



Agenda
Utility Advisory Committee Meeting
Tuesday, January 9, 2024
Richland City Hall ~ Council Chambers
625 Swift Boulevard

Committee Members: Chair Lo Presti, Vice-Chair Larkin and Members Miller, Porter, and Staven

Council Liaisons: Council Liaison: VanDyke
Council Liaison Alternate: Jones
Staff Liaison: Whitney

Regular Meeting - 3:00 p.m.

Call to Order/Attendance:

Approval of Agenda: (Approved by Motion)

Presentations::

1. Election of Utility Advisory Committee Chair and Vice-Chair

Approval of Minutes: (Approved by Motion)

2. Approval of the November 14, 2023 Utility Advisory Committee Meeting Minutes

Public Comments: Please limit public comments to 3 minutes per speaker.

Items of Business:

3. Status - Each City Utility (10 Minutes each)
 - Tom Huntington, Fire Chief
 - Pete Rogalsky, Public Works Director
 - Clint Whitney, Energy Services Director
4. Recent US Government Negotiations on Lower Snake River Dams and BPA Provider of Choice Contracts (15 minutes)
 - Clint Whitney, Energy Services Director
5. BPA Reserve Distribution Clause (15 minutes)
 - Clint Whitney, Energy Services Director
6. BPA Requested Outage Response Example (15 minutes)
 - Clint Whitney, Energy Services Director
7. Atlas Agro Non-Potable Industrial Water Supply Rate (30 Minutes)
 - Pete Rogalsky, Public Works Director
8. Forward Agenda

Adjournment

Richland City Hall is ADA accessible. Any individual who has difficulty attending the meeting in-person may request to provide comments remotely. (Ch. 42.30 RCW) Requests for sign interpreters, audio equipment, and/or other special services must be received 48 hours prior to the meeting by calling the City Clerk's Office at 509-942-7389.



UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Presentations:

Prepared By:

Subject:

Election of Utility Advisory Committee Chair and Vice-Chair

Department:

Energy Services

Recommended Motion:

Nominate and approve the UAC Chair and Vice-Chair.

Summary:

Annually, the Utility Advisory Committee nominates and approves the Chair and Vice-Chair positions.

Fiscal Impact:

Attachments:



UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Approval of Minutes

Prepared By: Arturo Mata, Administrative Assistant II

Subject:

Approval of the November 14, 2023 Utility Advisory Committee Meeting Minutes

Department:

Energy Services

Recommended Motion:

Approve the minutes of the UAC meeting held on November 14, 2023.

Summary:

Fiscal Impact:

None.

Attachments:

I. 2023.11.14 UAC Minutes



MINUTES

UTILITY ADVISORY COMMITTEE REGULAR MEETING
Tuesday, November 14, 2023
Richland City Hall ~ Council Chamber
625 Swift Boulevard

Utility Advisory Committee Regular Meeting – 3:00 p.m.

Vice Chair Larkin called the meeting to order at 3:02 pm.

Attendance: Chair Charles Lo Presti, Vice Chair Dave Larkin, Committee Members Roy Miller, Daniel Porter, and Bill Richmond were present. Also present were Staff Liaison and Energy Services Director Whitney, Public Works Director Rogalsky, Fire Chief Huntington, Council Member Van Dyke, and Administrative Assistant Il Mata.

Harry Staven was excused.

Approval of Agenda

MEMBER MILLER MOVED AND MEMBER PORTER SECONDED THE MOTION TO APPROVE THE AGENDA AS PUBLISHED. THE MOTION CARRIED 5-0.

Minutes

1. Approval of the September 12, 2023 Utility Advisory Committee Regular Meeting Minutes.

CHAIR LO PRESTI REQUESTED THE MEETING MINUTES STATE THE MEETING WAS HELD IN QUORUM. MEMBER MILLER MOVED AND MEMBER LARKIN SECONDED THE MOTION TO APPROVE THE SEPTEMBER 12, 2023 MEETING MINUTES WITH THE REQUESTED CHANGE. THE MOTION CARRIED 5-0.

Public Comments

None.

Items of Business

2. Status of Each City Utility

Director Whitney provided details from the pre-application meeting with Atlas Agro on November 11, 2023. Director Whitney also mentioned he will go into more details about the status of the AMI project, 115 kV transmission line, and preliminary results of the Energy Environmental Economics (E3) Study. Director Whitney provided an update from the NRU meeting in Portland. A BPA contract will be drafted in 2024 to renew the contract expiring in 2028. Director Whitney responded to questions from members.

Director Rogalsky shared updates related to water utility changes, annual water sampling program update, the status of the capital sewer plant project and shared details about Atlas Agro and potential water utility services that will be provided after completion of facility. There was a discussion EPA regulations and fire-retardant chemicals found in the drinking water. Director Rogalsky also provided an update related to the Solid Waste division. The landfill gas plant is set to start-up in one to two weeks, and Solid Waste division is in the middle of fall clean-up. Director Rogalsky responded to questions from Members.

Chief Huntington provided updates around Fire Station 76 progress that is anticipated to open in 2024. There may be an ambulance rate increase for 2024 and the increase will be brought to Council in Q1 of 2024. The Strategic Plan will also need to be updated in 2024. Chief Huntington thanked UAC members for their support. There were no questions by members.

3. Tri-Cities 115kV Transmission Network Load Modeling & NW Regional Resource Forecast

Director Whitney presented load modeling for the 115kV transmission expansion. He went over Tri-Cities' current load capacity details and referenced the graphs provided in the packet. Director Whitney responded to questions from members.

4. Energy Environmental Economics (E3) – Draft Net Energy Metering Report

Director Whitney provided an update to the E3 Net Metering Study. He went over the cost benefit for net metering and referenced the slides for key information from the draft NEM report. Director Whitney responded to questions from members.

5. Advanced Metering Infrastructure (AMI) Project Status

Director Whitney provided an update to the AMI project. The remaining electrical and water meters are expected to be delivered and installed between December 2023 and February 2024. There were no questions by members.

6. Director Whitney briefly went over upcoming items for January 2024. The items mentioned are the election of UAC Chair and Vice Chair, electric rate increase recommendation, E3 Net Metering Final Report, and the Low-Income Program.

Unfinished Business

None.

Other Informational Items

7. Tour of Biogas Facility at Landfill
8. AMI Benefits to Customer – March 2024
9. Reliabilities Stats and Inventory Spares – May 2024
10. Resource Adequacy
11. Tour of Fire Station 76

The following informational handouts were provided to Members:

12. Capital Work Plan Update – October 2023
13. 2023 BPA Tri-Cities Load Analysis
14. 2023 PNUCC NW Regional Forecast – Page 9 – Figure 6 Peak Capacity Load and Resources
15. WA Utilities NEM Evaluation – Draft Results 2023-10-31
16. AMI Water and Electric Meter Installation Status
17. NRU Meeting Notes – October 31, 2023-November 1, 2023

Adjournment

Chair Lo Presti adjourned the meeting at 4:58 pm.

Prepared by: _____
Arturo Mata, Administrative Assistant II

Reviewed by: _____
Clint Whitney, Energy Services Director

Approved by: _____
Charles Lo Presti, Chair

DATE APPROVED:

DATE PUBLISHED:



UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Items of Business

Prepared By: Tom Huntington, Fire Chief
Pete Rogalsky, Public Works Director
Clint Whitney, Energy Services Director

Subject:

Status - Each City Utility (10 Minutes each)

Department:

Energy Services

Recommended Motion:

This item is informational only.

Summary:

A representative from each of the City's utilities will provide a status update.

Fiscal Impact:

Attachments:



UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Items of Business

Prepared By:

Subject:

Recent US Government Negotiations on Lower Snake River Dams and BPA Provider of Choice Contracts (15 minutes)

Department:

Energy Services

Recommended Motion:

This item is informational only.

Summary:

BPA and Public Power Council (PPC) have analyzed the potential financial exposure to public power from the recent [US Government](#) agreement and the proposed stay on the Columbia River System Operations (CRSO) litigation. While limits have been added to additional fish and wildlife mitigation programs, replacement resources for potential Lower Snake River Dams (LSRD) breaching continues to be the largest financial exposure for public power consumers.

The US Government agreement will put pressure on BPA to purchase the output of tribal developed LSRD replacement resources. Energy Environmental Economics (E3) estimated in a [July 2022 report](#) that replacement power for the LSRD resources would cost \$415-\$860M annually and require 2.3-4.3GW of replacement resources. PPC estimates the additional replacement costs would be equivalent to an increase in wholesale power rates of 21-43% annually.

The additional power cost impacts and additional uncertainties that were negotiated may impact long-term agreements between public power entities and BPA's Provider of Choice 2028–2044 contracts. BPA expects all post-2028 contracts to be executed by December 31, 2025.

Fiscal Impact:

Attachments:

- I. Proposed CRSO Stay - PPC Updated BPA Ratepayer Impacts 12-15-23_FINAL

Federal Decision on CRSO: BPA Ratepayer Financial Impacts – December 15, 2023 Update

PPC analysis shows BPA Power rates for Northwest public utilities could climb more than 40%

With the public filing of the final proposed stay in the Columbia River System Operations (CRSO) litigation on December 14, 2023, the potential impacts to non-profit public power utilities in the Northwest are still massive, and tremendous uncertainty remains. The United States Government (USG) made billions of dollars of commitments in this agreement with six sovereign parties, which is on top of the \$685 million per year BPA customers have paid on average over last ten years, funding the largest and most sophisticated fish and wildlife program in the nation. A change in the USG's public filing includes more explicit language limiting BPA and ratepayer exposure for new fish and wildlife mitigation programs and measures that the USG has committed to. The new language limits BPA customer exposure to \$100 million in new program funding to the agreeing parties plus \$200 million in hatchery capital improvements (\$300 million over ten years, indexed for inflation). BPA's analysis shows this as ramping up to a 2.7% rate impact over the 10-year term. This is a significant improvement over the previous version resulting from intensive advocacy by PPC and our members. **However, we cannot emphasize enough that this is but one change, and there is still substantial uncertainty in many key areas with associated potential BPA Power rate impacts due to:**

- Potential for additional litigation from other parties in the region or outside the region
- Litigation under different provisions of law such as the Clean Water Act
- Potential for additional agreements and costs with other parties who were not part of this USG agreement
- Lack of certainty that proposed system operations will be durable – the agreement provides numerous opportunities for “adaptive management” led by others, but without ratepayer input
- Cost increases for BPA's existing fish and wildlife program, including litigation of BPA's costs and budgets by plaintiffs in the CRSO agreement or other parties
- Costs of “replacement” resources for the Lower Snake River Dams (LSRD)

While mitigation program spending now has limits under the agreement, “replacement” resources for potential LSRD breaching remains the largest exposure under the final agreement, just as in a previous version. BPA's own analysis pegs these costs at \$415 to \$860 million annually¹, equivalent to a 21% to 43% increase to BPA power rates.

