer buildings. They are

instrumental in helping spread customer awareness about the VPP opportunities and helping customers through the DER procurement and enrollment process.

Platte River and the owner communities will engage with all of these stakeholders as they implement the VPP.

VPP potential

Platte River commissioned Dunsky Energy+Climate Advisors to complete a DER forecast and potential study in 2023. The study forecasted customer adoption of DERs like solar, storage, electric vehicles, smart thermostats and others. In addition, the study assessed the potential for customers' flexible DERs to provide cost-effective capacity and energy resources. Platte River used the study results to inform planning goals for the VPP: 32 MW of achievable potential by 2030 and 93 MW by 2040.



There are several items of note in these results.

- **VPP capacity from customer DERs.** Most of the achievable capacity from customer DERs is currently projected to come from customer storage and EV charge management. Less is anticipated from traditional demand response programs, such as heating, ventilating and air conditioning (smart thermostats), water heating and large commercial and industrial. This is due to the operating characteristics of each DER, which are determined by the physical operating characteristics as well as the impact of DER operation on customer comfort, convenience and productivity.

  The tables below summarize the customer DER characteristics used in the potential study. Of note, storage and EV charge management may be dispatched four hours or more per event on a near-daily basis, while traditional demand response tends to be limited to a few hours per

event and 15 to 20 events per year. In addition, flexible DER programs move energy use from the control period to other periods when energy use is more favorable. Storage and EVs tend to have significant flexibility between the time energy use is reduced (or storage is discharged) and when it increases (or storage is charged). These times may be separated by hours, and the shape of the increase may be manageable. In contrast, most traditional demand response resources result in a rebound of load immediately following the control event (for example, to cool the house down after the air conditioning was limited for two hours) or a pre-event pre-charge (for example, to pre-cool a house in anticipation of limited air conditioning). During these times, the curtailed energy results in an increase in energy use that is higher than it would have otherwise been. The added flexibility of when energy is used by EVs and storage is beneficial, because it can be used to make use of energy during high-renewable, low-cost times.

Flexible DER operating characteristics - storage

Measure Group	Measure Sub-Groups		Characteristics				
		Size (kW)	Curtailment Potential	Round Trip Efficiency	Typical Event Duration (hours)	Typical Rebound / Pre-charge Time	Typical Event Frequency (per year)
Storage	Battery Storage - Residential	3.3	33%	85%	4 h	4 h	300+
	Battery Storage - Small Commercial	5	100%	85%	4 h	4 h	300+
	Battery Storage - Large Commercial	50	100%	85%	4 h	4 h	300+

Flexible DER operating characteristics - loads

Measure Group	Measure Sub-Groups	Characteristics						
		Curtailment Potential	Event Duration (hours)	Pre-charge time	Pre-charge Sizing	Rebound Time	Rebound Sizing (per hour)	Event Frequency (per year)
HVAC Controls	Smart Thermostats	[75%, 33%]	Up to 2 h	1 h	40%	2 h	30%	20
EV Charging	EV Smart Chargers	100%	4 h +	N/A	N/A	6 h	17%	300+
	Vehicle-to-Grid	100%	4 h +	N/A	N/A	6 h	17%	300+
Water Heating	Electric Water Heaters	100%	Up to 4 h	2 h	17%	4 h	17%	15
Other Load Flexibility	Large C&I Curtailment	25%	Up to 4 h	N/A	N/A	N/A	N/A	15

- **VPP measures of capacity.** Characterizing and forecasting VPP capacity is a multistep process that results in a range of estimated VPP potential capacities. The DER study started by evaluating the DERs anticipated to be adopted by owner community customers. A subset of DER-owning customers is those willing to enroll in the program, resulting in enrollment or participation estimates. The study also assessed the anticipated, diversified load represented by the enrolled customers' DERs ("enrolled, diversified" capacity in the graph above).

  Next, the study assessed the ability of these DERs to reduce Platte River's peak net load—that is, the load less noncarbon generation resources. The largest net peak loads are anticipated to occur from 5 to 9 p.m. on hot summer evenings. The portion of enrolled, diversified capacity that could reduce the net peak is called the "achievable" capacity. The difference between enrolled, diversified and achievable capacities is due to typical VPP program limits intended to protect a

customer's ability to use their DERs for their own purposes. For example, a customer who enrolls battery storage in the VPP may want to reserve a portion of that storage to use during a power outage, or a customer with a smart thermostat may be willing to allow curtailment of cooling only for a couple of hours at a time. Stated more simply, the enrolled, diversified capacity is the capacity managed by the VPP, but the achievable capacity better indicates the dispatchable capacity that could meet resource adequacy requirements.

- **Number of devices.** The enrolled capacity is projected to include 50,000 DER devices by 2030 and close to 100,000 devices by 2040. Note that these are device estimates, not numbers of customers. It is possible, perhaps likely, that some customers could enroll multiple devices in the VPP.

Inclusion of distributed and behind-the-meter solar in the VPP

Distributed solar is currently and anticipated to remain the single largest DER: the DER study forecasted 155 MW (alternating-current rating) potential by 2030. However, solar is currently not flexible or dispatchable, so it has not been included in the VPP potential discussed above. While the ability to dispatch solar for potential grid benefits may be the horizon, in the near term our focus is on improving system operator visibility of solar operation. This is a challenge because most distributed solar is not separately metered. Rather, it is netted with load behind a utility meter to support net metering and net billing rates. This leaves a gap in Platte River's and the owner communities' ability to monitor, forecast and potentially make beneficial use of solar as part of a VPP. Multiple options are being considered, from modeling solar performance based on system parameters and weather data to active power monitoring via inverters to separately metering solar.

Inclusion of utility-owned DERs in the VPP

Much of this whitepaper is focused on the customer DERs that will be included in the VPP. However, utility-owned DERs can be managed by the VPP to provide many of the same benefits as customer DERs. For example, the 20 MW of distribution-scale storage under development by Platte River will be managed as part of the VPP, allowing Platte River and the owner communities to share operational control and achieve wholesale and distribution system benefits. This capacity is not included in the table above. If included, it would increase the enrolled and achievable potentials in 2030 to 91 and 52 MW, respectively.

Building the VPP

Platte River and the owner communities must make progress on two main fronts to develop a VPP that can provide value to customers and the grid. These include implementing VPP-enabling systems and VPP customer programs. We believe work on the two fronts can occur simultaneously.

VPP customer programs

Customers with flexible DERs willing to enroll them in the VPP provide the engine for the VPP's operation. VPP programs are the means by which customers become aware of, learn about, participate in and benefit from VPP participation. To accomplish this, VPP programs encompass a broad scope of activities intended to provide a positive customer experience participating in the VPP and to achieve grid benefits. The following is an overview of these activities:

- Provide an effective customer journey that takes the customer from initial awareness of the VPP through to enrollment, operations and, when necessary, unenrollment. The customer journey should relate to and leverage other Efficiency Works™ program journeys.
- Marketing, promotions, customer outreach and engagement used to increase awareness and provide support to customers as they consider VPP program participation.
- Program partners to support customer VPP participation, including DER OEMs, DER aggregators and local service providers.
- A means for determining and delivering compensation to participating customers for the VPP services their DERs provide over time.
- Customer participation agreements that outline the terms and conditions of their participation in the VPP.
- A measurement and verification plan sufficient to meet Platte River, owner community and market requirements.

Platte River and the owner communities anticipate hiring an experienced DER aggregation provider that can help develop and implement effective VPP programs.

VPP enabling-systems

Platte River and the owner communities performed a gap assessment and developed a roadmap to identify the technologies and systems required to integrate flexible DERs into a VPP. This work was done in consultation with Utilicast, a consulting firm experienced in utility and DER technologies.

As part of the gap assessment and roadmap development, Platte River and the owner communities identified the goals of the project, desired outcomes (see Appendix 1) and specific functional capabilities that would need to be developed (Appendix 2). These functional capabilities help define the target technology state—the systems required for effective flexible DER management as part of a VPP. The following is a brief explanation of a few of the critical systems that must be procured, implemented and integrated:

- **Enterprise distributed energy resource management system (enterprise DERMS)**. A DERMS is a control system that supports the management of DERs as part of a VPP. The enterprise DERMS is required for Platte River to manage DERs that support its responsibilities

to provide reliable electric supply, electric delivery and coordination within the regional energy market.

- **Owner community DERMS.** Owner community DERMS is a tenant of Platte River's enterprise DERMS that provides the owner communities with DER management to support their responsibilities to provide reliable electric distribution and coordinating with Platte River. Integration between the enterprise DERMS and owner community DERMS coordinates DER operation between Platte River and the owner communities. Owner communities may use their own DERMS if it can be integrated with the enterprise DERMS.
- **Customer information systems (CIS).** The owner communities operate CIS to support meter to cash functions and other customer account management services. An integration between DERMS and CIS is required to support DERMS's customer enrollment capabilities as well as bill credits processed as an incentive for participating in the VPP or when customers receive financial benefits for participating in the VPP r.
- **Advanced metering infrastructure (AMI) and meter data management (MDM) systems.** AMI refers to meters capable of measuring customer energy use at customized intervals (to support time-varying and other new rates) and capable of two-way communication (to support meter reading, meter configuration, outage restoration and other functions). MDM refers to a system that supports collection, cleaning and manipulation of data obtained from AMI to support customer billing. AMI and MDM also provide data that will be crucial to support DER integration functions, including measurement and verification of DER performance and analytics to support DER planning. AMI and MDM system must integrate with the DERMS.
- **Advanced distribution management systems (ADMS).** ADMS is an operational technology platform that includes supervisory control and data acquisition, outage management systems, and distribution management systems, which can provide the full suite of distribution management and optimization capabilities. ADMS includes functions that support outage restoration, distribution grid optimization, fault location, isolation and restoration, volt/volt-ampere reactive optimization, conservation through voltage reduction, peak demand management, and support for generation on the distribution system. Effective integration and communication between ADMS and DERMS will be needed as DER penetration increases for enhanced situational awareness, grid monitoring, and optimized control of DER assets.

These systems, other related VPP-enabling systems and the architecture and integration of these system are depicted in Appendix 3.

VPP and DERMS are new, rapidly evolving technologies that have largely been built around individual use cases identified by a few early adopting utilities and around technology provider business models. This means that a DERMS is not an off-the-shelf commoditized software system. As a result, DERMS implementation may require significant customization to meet the unique needs of Platte River and its owner communities. Additional technology system needs may be identified as a preferred vendor is identified and their capabilities become apparent. For example, some early adopters of DERMS have determined that additional data management systems are required to ensure that DER data is collected, managed and available to appropriate business processes in an efficient, consistent manner. Platte River will continue to work with the owner communities to refine and implement this roadmap in response to technological change and evolving business needs.

VPP implementation timeline

Implementation and integration of these systems will take time. The roadmap Platte River and the owner communities developed is complex but can be simplified as follows. This timeline is based on Platte River's, the owner communities' and our consultant's best estimate. It will likely change, particularly as we begin working with a DERMS and VPP program vendor or vendors.

- Foundation (2024-2025)
    - During this time a DERMS vendor and VPP program implementor will be selected.
    - Work will begin to design the DERMS architecture, system integrations and VPP programs.
    - A data management approach will be developed.
    - Common VPP programs may launch if program designs can be completed and necessary systems can be put into place and integrated (e.g., CIS to support customer enrollment).
- Prepare for DERMS launch (2026)
    - The enterprise and tenant DERMS will be built and integrated with owner community systems (e.g., AMI and MDMS).
    - The data management approach will be implemented.
    - Common VPP program performance will be evaluated, adjustments made and programs scaled.
- Launch, learning and prepare for market dispatch (2027-2028)
    - The VPP will be launched (targeting Q1 2027) in operator dispatch mode, meaning dispatch will be manually performed by Platte River and owner community system operators.
    - VPP market dispatch capabilities will be developed and launched (targeting Q4 2028). This means the VPP will support the system operator's ability to bid VPP capacity into the market and to have it be dispatched by the market through automatic generation control.
    - Data analytics will begin.
    - Common VPP programs will continue to scale
- Maturation and prepare for distribution operation mode (2029-2030)
    - ADMS will be integrated with DERMS.
    - Distribution operation mode of the DERMS will launch (targeting Q4 2029). This means VPP operations can be more responsive to the real-time and predicted operating conditions on the distribution system.

    - Predictive analytics and insights from DER and load data will be analyzed for use.
    - Common VPP programs will continue to scale.
- VPP operations to support a decarbonizing electric system (2031 and beyond)
    - Operate VPP in market operation mode and distribution operation mode.
    - Predictive analytics and insights from DER and load data is mature.
    - Common VPP programs are well established.
    - Continue to evaluate and invest in promising new VPP technologies and programs.

Note that the timeline shows the integration of ADMS to support distribution-aware management of DERs but the implementation of ADMS is not shown. ADMS is an owner community system, and it is the owner communities' responsibility to implement it. Platte River may, upon request, provide implementation support. Estes Park has already requested this support and Platte River will be working with Estes Park later in 2024 to determine a path forward.

FERC Order 2222

FERC issued Order 2222 in September 2020. The order aims to expand participation of DERs in wholesale electricity markets. It requires ISOs and RTOs to revise their market rules to allow DER aggregations to participate in wholesale electricity markets to provide any market service that they are capable of delivering.

FERC Order 2222 requires that markets create a path for DER participation not only for utilities, but for any entity that meets the market participation requirements. The possibility of having DER dispatched within the utility service area by a nonutility entity creates some complexity for both parties to ensure the DER interconnection and operation is coordinated appropriately to maintain reliability of the distribution system. As a result of this complexity, the order grants an exception for utilities that sell less than 4,000,000 MWh annually. These utilities need not allow third-party aggregations, but their governing bodies may opt in to allow them.

The owner communities may or may not choose to opt in to allow third-party aggregation. Regardless of this decision, the existence of Order 2222 and potential for third-party aggregation models are driving VPP market requirements, business practices and DER aggregation business models. Platte River and the owner communities will need to monitor this evolution and may need to adjust our plans to support our collective goals for providing customer service and supporting DER integration and decarbonization.

Conclusion

Platte River and the owner communities are working together to develop a VPP that could control an estimated 70 MW of customer DER by 2030, providing 32 MW of dispatchable capacity. Including currently planned distribution-scale storage projects increases the controlled capacity to 90 MW and dispatchable capacity to 52 MW.

We are nearing the end of our initial planning phase and are preparing to move ahead with implementation. Implementation will include procurement of an enterprise DERMS, tenant DERMS for the owner communities and VPP customer program services. In addition, owner community systems, such as CIS, AMI, MDMS and ADMS, will support the VPP through integration with the DERMS. Implementation will follow a phased approach with work starting in 2024. Between now and 2027, the focus is on building a foundation, which includes developing and launching pilot programs for customers and preparing for DERMS launch first quarter 2027. More advanced functional capabilities that enable market dispatch and distribution management will come in 2028 and 2029, respectively.

The VPP will provide an exciting new opportunity for customers with DERs to provide some of the dispatchable capacity that is needed to achieve a noncarbon electric system while maintaining reliability and financial sustainability.

Appendix 1: DER integration goals and desired outcomes

Following are the goals and desired outcomes determined at the outset of the DER gap assessment and roadmap. These goals and outcomes guided the development of the work to follow and will continue to provide guidance throughout the project implementation.