CRSO litigants are already publicly celebrating the agreement as a “roadmap” for LSRD breaching. At a minimum, there will be tremendous pressure for BPA to acquire the output of the tribally developed “replacement” resources contemplated in the agreement. Given the LSRD status as among the least cost, carbon free, and most flexible resources on the system, this would certainly result in dramatic cost pressure for Northwest public power utilities.

PPC's assessment is the proposed agreement still results in major cost risk and uncertainty for Northwest communities and businesses – up to 40% or more. It is a demonstrated fact that hydropower and salmon are not mutually exclusive – and that our existing mitigation efforts are working. When ocean and other conditions allow, the federal system supports salmon returns that exceed those prior to construction of the dams.

For more information, reach out to us at info@ppcpdx.org.

¹ <https://www.bpa.gov/-/media/Aep/power/hydropower-data-studies/e3-bpa-lower-snake-river-dams-power-replacement-study.pdf>



UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Items of Business

Prepared By:

Subject:

BPA Reserve Distribution Clause (15 minutes)

Department:

Energy Services

Recommended Motion:

This item is informational only.

Summary:

BPA's Administrator, John Hairston, announced on December 22, 2023, a [final record of decision for the 2023 federal fiscal year Power Reserves Distribution Clause \(RDC\)](#). The RDC is automatically triggered when financial reserves in BPA's Power or Transmission business units exceed a threshold established in its Financial Reserves Policy. Similarly, if BPA's financial reserves dip below a threshold, a Cost Recovery Adjustment Clause (CRAC) is initiated for priority firm (PF) power customers that increases wholesale power and transmission charges. Since priority firm power customers have BPA's financial risks, the argument is RDC should be returned to the preference power customers.

The RDC for 2024 is \$285.4M which the BPA Administrator announced would be applied with \$165.4M for federal fiscal year 2024 power rates, \$90M for debt reduction or revenue financing, and \$30M for one-time fish and wildlife mitigation assets. Attached is an estimate of the RDC by each priority firm power customer. For the City of Richland, the 2024 RDC is estimated to be \$3.4M compared to total wholesale power and transmission costs of \$42.3M in 2022.

Where does the RDC come from? The largest source of BPA's revenue is from priority firm customer Tier 1 power sales (71%) with the next largest revenue from net secondary sales (15%) and followed by Tier 2 power sales to priority firm customers (5%). Attached is a ["dollar bill infographic"](#) showing BPA's revenues and expenses. The largest change in revenue is from the net secondary sales as wholesale power prices in the NW have doubled since 2021. Attached is a forward price curve showing wholesale power prices at the Mid-Columbia (Mid-C) delivery exchange point.

Fiscal Impact:

Attachments:

1. Final FY 2024 Power DD Credit Estimates by PF Customer 121523
2. BP24-Dollar-Infographic
3. Mid-C Forward Price Curves 2021-2028

FY 2024 Power Dividend Distribution Credit Estimates by PF Customer net Low Density Discount													
(the amounts below may differ from billed amounts due to rounding)													
	BESID	Preference Customer	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Total
		10005 Alder Mutual	(\$1,907)	(\$1,982)	(\$1,704)	(\$1,861)	(\$1,469)	(\$1,822)	(\$1,862)	(\$1,616)	(\$1,563)	(\$1,438)	(\$17,224)
		10015 Asotin County PUD #1	(\$2,044)	(\$2,124)	(\$1,827)	(\$1,994)	(\$1,574)	(\$1,953)	(\$1,995)	(\$1,732)	(\$1,675)	(\$1,541)	(\$18,459)
**		10024 Benton County PUD #1	(\$372,193)	(\$386,766)	(\$332,671)	(\$363,210)	(\$286,693)	(\$355,682)	(\$363,399)	(\$315,483)	(\$304,988)	(\$280,648)	(\$3,361,733)
		10025 Benton REA	(\$200,128)	(\$207,964)	(\$178,877)	(\$195,298)	(\$154,155)	(\$191,250)	(\$195,399)	(\$169,635)	(\$163,992)	(\$150,904)	(\$1,807,602)
		10027 Big Bend Elec Coop	(\$201,393)	(\$209,278)	(\$180,007)	(\$196,532)	(\$155,129)	(\$192,458)	(\$196,634)	(\$170,707)	(\$165,028)	(\$151,858)	(\$1,819,024)
		10029 Blachly Lane Elec Coop	(\$57,822)	(\$60,086)	(\$51,682)	(\$56,426)	(\$44,539)	(\$55,257)	(\$56,456)	(\$49,012)	(\$47,381)	(\$43,600)	(\$522,261)
		10044 Canby, City of	(\$72,458)	(\$75,295)	(\$64,764)	(\$70,709)	(\$55,813)	(\$69,243)	(\$70,746)	(\$61,418)	(\$59,374)	(\$54,636)	(\$654,456)
		10046 Central Electric Coop	(\$269,092)	(\$279,628)	(\$240,518)	(\$262,597)	(\$207,276)	(\$257,154)	(\$262,734)	(\$228,091)	(\$220,503)	(\$202,906)	(\$2,430,499)
		10047 Central Lincoln PUD	(\$543,410)	(\$564,687)	(\$485,706)	(\$530,295)	(\$418,579)	(\$519,303)	(\$530,571)	(\$460,612)	(\$445,289)	(\$409,752)	(\$4,908,204)
		10055 Albion, City of	(\$1,396)	(\$1,451)	(\$1,248)	(\$1,362)	(\$1,075)	(\$1,334)	(\$1,363)	(\$1,183)	(\$1,144)	(\$1,053)	(\$12,609)
		10057 Ashland, City of	(\$71,334)	(\$74,127)	(\$63,759)	(\$69,612)	(\$54,947)	(\$68,169)	(\$69,648)	(\$60,465)	(\$58,454)	(\$53,789)	(\$644,304)
		10059 Bandon, City of	(\$27,128)	(\$28,190)	(\$24,247)	(\$26,473)	(\$20,896)	(\$25,924)	(\$26,487)	(\$22,994)	(\$22,230)	(\$20,455)	(\$245,024)
		10061 Blaine, City of	(\$31,208)	(\$32,430)	(\$27,894)	(\$30,455)	(\$24,039)	(\$29,823)	(\$30,470)	(\$26,453)	(\$25,573)	(\$23,532)	(\$281,877)
		10062 Bonners Ferry, City of	(\$18,981)	(\$19,724)	(\$16,965)	(\$18,523)	(\$14,621)	(\$18,139)	(\$18,532)	(\$16,089)	(\$15,553)	(\$14,312)	(\$171,439)
		10064 Burley, City of	(\$50,176)	(\$52,141)	(\$44,848)	(\$48,965)	(\$38,650)	(\$47,950)	(\$48,990)	(\$42,531)	(\$41,116)	(\$37,835)	(\$453,202)
		10065 Cascade Locks, City of	(\$7,922)	(\$8,232)	(\$7,081)	(\$7,731)	(\$6,102)	(\$7,570)	(\$7,735)	(\$6,715)	(\$6,491)	(\$5,973)	(\$71,552)
		10066 Centralia, City of	(\$86,948)	(\$90,352)	(\$77,715)	(\$84,849)	(\$66,974)	(\$83,091)	(\$84,894)	(\$73,700)	(\$71,248)	(\$65,562)	(\$785,333)
		10067 Cheney, City of	(\$56,431)	(\$58,640)	(\$50,438)	(\$55,069)	(\$43,467)	(\$53,927)	(\$55,097)	(\$47,832)	(\$46,241)	(\$42,551)	(\$509,693)
		10068 Chewelah, City of	(\$8,999)	(\$9,351)	(\$8,043)	(\$8,782)	(\$6,932)	(\$8,600)	(\$8,786)	(\$7,628)	(\$7,374)	(\$6,786)	(\$81,281)
		10070 Declo, City of	(\$1,280)	(\$1,330)	(\$1,144)	(\$1,249)	(\$986)	(\$1,223)	(\$1,250)	(\$1,085)	(\$1,049)	(\$965)	(\$11,561)
		10071 Drain, City of	(\$6,653)	(\$6,913)	(\$5,946)	(\$6,492)	(\$5,125)	(\$6,358)	(\$6,496)	(\$5,639)	(\$5,452)	(\$5,016)	(\$60,090)
		10072 Ellensburg, City of	(\$85,562)	(\$88,912)	(\$76,476)	(\$83,497)	(\$65,907)	(\$81,766)	(\$83,540)	(\$72,525)	(\$70,112)	(\$64,517)	(\$772,814)
		10074 Forest Grove, City of	(\$95,193)	(\$98,921)	(\$85,085)	(\$92,896)	(\$73,326)	(\$90,970)	(\$92,944)	(\$80,689)	(\$78,005)	(\$71,780)	(\$859,809)
		10076 Heyburn, City of	(\$17,186)	(\$17,859)	(\$15,361)	(\$16,772)	(\$13,238)	(\$16,424)	(\$16,780)	(\$14,568)	(\$14,083)	(\$12,959)	(\$155,230)
		10078 McCleary, City of	(\$13,265)	(\$13,785)	(\$11,857)	(\$12,945)	(\$10,218)	(\$12,677)	(\$12,952)	(\$11,244)	(\$10,870)	(\$10,003)	(\$119,816)
		10079 McMinnville, City of	(\$291,744)	(\$303,167)	(\$260,764)	(\$284,703)	(\$224,725)	(\$278,802)	(\$284,851)	(\$247,292)	(\$239,065)	(\$219,986)	(\$2,635,099)
		10080 Milton, Town of	(\$23,575)	(\$24,498)	(\$21,071)	(\$23,006)	(\$18,159)	(\$22,529)	(\$23,018)	(\$19,983)	(\$19,318)	(\$17,776)	(\$212,933)
		10081 Milton-Freewater, City of	(\$32,513)	(\$33,786)	(\$29,061)	(\$31,728)	(\$25,044)	(\$31,071)	(\$31,745)	(\$27,559)	(\$26,642)	(\$24,516)	(\$293,665)
		10082 Minidoka, City of	(\$353)	(\$367)	(\$315)	(\$344)	(\$272)	(\$337)	(\$344)	(\$299)	(\$289)	(\$266)	(\$3,186)
		10083 Monmouth, City of	(\$29,837)	(\$31,005)	(\$26,669)	(\$29,117)	(\$22,983)	(\$28,513)	(\$29,132)	(\$25,291)	(\$24,449)	(\$22,498)	(\$269,494)
		10086 Plummer, City of	(\$13,805)	(\$14,345)	(\$12,339)	(\$13,471)	(\$10,633)	(\$13,192)	(\$13,478)	(\$11,701)	(\$11,312)	(\$10,409)	(\$124,685)
		10087 Port Angeles, City of	(\$166,938)	(\$173,475)	(\$149,211)	(\$162,909)	(\$128,589)	(\$159,532)	(\$162,994)	(\$141,502)	(\$136,795)	(\$125,878)	(\$1,507,823)
		10089 Richland, City of	(\$371,803)	(\$386,360)	(\$332,321)	(\$362,829)	(\$286,392)	(\$355,308)	(\$363,018)	(\$315,152)	(\$304,668)	(\$280,353)	(\$3,358,204)
		10091 Rupert, City of	(\$32,233)	(\$33,496)	(\$28,811)	(\$31,456)	(\$24,829)	(\$30,803)	(\$31,472)	(\$27,322)	(\$26,413)	(\$24,305)	(\$291,140)
		10094 Soda Springs, City of	(\$10,818)	(\$11,242)	(\$9,670)	(\$10,557)	(\$8,333)	(\$10,338)	(\$10,563)	(\$9,170)	(\$8,865)	(\$8,157)	(\$97,713)
		10095 Sumas, Town of	(\$12,998)	(\$13,507)	(\$11,618)	(\$12,685)	(\$10,012)	(\$12,422)	(\$12,691)	(\$11,018)	(\$10,651)	(\$9,801)	(\$117,403)
		10097 Troy, City of	(\$7,124)	(\$7,403)	(\$6,368)	(\$6,952)	(\$5,488)	(\$6,808)	(\$6,956)	(\$6,039)	(\$5,838)	(\$5,372)	(\$64,348)
		10101 Clallam County PUD #1	(\$257,427)	(\$267,506)	(\$230,091)	(\$251,214)	(\$198,291)	(\$246,006)	(\$251,344)	(\$218,203)	(\$210,944)	(\$194,109)	(\$2,325,135)
		10103 Clark County PUD #1	(\$586,510)	(\$609,475)	(\$524,229)	(\$572,355)	(\$451,778)	(\$560,491)	(\$572,652)	(\$497,144)	(\$480,607)	(\$442,251)	(\$5,297,492)
		10105 Clatskanie PUD	(\$120,404)	(\$125,118)	(\$107,618)	(\$117,498)	(\$92,745)	(\$115,062)	(\$117,559)	(\$102,058)	(\$98,663)	(\$90,789)	(\$1,087,514)
		10106 Clearwater Power	(\$79,167)	(\$82,267)	(\$70,761)	(\$77,257)	(\$60,981)	(\$75,655)	(\$77,297)	(\$67,105)	(\$64,873)	(\$59,695)	(\$715,058)
		10109 Columbia Basin Elec Coop	(\$39,529)	(\$41,076)	(\$35,331)	(\$38,575)	(\$30,448)	(\$37,775)	(\$38,595)	(\$33,506)	(\$32,391)	(\$29,806)	(\$357,032)
		10111 Columbia Power Coop	(\$10,408)	(\$10,815)	(\$9,303)	(\$10,157)	(\$8,017)	(\$9,946)	(\$10,162)	(\$8,822)	(\$8,529)	(\$7,848)	(\$94,007)
		10112 Columbia River PUD	(\$207,820)	(\$215,957)	(\$185,752)	(\$202,805)	(\$160,080)	(\$198,601)	(\$202,910)	(\$176,155)	(\$170,295)	(\$156,704)	(\$1,877,079)
		10113 Columbia REA	(\$123,608)	(\$128,448)	(\$110,482)	(\$120,625)	(\$95,213)	(\$118,124)	(\$120,687)	(\$104,774)	(\$101,289)	(\$93,205)	(\$1,116,455)