Goal 1: Provide DER benefits to all customers while facilitating DER deployment

Outcomes for goal 1:

1. All customers realize the benefits of DERs through direct adoption and/or indirectly via system wide benefits as a result of expanded engagement and choices.
2. Customers are informed and educated on the DER programs available to them as well as utility-owned DER on the grid.
3. Customer participation and access to DER programs and services is optimized through special rates, incentives and/or other innovative program offerings aligned with the benefits of DER.
4. Customers are informed of benefits received from DER participation and integration.
5. Utility and community greenhouse gases are reduced through DER integration in a financially sustainable manner:
    a. Flexible DERs reduce system costs and greenhouse gases by reducing renewable curtailment and non-renewable capacity costs.
    b. Beneficial electrification reduces community greenhouse gases.
    c. Energy efficiency supports a more cost-effective electric system.
    d. DER solutions encompass a diversity of DERs, such as solar, batteries, electric vehicles and flexible customer load.
6. DER solutions encompass a diversity of DERs, such as solar, batteries, electric vehicles and flexible customer load.

Goal 2: Embed DERs into planning

Outcomes for goal 2:

1. Planning processes evaluate benefits and costs across the electric system:
    a. Generation/Resource planning
    b. Transmission planning
    c. Distribution planning
    d. Financial and rates planning

2. Planning for DER adoption aligns with reliability, financial sustainability, and environmental stewardship goals.
3. Platte River and owner communities are aligned in their planning for a load, resource and capacity future involving DERs.
4. Dispatchable DERs support resource adequacy required in the Resource Diversification Policy and by organized market.
5. Planning processes inclusive of DERs support evaluation of system upgrades driven by increasing loads and DER adoption as well as the ability to offset upgrades through DER optimization.
6. Utility and community greenhouse gases are reduced through DER integration in a financially sustainable manner.
7. Forecast quality is improved to facilitate planning processes - including disaggregating DERs from load.

Goal 3: Facilitate DER enrollment, interconnection, and aggregation

Outcomes for goal 3:

1. Systems and processes are adopted to simplify the DER adoption including registration, enrollment, and interconnection (both distribution and transmission).
2. Platte River and the owner communities have the technological capabilities required to support integration with third-party DER aggregators when it provides net benefits to the electric system and customers or if mandated. (Currently not mandated under FERC Order 2222 due to owner community loads less than 4,000,000 MWh/yr.)

Goal 4: Integrate DERs into operations

Outcomes for goal 4:

1. DER operations are optimized for transmission and distribution operation.
2. Visibility, situational awareness and dispatchability of DERs are enabled.
3. Operational forecasting of DERs acting as a load modifier to support economic dispatch of resources, load-serving ability and system reliability are enabled.
4. Advanced notice regarding anticipated DER dispatch events is provided to customers.
5. Dispatchable DER can support economic dispatch, load-serving ability and system reliability in support of bulk power markets.
6. Dispatchable DER operation is regulated relative to distribution system constraints; dispatchable DERs support distribution system benefits and/or reliability.
7. Methods to prioritize DER dispatch among different use cases are established.

8. DERs contribute to maintaining reliability, meeting NERC bulk power planning/reliability metrics (e.g., availability), and any applicable municipality service reliability metrics (e.g., SAIFI, SAIDI, etc.).

Goal 5: Institute set of minimum standards and processes for DER among Platte River and the owner communities

Outcomes for goal 5:

1. A common set of minimum standards covering DER enrollment and registration and data-sharing requirements are collaboratively developed and utilized. Data-sharing standards are included during development of future DER rates, contracts and programs.
2. A set of minimum standards, processes, and methodologies to facilitate interconnection of DERs is collaboratively developed and utilized.
3. Measurement, quantification and verification of grid benefits/impacts attributable to DERs, individually or as aggregations, are enabled.
4. Communication, metering and information exchange standards to facilitate visibility and control of DERs are collaboratively developed and utilized.
5. Individual owner community DER solutions and programs are effectively integrated by Platte River into its programs, planning, operations and information systems.
6. A common DER benefit/cost evaluation framework including agreement on allocating limited DER operational flexibility among various use cases based on system value is established and utilized.

Goal 6: Incorporate safety in planning and operations

Outcome for goal 6:

1. Appropriate policies and procedures are instituted so that DERs do not compromise community, customer or utility staff safety.

Goal 7: Comply with cybersecurity and data privacy/ protection policies and standards

Outcomes for goal 7:

1. DERs and the enabling systems are planned, designed, implemented, and operated with a high degree of focus on maintaining cybersecurity, protection, and confidentiality of customer data and privacy.
2. Procedures operationalizing DERs meet physical security requirements.

Appendix 2: Functional capabilities and use cases

A total of over 160 functional use cases grouped within 17 functional capabilities were developed during the gap assessment and roadmap work. Each functional use case typically ends the following statement: “with the DERMS I want to…” and includes a date by which the functionality is desired.

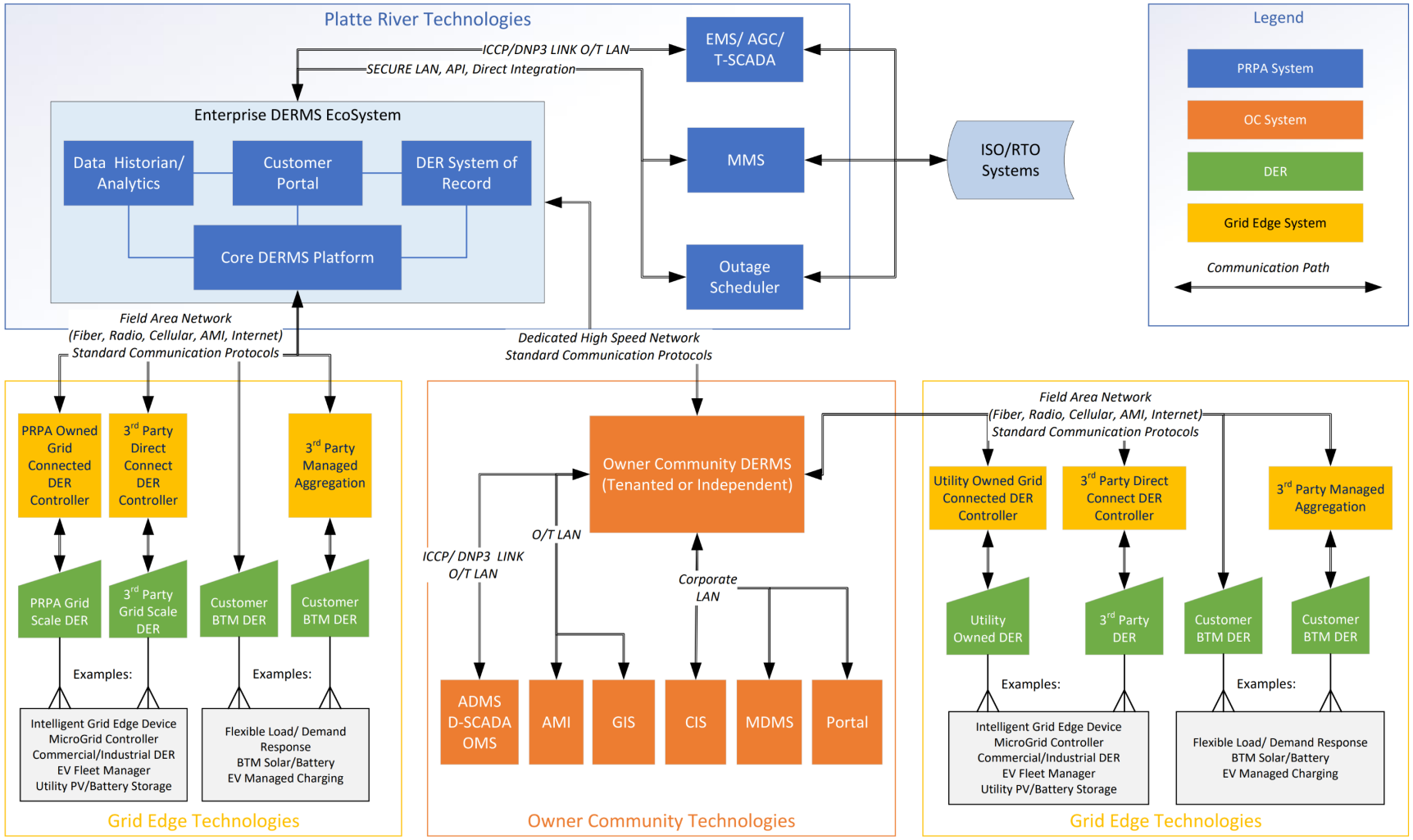
Only the 17 functional use cases are shown below. Following are two examples for use cases under the “virtual power plant” capability:

- With the DERMS I want to automatically present VPP forecast availability to Platte River merchant platforms for bidding into markets or for load modifications.
- With the DERMS I want to accept signals/instructions from market platforms and lock in VPP schedule for Market Commitment. Tag committed DERs to the scheduled event.

Functional capabilities

- Virtual power plant
- Aggregation - independent (FERC 2222)
- Aggregation - PRPA/OC
- Analytics and reporting
- Architecture and integration
- DER control and dispatch (operate DERs)
- DER enrollment / interconnection
- DER program management
- DER visibility
- Distribution grid management
- Forecasting
- Grid reliability
- Optimization
- Planning
- Safety, security, compliance
- Settlement / billing
- Telecom / telemetry

Appendix 3: VPP-enabling systems and architecture (draft)



Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Legal, environmental and compliance report

February 2024

Platte River Power Authority

Overview of recent developments

Legal matters

Municipal Energy Agency of Nebraska complaint challenging Colorado's Power Pathway

On Feb. 16, 2024, the Municipal Energy Agency of Nebraska (MEAN) and several Colorado cities to which it supplies power filed a complaint with the Federal Energy Regulatory Commission (FERC) against Public Service Company of Colorado (PSCo). PSCo plans to build a new transmission project (called Colorado's Power Pathway, or simply Power Pathway) at a cost of over $2 billion. MEAN and the Colorado cities allege Power Pathway costs will more than double their transmission rates with no corresponding benefits. They also claim PSCo violated FERC rules when it submitted the Power Pathway to the Colorado Public Utilities Commission for approval. The full report is on page 2 of this document.

Environmental matters

Environmental Protection Agency's proposed new regulations for greenhouse gas emissions from power plants

On May 11, 2023, the U.S. Environmental Protection Agency (EPA) issued its long-awaited proposed rules to regulate carbon dioxide emissions from the power sector. The proposed rules included existing and new fossil-fired electric generating units. On Feb. 29, 2024, the EPA removed existing natural gas-fired power plants from the scope of its proposed rules, leaving coal-fired power plants and new and reconstructed natural gas-fired plants within the scope of the rules. The EPA plans to issue final rules later this spring. The full report is on page 2 of this document.

Compliance matters

There are no new compliance matters to report.

Monitoring—status unchanged

Page 4 of this document provides a list of matters previously reported but unchanged since our last report.

Recently concluded matters

Page 6 of this document provides a list of matters that have concluded within the last three months.

Platte River Power Authority

Active matters

Legal matters

Municipal Energy Agency of Nebraska complaint challenging Colorado's Power Pathway

On Feb. 16, 2024, the Municipal Energy Agency of Nebraska (MEAN) and several Colorado cities to which it supplies power filed a complaint with the Federal Energy Regulatory Commission (FERC) against Public Service Company of Colorado (PSCo). PSCo plans to build a new transmission project (called Colorado's Power Pathway, or simply Power Pathway) at a cost of over $2 billion. The Colorado Public Utilities Commission (Colorado PUC) granted PSCo a "certificate of public necessity and convenience" in 2022, authorizing PSCo to build the Power Pathway. Platte River joined PSCo and several other clean power providers, utilities, and environmental organizations to support the Pathway Project, a proposed transmission "highway" from prime renewable generation locations in southern and eastern Colorado to the cities on the Front Range.

MEAN and the Colorado cities allege in their complaint that Power Pathway costs will more than double their transmission rates (because PSCo will recover these costs from all PSCo transmission customers), but they will receive no benefits. MEAN and the Colorado cities claim that they are geographically distant from the Power Pathway (have no direct connections to it) and have already secured the resources they need to meet their non-carbon energy goals. They ask FERC to determine that: (1) PSCo's proposed transmission service agreement is unjust and unreasonable, (2) PSCo must create a separate transmission pricing zone for MEAN and the Colorado cities and (3) PSCo violated FERC rules about open transmission access, regional transmission planning, and cost allocation when it submitted the Power Pathway to the Colorado PUC for approval.

Comments on the complaint are due March 21, 2024. Platte River will closely follow this proceeding and update the board with any developments that may affect our transmission planning or rates.

Environmental matters

Environmental Protection Agency's proposed new regulations for greenhouse gas emissions from power plants

Background:

On May 11, 2023, the U.S. Environmental Protection Agency (EPA) issued its long-awaited proposed rules to regulate carbon dioxide emissions from the power sector, replacing the Clean Power Plan from 2015 and the Affordable Clean Energy rule from 2018. The EPA proposed more stringent source performance standards for greenhouse gas (GHG) emissions from new and reconstructed fossil fuel-fired stationary combustion turbines that are based on highly efficient generation, hydrogen co-firing,

Platte River Power Authority

and carbon capture and sequestration (CCS) technologies. The EPA also proposed to establish new emission guidelines for existing fossil-fueled steam generators.

For new and reconstructed fossil fuel-fired combustion turbines, the EPA proposed to create three subcategories based on the function the combustion turbine serves. Limits for new natural gas-fired combustion turbines would apply as soon as they are constructed and become more stringent in 2035 for turbines that install CCS; or in 2032 and 2038 for turbines that co-fire with low-GHG hydrogen.

The three subcategories in the proposed rules were:

- Low load “peaking units” or combustion turbines with capacity factors of less than 20%;
- Intermediate load units or combustion turbines with capacity factors between 20% and a source-specific upper bound based on combustion turbine design efficiency; and
- Base load units or combustion turbines that operate above the upper-bound threshold for intermediate load turbines.

The requirements for the intermediate and base load subcategories were multi-phase. For example, for base load units that adopt CCS, the EPA proposed requiring CCS with 90% carbon dioxide capture starting in 2035. For base load units that adopt low-GHG hydrogen co-firing, the EPA proposed co-firing 30% (by volume) low-GHG hydrogen starting in 2032, and co-firing 96% (by volume) low-GHG hydrogen by 2038.

The comment period ended Aug. 8, 2023. The EPA received more than one million comments on this proposed rules, showing the high level of interest and controversy over relying on new technologies like hydrogen co-firing and CCS.

Current Status:

On Feb. 29, 2024, the EPA removed existing natural gas-fired power plants from the scope of its proposed rules, leaving coal-fired power plants and new and reconstructed natural gas-fired plants within the scope of the rules. The Office of Management and Budget is now reviewing the proposed rules, which the EPA plans to issue in final form later this spring.

Compliance matters

There are no active compliance-related matters to report.

Platte River Power Authority

Monitoring—status unchanged

Legal matters

Progress on the Southwest Power Pool's western regional transmission organization

Current Status:

Platte River and the other participants are working with the Southwest Power Pool (SPP) to further develop the western regional transmission organization (RTO West), including setting up committees and drafting tariff provisions to incorporate western operations. On Jan. 19, 2024, the participants voted to endorse SPP tariff Attachment AE, setting up the market structure RTO West will use going forward. SPP plans to file the updated tariff provisions with FERC in early- to mid-2024.

Proposed revisions to Colorado Air Quality Control Commission Regulation No. 3 for sources in disproportionately impacted communities

Current Status:

On Aug. 21, 2023, a coalition of non-governmental organizations, including GreenLatinos, 350 Colorado, and Earthworks, sued the Air Quality Control Commission (Air Commission) in Denver County District Court. The lawsuit alleges that the rules the Air Commission adopted on May 18 do not comply with Colorado's Environmental Justice Act and are otherwise arbitrary and capricious. If the lawsuit succeeds, the likely outcome is a remand to the Air Commission for a new rulemaking. Platte River will monitor this lawsuit and update the board with any developments.

Save the Colorado v. Bureau of Reclamation (Glen Canyon Dam)

Current Status:

On June 1, 2023, Save the Colorado and other environmental groups (appellants) filed their opening brief at the Ninth Circuit Court of Appeals (Ninth Circuit). The defendants (now appellees), including the Bureau and the Colorado River Energy Distributors Association (of which Platte River is a member), filed their responding briefs on Aug. 2, 2023. Appellants filed their reply brief on Sept. 22, 2023. On Feb. 6, 2024, the parties argued the case to the Ninth Circuit. The parties must now wait for the Ninth Circuit to decide the case.

Platte River Power Authority

Environmental matters

Groundwater and waste management

Current status:

Platte River continues to monitor groundwater and has nearly completed lining and improvements at the monofil. There have been no new developments since our last report.

Compliance matters

There are no compliance-related matters in monitored status this month.

Platte River Power Authority

Recently concluded matters (last three months)

Legal matters

El Paso Electric Co. v. Federal Energy Regulatory Commission

FERC issued Order 1000 in 2011. Order 1000 requires FERC-jurisdictional utilities to create regional organizations to plan transmission expansions and allocate costs to the beneficiaries of the new transmission projects. Although Platte River is not subject to FERC jurisdiction, Platte River is a party to the WestConnect Planning and Participation Agreement, along with other FERC-jurisdictional and non-jurisdictional utilities in the planning region (Arizona, Colorado, Nevada, New Mexico, Utah and Wyoming).

In 2014, El Paso Electric Co. and several other FERC-jurisdictional utilities filed initial appeals in the Fifth Circuit Court of Appeals (Fifth Circuit) challenging FERC's approval of WestConnect cost allocation provisions. These provisions allowed utilities not subject to FERC jurisdiction (Coordinating Transmission Owners or CTOs) to opt out of cost allocation for regional transmission projects that CTO governing bodies do not approve. The appeals claimed CTOs' ability to opt out of cost allocation could impose unjust and unreasonable rates on customers of FERC-jurisdictional participants.

Platte River took part in settlement negotiations between the jurisdictional and non-jurisdictional utilities to modify the cost allocation and governance provisions of the Planning and Participation Agreement. The parties filed a settlement agreement with FERC in February 2022 and the Fifth Circuit stayed the case to await FERC's decision. On Dec. 15, 2022, FERC rejected the parties' proposed settlement agreement. On Aug. 2, 2023, the Fifth Circuit Court of Appeals (Fifth Circuit) found that the cost allocation scheme FERC approved for WestConnect might require FERC-jurisdictional utilities to subsidize non-jurisdictional utilities on regional transmission projects. Therefore, the Fifth Circuit overturned FERC's orders.

When Platte River joins a regional transmission organization (like SPP's RTO West), the RTO will be the planning region for Order 1000 purposes, filling the role WestConnect has filled previously.

Platte River Power Authority

Environmental matters

Early Settlement Agreement to Resolve 2022 Air Permit Exceedances

On Nov. 29, 2023, Platte River entered into an early settlement agreement with the Colorado Air Pollution Control Division (Division), to settle compliance advisories for two exceedances in 2022. The first exceedance, on Jan. 1, 2022, was due to erratic nitrogen oxides (NOx) emissions readings from an unanticipated computer update. NOx emissions from combustion turbine Unit F exceeded the three-hour rolling average limit for two hours. The second exceedance, on April 18, 2022, was due to a plug in a slurry tank that feeds the sulfur dioxide (SO_2) scrubber on Rawhide Unit 1. The scrubber malfunction caused Unit 1 to exceed the three-hour SO_2 rolling average for one hour.

Platte River met with Division staff after the Division's annual air compliance audit to discuss these exceedances. Platte River promptly reported the exceedances when they occurred and established after-action review plans and additional processes to ensure that these issues would not recur. The Division complimented Platte River's prompt response and exemplary compliance history, demonstrating our high credibility with regulators. The Division proposed, and Platte River paid, a $21,000 fine to settle these two exceedance reports.

Compliance matters

There are no recently concluded compliance matters.

Platte River Power Authority

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Resource diversification report

February 2024

Resource integration

In late 2023, Platte River issued a request for proposals (RFP) to acquire 150 – 250 megawatts (MW) of additional nameplate wind capacity. Since receiving these proposals in November 2023, Platte River has been working with the wind developers to fully understand the total effective cost of delivering the output of each wind project to Platte River's load. By partnering with legal, the team is developing a term sheet to ensure agreement on the key terms, with a goal for this additional wind capacity to come online in 2027.

Platte River is currently in active negotiations to secure up to 150 MW of nameplate solar capacity, with the aim of beginning commercial operations in late 2026 or early 2027.

Construction started on the transmission facility improvements necessary to interconnect the 150 MW Black Hollow Sun Solar, LLC project. Platte River was able to obtain the required permits to allow construction of the new Severance Substation. At the time of this report, Weld County has yet to grant a permit for improvements to County Road 23 for better access to the substation site. Construction of the 150 MW utility-scale solar project is expected to start in late March 2024. The anticipated commercial operation date of the project is spring 2025.

Platte River issued its all-dispatchable resource RFP on February 22 seeking proposals to help us consider all possible resource options to maintain system reliability after existing coal units retire in 2028 and 2029. We currently have received notices of intent to submit proposals from 15 different entities. The RFP responses are due by late April 2024. Platte River will need a few months to vet and review the proposals thoroughly.

The table below summarizes Platte River's latest resource expansion initiatives, tailored to align with our evolving power supply objectives.

	2023	2024	2025	2026	2027	2028	2029	2030
Existing Resources								
Rawhide 1	278	278	278	278	278	278	278	
Craig 1 & 2	151	151	151	151	74	74		
Peaking capacity	388	388	388	388	388	388	388	388
Wind	231	231	231	231	231	231	231	285
Solar	52	52	52	52	52	52	52	52
New Resources (*)								
Solar			150		150			
Wind					200		200	
Storage				25	75	100		
Dispatchable capacity						166		

(*) In-service year for new resources is based on first year such resource is available during the summer months.

DER system integration

Platte River and the four owner communities are working together to integrate Distributed Energy Resources (DERs), whether owned by customers or the utility, into the electric system. This collaborative endeavor includes the DER Advisory Committee, DER Planning and Programs teams, and additional working groups of Platte River personnel and owner communities.

The table below summarizes our planning forecast of DER adoption and the projected enrolled and achievable potential for DERs that can be managed by the virtual power plant (VPP).

DER planning forecast (MW)

	2022 actual	2030 forecast	2040 forecast
DER adoption forecast [1]			
Distributed customer solar, rated output	24	155	282
Distributed customer storage, rated output	1	47	135
Electric vehicles, summer peak	2	26	107
Building electrification, winter peak	0	46	244
VPP: DERs enrolled [2]			
Electric vehicles, enrolled MW	0	10	38
Distributed storage, enrolled MW	0	47	135
Demand response, enrolled MW	0	15	31
Total VPP, enrolled MW	0	71	204
Total VPP, achievable MW	0	32	93

1. DER adoption forecast: Projected customer-driven uptake of solar, storage, and electrification based on costs, incentives, and customer evaluations of technology and fuel expenses.
2. VPP-enrolled MW capacities represent the capacity of DERs projected to be enrolled in VPP management. Achievable MW capacities are projected to be dispatchable after adjusting for customer usage limitations.

Work continues to develop distribution-scale storage projects, which could give Platte River and the owner communities as much as 25 MW of four-hour storage.

- Operational safety memorandum – The developer provided a memorandum that describes its approach to maintaining safe operations and mitigating fire risks inherent to energy and energy-storage projects. This has been shared with the owner community staff to support their evaluation of the project and site-selection decision.

- Site selection – We continue to work with the owner community staff to identify their preferred storage locations. We have identified a preferred primary and backup location for Longmont and Loveland. Work continues in Estes Park and Fort Collins.

- Site control – We will work with the landowners of the preferred sites to negotiate leases and will sublease to the developer for a development phase and an operational phase of the project. Most of the preferred sites are located on owner-community property. A draft “term sheet” for the land leases have been shared with legal counsels for Longmont and Loveland.

- Permitting and interconnection – Work can proceed once site control is established.

- Energy storage service agreement terms – Discussions with the bidder on key terms have been initiated.

Once site control, permits and all agreements are in place for each site, Platte River will issue a notice to proceed. The developer anticipates it will then take 20 months to complete the project and achieve commercial operation. Note that site selection and site control discussions with each owner community may proceed at different paces. As a result, some projects may begin before others.

We continue to meet individually with each owner community’s DER Advisory Committee members and utility director to confirm the DER roadmap, answer questions and determine the next steps for Platte River and the owner communities to continue implementing the roadmap.

Members of the DER department, other Platte River departments and owner community staff attended Distributech in Orlando, Florida, the week of February 26. Distributech is an annual transmission and distribution conference. While the conference and exhibits cover all aspects of transmission and distribution technology, DER integration and management featured prominently in the conference sessions. Attending the conference gave our team an opportunity to learn how other utilities are integrating and managing DERs and to meet with several DER consultants and vendors.

Platte River and the owner communities submitted a concept paper in January 2024 for a Smart Grid Grant. This grant opportunity is part of the Grid Resilience and Innovation Partnerships Program, a program established under the Bipartisan Infrastructure Law and administered by the U.S. Department of Energy (DOE). The concept paper is for an “Efficiency Works Virtual Power Plant” project. The project encompasses key systems required for DER integration, VPP programs to gain customer participation and a plan that provides community benefits, such as community and labor engagement as well as workforce development.

Platte River has now received notification from the DOE indicating it reviewed our concept paper and encouraged us to submit a full application, which will be due May 22, 2024. We will continue to work closely with owner community staff to complete the application. Note that this is expected to be a highly competitive process. But making it to this point reflects favorably on the shared vision Platte River and the owner communities have established for DER integration and on the collaborative planning we have done.

Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Operating report

February 2024

Executive Summary

The region experienced mild weather, in February, which resulted in owner community demand and energy coming in below budget. Owner community demand is slightly above budget, while energy is below budget, year to date. The overall net variable cost to serve owner community load was near budget for the month, due to significantly below budget surplus sales offset by coal fuel savings and lower wind production. Year to date, the net variable cost to serve owner community load is below budget.

Thermal resources

Rawhide Unit 1 had an excellent operational month with no curtailments or outages. Rawhide equivalent availability factor was above budget and net capacity factor was significantly below budget for the month, due to lower dispatch in the Southwest Power Pool Western Energy Imbalance Service (SPP WEIS). Year to date, Rawhide equivalent availability factor is slightly below budget and net capacity factor is below budget.

Craig units 1 and 2 experienced numerous curtailments, in February. Craig Unit 1 experienced six curtailments due to mill issues, baghouse issues, fan issues and vibrations. Craig Unit 2 experienced three curtailments due to high vibrations and baghouse issues. Craig Unit 1 experienced one forced outage and one planned outage. Craig Unit 1's forced outage was due to pump issues which occurred on Feb. 2 and lasted approximately seven hours. Craig Unit 1's planned outage to perform electrical and mechanical repairs took place on Feb. 26 and was completed after approximately 30 hours. Craig equivalent availability factor was slightly below budget, while net capacity factor was slightly above budget for the month. Year to date, Craig equivalent availability factor and net capacity factor are above budget.

In February, the combustion turbines (CTs) were run for testing and to replace baseload generation during the Craig Unit 1 forced outage. CT equivalent availability factor and net capacity factor were slightly below budget for the month. Year to date, CT equivalent availability factor and net capacity factor are slightly below budget.

Renewable resources

Wind generation was below budget for the month. The Roundhouse Wind project experienced WEIS market curtailments and underproduction, due to high winds, causing over-speeding for a few days in February. On Feb. 21, the Medicine Bow Wind project was offline for approximately two hours and experienced a force majeure due to snow/road closures on Feb. 27. Solar generation was above budget. The Rawhide Prairie Solar project experienced WEIS market curtailments. Net capacity factor for wind was below budget, while net capacity factor for solar was slightly above budget for the month. The Rawhide Prairie Solar battery system was out of service during the entire month of February. As such, the battery was not charged or discharged. Year to date, net capacity factor for wind is below budget and solar is slightly below budget.

Surplus sales

Surplus sales volume was below budget due to unit curtailments, outages on the Craig units and mild weather. Shaft share was delivered for nearly a full week due to a Craig Unit 3 outage. Average surplus sales pricing for the month was below budget. Year to date, surplus sales volume is below budget and average surplus sales pricing is above budget.

Purchased power

Overall purchased power volume was below budget while pricing was above budget. The SPP WEIS average purchased power price was above budget for the month, but below generation costs. Year to date, purchased power volume is below budget and pricing is above budget.

Total resources

Total blended resource costs were above budget for the month, due to above budget coal costs at Craig and significantly above budget natural gas costs. Year to date, total blended resource costs are above budget.