(the amounts below may differ from billed amounts due to rounding)													
	BESID	Preference Customer	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Total
	10116	Consolidated Irrigation District #19	(\$814)	(\$846)	(\$728)	(\$794)	(\$627)	(\$778)	(\$795)	(\$690)	(\$667)	(\$614)	(\$7,353)
	10118	Consumers Power	(\$151,538)	(\$157,472)	(\$135,447)	(\$147,881)	(\$116,727)	(\$144,816)	(\$147,958)	(\$128,449)	(\$124,176)	(\$114,266)	(\$1,368,730)
	10121	Coos Curry Elec Coop	(\$132,450)	(\$137,636)	(\$118,385)	(\$129,253)	(\$102,024)	(\$126,574)	(\$129,320)	(\$112,269)	(\$108,534)	(\$99,872)	(\$1,196,317)
	10123	Cowlitz County PUD #1	(\$727,802)	(\$756,299)	(\$650,518)	(\$710,237)	(\$560,612)	(\$695,515)	(\$710,606)	(\$616,908)	(\$596,386)	(\$548,791)	(\$6,573,674)
	10136	Douglas Electric Cooperative	(\$61,037)	(\$63,427)	(\$54,556)	(\$59,564)	(\$47,016)	(\$58,329)	(\$59,595)	(\$51,737)	(\$50,016)	(\$46,024)	(\$551,301)
	10142	East End Mutual Electric	(\$9,231)	(\$9,593)	(\$8,251)	(\$9,009)	(\$7,111)	(\$8,822)	(\$9,013)	(\$7,825)	(\$7,565)	(\$6,961)	(\$83,381)
	10144	Eatonville, City of	(\$11,620)	(\$12,075)	(\$10,386)	(\$11,339)	(\$8,950)	(\$11,104)	(\$11,345)	(\$9,849)	(\$9,522)	(\$8,762)	(\$104,952)
	10156	Elmhurst Mutual P & L	(\$115,016)	(\$119,519)	(\$102,803)	(\$112,240)	(\$88,595)	(\$109,913)	(\$112,298)	(\$97,491)	(\$94,248)	(\$86,726)	(\$1,038,849)
	10157	Emerald PUD	(\$79,937)	(\$83,067)	(\$71,449)	(\$78,008)	(\$61,574)	(\$76,391)	(\$78,048)	(\$67,757)	(\$65,503)	(\$60,276)	(\$722,010)
	10158	Energy Northwest	(\$8,094)	(\$8,411)	(\$7,235)	(\$7,899)	(\$6,235)	(\$7,735)	(\$7,903)	(\$6,861)	(\$6,633)	(\$6,103)	(\$73,109)
	10170	Eugene Water & Electric Board	(\$376,767)	(\$391,519)	(\$336,759)	(\$367,674)	(\$290,216)	(\$360,052)	(\$367,865)	(\$319,360)	(\$308,736)	(\$284,097)	(\$3,403,045)
	10172	U.S. Airforce Base, Fairchild	(\$18,812)	(\$19,548)	(\$16,814)	(\$18,358)	(\$14,490)	(\$17,977)	(\$18,367)	(\$15,946)	(\$15,415)	(\$14,185)	(\$169,912)
	10173	Fall River Elec Coop	(\$108,178)	(\$112,413)	(\$96,691)	(\$105,567)	(\$83,327)	(\$103,379)	(\$105,622)	(\$91,695)	(\$88,645)	(\$81,570)	(\$977,087)
	10174	Farmers Elec Coop	(\$1,769)	(\$1,838)	(\$1,581)	(\$1,726)	(\$1,363)	(\$1,691)	(\$1,727)	(\$1,500)	(\$1,450)	(\$1,334)	(\$15,979)
	10177	Ferry County PUD #1	(\$28,723)	(\$29,848)	(\$25,673)	(\$28,030)	(\$22,125)	(\$27,449)	(\$28,045)	(\$24,347)	(\$23,537)	(\$21,658)	(\$259,435)
	10179	Flathead Elec Coop	(\$595,174)	(\$618,478)	(\$531,973)	(\$580,809)	(\$458,451)	(\$568,770)	(\$581,111)	(\$504,488)	(\$487,706)	(\$448,784)	(\$5,375,744)
	10183	Franklin County PUD #1	(\$222,419)	(\$231,128)	(\$198,800)	(\$217,051)	(\$171,325)	(\$212,552)	(\$217,163)	(\$188,529)	(\$182,258)	(\$167,712)	(\$2,008,937)
	10186	Glacier Elec Coop	(\$58,553)	(\$60,845)	(\$52,335)	(\$57,140)	(\$45,102)	(\$55,955)	(\$57,169)	(\$49,631)	(\$47,980)	(\$44,151)	(\$528,861)
	10190	Grant County PUD #2	(\$18,525)	(\$19,250)	(\$16,558)	(\$18,078)	(\$14,269)	(\$17,703)	(\$18,087)	(\$15,702)	(\$15,180)	(\$13,968)	(\$167,320)
**	10191	Grays Harbor PUD #1	(\$185,841)	(\$193,117)	(\$166,107)	(\$181,356)	(\$143,150)	(\$177,596)	(\$181,450)	(\$157,525)	(\$152,284)	(\$140,131)	(\$1,678,557)
	10197	Harney Elec Coop	(\$74,126)	(\$77,028)	(\$66,255)	(\$72,337)	(\$57,098)	(\$70,838)	(\$72,375)	(\$62,832)	(\$60,741)	(\$55,894)	(\$669,524)
	10202	Hood River Elec Coop	(\$46,734)	(\$48,563)	(\$41,771)	(\$45,606)	(\$35,998)	(\$44,660)	(\$45,629)	(\$39,613)	(\$38,295)	(\$35,239)	(\$422,108)
	10203	Idaho County L & P	(\$20,486)	(\$21,288)	(\$18,310)	(\$19,991)	(\$15,780)	(\$19,577)	(\$20,002)	(\$17,364)	(\$16,787)	(\$15,447)	(\$185,032)
	10204	Idaho Falls Power	(\$145,533)	(\$151,232)	(\$130,079)	(\$142,021)	(\$112,101)	(\$139,077)	(\$142,095)	(\$123,359)	(\$119,255)	(\$109,738)	(\$1,314,490)
	10209	Inland P & L	(\$342,280)	(\$355,681)	(\$305,933)	(\$334,019)	(\$263,652)	(\$327,095)	(\$334,192)	(\$290,127)	(\$280,476)	(\$258,092)	(\$3,091,547)
	10230	Kittitas County PUD #1	(\$31,533)	(\$32,768)	(\$28,185)	(\$30,772)	(\$24,290)	(\$30,135)	(\$30,788)	(\$26,729)	(\$25,840)	(\$23,777)	(\$284,817)
	10231	Klickitat County PUD #1	(\$118,706)	(\$123,354)	(\$106,101)	(\$115,841)	(\$91,437)	(\$113,440)	(\$115,902)	(\$100,619)	(\$97,272)	(\$89,509)	(\$1,072,181)
	10234	Kootenai Electric Coop	(\$181,950)	(\$189,074)	(\$162,629)	(\$177,559)	(\$140,153)	(\$173,878)	(\$177,651)	(\$154,226)	(\$149,096)	(\$137,197)	(\$1,643,413)
	10235	Lakeview L & P (WA)	(\$107,874)	(\$112,098)	(\$96,419)	(\$105,271)	(\$83,093)	(\$103,089)	(\$105,325)	(\$91,438)	(\$88,396)	(\$81,341)	(\$974,344)
	10236	Lane County Elec Coop	(\$93,648)	(\$97,314)	(\$83,703)	(\$91,387)	(\$72,135)	(\$89,493)	(\$91,435)	(\$79,379)	(\$76,738)	(\$70,614)	(\$845,846)
	10237	Lewis County PUD #1	(\$156,226)	(\$162,343)	(\$139,637)	(\$152,456)	(\$120,338)	(\$149,296)	(\$152,535)	(\$132,422)	(\$128,017)	(\$117,801)	(\$1,411,071)
	10239	Lincoln Elec Coop (MT)	(\$46,180)	(\$47,989)	(\$41,277)	(\$45,066)	(\$35,572)	(\$44,132)	(\$45,089)	(\$39,144)	(\$37,842)	(\$34,822)	(\$417,113)
	10242	Lost River Elec Coop	(\$31,162)	(\$32,382)	(\$27,853)	(\$30,410)	(\$24,004)	(\$29,780)	(\$30,426)	(\$26,414)	(\$25,535)	(\$23,497)	(\$281,463)
	10244	Lower Valley Energy	(\$285,562)	(\$296,743)	(\$255,239)	(\$278,670)	(\$219,963)	(\$272,894)	(\$278,815)	(\$242,051)	(\$233,999)	(\$215,325)	(\$2,579,261)
	10246	Mason County PUD #1	(\$32,062)	(\$33,317)	(\$28,657)	(\$31,288)	(\$24,697)	(\$30,640)	(\$31,305)	(\$27,177)	(\$26,273)	(\$24,176)	(\$289,592)
	10247	Mason County PUD #3	(\$285,165)	(\$296,330)	(\$254,883)	(\$278,282)	(\$219,657)	(\$272,514)	(\$278,427)	(\$241,714)	(\$233,674)	(\$215,025)	(\$2,575,671)
	10256	Midstate Elec Coop	(\$153,420)	(\$159,427)	(\$137,128)	(\$149,717)	(\$118,176)	(\$146,614)	(\$149,795)	(\$130,043)	(\$125,717)	(\$115,684)	(\$1,385,721)
	10258	Mission Valley	(\$128,052)	(\$133,066)	(\$114,454)	(\$124,961)	(\$98,636)	(\$122,371)	(\$125,026)	(\$108,541)	(\$104,930)	(\$96,556)	(\$1,156,593)
	10259	Missoula Elec Coop	(\$88,513)	(\$91,979)	(\$79,114)	(\$86,377)	(\$68,180)	(\$84,586)	(\$86,421)	(\$75,026)	(\$72,530)	(\$66,742)	(\$799,468)
	10260	Modern Elec Coop	(\$93,777)	(\$97,449)	(\$83,819)	(\$91,514)	(\$72,235)	(\$89,617)	(\$91,561)	(\$79,489)	(\$76,844)	(\$70,712)	(\$847,017)
	10273	Nespelem Valley Elec Coop	(\$18,963)	(\$19,705)	(\$16,949)	(\$18,505)	(\$14,607)	(\$18,121)	(\$18,515)	(\$16,073)	(\$15,539)	(\$14,298)	(\$171,275)
	10278	Northern Lights	(\$119,013)	(\$123,673)	(\$106,375)	(\$116,141)	(\$91,673)	(\$113,733)	(\$116,201)	(\$100,879)	(\$97,523)	(\$89,740)	(\$1,074,951)
	10279	Northern Wasco County PUD	(\$231,062)	(\$240,110)	(\$206,526)	(\$225,486)	(\$177,983)	(\$220,812)	(\$225,603)	(\$195,856)	(\$189,340)	(\$174,230)	(\$2,087,008)
	10284	Ohop Mutual Light Company	(\$34,305)	(\$35,648)	(\$30,662)	(\$33,477)	(\$26,425)	(\$32,783)	(\$33,494)	(\$29,078)	(\$28,111)	(\$25,867)	(\$309,850)
	10285	Okanogan County Elec Coop	(\$21,488)	(\$22,329)	(\$19,206)	(\$20,969)	(\$16,552)	(\$20,535)	(\$20,980)	(\$18,214)	(\$17,608)	(\$16,203)	(\$194,084)
	10286	Okanogan County PUD #1	(\$163,798)	(\$170,212)	(\$146,405)	(\$159,845)	(\$126,171)	(\$156,532)	(\$159,928)	(\$138,841)	(\$134,222)	(\$123,510)	(\$1,479,464)

(the amounts below may differ from billed amounts due to rounding)													
	BESID	Preference Customer	Dec-23	Jan-24	Feb-24	Mar-24	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Total
	10288	Orcas P & L	(\$82,541)	(\$85,773)	(\$73,776)	(\$80,549)	(\$63,580)	(\$78,879)	(\$80,591)	(\$69,965)	(\$67,637)	(\$62,239)	(\$745,530)
**	10291	Oregon Trail Elec Coop	(\$264,991)	(\$275,366)	(\$236,852)	(\$258,595)	(\$204,117)	(\$253,235)	(\$258,729)	(\$224,614)	(\$217,142)	(\$199,813)	(\$2,393,454)
	10294	Pacific County PUD #2	(\$58,658)	(\$60,955)	(\$52,429)	(\$57,243)	(\$45,183)	(\$56,056)	(\$57,272)	(\$49,721)	(\$48,067)	(\$44,231)	(\$529,815)
	10304	Parkland L & W	(\$47,858)	(\$49,731)	(\$42,776)	(\$46,703)	(\$36,864)	(\$45,734)	(\$46,727)	(\$40,566)	(\$39,216)	(\$36,086)	(\$432,261)
	10306	Pend Oreille County PUD #1	(\$41,089)	(\$42,698)	(\$36,726)	(\$40,097)	(\$31,650)	(\$39,266)	(\$40,118)	(\$34,828)	(\$33,670)	(\$30,983)	(\$371,125)
	10307	Peninsula Light Company	(\$244,978)	(\$254,570)	(\$218,964)	(\$239,065)	(\$188,702)	(\$234,110)	(\$239,190)	(\$207,651)	(\$200,743)	(\$184,723)	(\$2,212,696)
	10326	U.S. Naval Base, Bremerton	(\$108,673)	(\$112,928)	(\$97,133)	(\$106,050)	(\$83,709)	(\$103,852)	(\$106,105)	(\$92,115)	(\$89,050)	(\$81,944)	(\$981,559)
	10331	Raft River Elec Coop	(\$117,324)	(\$121,917)	(\$104,865)	(\$114,492)	(\$90,372)	(\$112,119)	(\$114,551)	(\$99,447)	(\$96,139)	(\$88,466)	(\$1,059,692)
	10333	Ravalli County Elec Coop	(\$61,390)	(\$63,794)	(\$54,871)	(\$59,909)	(\$47,288)	(\$58,667)	(\$59,940)	(\$52,036)	(\$50,305)	(\$46,291)	(\$554,491)
	10338	Riverside Elec Coop	(\$8,172)	(\$8,492)	(\$7,305)	(\$7,975)	(\$6,295)	(\$7,810)	(\$7,979)	(\$6,927)	(\$6,697)	(\$6,162)	(\$73,814)
	10342	Salem Elec Coop	(\$136,348)	(\$141,686)	(\$121,869)	(\$133,057)	(\$105,026)	(\$130,299)	(\$133,126)	(\$115,573)	(\$111,728)	(\$102,811)	(\$1,231,523)
	10343	Salmon River Elec Coop	(\$39,680)	(\$41,233)	(\$35,466)	(\$38,722)	(\$30,565)	(\$37,919)	(\$38,742)	(\$33,634)	(\$32,515)	(\$29,920)	(\$358,396)
	10349	Seattle City Light	(\$1,754,120)	(\$1,822,802)	(\$1,567,852)	(\$1,711,784)	(\$1,351,165)	(\$1,676,302)	(\$1,712,673)	(\$1,486,847)	(\$1,437,386)	(\$1,322,673)	(\$15,843,604)
	10352	Skamania County PUD #1	(\$53,839)	(\$55,947)	(\$48,122)	(\$52,540)	(\$41,471)	(\$51,450)	(\$52,567)	(\$45,636)	(\$44,117)	(\$40,597)	(\$486,286)
	10354	Snohomish County PUD #1	(\$1,328,835)	(\$1,380,865)	(\$1,187,728)	(\$1,296,764)	(\$1,023,577)	(\$1,269,884)	(\$1,297,437)	(\$1,126,362)	(\$1,088,893)	(\$1,001,992)	(\$12,002,337)
	10360	South Side Elec	(\$22,770)	(\$23,661)	(\$20,352)	(\$22,220)	(\$17,539)	(\$21,759)	(\$22,232)	(\$19,300)	(\$18,658)	(\$17,169)	(\$205,660)
	10363	Springfield Utility Board	(\$324,842)	(\$337,561)	(\$290,348)	(\$317,002)	(\$250,220)	(\$310,431)	(\$317,167)	(\$275,346)	(\$266,187)	(\$244,943)	(\$2,934,047)
	10369	Surprise Valley Elec Coop	(\$54,036)	(\$56,152)	(\$48,298)	(\$52,732)	(\$41,623)	(\$51,639)	(\$52,759)	(\$45,802)	(\$44,279)	(\$40,745)	(\$488,065)
	10370	Tacoma Public Utilities	(\$494,542)	(\$513,906)	(\$442,028)	(\$482,607)	(\$380,937)	(\$472,603)	(\$482,857)	(\$419,190)	(\$405,245)	(\$372,904)	(\$4,466,819)
	10371	Tanner Elec Coop	(\$39,360)	(\$40,901)	(\$35,180)	(\$38,410)	(\$30,318)	(\$37,614)	(\$38,430)	(\$33,363)	(\$32,253)	(\$29,679)	(\$355,508)
	10376	Tillamook PUD #1	(\$199,895)	(\$207,722)	(\$178,668)	(\$195,070)	(\$153,975)	(\$191,027)	(\$195,172)	(\$169,437)	(\$163,801)	(\$150,728)	(\$1,805,495)
	10378	Coulee Dam, City of	(\$7,210)	(\$7,492)	(\$6,444)	(\$7,036)	(\$5,554)	(\$6,890)	(\$7,039)	(\$6,111)	(\$5,908)	(\$5,436)	(\$65,120)
	10379	Steilacoom, Town of	(\$16,375)	(\$17,016)	(\$14,636)	(\$15,980)	(\$12,613)	(\$15,649)	(\$15,988)	(\$13,880)	(\$13,418)	(\$12,347)	(\$147,902)
	10388	Umatilla Elec Coop	(\$376,249)	(\$390,981)	(\$336,296)	(\$367,168)	(\$289,818)	(\$359,558)	(\$367,359)	(\$318,921)	(\$308,311)	(\$283,706)	(\$3,398,367)
	10391	United Electric Coop	(\$102,877)	(\$106,905)	(\$91,952)	(\$100,394)	(\$79,244)	(\$98,313)	(\$100,446)	(\$87,202)	(\$84,301)	(\$77,573)	(\$929,207)
	10406	U.S. DOE Albany Research Center	(\$1,633)	(\$1,697)	(\$1,460)	(\$1,594)	(\$1,258)	(\$1,561)	(\$1,594)	(\$1,384)	(\$1,338)	(\$1,231)	(\$14,750)
	10408	U.S. Naval Station, Everett (Jim Creek)	(\$5,448)	(\$5,662)	(\$4,870)	(\$5,317)	(\$4,197)	(\$5,207)	(\$5,320)	(\$4,618)	(\$4,464)	(\$4,108)	(\$49,211)
	10409	U.S. Naval Submarine Base, Bangor	(\$72,856)	(\$75,709)	(\$65,120)	(\$71,098)	(\$56,120)	(\$69,624)	(\$71,135)	(\$61,755)	(\$59,701)	(\$54,936)	(\$658,054)
	10426	U.S. DOE Richland Operations Office	(\$113,083)	(\$117,511)	(\$101,075)	(\$110,354)	(\$87,106)	(\$108,066)	(\$110,411)	(\$95,853)	(\$92,664)	(\$85,269)	(\$1,021,392)
	10434	Vera Irrigation District	(\$96,889)	(\$100,683)	(\$86,601)	(\$94,551)	(\$74,632)	(\$92,591)	(\$94,600)	(\$82,127)	(\$79,395)	(\$73,058)	(\$875,127)
	10436	Vigilante Elec Coop	(\$62,112)	(\$64,544)	(\$55,516)	(\$60,613)	(\$47,844)	(\$59,357)	(\$60,644)	(\$52,648)	(\$50,897)	(\$46,835)	(\$561,010)
	10440	Wahkiakum County PUD #1	(\$16,826)	(\$17,485)	(\$15,040)	(\$16,420)	(\$12,961)	(\$16,080)	(\$16,429)	(\$14,262)	(\$13,788)	(\$12,688)	(\$151,979)
	10442	Wasco Elec Coop	(\$41,756)	(\$43,391)	(\$37,322)	(\$40,748)	(\$32,164)	(\$39,904)	(\$40,769)	(\$35,394)	(\$34,216)	(\$31,486)	(\$377,150)
	10446	Wells Rural Elec Coop	(\$319,187)	(\$331,685)	(\$285,293)	(\$311,483)	(\$245,864)	(\$305,027)	(\$311,645)	(\$270,553)	(\$261,553)	(\$240,679)	(\$2,882,969)
	10448	West Oregon Elec Coop	(\$27,343)	(\$28,414)	(\$24,439)	(\$26,683)	(\$21,062)	(\$26,130)	(\$26,697)	(\$23,177)	(\$22,406)	(\$20,618)	(\$246,969)
	10451	Whatcom County PUD #1	(\$93,623)	(\$97,289)	(\$83,682)	(\$91,364)	(\$72,116)	(\$89,470)	(\$91,411)	(\$79,358)	(\$76,718)	(\$70,596)	(\$845,627)
	10482	Umpqua Indian Utility Cooperative	(\$9,901)	(\$10,289)	(\$8,850)	(\$9,662)	(\$7,627)	(\$9,462)	(\$9,667)	(\$8,393)	(\$8,113)	(\$7,466)	(\$89,430)
	10502	Yakama Power	(\$61,764)	(\$64,182)	(\$55,205)	(\$60,273)	(\$47,575)	(\$59,024)	(\$60,304)	(\$52,353)	(\$50,611)	(\$46,572)	(\$557,863)
	13927	Kalispel Tribe Utility	(\$12,724)	(\$13,222)	(\$11,372)	(\$12,416)	(\$9,801)	(\$12,159)	(\$12,423)	(\$10,785)	(\$10,426)	(\$9,594)	(\$114,922)
	10597	Hermiston, City of	(\$43,936)	(\$45,657)	(\$39,271)	(\$42,876)	(\$33,843)	(\$41,987)	(\$42,898)	(\$37,242)	(\$36,003)	(\$33,130)	(\$396,843)
	10706	Port of Seattle - SETAC In'tl. Airport	(\$59,770)	(\$62,110)	(\$53,423)	(\$58,327)	(\$46,039)	(\$57,118)	(\$58,357)	(\$50,663)	(\$48,977)	(\$45,069)	(\$539,853)
	11680	Weiser, City of	(\$22,579)	(\$23,463)	(\$20,182)	(\$22,034)	(\$17,392)	(\$21,578)	(\$22,046)	(\$19,139)	(\$18,502)	(\$17,026)	(\$203,941)
	12026	Jefferson County PUD #1	(\$161,165)	(\$167,475)	(\$144,051)	(\$157,275)	(\$124,142)	(\$154,015)	(\$157,357)	(\$136,608)	(\$132,064)	(\$121,524)	(\$1,455,676)
	10298	PNGC Aggregate	(\$2,023,385)	(\$2,102,610)	(\$1,808,525)	(\$1,974,550)	(\$1,558,575)	(\$1,933,622)	(\$1,975,577)	(\$1,715,087)	(\$1,658,032)	(\$1,525,710)	(\$18,275,673)
** Denotes product switching adjustment has been made													