Variances

February operational results

Owner community load	Budget	Actual	Variance	% variance	
Owner community demand	490 MW	448 MW	(42 MW)	(8.5%)	■
Owner community energy	261 GWh	248 GWh	(13 GWh)	(5.0%)	■
Net variable cost* to serve owner community energy	$4.6M	$4.5M	($0.1M)	1.7%	◆
	$17.72/MWh	$18.02/MWh	$.30/MWh		

*Net variable cost = total resource variable costs + purchased power costs - sales revenue

Market impacts to net variable cost

Downward pressure	
Generation and market outcomes pushing costs lower	
Coal generation fuel savings	$.86M
Lower wind generation volume	$.34M

Upward pressure	
Generation and market outcomes pushing costs higher	
Lower bilateral and market sales volume	$.91M
Higher shaft share pricing	$.42M

Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■

YTD operational results

Owner community load	Budget	Actual	Variance	% variance	
Owner community demand	977 MW	977 MW	0 MW	0.1%	◆
Owner community energy	547 GWh	536 GWh	(11 GWh)	(2.0%)	◆
Net variable cost* to serve owner community energy	$10.1M	$8.3M	$1.8M	(16%)	●
	$18.47/MWh	$15.51/MWh	($2.96/MWh)		

*Net variable cost = total resource variable costs + purchased power costs - sales revenue

Market impacts to net variable cost

Downward pressure	
Generation and market outcomes pushing costs lower	
Coal generation fuel savings	$1.2M
Lower wind generation volume	$1.4M

Upward pressure	
Generation and market outcomes pushing costs higher	
Lower bilateral and market sales volume	$2.0M
Higher Craig pricing	$.40M

Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■

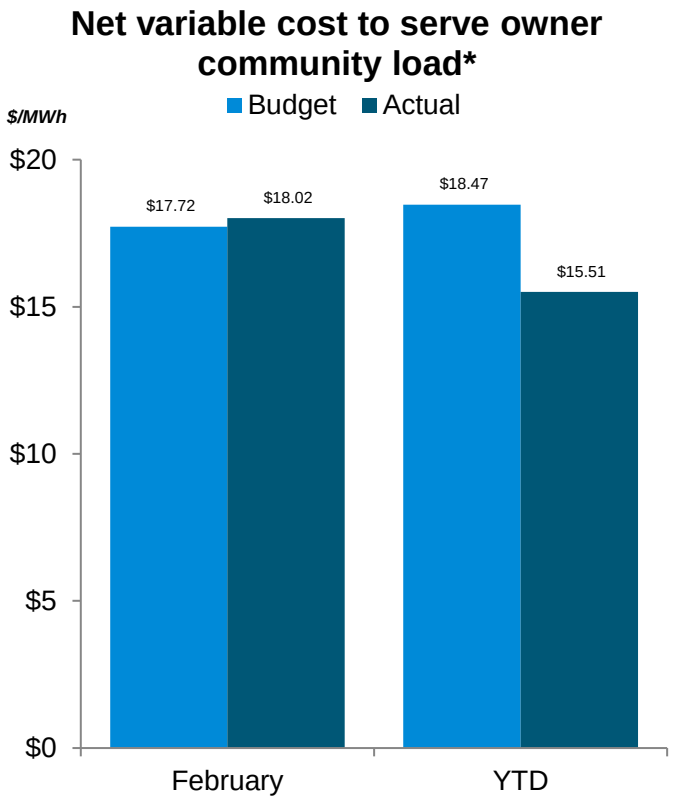
Loss of load

System disturbances

There were no system disturbances resulting in loss of load during the month of February.

2024 goal		February actual		YTD total	
0	●	0	●	0	●

Net variable cost to serve owner community load



*** The net variable operating cost to serve owner community load is equal to the sum of fuel, renewable purchases, energy purchases less surplus energy sales. The net variable cost is divided by total owner community load to determine average net variable cost to serve owner community load.**

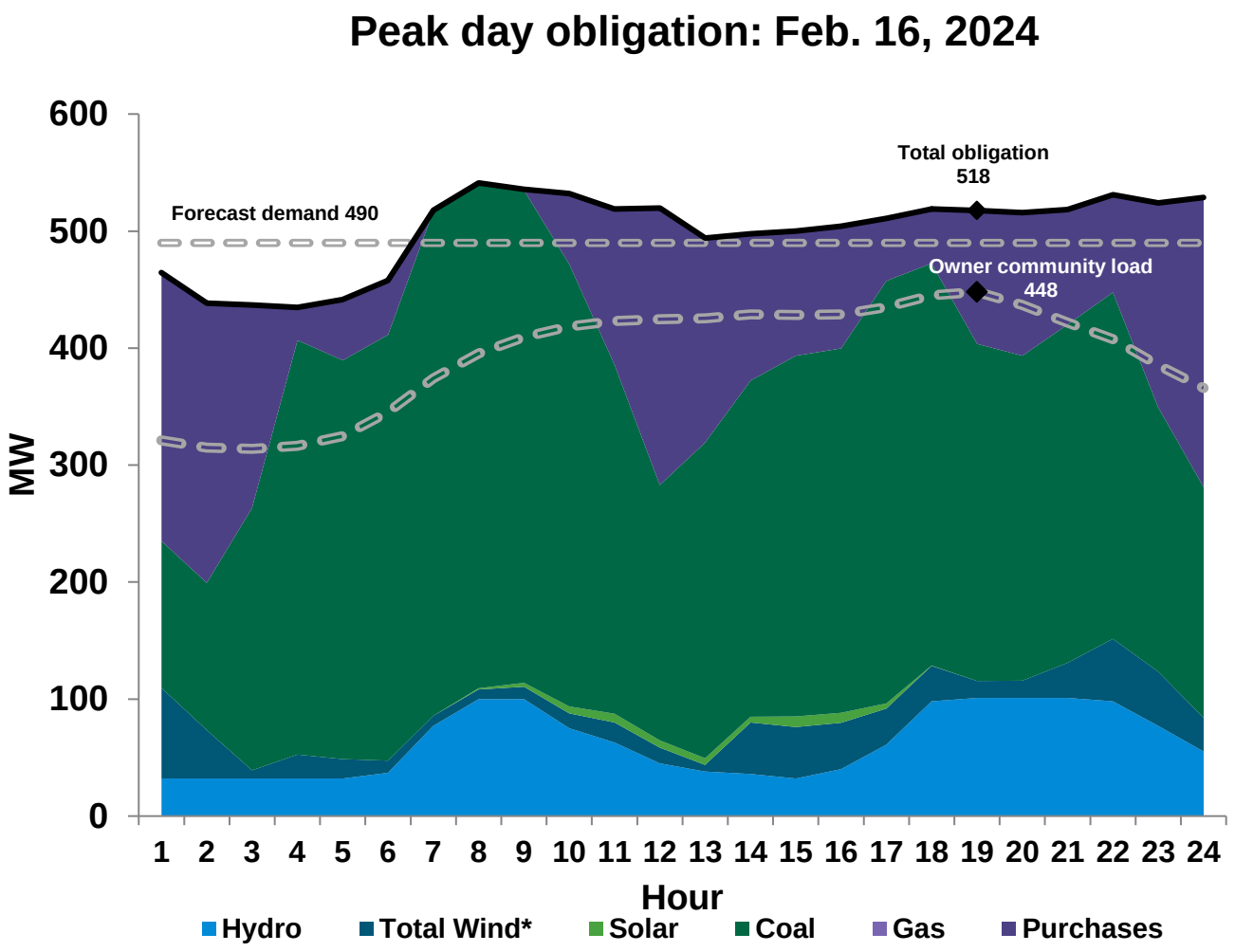
Events of significance

- On Feb. 27, the Western Area Power Administration removed the Estes – Wagon wheel 115-kV line from service to begin airflow spoiler installation. The new estimated completion date is March 7, as high winds have delayed the work.
- On Feb. 7, a car accident damaged a structure on the Horseshoe – Foothills 115-kV line. The line was, initially, removed from service but has since been returned to service. Estimated maintenance and completion dates will be shared once the vendor schedules the necessary repairs.
- On Feb. 2, the dual circuit outages of the Ault – Rawhide and Ault – Carey 230 kV lines were successfully completed with no system disturbances. The weather was favorable during the outages and the generation desk maintained the appropriate injection limits, as set forth in the operating procedure.
- Transmission power system operations completed their annual SPP black start training. In total, 21 Platte River staff members from transmission, generation and a select few engineering staff members attended the drills, with a total of 344 continuing education hours earned by participating personnel. Platte River is required to attend the reliability coordinator-led drills annually.

Peak day

Peak day obligation

Peak demand for the month was 448 megawatts which occurred on Feb. 16, 2024, at hour ending 19:00 and was 42 megawatts below budget. Platte River's obligation at the time of the peak totaled 518 megawatts. Demand response was not called upon at the time of peak.



*** Some off-system wind renewable energy credits and associated energy have been sold to another utility and, therefore, cannot be claimed as a renewable resource by Platte River or its owner communities.**

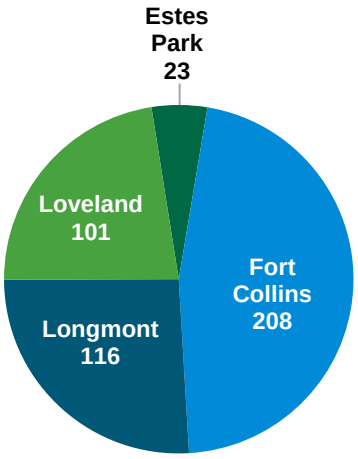
Owner community loads

	Feb. budget	Feb. actual	Minimum	Actual variance	
Coincident demand (MW)	490	448	507	(8.6%)	■
Estes Park	27	**23**	13	(14.8%)	■
Fort Collins	230	208	**231**	(9.6%)	■
Longmont	124	116	**144**	(6.5%)	■
Loveland	109	101	**119**	(7.3%)	■
Non-coincident demand (MW)	491	450	516	(8.4%)	■
Estes Park	27	**25**	21	(7.4%)	■
Fort Collins	230	208	**231**	(9.6%)	■
Longmont	124	116	**144**	(6.5%)	■
Loveland	110	101	**120**	(8.2%)	■
Energy sales (MWh)	260,819	247,790		(5.0%)	■
Estes Park	13,343	12,858		(3.6%)	■
Fort Collins	123,132	115,208		(6.4%)	■
Longmont	66,069	63,621		(3.7%)	■
Loveland	58,275	56,103		(3.7%)	■

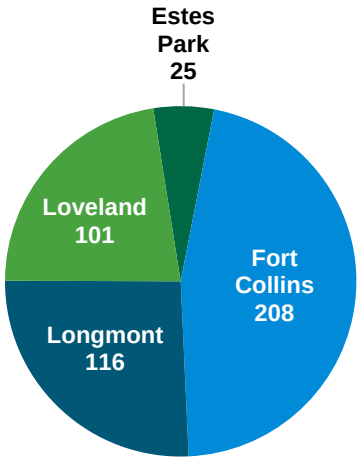
Variance key: Favorable: ● | Near budget: ◆ | Unfavorable: ■

Note: The bolded values above were those billed to the owner communities, based on the maximum of either the actual metered demand or the annual minimum ratchet.

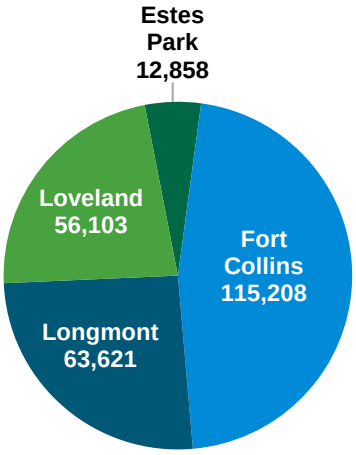
Actual February coincident demand = 448 MW



Actual February non-coincident demand = 450 MW

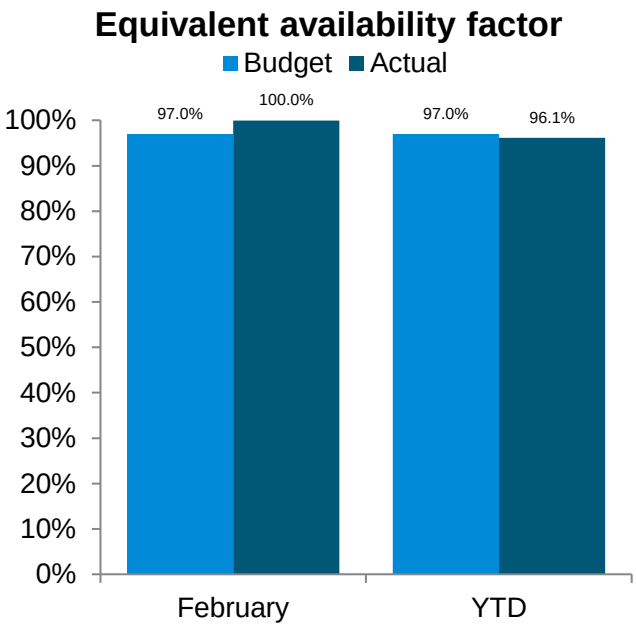


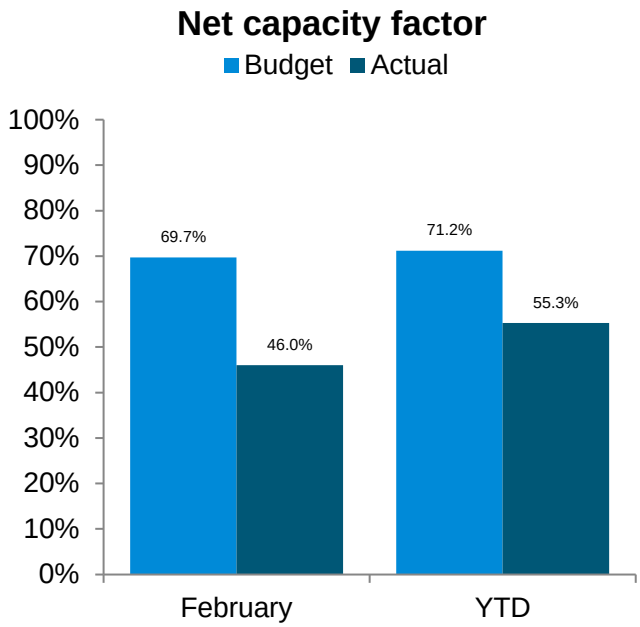
Actual February energy sales = 247,790 MWh