BP-24 rate period (Oct. 1, 2023, through Sept. 30, 2025)

Updated 7/15/2023

How BPA spends a dollar of its power revenues

O&M (26 cents)

Operation and maintenance costs at the hydro projects and Columbia Generating Station.

Debt (20 cents)

Principal and interest on federal and nonfederal debt.

Fish & Wildlife (17 cents, plus the impact of lost power generation)

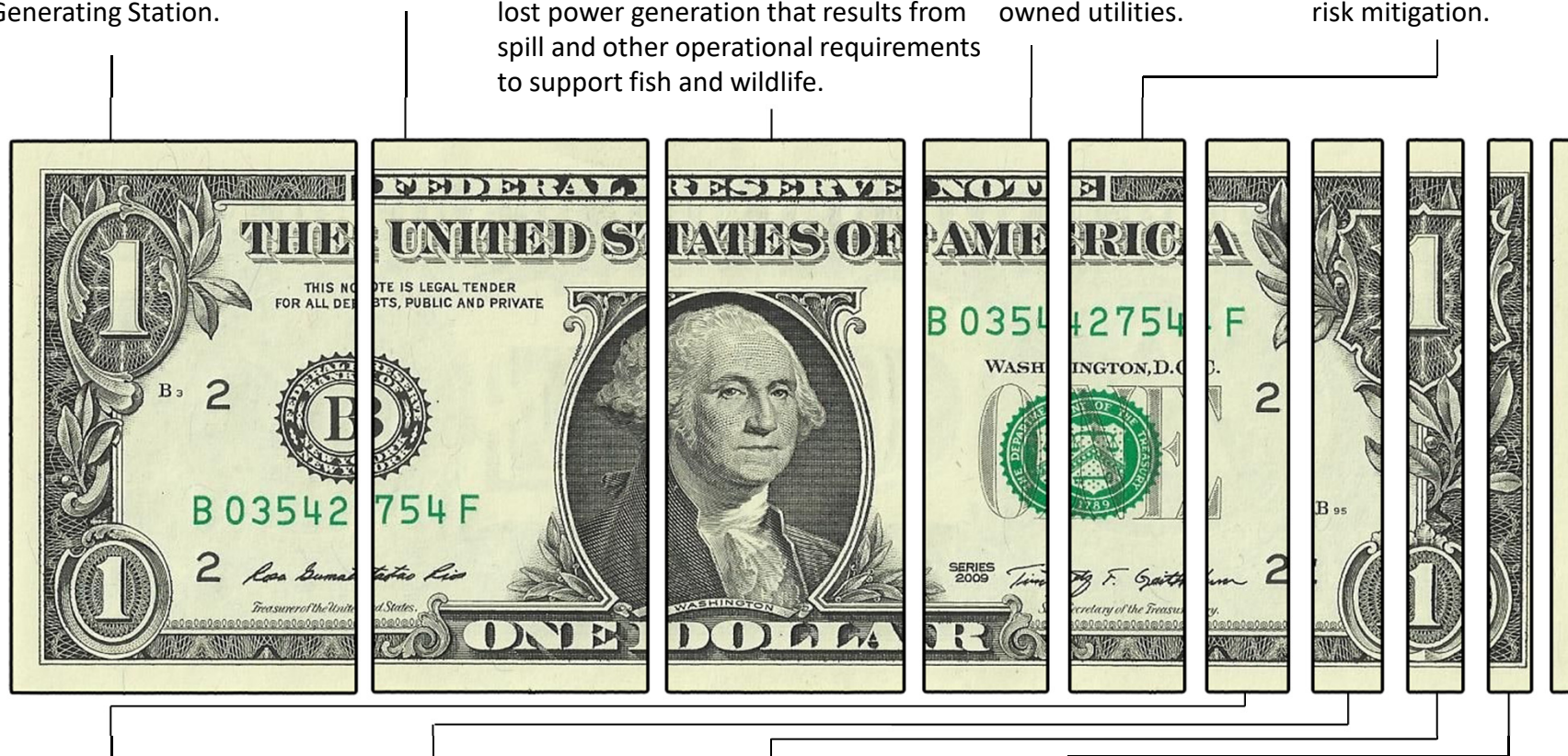
Principal and interest on debt, expense and people costs total 17 cents. But the full impact is 26 cents due to the cost of lost power generation that results from spill and other operational requirements to support fish and wildlife.

Residential Exchange (9 cents)

Payments to consumers served by higher-cost investor- and consumer-owned utilities.

Power purchases (8 cents)

System augmentation, balancing purchases, renewable purchases, long-term contracts and risk mitigation.



Conservation (6 cents)

Principal and interest on debt, expense costs, people and Energy Efficiency Incentive.

BPA people (5 cents)

Salaries, benefits and supplies for power and corporate employees not supporting conservation and fish and wildlife.

Transmission (4 cents)

Resource integration costs and cost to deliver secondary energy to customers.

Transfer (3 cents)

Cost to deliver power to customers not directly connected to BPA's transmission system.

Rate discounts (2 cents)

Discount provided to customers with low system densities and to customers with eligible irrigation load.

Source of BPA's power revenues

Tier 1 Priority Firm (71 cents)

Revenue from the sale of power at Tier 1 rates to PUDs, co-ops, municipalities, federal agencies and tribal utilities.

Secondary (15 cents)

Revenue from the sale of surplus power at negotiated rates.

Tier 2 Priority Firm (5 cent)

Revenue from the sale of power at Tier 2 rates to PUDs, co-ops, municipalities, federal agencies and tribal utilities.

Generation inputs (4 cents)

Revenue from using generation to support reliable transmission service.



4(h)(10)(C) (4 cents)

Revenue credit from U.S. taxpayers to pay for a portion of fish and wildlife costs.

Miscellaneous (1 cents)

Revenue from long-term contracts, downstream benefits and firm surplus sales.

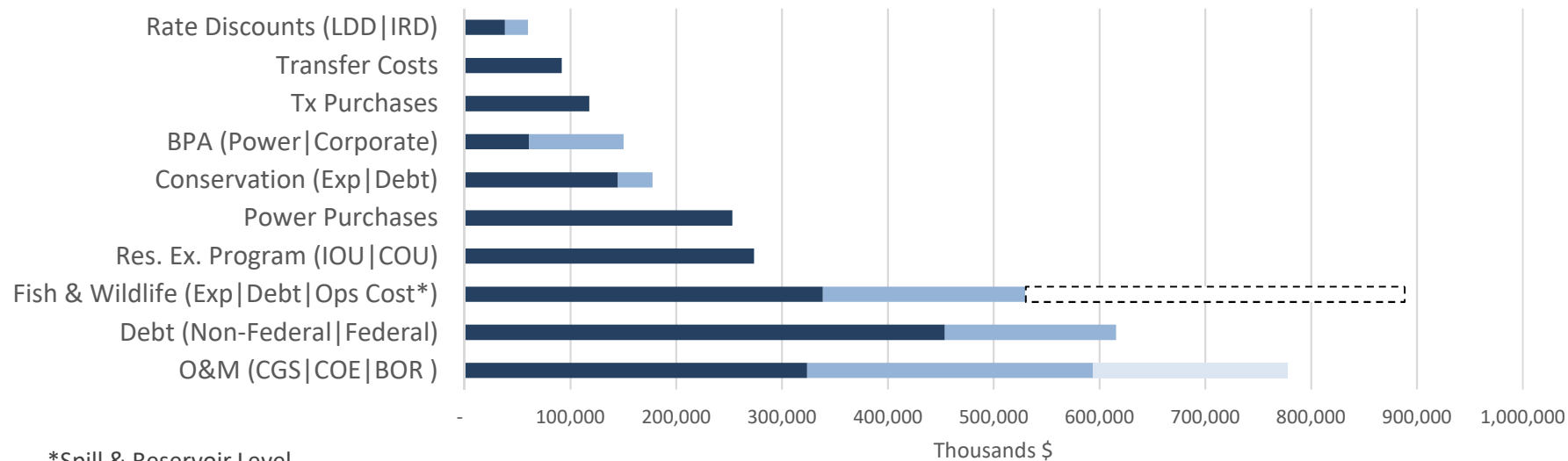
Direct Service Industrial (0.1 cent)

Revenue from one directly served industrial customer.

Power costs and revenue

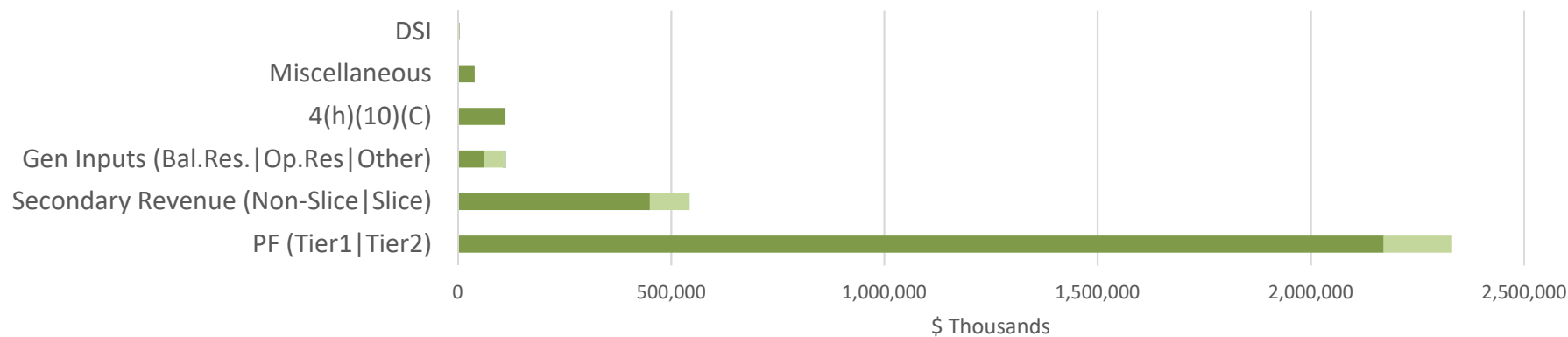
BP-24 Power Costs (annual average)

See parenthetical in label for color meaning (*category1* | *category2* | *category3*)

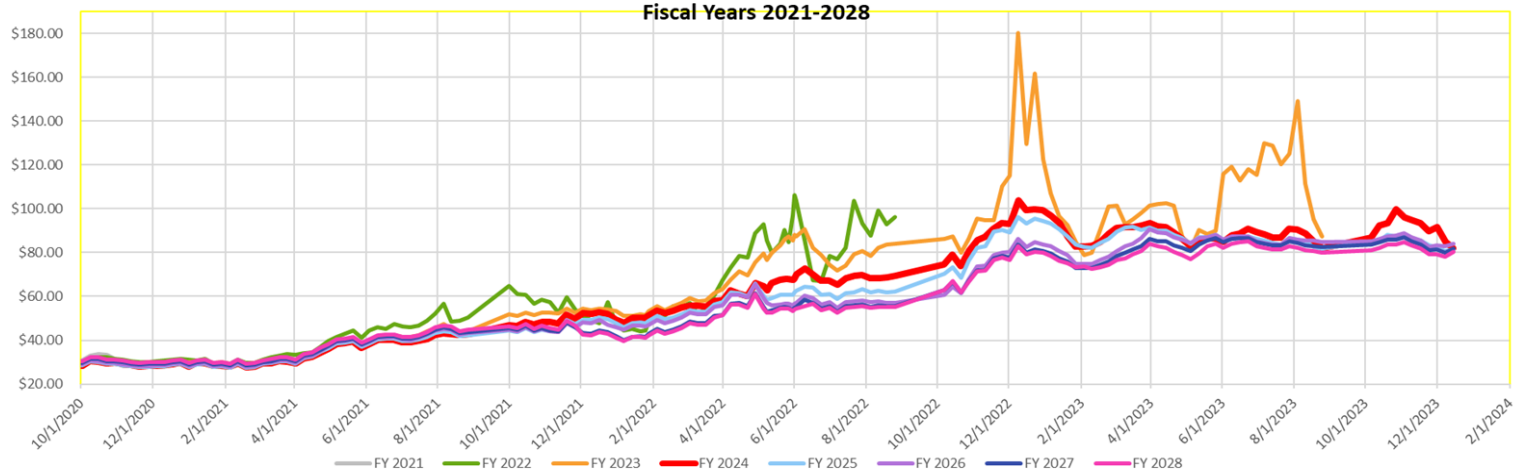


BP-24 Power Revenue (annual average)

See parenthetical in label for color meaning (*category1* | *category2*)



Mid-C Forward Price Curves since October 2019





UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Items of Business

Prepared By:

Subject:

BPA Requested Outage Response Example (15 minutes)

Department:

Energy Services

Recommended Motion:

This is only an informational item.

Summary:

After the November UAC meeting discussing BPA transmission capacity constraints, a UAC member inquired about the City's proposed plan for communicating customer requested actions and load curtailment messaging.

Electric utilities respond to varying events caused by weather, equipment failures and system constraints. Each event require varying responses. However, communication messaging has similarities of where the incident has occurred and when services will be restored.

The City works with Bonneville Power Administration (BPA) as the region's transmission and typical power provider. The City provides annual load forecasts for inclusion in BPA's ten-year forecast model. BPA uses the model with transmission planning to make improvement plans to the regional transmission system. Unfortunately, transmission improvements take many years to implement.

Until the BPA transmission improvements are fully implemented in 2028, there is a possibility BPA may request regional electrical utilities to respond to excessive loads. This could involve utilities moving load from one transmission line or substation to another. If load curtailment is required, the City can respond with early customer messaging, requested customer actions, or rolling outages. Attached is a brief presentation of similar messaging used during a June 28, 2021 heat wave where temperatures were approximately 115F for multiple days. Outages were not required as customers responded to the media messaging with favorable load reductions.

The City is supportive of BPA making the necessary transmission improvements as timely as possible. While an outage is the last resort, the City does have messaging and contingency responses if needed to respond to weather, equipment failures or system constraints.

Fiscal Impact:

Attachments:

- I. BPA Requested Outage Response Example



BPA Requested Outage Response Example

UAC

1/9/2024



Sample Messaging for BPA Requested Outage

FOR IMMEDIATE RELEASE

Contact:

Alison Manka, Communications, 942-7394

Doug Johnson, BPA Sr. Spokesperson Phone: 360-619-6797 Cell: 503-713-7658

Richland Informs Citizens of Potential Rolling Power Outages by BPA

Bonneville Power Administration (BPA) transmits electricity to Richland Energy Services (RES) and other Tri-Cities utilities through a transmission system designed to meet Tri-Cities peak and above-peak demand for power.

Under extreme summer and winter temperatures, customers use more energy for air conditioning and heating which increases load on the system. If total load approaches maximum capacity, BPA requires RES to shift load on its distribution system to prevent an overload condition on BPA's transmission system that could result in a blackout. Our distribution system is designed so that shifting distribution load is a common operation.

Richland Energy Services will do everything it can to manage load by shifting customer loads to another distribution line when possible.

In extreme circumstances such as we are see this week, BPA will require our utility to "shed load" to keep the system stable. This means RES will be forced to temporarily disconnect distribution lines resulting in rolling outages. RES maintains a prioritization system identifying the least amount of impact while keeping essential businesses and services in operation. The same customers will not be impacted consecutively.

If/When this occurs, residents will likely see some power outages up to four hours.

BPA's notification to utilities to shed load can occur quickly. We will communicate to customers as soon as possible before the outages occur.

We will continue to remain diligent to plan for any expected and unexpected power outages so we can restore power as safely and quickly as possible to everyone.

Please follow our Facebook page @richlandwa and our website www.ci.richland.wa.us for more information.



Execution of Outage Request

Upon receiving request for an outage the City will notify customers with as much notice as possible. BPA attempts to give notice that it could happen when they determine possible conditions are correct.

The City will determine which substations will be affected to implement rolling outages totaling the load requested to shed. The rolling outages will be in 15-30 minute increments for the duration of the request. The City will load premade Excel files into the MDMS (Meter Data Management System) with scheduled times to turn off the meters and then turn them back on as needed.



Execution of Outage Request

INITIATE SERVICE ORDER

Allows a service order to be created. Add meters with an action to be performed or upload a file with meters.

Action Connect ▼	Meter Add	File to Upload Select Upload
Schedule Option ☐ Now ☒ Start Time		
	Schedule Date 12/28/2023	Time (HH:MM) 00:00 ▼

Initiate Request



Execution of Outage Request

Group	Meter Count	kW Total
Badger Canyon	6098	30490
BC_1	1000	5000
BC_2	1000	5000
BC_3	1000	5000
BC_4	1000	5000
BC_5	1000	5000
BC_6	1098	5490
White Bluffs - Stevens	10397	51985
WBS_1	1000	5000
WBS_2	1000	5000
WBS_3	1000	5000
WBS_4	1000	5000
WBS_5	1000	5000
WBS_6	1000	5000
WBS_7	1000	5000
WBS_8	1000	5000
WBS_9	1000	5000
WBS_10	1000	5000
WBS_11	397	1985
White Bluffs-Richland	8167	40835
WBR_1	1000	5000
WBR_2	1000	5000
WBR_3	1000	5000
WBR_4	1000	5000
WBR_5	1000	5000
WBR_6	1000	5000
WBR_7	1000	5000
WBR_8	1167	5835



UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Items of Business

Prepared By:

Subject:

Atlas Agro Non-Potable Industrial Water Supply Rate (30 Minutes)

Department:

Public Works

Recommended Motion:

Staff is seeking a Utility Advisory Committee recommendation to commence negotiations with Atlas Agro for a year round non-potable industrial water supply.