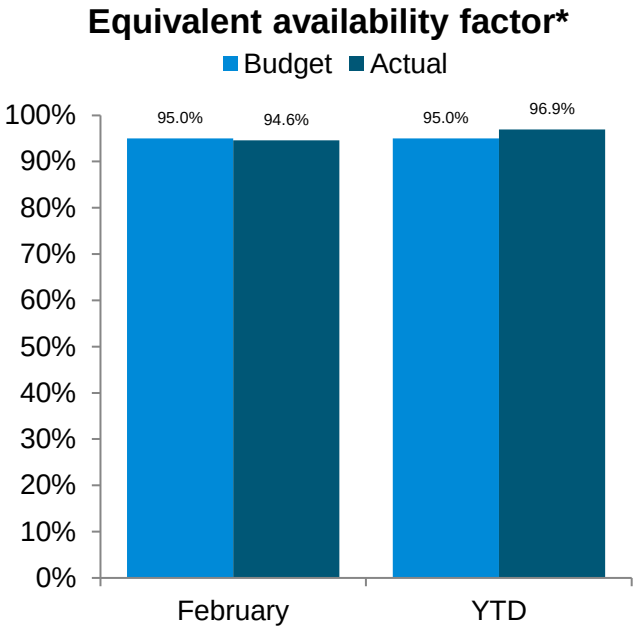
Thermal resources

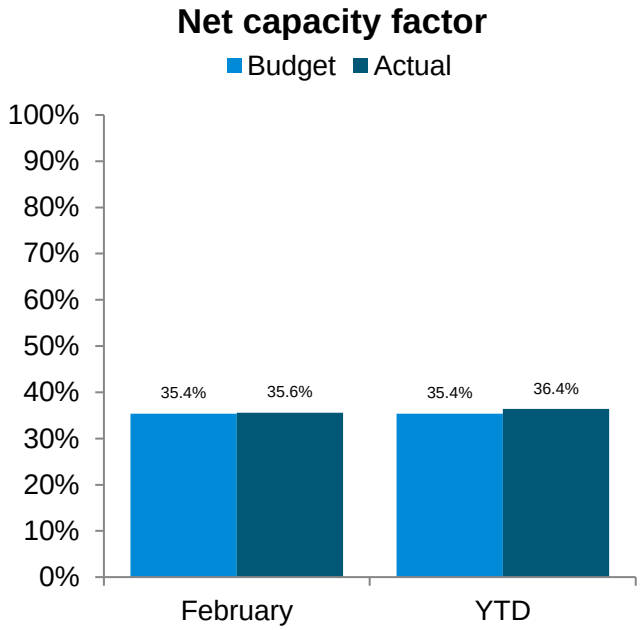
Power generation - Rawhide





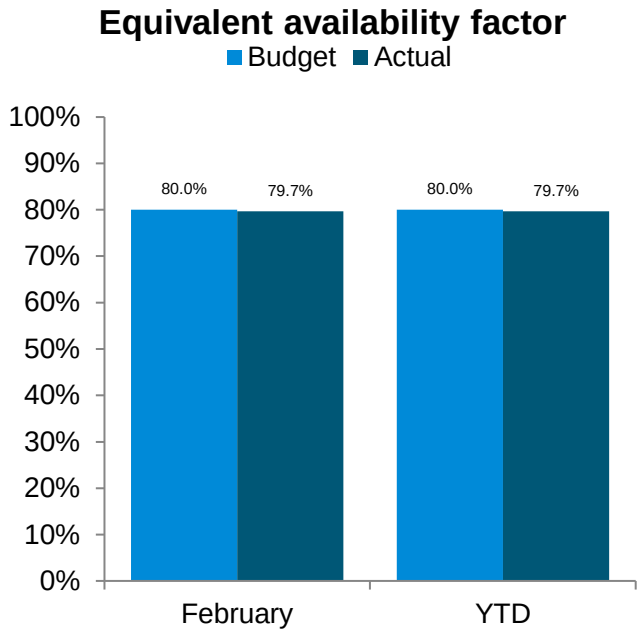
Power generation - Craig

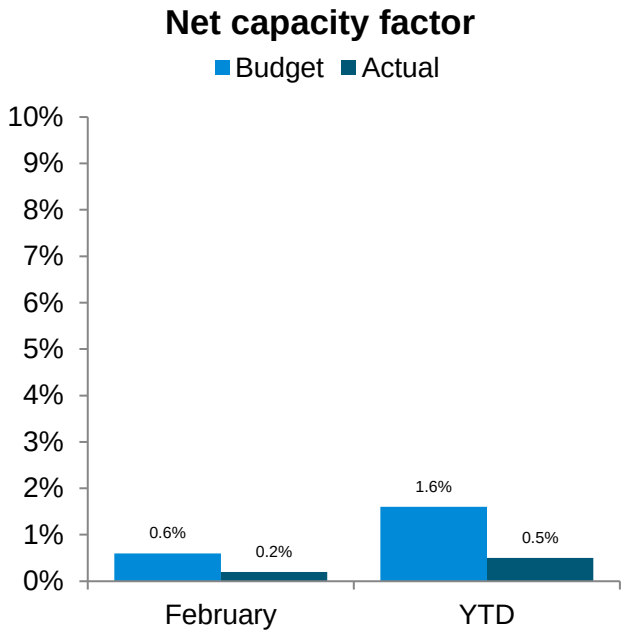




*** Estimated due to a delay of the actual results**

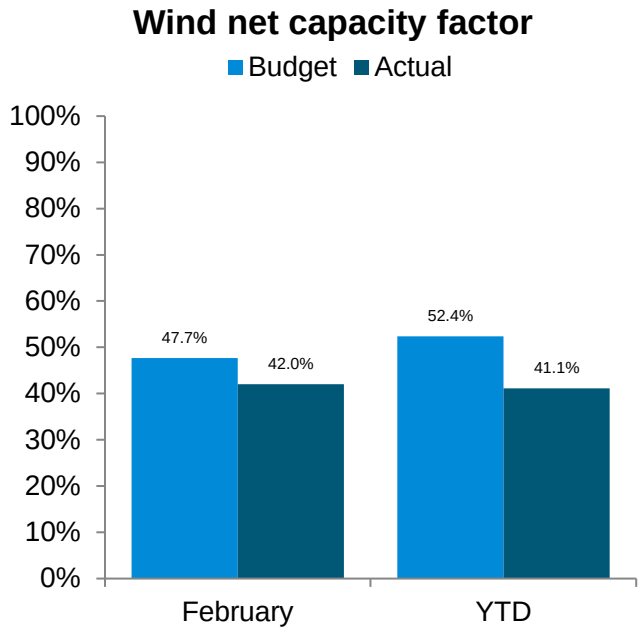
Power generation – combustion turbines

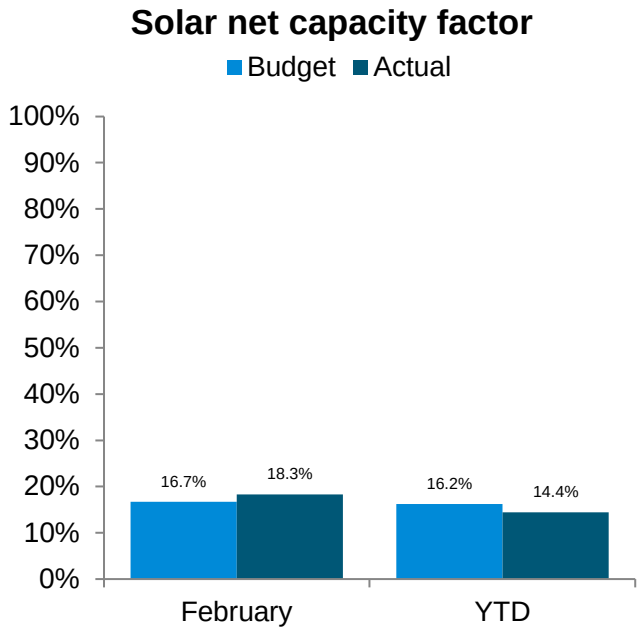




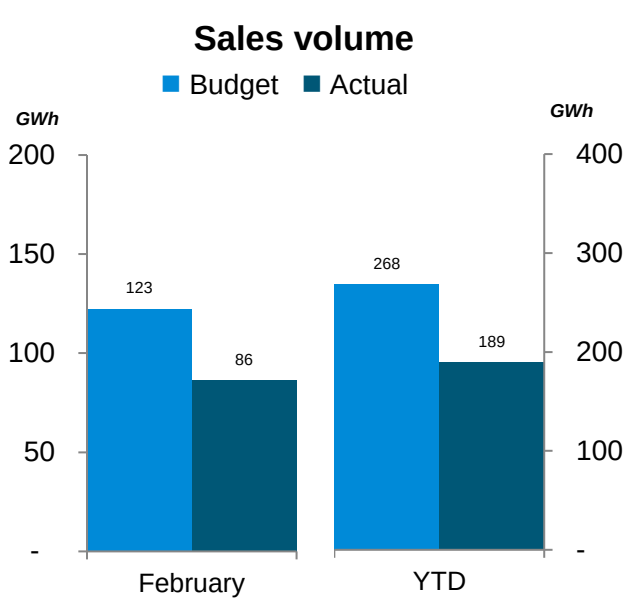
Renewable resources

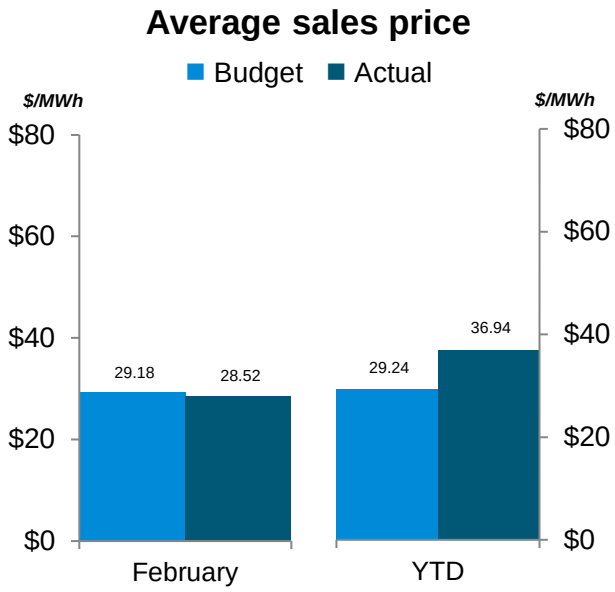
Power generation – wind and solar production



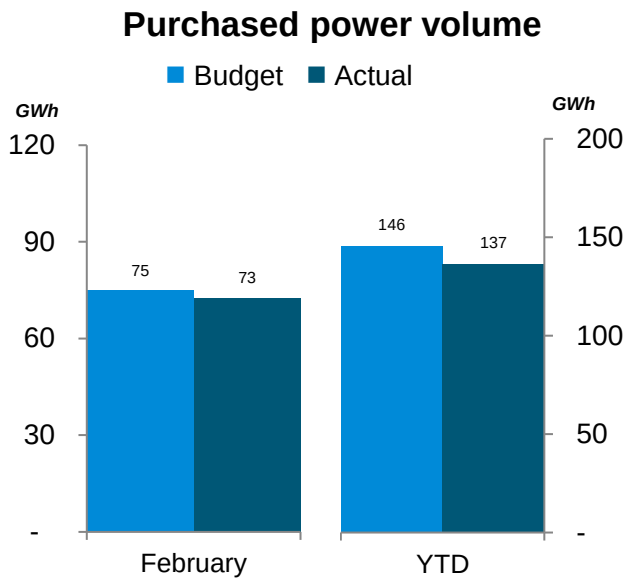


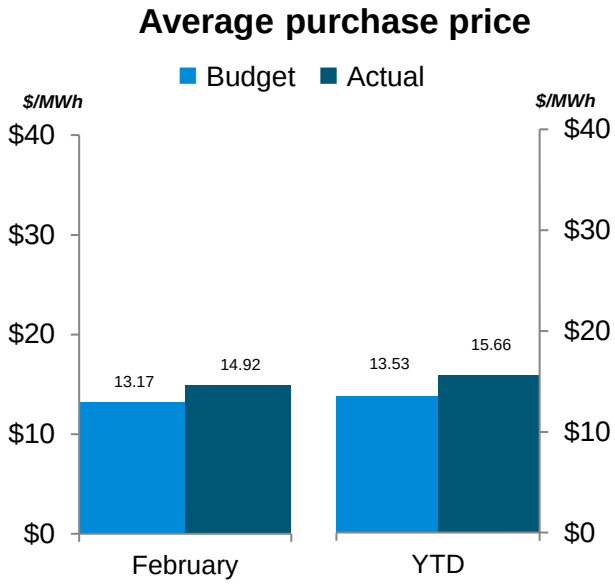
Surplus sales



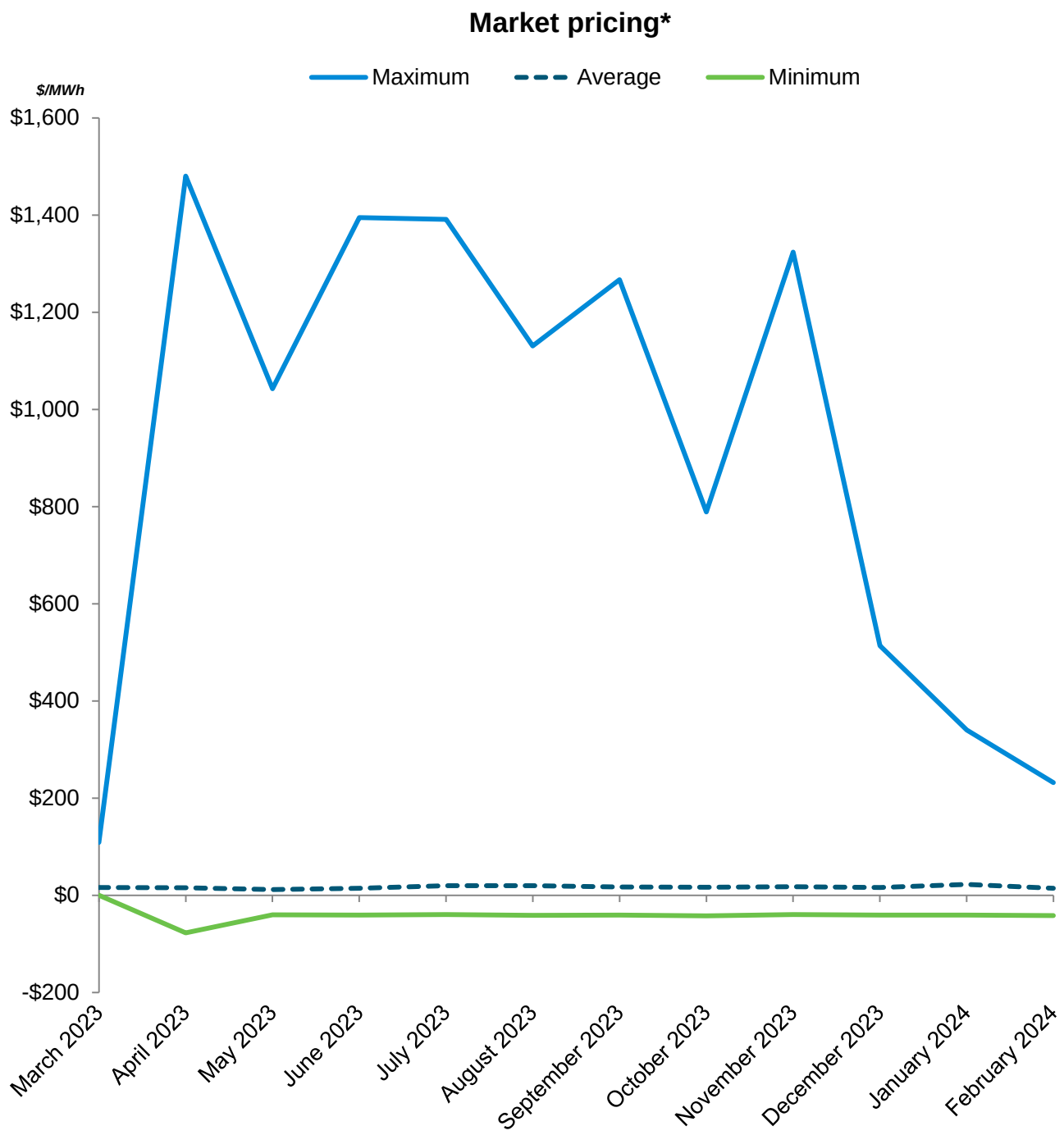


Purchased power

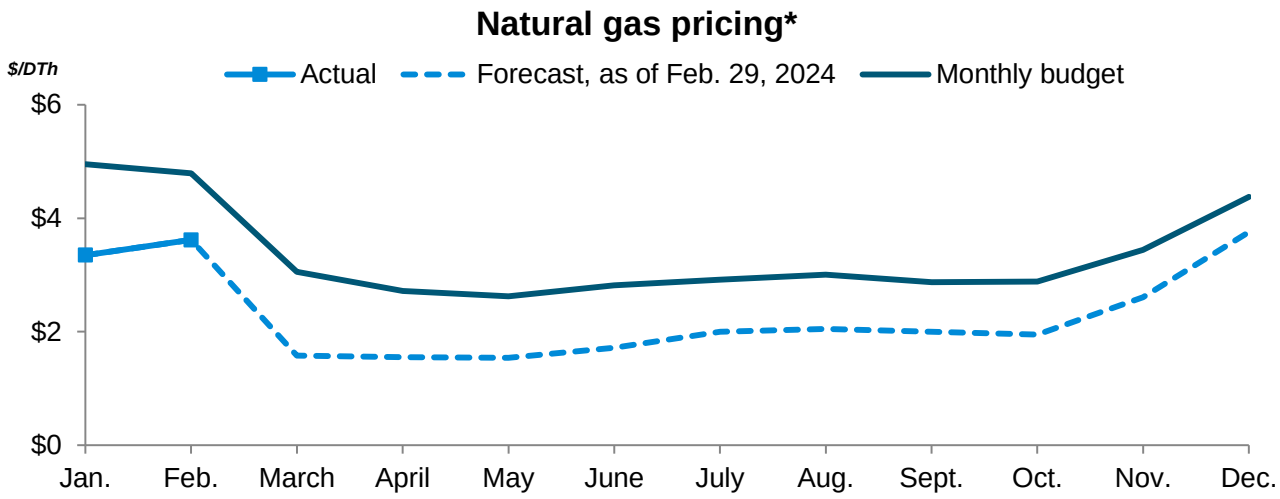




Market pricing



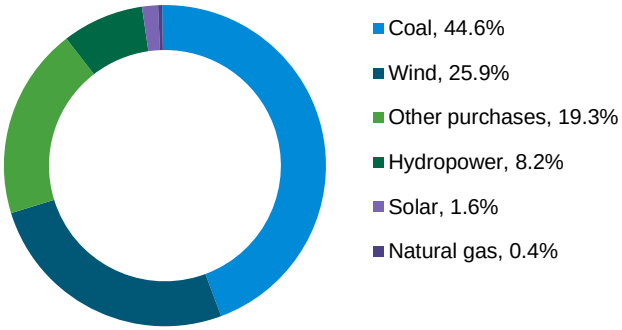
Natural gas pricing



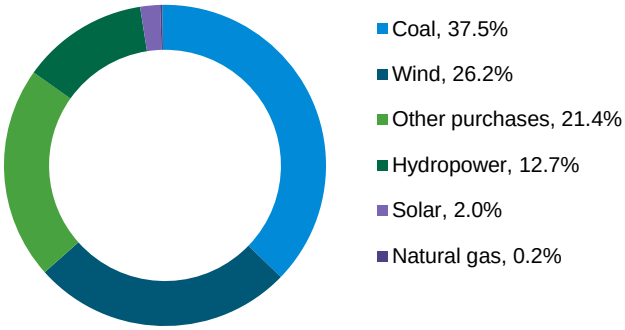
***Forecast based on Argus North American Natural Gas forward curves. Pricing does not include transport.**

Total resources

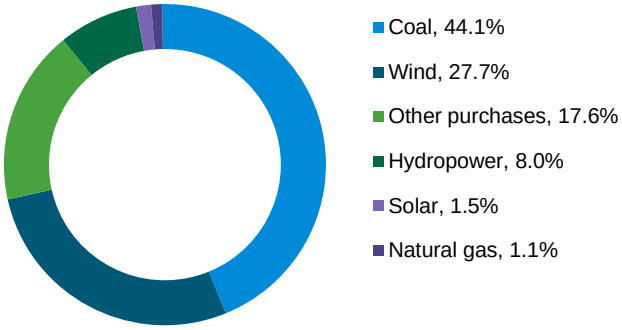
February generation budget



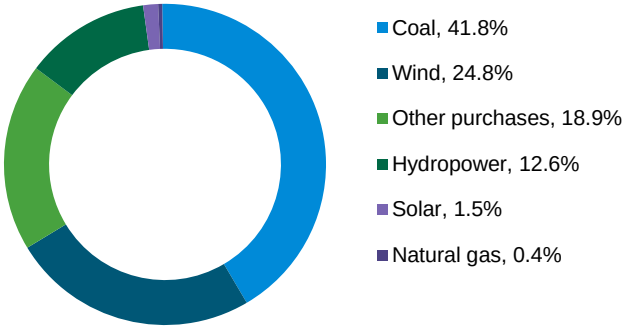
February generation actual

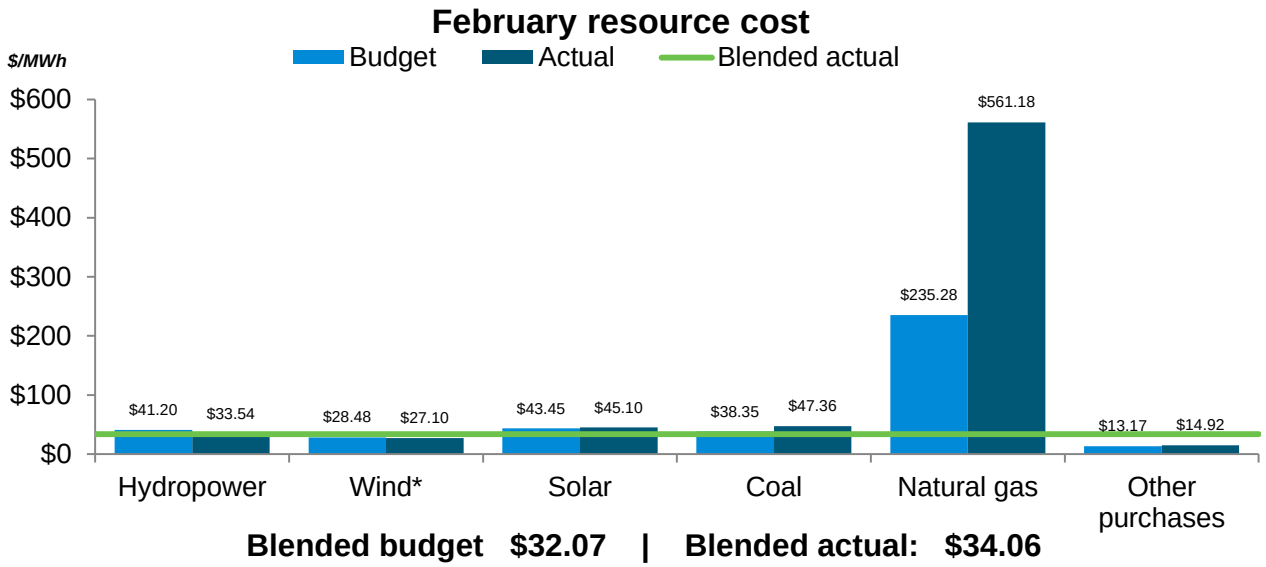


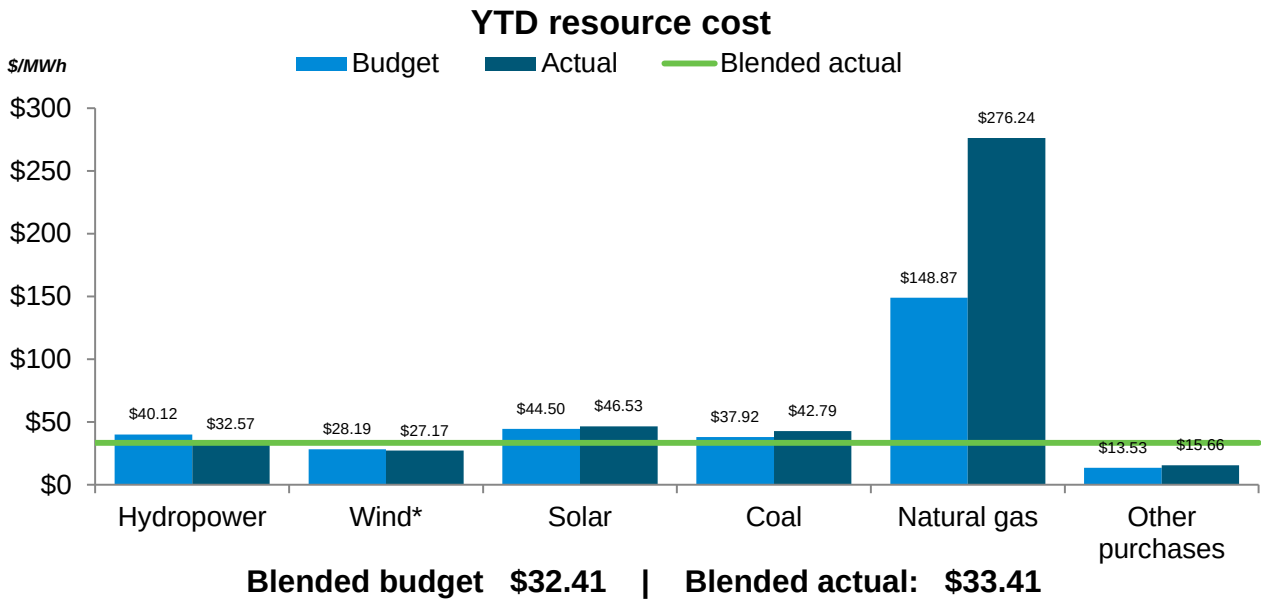
YTD budget



YTD actual







***Some off-system wind RECs and associated energy have been sold to another utility and, therefore, cannot be claimed as a renewable resource by Platte River or its owner communities.**

Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

Financial report

February 2024

Financial highlights year to date

Platte River reported favorable results year to date. Change in net position of $3.1 million was favorable by $1.3 million compared to budget primarily due to below-budget operating expenses, partially offset by below-budget revenues and above-budget unrealized losses.

Key financial results [1] ($ millions)	February Budget	February Actual		Favorable (unfavorable)		Year to date Budget	Year to date Actual		Favorable (unfavorable)		Annual budget
Change in net position	$ 1.5	$ 0.5	■	$ (1.0)	(66.7%)	$ 1.8	$ 3.1	●	$ 1.3	72.2%	$ 7.3
Fixed obligation charge coverage	2.11x	2.04x	■	(0.07x)	(3.3%)	1.80x	2.07x	●	0.27x	15.0%	1.89x

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

(1) The key financial results for the annual budget reflect projected deferred revenues of $14 million according to the deferred revenue and expense accounting policy discussed in the other financial information section. The actual deferral will be determined at the end of the year.

Budgetary highlights year to date

The following budgetary highlights are presented on a non-GAAP budgetary basis.

Key budgetary results ($ millions)	February Budget	February Actual		Favorable (unfavorable)		Year to date Budget	Year to date Actual		Favorable (unfavorable)		Annual budget
Total revenues	$ 24.0	$ 22.3	■	$ (1.7)	(7.1%)	$ 49.8	$ 48.7	■	$ (1.1)	(2.2%)	$ 313.0
Sales to owner communities	18.2	17.6	■	(0.6)	(3.3%)	37.3	37.0	◆	(0.3)	(0.8%)	235.7
Sales for resale - long-term	1.4	1.2	■	(0.2)	(14.3%)	3.5	2.5	■	(1.0)	(28.6%)	20.1
Sales for resale - short-term	2.7	1.9	■	(0.8)	(29.6%)	5.5	5.6	◆	0.1	1.8%	36.4
Wheeling	0.8	0.7	■	(0.1)	(12.5%)	1.6	1.6	◆	0.0	0.0%	8.9
Interest and other income	0.9	0.9	◆	0.0	0.0%	1.9	2.0	●	0.1	5.3%	11.9
Total operating expenses	$ 18.6	$ 17.0	●	$ 1.6	8.6%	$ 40.3	$ 37.0	●	$ 3.3	8.2%	$ 242.7
Purchased power	5.3	4.7	●	0.6	11.3%	11.3	10.0	●	1.3	11.5%	63.8
Fuel	3.7	3.0	●	0.7	18.9%	8.1	6.8	●	1.3	16.0%	51.1
Production	4.0	4.0	◆	0.0	0.0%	8.8	8.8	◆	0.0	0.0%	55.8
Transmission	1.6	1.4	●	0.2	12.5%	3.9	3.6	●	0.3	7.7%	21.4
Administrative and general	3.0	3.1	■	(0.1)	(3.3%)	6.3	6.5	■	(0.2)	(3.2%)	36.9
Distributed energy resources	1.0	0.8	●	0.2	20.0%	1.9	1.3	●	0.6	31.6%	13.7
Capital additions	$ 7.7	$ 2.1	●	$ 5.6	72.7%	$ 12.5	$ 3.0	●	$ 9.5	76.0%	$ 53.2
Debt service expenditures	$ 1.5	$ 1.5	◆	$ -	0.0%	$ 3.4	$ 3.4	◆	$ -	0.0%	$ 18.7

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

Total revenues, $1.1 million below budget

Key variances greater than 2% or less than (2%)

- **Sales for resale - long-term** were below budget $1 million due to below-budget calls on capacity contracts and below-budget wind generation resold to third parties.
- **Interest and other income** was above budget $0.1 million primarily due to higher interest income earned on investments.

Total operating expenses, $3.3 million below budget

Key variances greater than 2% or less than (2%)

- **Purchased power** was $1.3 million below budget. The below-budget expenses include: 1) wind generation, 2) net energy delivered to Tri-State Generation and Transmission Association, Inc. (Tri-State) under the forced outage assistance agreement, and 3) purchased reserves due to a lower rate than anticipated. The above-budget expenses include: 1) hydropower purchases due to favorable conditions, 2) market and bilateral purchases to replace baseload generation during outages and curtailments, serve sales and to take advantage of lower-cost energy in the Western Energy Imbalance Service Market.
- **Fuel** was $1.3 million below budget.
  Coal - Rawhide Unit 1 100% of the overall variance, $1.3 million below budget. Generation was below budget due to lower-cost energy available in the WEIS market, an unplanned outage and curtailments. Price was below budget due to a lower transportation base rate.
  Natural Gas 38% of the overall variance, $0.5 million below budget. Generation was below budget primarily due to no calls on capacity contracts. Price was below budget due to lower market prices.
  Coal - Craig units (38%) of the overall variance, $0.5 million above budget. Additional fuel was required due to a less efficient heat rate. Price was above budget due to an updated price from Trapper Mine as total projected production from the mine decreased, increasing cost per ton delivered.
- **Distributed energy resources** were $0.6 million below budget due to the unpredictability of the completion of customers' energy efficiency projects, below-budget consulting services and personnel expenses.

Capital additions (year-end estimates as of February 2024)

The projects listed below are projected to end the year with a budget variance of more than $100,000. In addition, the amounts below are costs for 2024 and may not represent the total cost of the project. Further changes to capital projections are anticipated and staff will continue to monitor spending estimates to ensure capital projects are appropriately funded.

	Project ($ thousands)	2024 budget	Estimate	Favorable (unfavorable)	Carryover request
	Below budget projects				
**	**Evergreen controls hardware upgrade - Rawhide Unit 1** - This project will be below budget as not all milestone payments will be required in 2024 based on the latest project schedule. *The below-budget funds will be requested to be carried over into 2025.*	$ 1,111	$ 811	$ 300	$ 300
	Above budget projects				
	Solar substation 230 kV - Severance Substation - This project will be above budget due to design and cost increases. Primary cost drivers include professional services, land rights and crossing agreements, substation materials and substation construction services.	$ 10,156	$ 18,079	$ (7,923)	$ -

	Project ($ thousands)	2024 budget	Estimate	Favorable (unfavorable)	Carryover request
**	**Switchgear replacement - Soldier Canyon Pump Station** - This project will be above budget due to price escalations for labor and materials. The scope was also increased to include variable frequency drives for each pump.	$ 209	$ 339	$ (130)	$ -
	Delayed projects				
**	**Distributed energy resources management system** - This project will be delayed to allow additional time for scope development, the request for proposal process and vendor selection. *The below-budget funds will be requested to be carried over into 2025.*	$ 2,485	$ -	$ 2,485	$ 2,485
	Circuit breakers replacement 592, 596 - Ault Substation WAPA - This project will be delayed due to a change in WAPA's schedule. *The below-budget funds will be requested to be carried over into 2025.*	$ 878	$ -	$ 878	$ 878
	Circuit breakers replacement 492, 1092, 3124, 3224 - Ault Substation WAPA - This project will be delayed due to a change in WAPA's schedule. *The below-budget funds will be requested to be carried over into 2025.*	$ 752	$ -	$ 752	$ 752
**	**Network replacement - headquarters** - This project will be delayed due to internal resources shifting to higher priority projects. *The below-budget funds will be requested to be carried over into 2025.*	$ 345	$ -	$ 345	$ 345

* Project details or amounts have changed since last report.

** Project is new to the report.

Debt service expenditures

Debt service expenditures include principal and interest expense for power revenue bonds and for lease and subscription liabilities.

Debt service expenditures ($ thousands)	February Budget	February Actual		Favorable (unfavorable)		Year to date Budget	Year to date Actual		Favorable (unfavorable)		Annual budget
Total principal	$ 1,076	$ 1,112	■	$ (36)	(3.3%)	$ 2,558	$ 2,541	◆	$ 17	0.7%	$ 14,015
Power revenue bonds	1,066	1,066	◆	-	0.0%	2,132	2,132	◆	-	0.0%	13,146
Lease and subscription liabilities	10	46	■	(36)	(360.0%)	426	409	●	17	4.0%	869
Total interest expense	$ 417	$ 417	◆	$ -	0.0%	$ 839	$ 857	■	$ (18)	(2.1%)	$ 4,667
Power revenue bonds	416	416	◆	-	0.0%	832	832	◆	-	0.0%	4,642
Lease and subscription liabilities	1	1	◆	-	0.0%	7	25	■	(18)	(257.1%)	25
Total debt service expenditures	$ 1,493	$ 1,529	■	$ (36)	(2.4%)	$ 3,397	$ 3,398	◆	$ (1)	0.0%	$ 18,682

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

The outstanding principal for Series JJ and KK represents debt associated with transmission assets ($104.6 million) and the Rawhide Energy Station ($21.3 million). Principal and interest payments are made June 1 and interest only payments are made Dec. 1. The table below shows current debt outstanding.

Series	Debt outstanding ($ thousands)	Par issued ($ thousands)	True interest cost	Maturity date	Callable date	Purpose
Series JJ - April 2016	$ 102,320	$ 147,230	2.2%	6/1/2036	6/1/2026	$60M new money for Rawhide & transmission projects & refund portion of Series HH ($13.7M NPV/12.9% savings)
Series KK - December 2020	23,550	$ 25,230	1.6%	6/1/2037	N/A*	Refund a portion of Series II ($6.5M NPV/27.6% savings)
Total par outstanding	125,870					
Unamortized bond premium	9,255					
Total revenue bonds outstanding	135,125					
Less: due within one year	(12,790)					
Total long-term debt, net	$ 122,335					

Fixed rate bond premium costs are amortized over the terms of the related bond issues.

*Series KK is subject to prior redemption, in whole or in part as selected by Platte River, on any date.

Contingency appropriation

At this time, capital additions and debt service expenditures are expected to be above budget at the end of the year. A budget contingency appropriation may be required to cover the additional expenditures in 2024. Staff will evaluate the budgetary results at the end of the year and apply the contingency appropriation accordingly.

Other financial information

- **Deferred revenue and expense accounting policy** - This policy allows deferring revenues and expenses to reduce rate pressure and achieve rate smoothing during the portfolio transition to meet the Resource Diversification Policy goal. Staff will evaluate the financial statements at the end of the year and apply the policy accordingly, which would impact the change in net position.

Budget schedules

Schedule of revenues and expenditures, budget to actual

February 2024

Non-GAAP budgetary basis (in thousands)

	Month of February		Favorable
	Budget	**Actual**	(unfavorable)
Revenues			
Operating revenues			
Sales to owner communities	$ 18,145	**$ 17,560**	$ (585)
Sales for resale - long-term	1,485	**1,217**	(268)
Sales for resale - short-term	2,666	**1,820**	(846)
Wheeling	818	**750**	(68)
Total operating revenues	23,114	**21,347**	(1,767)
Other revenues			
Interest income[(1)]	877	**897**	20
Other income	10	**22**	12
Total other revenues	887	**919**	32
Total revenues	$ 24,001	**$ 22,266**	$ (1,735)
Expenditures			
Operating expenses			
Purchased power	$ 5,291	**$ 4,677**	$ 614
Fuel	3,647	**2,986**	661
Production	4,064	**4,026**	38
Transmission	1,631	**1,448**	183
Administrative and general	3,036	**3,108**	(72)
Distributed energy resources	950	**761**	189
Total operating expenses	18,619	**17,006**	1,613
Capital additions			
Production	728	**357**	371
Transmission	4,805	**1,203**	3,602
General	2,120	**594**	1,526
Asset retirement obligations	78	**-**	78
Total capital additions	7,731	**2,154**	5,577
Debt service expenditures			
Principal	1,076	**1,112**	(36)
Interest expense	417	**417**	-
Total debt service expenditures	1,493	**1,529**	(36)
Total expenditures	$ 27,843	**$ 20,689**	$ 7,154
Revenues less expenditures	$ (3,842)	**$ 1,577**	$ 5,419

[(1)] Excludes unrealized holding gains and losses on investments.

Schedule of revenues and expenditures, budget to actual

February 2024 year-to-date

Non-GAAP budgetary basis (in thousands)

	February year to date		Favorable	Annual
	Budget	**Actual**	(unfavorable)	budget
Revenues				
Operating revenues				
Sales to owner communities	$ 37,317	**$ 37,041**	$ (276)	$ 235,737
Sales for resale - long-term	3,542	**2,522**	(1,020)	20,086
Sales for resale - short-term	5,453	**5,617**	164	36,356
Wheeling	1,621	**1,594**	(27)	8,942
Total operating revenues	47,933	**46,774**	(1,159)	301,121
Other revenues				
Interest income[(1)]	1,710	**1,820**	110	11,569
Other income/(loss)	204	**179**	(25)	282
Total other revenues	1,914	**1,999**	85	11,851
Total revenues	$ 49,847	**$ 48,773**	$ (1,074)	$ 312,972
Expenditures				
Operating expenses				
Purchased power	$ 11,371	**$ 10,042**	$ 1,329	$ 63,776
Fuel	8,078	**6,777**	1,301	51,119
Production	8,801	**8,790**	11	55,842
Transmission	3,870	**3,582**	288	21,412
Administrative and general	6,303	**6,486**	(183)	36,863
Distributed energy resources	1,878	**1,303**	575	13,664
Total operating expenses	40,301	**36,980**	3,321	242,676
Capital additions				
Production	1,273	**684**	589	12,363
Transmission	7,738	**1,540**	6,198	21,957
General	3,280	**763**	2,517	17,979
Asset retirement obligations	156	**-**	156	933
Total capital additions	12,447	**2,987**	9,460	53,232
Debt service expenditures				
Principal	2,558	**2,541**	17	14,015
Interest expense	839	**857**	(18)	4,667
Total debt service expenditures	3,397	**3,398**	(1)	18,682
Total expenditures	$ 56,145	**$ 43,365**	$ 12,780	$ 314,590
Contingency reserved to board	-	**-**	-	56,000
Total expenditures and contingency	$ 56,145	**$ 43,365**	$ 12,780	$ 370,590
Revenues less expenditures and contingency	$ (6,298)	**$ 5,408**	$ 11,706	$ (57,618)

[(1)] Excludes unrealized holding gains and losses on investments.

Financial statements

Statements of net position

Unaudited (in thousands)

	February 29 2024	2023
Assets		
Electric utility plant, at original cost		
Land and land rights	**$ 19,446**	$ 19,446
Plant and equipment in service	**1,482,293**	1,468,308
Less: accumulated depreciation and amortization	**(983,003)**	(943,481)
Plant in service, net	**518,736**	544,273
Construction work in progress	**34,695**	25,256
Total electric utility plant	**553,431**	569,529
Special funds and investments		
Restricted funds and investments	**23,046**	22,384
Dedicated funds and investments	**169,033**	161,554
Total special funds and investments	**192,079**	183,938
Current assets		
Cash and cash equivalents	**63,474**	47,530
Other temporary investments	**50,080**	45,789
Accounts receivable - owner communities	**17,532**	16,960
Accounts receivable - other	**5,753**	10,325
Fuel inventory, at last-in, first-out cost	**20,989**	10,123
Materials and supplies inventory, at average cost	**18,216**	16,185
Prepayments and other assets	**9,311**	7,049
Total current assets	**185,355**	153,961
Noncurrent assets		
Regulatory assets	**131,257**	128,471
Other long-term assets	**8,615**	5,866
Total noncurrent assets	**139,872**	134,337
Total assets	**1,070,737**	1,041,765
Deferred outflows of resources		
Deferred loss on debt refundings	**2,167**	2,943
Pension deferrals	**9,787**	14,849
Asset retirement obligations	**25,721**	24,858
Total deferred outflows of resources	**37,675**	42,650
Liabilities		
Noncurrent liabilities		
Long-term debt, net	**122,335**	137,419
Other long-term obligations	**93,406**	95,183
Net pension liability	**28,274**	30,520
Asset retirement obligations	**34,994**	31,700
Lease and subscription liabilities	**521**	916
Other liabilities and credits	**12,302**	7,327
Total noncurrent liabilities	**291,832**	303,065
Current liabilities		
Current maturities of long-term debt	**12,790**	12,215
Current portion of other long-term obligations	**889**	-
Current portion of asset retirement obligations	**933**	1,547
Current portion of lease and subscription liabilities	**704**	338
Accounts payable	**19,327**	17,761
Accrued interest	**1,248**	1,392
Accrued liabilities and other	**4,903**	6,294
Total current liabilities	**40,794**	39,547
Total liabilities	**332,626**	342,612
Deferred inflows of resources		
Deferred gain on debt refundings	**110**	124
Regulatory credits	**103,649**	75,578
Pension deferrals	**-**	287
Lease deferrals	**704**	852
Total deferred inflows of resources	**104,463**	76,841
Net position		
Net investment in capital assets	**407,192**	399,911
Restricted	**21,797**	20,993
Unrestricted	**242,334**	244,058
Total net position	**$ 671,323**	$ 664,962

Note: Certain prior year line items have changed due to the restatement of financial statements.

Statements of revenues, expenses and changes in net position

Unaudited (in thousands)

	Month of February	February year to date 2024	2023
Operating revenues			
Sales to owner communities	**$ 17,560**	**$ 37,041**	$ 35,481
Sales for resale	**3,037**	**8,139**	11,005
Wheeling	**750**	**1,594**	1,612
Total operating revenues	**21,347**	**46,774**	48,098
Operating expenses			
Purchased power	**4,677**	**10,042**	7,633
Fuel	**2,986**	**6,777**	9,827
Operations and maintenance	**5,553**	**12,768**	12,216
Administrative and general	**3,152**	**6,668**	4,629
Distributed energy resources	**769**	**1,350**	699
Depreciation, amortization and accretion	**3,474**	**6,949**	6,394
Total operating expenses	**20,611**	**44,554**	41,398
Operating income	**736**	**2,220**	6,700
Nonoperating revenues (expenses)			
Interest income	**862**	**1,760**	996
Other income/(loss)	**22**	**179**	175
Interest expense	**(417)**	**(857)**	(928)
Amortization of bond financing costs	**111**	**221**	246
Net (decrease)/increase in fair value of investments	**(760)**	**(402)**	(150)
Total nonoperating revenues (expenses)	**(182)**	**901**	339
Change in net position	**554**	**3,121**	7,039
Net position at beginning of period, as previously reported	**670,769**	**668,202**	657,923
Net position at end of period	**$ 671,323**	**$ 671,323**	$ 664,962

Note: Certain prior year line items have changed due to the restatement of financial statements.

Statements of cash flows

Unaudited (in thousands)

	Month of February	February year to date 2024	February year to date 2023
Cash flows from operating activities			
Receipts from customers	**$ 26,541**	**$ 48,095**	$ 51,351
Payments for operating goods and services	**(16,492)**	**(32,600)**	(29,622)
Payments for employee services	**(6,461)**	**(11,046)**	(7,522)
Net cash provided by operating activities	**3,588**	**4,449**	14,207
Cash flows from capital and related financing activities			
Additions to electric utility plant	**(1,193)**	**(2,044)**	(923)
Payments from accounts payable incurred for electric utility plant additions	**(965)**	**(2,136)**	(3,493)
Proceeds from disposal of electric utility plant	**-**	**17**	-
Payments related to other long-term obligations	**-**	**(5,390)**	-
Payments on lease and subscription liabilities	**(47)**	**(434)**	-
Net cash used in capital and related financing activities	**(2,205)**	**(9,987)**	(4,416)
Cash flows from investing activities			
Purchases and sales of temporary and restricted investments, net	**(6,035)**	**(3,699)**	(11,444)
Interest and other income, including realized gains and losses	**915**	**1,991**	1,166
Net cash used in investing activities	**(5,120)**	**(1,708)**	(10,278)
Decrease in cash and cash equivalents	**(3,737)**	**(7,246)**	(487)
Balance at beginning of period in cash and cash equivalents	**67,211**	**70,720**	48,017
Balance at end of period in cash and cash equivalents	**$ 63,474**	**$ 63,474**	$ 47,530
Reconciliation of net operating income to net cash provided by operating activities			
Operating income	**$ 736**	**$ 2,220**	$ 6,700
Adjustments to reconcile operating income to net cash provided by operating activities			
Depreciation	**3,426**	**6,852**	6,625
Amortization	**(403)**	**(805)**	(927)
Operating expenses relating to other long-term obligations	**241**	**481**	481
Changes in assets and liabilities that provided/(used) cash			
Accounts receivable	**4,771**	**1,103**	3,542
Fuel and materials and supplies inventories	**(793)**	**(1,575)**	(376)
Prepayments and other assets	**210**	**(2,738)**	(1,392)
Regulatory assets	**96**	**193**	355
Deferred outflows of resources	**326**	**651**	458
Accounts payable	**(4,120)**	**(4,127)**	(4,137)
Asset retirement obligations	**11**	**11**	(38)
Other liabilities	**(1,330)**	**1,310**	2,147
Deferred inflows of resources	**417**	**873**	769
Net cash provided by operating activities	**$ 3,588**	**$ 4,449**	$ 14,207
Noncash capital and related financing activities			
Additions of electric utility plant through incurrence of accounts payable	**960**	**960**	1,032
Additions of electric utility plant through leasing and subscription	**-**	**132**	-
Amortization of regulatory asset (debt issuance costs)	**6**	**12**	13
Amortization of bond premiums, deferred loss and deferred gain on refundings	**(117)**	**(234)**	(259)

Note: Certain prior year line items have changed due to the restatement of financial statements.

Schedule of net revenues for bond service and fixed obligations

Unaudited (in thousands)

Bond service coverage	Month of February	February year to date 2024	2023
Net revenues			
Operating revenues	**$ 21,347**	**$ 46,774**	$ 48,098
Operations and maintenance expenses, excluding depreciation, amortization and accretion	**17,137**	**37,605**	35,004
Net operating revenues	**4,210**	**9,169**	13,094
Plus interest income on bond accounts and other income [1]	**919**	**1,999**	1,173
Net revenues before rate stabilization	**5,129**	**11,168**	14,267
Rate stabilization			
Deposits	-	-	-
Withdrawals	-	-	-
Total net revenues	**$ 5,129**	**$ 11,168**	$ 14,267
Bond service			
Power revenue bonds	**$ 1,482**	**$ 2,964**	$ 2,964
Coverage			
Bond service coverage ratio	**3.46**	**3.77**	4.81

Fixed obligation charge coverage [2]	Month of February	February year to date 2024	2023
Total net revenues, above	**$ 5,129**	**$ 11,168**	$ 14,267
Fixed obligation charges included in operating expenses [3]	**1,935**	**3,882**	4,063
Adjusted net revenues before fixed obligation charges	**$ 7,064**	**$ 15,050**	$ 18,330
Fixed obligation charges			
Power revenue bonds, above	**$ 1,482**	**$ 2,964**	$ 2,964
Fixed obligation charges [3][4]	**1,982**	**4,316**	4,063
Total fixed obligation charges	**$ 3,464**	**$ 7,280**	$ 7,027
Coverage			
Fixed obligation charge coverage ratio	**2.04**	**2.07**	2.61

[1] Excludes unrealized holding gains and losses on investments.

[2] Strategic Financial Plan (SFP) metrics accord with the plan year in which they are calculated.

[3] Fixed obligation charges included in operating expenses are debt-like obligation payments including those for demand or capacity on contracted assets and any debt service associated with off-balance sheet obligations.

[4] This value includes lease and subscription debt service expenditures which are not included in operating expenses.

Note: Certain prior year line items have changed due to the restatement of financial statements.

Platte River Power Authority

Estes Park • Fort Collins • Longmont • Loveland

General management report

February 2024

Business Strategies

Communications, marketing and external affairs

Communications

Strategic communications

- Published the first in a series of public education articles about Platte River's path to a clean, reliable energy future; leveraged content on Platte River's website to serve as a landing page.
- Supported presentation development for new board member orientation and year-in-review slides for the 2024 annual board meeting.
- Developed request for proposals (RFP) page on Platte River's website to facilitate vendor submissions to bids for new resources, included the all-dispatchable resource RFP issued mid-February.
- Distributed press releases announcing Platte River's fifth annual NoCo Time Trials event; efforts to enhance the resilience of Estes Park transmission lines; a summary of 2023 results from Efficiency Works programs participation; and the all-dispatchable resource RFP.
- Engaged with utility communications staff during the Q1 utility communicator's task force meeting, providing updates about Platte River and facilitating connection between owner communities' communications staff.

Community relations

- Continued planning efforts for the NoCo Time Trials event including preparations for the March 4 information session for teachers; official event scheduled for Saturday, May 4 – more details to come.
- In support of our United Way partners, organized and attended a tour of the Loveland Youth Campus for Platte River staff members.
- Provided use of the Energy Engagement Center and related support to City of Fort Collins leadership for their February 16 budget kickoff meeting.
- Sponsored and attended the Longmont Chamber Jubilee (annual dinner) event; presented the Nonprofit of the Year award.
- Donated to CASA of Larimer County and the B.A.B.Y. Foundation.
- In final stages of developing a formal community engagement strategy for community relations, engagement and support activities for Platte River.

Marketing

- Developed and deployed:
    - Targeted email campaign for small and medium businesses and multifamily properties to promote Efficiency Works Business programs.
    - Direct mail postcard and targeted email campaign for Efficiency Works Homes to promote 50% off home assessments.
    - Targeted email and social media campaign to promote limited time rebates for the Efficiency Works Store on smart thermostats and specialty LEDs.
    - Initiated translation of all Efficiency Works applications into Spanish, beginning with Consumer Engagement.
    - Started process for complete revamp of the Efficiency Works website to launch later in 2024.
    - Continued project to streamline and update the Efficiency Works mission and vision.
- Reviewed several marketing campaign concepts to continue public education efforts around Platte River branding and its clean energy transition.
- Coordinated with marketing account executives at regional media partners on Platte River's series of public education articles, supporting strategic communications.

External affairs

- Attended:
    - Colorado Water Congress conference in Aurora, CO
    - Colorado Association of Municipal Utilities winter meeting in Loveland, CO
    - American Public Power Association Legislative Rally in Washington, DC and met with Colorado Senators Bennet and Hickenlooper as well as staff from Representative DeGette's and Neguse's offices
    - Fort Collins' State of the City event
    - Longmont Chamber Jubilee
- Presented to:
    - Larimer County Board of County Commissioners (topic: Platte River and Integrated Resource Plan (IRP) 101)
    - Longmont Rotary (topic: Platte River and IRP 101)
    - Fort Collins Chamber Local Legislative Affairs Committee (topic: Platte River and IRP 101)
    - Fort Collins Energy Board (topic: Virtual Power Plant)
- Engaged in initial or continued stakeholder calls for five proposed state bills:

  - SB24-166, air quality enforcement
  - HB24-1330, air quality permitting
  - SB24-165, air quality improvements
  - Power Up Colorado bill (no bill number as of 2/29)
  - Net-zero by 2040 (no bill number as of 2/29)
- Submitted feedback on HB24-1338 Cumulative Impacts & Environmental Justice bill draft to the State Chamber of Commerce.

Grants update

- Received notifications about our GRIP concept papers:
  - Concept paper 1: $32M substation improvement project (40% federal funds, 60% cost share) with Fort Collins Utilities and Longmont Power & Communications. NOT encouraged to submit a full application.
  - Concept paper 2: $76M VPP project (40% federal funds, 60% cost share) with all four owner communities. Encouraged to submit a full application. Full application due May 22, 2024.
- Exploring options for a grants compliance readiness assessment.

Human resources

Human Resources kicked off a yearlong leadership development e-learning program, LEAD 365. This online learning experience is designed to enhance and cultivate leadership skills. Each quarter focuses on a core leadership theme, including culture, change management, influence, and difficult conversations. Leadership of human resources and safety developed a high-level strategic plan for the departments.

Safety

- Safety specialist coordinated Windsor Audiology with Rawhide staff to perform ear molding and impressions for custom-made hearing protection.
- Safety is collaborating with headquarters staff to build and implement safety and emergency evacuation programs and processes for the Energy Engagement Center. Safety is also collaborating with communications to coordinate materials for the new quarterly employee safety engagement program.
- The manager of safety participated in this year's risk assessment at headquarters for transmission and substations facilitated by our insurance provider, AEGIS.

Injury statistics	2022 year end	2023 year end	YTD through February 2023	YTD through February 2024
Recordable injury rate	1.25	1.98	2.19	0.00
DART	0.83	0.39	0.00	0.00
Lost time rate	0.00	0.39	0.00	0.00

Platte River sustained zero recordable or lost time injuries in February 2024.

Emergency response team

- Two scheduled emergency response team (ERT) trainings took place at Rawhide.
- The Emergency Services Specialist coordinated the annual fire system inspection for combustion turbine unit F. The emergency services specialist continued work on transition and implementation of new software for paging, reporting, and data retention for the ERT.

Financial

2025 budget preparation

Platte River's 2025 budget process has begun. We continually look for ways to improve the existing process and to improve work planning and budgeting by better aligning scope, schedules and available resources. Staff received the budget message, instructions on forms, processes and procedures to facilitate departmental budget preparation. Below is a condensed schedule to show the overall budget process.

March to May	Kickoff presentations and preparation of budget details by departments
June	Data compilation, division budget reviews and reporting
July	Senior leadership and GM/CEO budget review
August	Refine budget and document preparation
September	Budget work session with board
October	Public hearing and board review of budget modifications
November	Prepare final budget document
December	Final budget review with board and request adoption

Defined benefit pension plan actuarial valuation

The annual actuarial valuation was received in February, allowing staff to complete financial statements and prepare for the external financial audit. The net pension liability was updated for 2023 based on the actuary report. The liability decreased $2.2 million to $28.3 million primarily due to market gains on investments. The average rate of return was 9.8% compared to the assumed rate of 7.5%.

The valuation report includes a funding recommendation for 2025. The recommended funding is decreasing $1.1 million from $9.1 million in 2024 to $8.0 million in 2025. During the March 2023 board meeting, the board approved funding $3 million of the 2024 recommended contribution in 2023, reducing 2024 funding to $6.1 million. The retirement committee will review the full actuarial valuation report in May.

2023 financial audit

Between Feb. 19, 2024 and March 5, 2024, staff from FORVIS performed audit fieldwork. Platte River staff prepared audit schedules and were available to respond to audit inquiries. Chris Telli and Anna Thigpen from FORVIS will present the results of the audit at the April 2024 board meeting.

Clean energy transition and integration

Distributed energy solutions

Through the administration and implementation of Efficiency Works™, the Distributed Energy Solutions department continues to transition the customer energy program portfolio to meet the changing needs of both the customer and utility. To support the transition, this new description of Efficiency Works was launched:

> *Efficiency Works is a regional utility collaboration that provides guidance and resources to enable customers to use energy effectively, work toward a noncarbon energy future and build strong, resilient communities for customers served by Platte River Power Authority and its owner communities of Estes Park, Fort Collins, Longmont and Loveland.*

Future program planning discussions continue to focus on building electrification, electric vehicle support, and traditional energy efficiency services. Distributed Energy Solutions staff hosted owner community staff on February 27 for a 2025 program planning and budgeting discussion to align all five entities to support existing and new initiatives.

As staff look to the future and support the utility energy transition, current key department achievements year to date (YTD) include the following:

$0.7 M	617	42	414
Invested in our communities YTD	**MTCO2e saved YTD**	**Income Qualifed (IQ) upgrades YTD**	**Customer participation YTD**
$11.1M annual budget from Platte River and Owner Communities excluding staff	Carbon reductions from customer upgrades based on regional electric generation emission rates	Residential IQ customers served with upgrades, advising and assessments	Commerical and residential customers served with incentives, advising and assessments
Investment	**Carbon**	**Equity**	**Customers**

The table below lists programming impacts year to date within our owner communities. Additional detailed department achievements in February include the following:

- Efficiency Works Homes experienced high demand for home upgrade incentives in February for both market rate and income qualified (IQ) programs. IQ programs have completed 375 energy services at 42 residential properties, while the market rate programming has completed 134 energy upgrades through 66 projects.
- Efficiency Works Consumer Engagement programming processed its first building electrification measures, completed contracts for new online platforms for consumer education on many energy products to be launched in late 2024, and experienced high enrollment rates in Think! Energy.
- Efficiency Works Business continued to experience strong interest among the largest commercial and industrial customers for building retro-commissioning efforts resulting in 54 projects underway. Small and medium business participation continues to lag pre-pandemic levels in traditional retrofit rebate services. Increased outreach efforts are underway, and there is growing interest in the Electric Vehicle public charging infrastructure incentives that were launched in 2023.

1,004	**MWh saved** 6,491 MWh savings in progress
68	**KW peak demand reduced** 213 KW peak reduction in progress
155	**MWh electrified**
16,432	**natural gas therms saved**
210,817	**water gallons saved**
6	**events and trainings**
2,369	**local students engaged**
Program metrics (YTD)	

Through February 2024, Efficiency Works programs have provided services for energy efficiency, building electrification, water savings and electric vehicles and have spent $0.7 million providing these services to customers (excluding staff costs). Currently, Platte River has budgeted $9.5 million for these program offerings with an additional $1.6 million available through directive funding provided by the

owner communities. Owner communities may provide additional directive funding as the year progresses.

Digital departments

The digital department encompasses various domains, including enterprise infrastructure, enterprise applications, operational technology, telecommunications and fiber optics, client technology and security, and information and cyber governance.

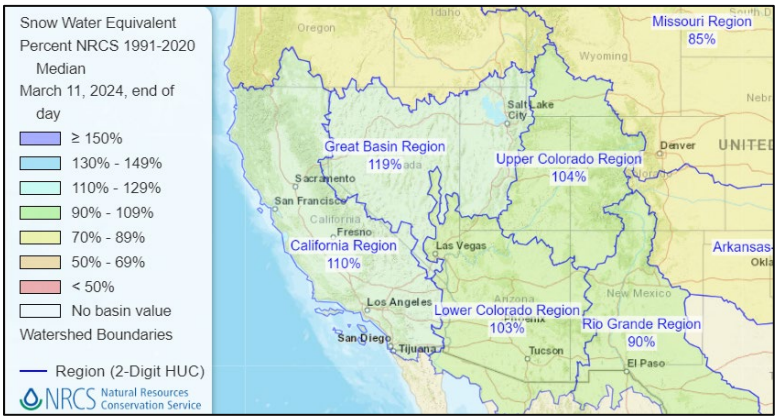
The following are updates on key in-process and completed department initiatives and activities.

System Implementations

- Oracle Cloud Fusion Enterprise Resource Planning system implementation
  - The team is continuing to prepare for the second conference room pilot for Oracle Utilities Work and Asset Cloud Service and Oracle Field Service Cloud. The required configuration changes identified in the first conference room pilot have been completed.
- OSI Energy Management System implementation
  - The infrastructure team continues to deploy the supporting systems and technologies needed for management, monitoring and compliance with critical infrastructure protection standards.

Operations

Fuels and water



After a dry start to the season, snowpack conditions throughout the Colorado River basin and the southwest United States have rebounded and are now above average. As shown in the image to the right, snowpack in the upper Colorado basin, which corresponds to the watershed above Lake Powell, is currently at 104% of average. Despite the normal snowpack, the most recent forecasts for Lake Powell indicate below-average inflows in the spring, most likely due to dry underlying soil conditions. More locally, the snowpack above Lake Granby and Windy Gap reservoir is estimated to be 106% of average and early modeling from Northern Water indicates that Lake Granby is expected to fill with Colorado-Big Thompson project water. This will leave no storage space for Windy Gap water and the project is not expected to pump this spring. Staff will continue to monitor water supply conditions and adjust operations as needed.

Progress during the winter construction season at Chimney Hollow reservoir has been described as “fantastic” by site personnel. When compared to last winter, the contractor has been able to complete nearly three times the amount of work this year, due to significantly improved weather at the site. Based on long-range weather forecasts, the contractor plans to resume a double shift work schedule in mid-March, approximately one month sooner than planned. The warming temperatures have also allowed asphalt core paving to resume at the main dam, which is expected to reach half of its total height in mid-March. Passing this milestone will trigger the second of three $5 million payments from project participants to the Grand Foundation, which was agreed to as part of the federal lawsuit settlement in 2021. Overall, the project is approximately 57% complete and is on track for completion by the fall of 2025.