Summary:

Atlas Agro has proposed a large fertilizer manufacturing facility in the North Richland Clean Energy Industrial Park. The manufacturing process features hydrogen fuel derived through hydrolysis of non-potable Columbia River Water. The City's water utility operates a non-potable water supply system, the distribution system of which passes by the south boundary of the Atlas Agro manufacturing site. To date, the City has operated the non-potable water system as a seasonal irrigation system. Staff believes the system can be modified to support a year round industrial supply function that will meet Atlas Agro's service needs. The City's water rights portfolio can be leveraged to provide the requested service to Atlas Agro without significant impact to other planned or potential uses of the water rights.

The City does not presently have a codified rate structure for the proposed non-potable industrial water supply. FCS Group was retained to work with staff to develop an appropriate rate structure for the requested service, which will likely be activated through a custom service contract with Atlas Agro.

FCS Group will present their work and facilitate discussion with the Utility Advisory Committee with the goal being to obtain the Committee's recommendation about terms of a service contract with Atlas Agro.

Fiscal Impact:

Attachments:

- I. Richland Irrigation RR and COSA - FINAL



Non-Potable Industrial Cost of Service



Brooke Tacia, Project Manager
January 9, 2024



Discussion Overview

- **Background**
- **Key assumptions**
- **Summary of findings**
 - » Revenue requirement
 - » Cost of service
 - » Rate design
- **Next steps**
- **Questions**



Background

- **Revenue requirement reviewed for non-potable water utility in 2021**
- **Resulted in a five-year rate forecast for the utility**

Utility	2022	2023	2024	2025	2026
Non Potable	0.0%	0.0%	5.0%	0.0%	10.0%

- **Rate strategy included:**
 - » Initial allocation of personnel expenses to begin transition to cost sharing
 - Non-potable service is run under the water utility umbrella
 - Historically, water utility has not fully allocated overhead expenses
- **Revisit rates every 3-5 years to evaluate progress**
- **Today's focus:**
 - » Additional focus on new non-potable industrial customer in recent update



Key Assumptions

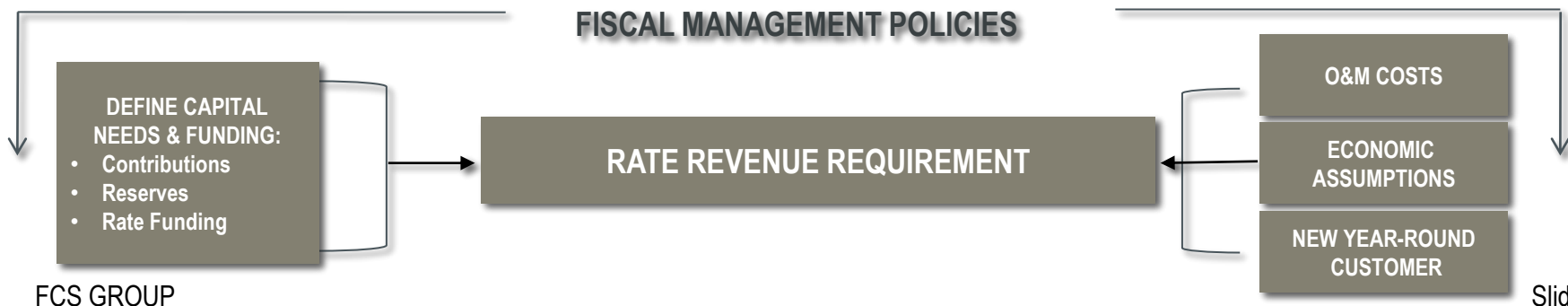
- **Study period 2024-2029**
- **Projected rate revenue based on 2024 budget plus growth**
- **Customer growth**
 - » 1.3% - approximately 20 new connections/year
- **2024 budget used as baseline – various escalation factors used for future years:**
 - » Total operating expenses increase approximately 2.8% annually
 - » Cost sharing initiated to allocate personnel expenses from water to non-potable
 - \$150,000 in FTE expenses beginning in 2025
- **New non-potable industrial customer expected to connect in 2027**
 - » Expected to increase non-potable demand by 5.0 MGD or roughly 45%
 - » Cost of service analysis will determine incremental costs and cost sharing with new customer



Revenue Requirement

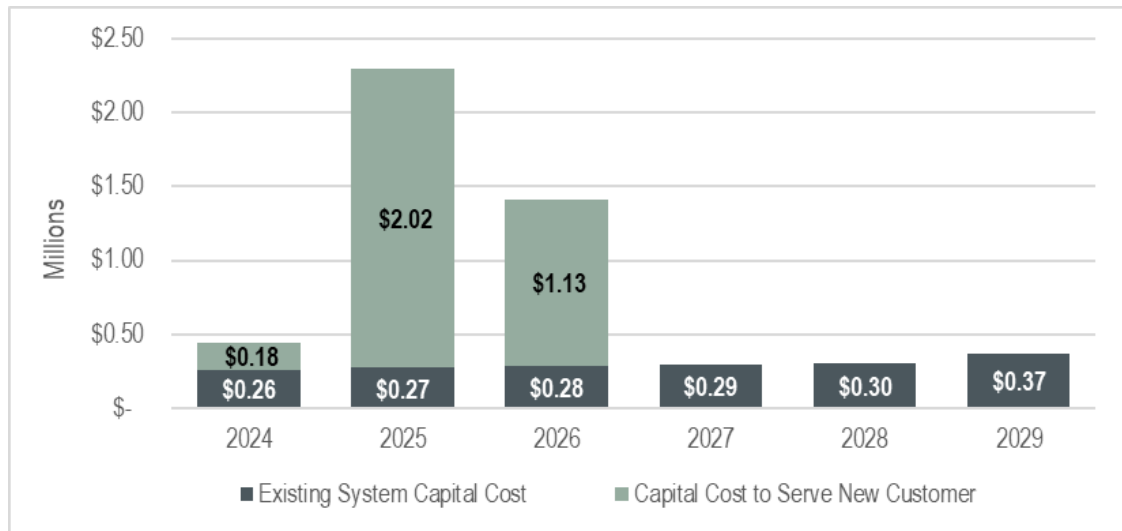
Revenue Requirement Overview

- **Determine the amount of annual revenue necessary to fund all financial obligations**
 - » Operating and maintenance expenses
 - » Debt service (principal & interest)
 - » Capital costs and funding approach
- **Meet financial parameters and targets**
 - » Target debt service coverage ratios
 - » Maintain target reserve balances
- **Evaluate revenue sufficiency over multi-year period**
- **Develop rate plan to balance financial needs and minimize customer impacts**



Key Components

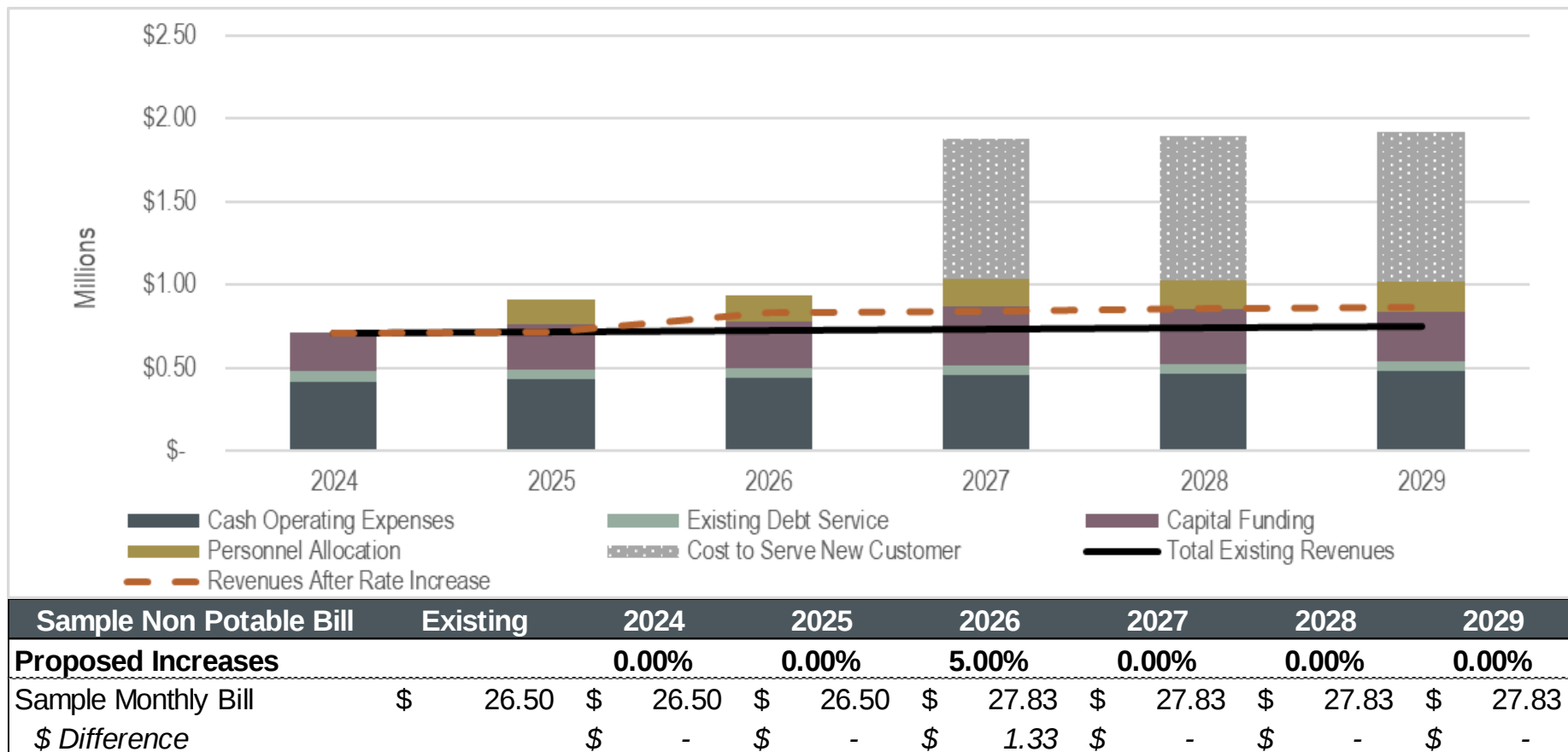
Description	2024-2029
Existing Revenue	\$710k - \$750k
O&M Expenses	\$419k - \$480k
Existing Debt Service	\$55k - \$60k
Personnel Allocation	\$0 - \$181k
New Customer Expenses	\$0 - \$900k
New Debt Service	\$0
Total CIP (2024-2029)	\$5.1 million



- **\$5.1 million in capital projects:**
 - » \$3.3 million needed for infrastructure to serve new customer
 - Assumed to be paid for by new customer prior to connecting
- **\$900k in additional operational expenses expected to serve new customer**
 - » Proportion of 1 New FTE
 - » Additional utility expenses
 - » Repair & maintenance expenses
 - » Allocated interfund costs



Revenue Requirement Summary



Note: 1 Acre



Cost of Service Analysis

Cost of Service Overview

- **An equitable distribution of cost shares that considers utility specific data:**
 - » Measures of usage and demand
 - » Planning, engineering and design criteria
 - » Facility requirements
- **Total cost by class (equity)**
- **Unit costs (\$/usage; \$/customer)**
- **Fundamental question: How much does it cost to serve different customer types?**
 - » Will help determine cost allocation for new customer



Cost of Service Process

- **Step 1: Allocate total costs to cost pools**

Non Potable Utility Functions*

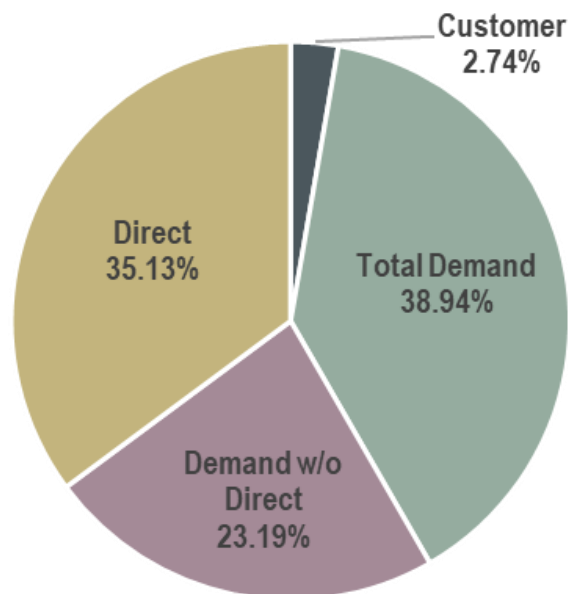
- Customer
- Demand (overall use)
- Direct Assignment

- **Step 2: Develop allocation factors using class specific information**
- **Step 3: Allocate costs to customer classes**

- * Industry Standard Methodologies; AWWA Principles of Water Rates, Fees and Charges, M1 Manual



2027 Cost of Service Classification



Customer

Accounts	Share
Existing Customers	99.94%
Future Customer	0.06%

Total Demand

Flow	Share
Existing Customers	56.22%
Future Customer	43.78%

Demand w/o Direct

Flow	Share
Existing Customers	100.00%
Future Customer	0.00%

Direct Allocation

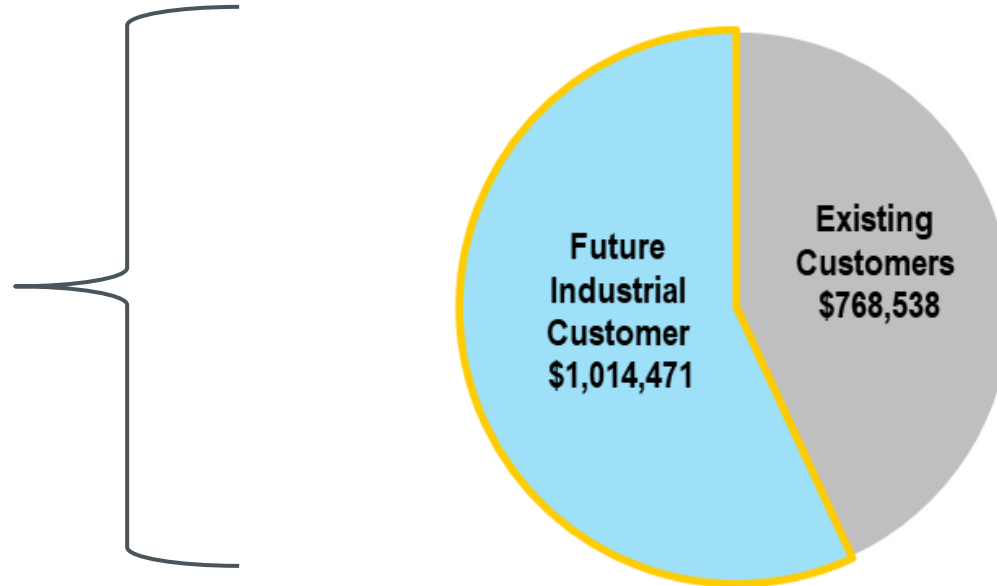
Flow	Share
Existing Customers	0.00%
Future Customer	100.00%

- Functional cost pools allocated to customers based on customer specific allocation factors



2027 Cost of Service Results

**2027 Revenue
Requirement:
\$1,783,009**

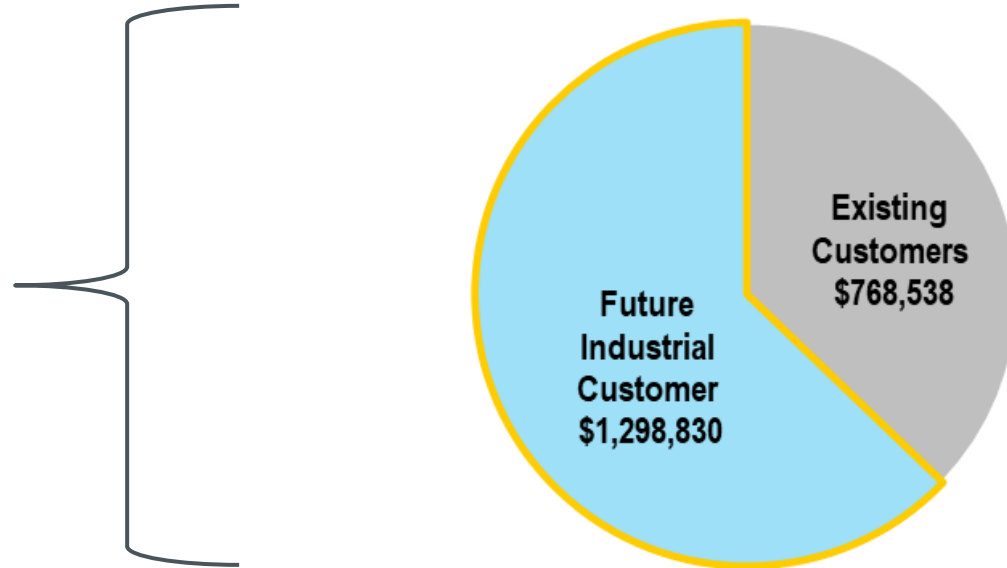


- **New non-potable customer allocated \$1.01M of 2027 forecasted expenses**
 - » Assumes new customer contributes capital investment needs up-front



2027 Cost of Service Results – with Debt

2027 Revenue
Requirement:
\$2,067,368



- **New non-potable customer allocated \$1.3M of 2027 forecasted expenses**
 - » Assumes new capital investment is amortized over twenty years

A background image showing a business meeting. Two people are seated at a table. One person is holding a pen and pointing at a tablet displaying a bar chart. The other person is also pointing at the tablet. A laptop is visible on the table. The image is overlaid with a network of glowing yellow dots connected by thin lines, suggesting a digital or data-driven environment. A dark blue arrow-shaped banner is positioned across the middle of the image, containing the text 'Rate Design'.

Rate Design

Rate Design

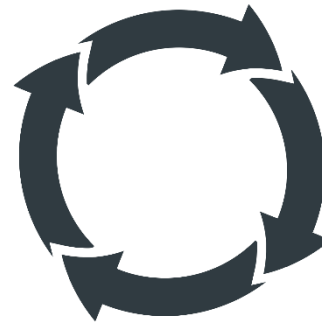
- Development of fixed and variable charges assessed to customers



Aligns fixed and variable costs with fixed and variable revenue sources



Generates sufficient revenue to meet utility requirements



Meet goals and objectives of the utility (e.g., conservation)

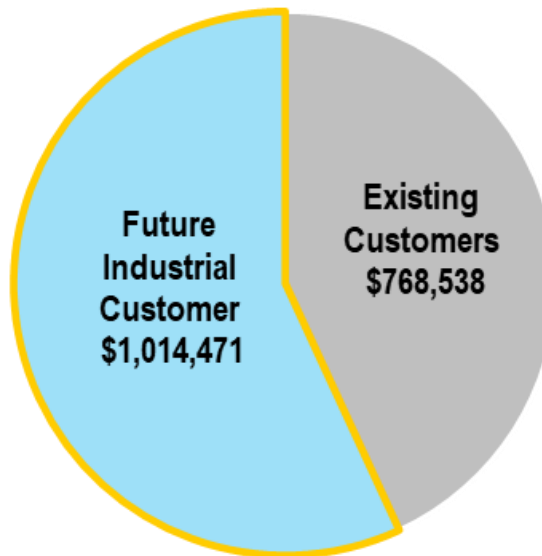


Evaluate monthly rate impact for different levels of water use



Contractual Customer Rates

- **Sample rates proposed based on up-front capital scenario**
- **Estimated cost to serve future customer determined in cost-of-service analysis**



- **Cost to be recovered through a fixed and variable charge**
 - » Variable charge aligned with forecasted utility and repair and maintenance expenses



Proposed 2027 Contractual Rates

Industrial Customer		2027
Fixed rate (monthly)	\$	57,104
Usage rate (per ccf)	\$	0.13

- **Customer would enter into a contract with the City to be supplied non-potable service**
- **Rates shown assume up-front capital investment by future customer**
- **Review of actual expenses incurred would occur through annual true-up process**
- **Non potable service offers savings over potable irrigation rates**
 - » Annual non-potable bill would be approximately 55% of potable rates

Industrial Customer	Proposed Non-Potable Rates		Potable Water Rates
Fixed rate (monthly)	\$	57,104	\$ 817.50
Usage rate (per ccf)	\$	0.13	\$ 0.75
Total Annual Charge	\$	1,014,471	\$ 1,839,562

Next Steps

- **Incorporate feedback**

- » Revenue requirement:

- Revisit in 2025, ahead of planned rate increase

Utility	2024	2025	2026	2027	2028
Non Potable	0.0%	0.0%	5.0%	0.0%	0.0%

- » Cost of service:

- Move forward with contractual customer discussion based on proposed rates



Thank you!

Brooke Tacia, Project Manager

425-502-6225

brooket@fcsgroup.com

www.fcsgroup.com



UTILITY ADVISORY COMMITTEE AGENDA ITEM COVERSHEET

Meeting Date: 1/9/2024

Agenda Category: Other Informational Items

Prepared By:

Subject:

Forward Agenda

Department:

Energy Services

Recommended Motion:

This is informational only.

Summary:

Tour of Biogas Facility at Landfill - March 2024

AMI benefits to customers - March 2024

Low Income Program - March 2024

Reliabilities Stats and Inventory Spares - May 2024

Tour of Fire Station 76 - May 2024

Resource Adequacy - July 2024

Electric Rates Review - September 2024

Fiscal Impact:

There is no fiscal impact.

Attachments: