Promising wheat crop could help Washington farmers counter chronically low prices.
HTTPS://WWW.SPOKESMAN.COM/STORIES/2020/AUG/05/PROMISING-WHEAT-CROP-COULD-HELP-WASHINGTON-FARMERS/

REQUIREMENTS MARKETING AE REPORT

Customer Report to the Administrator
August 7, 2020

PROGRAMS

Contract Actions

On August 4, a total of 49 attendees participated in BPA's second BP-22 Rate Period High Water Mark (RHWM) workshop. BPA presenters reviewed updates to customer load forecasts, reviewed changes to the Tier 1 Critical System Output, and discussed comments received during the last workshop. Earlier that day BPA also published the draft final BP-22 RHWM outputs. A comment period on those outputs is open August 5 through August 15. The BP-22 RHWM should finish up when BPA publishes the final RWHMs by September 30. ***(P. Garrett, 503-230-4553)***

CUSTOMER SPECIFIC

Clark Public Utilities

Kim Thompson and I recently met with several Clark representatives including Clark's CEO and General Manager Lena Wittler, Clark's Energy Resources Director Dan Bedbury, and Clark's Energy Operations Manager Tom Haymaker. The primary discussion item was Post-2028 contracts. At this point Clark is pretty happy with the

(b)(4) [redacted]

(b)(4) [redacted]

(K. Farleigh, 503-230-4055)

Snohomish County PUD No. 1

BPA Power and Transmission leadership met with Snohomish senior staff July 16th to check in on several topics and to set the groundwork for future discussions and collaborations. The first part of the meeting began with a robust discussion on COVID with both BPA and Snohomish offering experiences and outlook moving forward. From Snohomish we heard about their staged return to work for their office employees, with current communication being a return from telework status beginning in January.

(b)(4) [redacted]

The meeting then shifted to a discussion of Post 2028. We introduced the proposed timeline of the post 2028 process highlighting that we're currently at the initial customer data gathering phase, which then leads to a Concept Paper and more formal broad customer interactions to follow from there. Snohomish was interested in knowing how the Concept Paper will be developed, and they expressed interest in participating in customer facing groups to help in its development. Additionally, Snohomish acknowledged that there are a lot of unknowns floating in the air (Resource Adequacy, EIM Participation, CETA) heading to 2028, and that coordinating a new contract that must function effectively in this new environment is going to be a challenge. When prompted with the question, at a high level, what are you looking for in the next contract? Two items that immediately popped up were 1) Continue to provide a CLEAN power product, and 2) Understand the shortcomings of the current contract and pivot them to be successful outcomes in the next contract.

The meeting rounded out with a discussion of transmission topics including PTP to NT conversion and the Puget Sound Area Initiative. Snohomish was particularly grateful that

the latter subject was being addressed by BPA and really felt 'heard' and that BPA is actively trying to understand their concerns.

Again, this was a great meeting, overall, and it achieved the goal of starting conversations that both sides will continue to engage on and collaborate on moving forward.

Longtime Snohomish Power Supply Manager, Anna Berg, is leaving the PUD at the end of July and has taken a position at TEA starting in her new role 8/3. Jeff Kallstrom has been appointed the Interim Power Supply Manager until a permanent hire is in place.
(M. Perry, 206-220-6779)

Cowlitz County PUD

(b)(4) [redacted]

appreciated the speed and professionalism shown by Mike Normandeau's team of financial professionals across the agency in both developing the tool and making the process move forward smoothly.
(S. Wilson, 503-230-7638)

Relax! It's not until Friday.

REQUIREMENTS MARKETING AE REPORT

Customer Report to the Administrator
February 10, 2020

POST 2028 CONVERSATIONS

To date, I've had a handful of Post 2028 meetings with customers. These customers range from small to midsize utilities with varied load profiles (some heavy industrial, some mostly residential). The following are a few of the common themes that seemed to keep repeating in all my meetings thus far:

- Meeting the state requirements (namely, CETA) is their #1 priority for power purchases in the next contract period. Ensuring that there is a product available that ***guarantees*** they will meet the state legislation requirement of carbon free power, is essential.

- In a similar vein, if they have to mitigate for BPA's carbon content in their fuel mix, make it as easy as possible to add resources…and not to have these new resources restrict them from future access to Tier 1, cost based power.

- Carving out a rate structure or contract that acknowledges different fuel mix needs or allocation options for customers (or groups of customers) to purchase power from only the carbon free parts of the system. Our utility customers are facing

more and more "Green" initiatives in the cities they serve and want the ability to meet those needs… recognizing that there may be a price difference associated with that too.

(M. Perry, 206-220-6779)

I have been continuing the communication with my customers about their future contract needs and adjustments to our original survey plan. On Friday January 31, I received a voice mail message from Susan Cutrell, General Manager at Parkland Light & Water, saying that she had just come back from the monthly WPAG Meeting and that she heard that "BPA had canceled the questionnaire." Thinking about a good response to her message, I decided to call Ryan Neale at WPAG. We had a good discussion about the communication with his customers related to BPA's Post 2028 survey. He clarified that he was communicating about the PPC Executive Committee's (EC) response to Power Services (PS) that the EC did not want PS to send out a web link to the survey questions. Ryan said that his message to his customers had obviously been misunderstood and he said he was sorry about that. He then added that he thought the Post 2028 survey questions were good and that he does want his customers to send back replies to BPA. Ryan said that over the next six months he would cover most of the major survey topics included in the BPA survey with his customers, including transfer service, irrigation rate discount (IRD), low density discount (LDD) and of course the Residential Exchange Program (REP) and REP Settlement Agreement. Following up on my discussion with Ryan, I wrote an email message back to Susan Cutrell saying that if Parkland wants to provide answers to the December 2019 Post 2028 questions or has other comments that are valuable to share with BPA Power Services, that she should forward them to me as the Power AE. I have also followed up with similar messaging to all of my power customers.

(P. Munz, 206-220-6763)

Over the past month I met with Clark, EWEB, and Springfield representatives to discuss considerations around Post 2028 contracts. In each instance the customers appeared to genuinely appreciate the opportunity to share their thoughts and perspectives with BPA, and the meetings felt like a welcome kickoff of a series of conversations to come. While each customer shared plenty of unique perspectives specific to their utilities, the conversations featured several common themes. Overall these customers are generally satisfied with the current contracts and rate structure. Whether it's Slice or Load Following, their current product and the associated tiered rate structure seems to be working for them. Looking toward the next contract, they also favor longer-term contracts (10-20 years, or even evergreen) <u>if</u> there is some sort of cost protection or off-ramp structure built in. In terms of product attributes, low-carbon power will be crucial. In Washington, the new Clean Energy Transformation Act is a game changer and has put a major focus on carbon-free power moving forward. In Oregon, while cap and trade has yet to pass, the utilities see carbon legislation as inevitable and are equally focused on clean power moving forward.

In summary, it seems that each of these customers views BPA favorably (i.e. likely to be competitive absent some unforeseen event) as they look toward 2028 and beyond. They

also appreciate the great work BPA has done to date around its controllable costs and would urge us to continue with that. That said, they remain critically concerned with the major cost drivers for which we have much less control (e.g. Fish & Wildlife, Treaty, Residential Exchange, etc…). They see this bucket of issues as the biggest hurdle for BPA as we look toward Post 2028 contracts. They all acknowledge BPA's limitations around lobbying, but we heard suggestions that BPA should continue to provide periodic updates on the happenings around these major cost drivers. The extent to which customers know there is activity happening behind the scenes, the more confidence they will have with BPA's long-term competitive position. ***(K. Farleigh, 503-230-4055)***

CUSTOMER SPECIFIC

Centralia, City of

During our January 23, 2019 meeting, Centralia's GM and chief financial officer made it clear that they believe Washington's passage of the Clean Energy Transformation Act (CETA) will place excessive pressure on the regional hydro system by creating over reliance on intermittent wind and solar resources. They believe the true high value of hydropower will be revealed when CETA is implemented, coal resources completely disappear, and the region starts experiencing brownouts and blackouts. On a related note, they voiced their support for Washington Senate Bill 6125. It seeks to push back Department of Commerce's completion of its system reliability evaluation under CETA to January 1, 2022 instead of the currently proposed January 1, 2024.

We ended the meeting with the two utility leaders reiterating their utility's strong desire to remain a BPA Load Following customer post-2028. They plan to provide more details about their ideal future products and services at a later date.
(R.K. Watts, 206-220-6762)

Lewis County PUD

The GM shared some sound feedback on a variety of topics during our January 31 meeting. Below are the highlights.

- BPA should engage in better active listening when seeking customer feedback because we rarely hear how BPA has interpreted our messages. We want to hear, "Here is what we are taking from your message."
- BPA should get sufficiently out of the box of current products and services as it embarks on seeking feedback about and developing post-2028 products and services.
- My utility and other utilities have to perform fair market assessments of the BPA contracts relative to increasing state regulation of the industry.
- My utility is working closely with PGP on Extended Day Ahead Market (EDAM) issues. We recognize that BPA is in a very powerful position to influence EDAM development and policies. If BPA enters the EIM and subsequently the EDAM, we hope BPA will leverage its influence to net financial and other benefits that will be shared with its customers.

(R.K. Watts, 206-220-6762)

Seattle City Light - David Logsdon, new Director of Electrification & Strategic Technology

Seattle City Light (SCL) has hired David Logsdon as its new Director of Electrification & Strategic Technology. David comes to SCL from the Consolidated Edison Company ("Con Edison") of New York. In more than eight years at Con Edison, David led and developed high-performing teams that evaluated, implemented, and scaled the adoption of electrification approaches, emerging technologies, and distributed energy resources. He brings the experience of working on innovation of utility processes and leading teams to deliver sustained customer value. David's most recent role has been Section Manager of Non-Pipeline Solutions, where he and his team developed and implemented a new portfolio of energy efficiency and electrification programs to serve as demand-side alternatives to the construction of new natural gas pipelines. Prior to that, he served as Section Manager of Product and Service Development, overseeing the energy efficiency portfolio strategy and the development, testing, and scaling of emerging technology and distributed energy resource pilot programs to provide customers with new delivery channels and program designs. David also previously led Con Edison's Emerging Technology team, working on innovating interconnection procedures, design and implementation of new tariffs, and Smart Grid solutions to maximize the grid integration benefits of a variety of distributed energy resources. David will be a direct report to Emeka Anyanwu, SCL Officer of Energy Innovation & Resources Business Unit. David started working at SCL on January 22. ***(P. Munz, 206-220-6763)***

Seattle City Light - EV Update & Time of Day Rates

Seattle City Light (SCL) is moving to put its new electrification strategy into play. As part of its transportation electrification strategy, the utility is unveiling new public electric vehicle fast chargers that will allow SCL to leverage its clean electricity and reach the city of Seattle goals of reducing carbon emission by 2050. Road transportation represents two-thirds of Seattle's CO_2 impacts and the fast chargers will help SCL understand the impacts of EV charging on its electrical system. The utility is developing the groundwork to support electrifying all modes of transportation, from passenger vehicles to buses, ships via the Port of Seattle, heavy-duty vehicles and ferries.

In December 2019, SCL unveiled a new time of day (TOD) fee structure for the public EV fast charging stations. The utility views the new rate design as a tool to help it meet its transportation electrification goals. SCL's latest load forecasts show peak demand growing in the summer and winter time-periods over the next 5-10 years. The TOD rates are the first steps to develop tools to manage this projected demand growth. The TOD fee structure encourages EV drivers to use SCL-owned public fast charging stations during less popular times, increasing the overall use of the station and creates a signal to drivers to consider charging outside of hours with higher demand on the grid. In addition to the new fee structure at SCL-owned public chargers, the utility is also designing two TOD rate pilots that are expected to be implemented in 2020, one for commercial EV charging and the other for residential customers. ***(P. Munz, 206-220-6763)***

Tillamook PUD

Five long-time employees at Tillamook PUD (with a combined 156 years of experience) retired at the end of 2019. Tillamook PUD lost their Warehouse Supervisor, Wayne Greeson, Finance Manager, Jim Martin, Operations Manager, Wade Scott, Operations Supervisor, Jim Dentel and Accounting Supervisor, Shirley Scott to retirement representing over 10% of Tillamook's workforce. BPA load forecaster, Shelley Egerdahl and I visited Tillamook January 28, and learned that while the utility has filled vacated positions with focused succession planning, they have had a tough time filling a systems engineer position that has been open for over a year. ***(C. Hobson, 503-230-5544)***

Whatcom County PUD No. 1

(b)(4) [redacted]

Umatilla Electric Cooperative

(b)(4) [redacted]

Spring started 3/19. The last time spring arrived this early was in 1896—a whopping 124 years ago!
(Old Farmer's Almanac)

REQUIREMENTS MARKETING AE REPORT

Customer Report to the Administrator
March 20, 2020

PROGRAMS

Post-2028 Conversations

In the last month or so I have had several more meetings with customers to discuss post-2028 contracts. This includes meetings with Hood River Electric Cooperative, Skamania PUD, Forest Grove, and Cascade Locks. As has been my experience with other post-2028 conversations, these customers welcomed the discussion and appreciated that we were reaching out to get their thoughts. Overall each of these utilities are generally satisfied with the current contract and rate structure. While they may not appreciate the complexities of the contracts and TRM, the "deal" seems to be working for them. These are all small to medium-sized load following customers that welcome the full-service characteristics of their BPA service and the clean, reliable, low-cost power it provides.

Considering specifics, all four would support longer-term contracts (10-20 years), and there was support for the continuation of today's set of public benefit programs including Low Density Discount, Irrigation Rate Discount, and coverage for transfer costs. Hood

(b)(4)

[redacted]

(b)(4)

Contract Actions
Requirements Marketing has initiated an effort to assess the vulnerabilities of BPA and our customers to fulfill their contractual obligations under the Regional Dialogue agreements should BPA or customers need to invoke the force majeure/uncontrollable forces clause of the Agreements. We are collaborating with impacted internal stakeholders, including our Transmission Services teammates and plan to prepare some high level guidance for AEs to use when answering questions from preference customers. ***(P. Garrett, 503-230-4553)***

CUSTOMER SPECIFIC

Tacoma Power
In the interest of giving its low income customers one less thing to worry about as they navigate through the COVID-19 pandemic, Tacoma Public Utilities is making up to $250 in credit available to each qualifying household to cover utility bills as long as the state of emergency is in place in Tacoma. The funds will flow through the utility's newly formed Emergency Assistance Program. The utility board seeded the fund with $1 million on March 17, 2020. This effort is being made to expand customer access to assistance beyond that offered through the utility's Bill Credit Assistance Program. Additionally, the utility will be suspending all disconnections, extending its payment plans to 12 weeks, and waiving residential and commercial customers' late fees until further notice.

(b)(4)

Other

Annual Meetings changes due to COVID-19
Following recommendations from the U.S. Centers for Disease Control and Prevention (CDC) that discourages gatherings of more than 50 people, over the next eight weeks, many of my co-ops are notifying members that annual meetings held in spring will be postponed or canceled.

Columbia Rural Electric Association, Inc.
With gatherings of more than 50 people prohibited by an executive order from the governor, Columbia REA has replaced the in-person portion of its annual meeting with an online offering for members. The board elections will continue because

the balloting is completed by mail and/or online. The Elections and Credentials committee, which is made up of cooperative members, will still review the election results and certify them. The scholarship program will still award the scholarships provided for by the cooperative.

The revised meeting will be held on April 16, as previously scheduled, at 5:30 pm, with minimal staff, board members who wish to attend, and the cooperative's attorney in attendance. This meeting has been moved from the Marcus Whitman and will now take place at the Columbia REA office in Walla Walla.

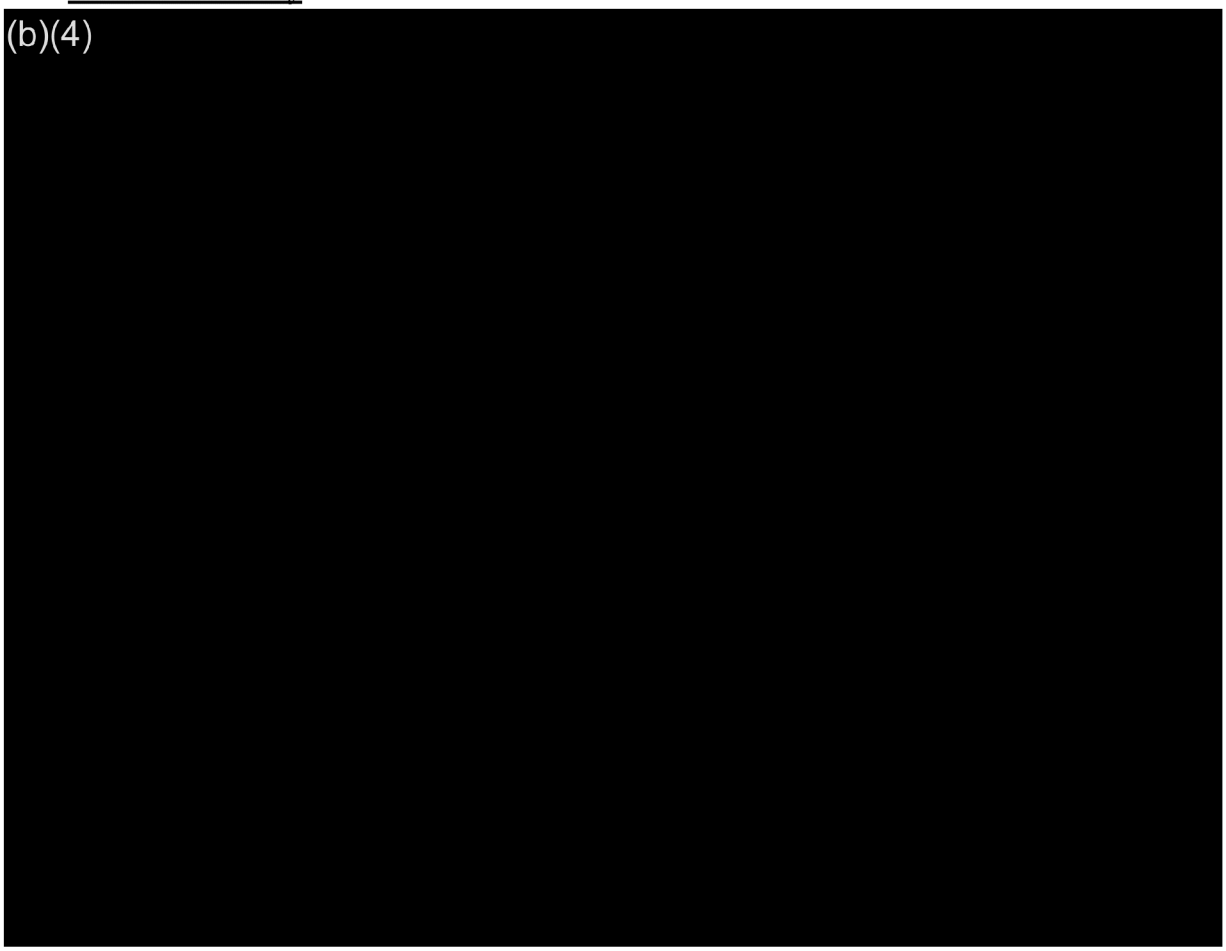
Kootenai Electric Cooperative (KEC)

In response to recent CDC guidelines discouraging public gatherings of over 50 people, KEC has postponed its 2020 Annual Membership Meeting that was scheduled for May 4, 2020. KEC's bylaws require a quorum of 150 members to participate in-person. The utility is working to reschedule the meeting and constitute a quorum by ballot instead.

(H. Ross, 509-822-4590)

Load Uncertainty

(b)(4)



In general, GMs I heard from expect to see an increase in residential usage, anticipate that agricultural loads will stay close to normal and that small commercial will decrease slightly. Of course, with the caveat that these are uncertain times.
(H. Ross, 509-822-4590)

From: Thompson,Kim T (BPA) - PS-6

Sent: Mon Dec 21 11:38:44 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Cc: Olive,Kelly J (BPA) - PSS-6; Mohamoud,Farah A (BPA) - PSS-6

Subject: RE: January 7 PPC Meeting - Draft Slides for Provider of Choice update

Importance: Normal

Attachments: image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg; image006.jpg

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PPC and Summary of Customer Engagement:

PPC intends to submit comments on the summary document we generated – but not until some time into the new year. He said they haven't had sufficient board engagement. He also stated that PPC doesn't have material concerns regarding that document.

January 7 Executive Committee:

Mike is hoping for about 40 minutes total – mostly focused on discussion / Q&A. The slides you've prepared are good content around which to have that discussion – but if you can provide some early glimpse into topics you are hoping to include in the initial leanings discussion aid, I would value that. It will get us one step past process and begin some content discussion.

I can also use the session to probe for content the Executive Committee would prioritize us including.

Here's what he requested for content:

- Update on process / timing
- How we are thinking of approaching next steps and getting to design
- Tie to broader BPA strategy

Mike gave a preview of a few topics he believes will be critical path (below). Let me know how you are thinking about these topics vis-à-vis the initial staff leaning document:

- Length of commitment / contract
- Memorializing commitments to cost control (I take this to mean off-ramps if we cannot meet certain defined cost limits)
- Introducing resource flexibilities (he noted that some customers want to develop new resources or want options – so nailing down the parameters around this is critical)
- Interestingly, Mike felt that topics like LDD, IRD, and even transfer service would at the end of the day be far less material than the above.

Kevin – I would like you to attend the 1/7 meeting if you are available. I would like you there to note and bring back the key policy topics and perspectives we hear (I'm never good at presenting and noting key points simultaneously).

Best Regards,

Kim Thompson

Northwest Requirements Marketing | Vice President

Bonneville Power Administration
bpa.gov | P 503-230-3408 | C (b)(6)

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One thing I am interested in adding, is a sense of content that the envisioned staff leanings for rough design – I've already fielded a specific question from NRU on whether we'll tip our hand regarding transfer service. I think it would be very helpful if my talking points included some examples of scope we plan to include – not the leanings themselves, but the array of topics.

Is that something you can work up?

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So to that end, please find attached some draft slides covering the Provider of Choice material. We wanted to put this on your radar and provide you some material now so as to not be caught by surprise the first week of January after the holidays. It also occurs to us that you may want to take this opportunity to cover other topics as well (e.g. rates), but we wanted to get you some post-2028 material to work from as a start.

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Cc: Olive,Kelly J (BPA) - PSS-6 <kjmason@bpa.gov>; Mohamoud,Farah A (BPA) - PSS-6 <famohamoud@bpa.gov>
Subject: January 7 PPC Meeting - Draft Slides for Provider of Choice update

Good morning Kim,

You are scheduled to present to the PPC Executive Committee on January 7. As you may recall, we approached PPC about this shortly after we released the Provider of Choice Engagement Summary doc. Our thinking at the time was to have you share highlights from the document. Unfortunately, they were not holding their normal meetings through the balance of 2020, but offered us this January slot instead.

So to that end, please find attached some draft slides covering the Provider of Choice material. We wanted to put this on your radar and provide you some material now so as to not be caught by surprise the first week of January after the holidays. It also occurs to us that you may want to take this opportunity to cover other topics as well (e.g. rates), but we wanted to get you some post-2028 material to work from as a start.

Please let us know if there's more we can help with on this. Thanks!

Kevin

503-230-4055

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Mon Dec 21 12:43:55 2020

To: Thompson,Kim T (BPA) - PS-6

Cc: Olive,Kelly J (BPA) - PSS-6; Mohamoud,Farah A (BPA) - PSS-6

Subject: RE: January 7 PPC Meeting - Draft Slides for Provider of Choice update

Importance: Normal

Attachments: image001.jpg; image002.jpg; image003.jpg; image004.jpg; image005.jpg; image006.jpg

Hi Kim,

Thanks for this update. We'll plan to get you an additional slide or two covering the topics (scope) we envision for the initial leanings doc, as well as some additional thinking around the topics mentioned below.

I will plan to attend the Jan 7 PPC meeting with you. Thanks again.

Kevin

From: Thompson,Kim T (BPA) - PS-6 <ktthompson@bpa.gov>

Sent: Monday, December 21, 2020 11:39 AM
To: Farleigh,Kevin S (BPA) - PSW-6 <ksfarleigh@bpa.gov>
Cc: Olive,Kelly J (BPA) - PSS-6 <kjmason@bpa.gov>; Mohamoud,Farah A (BPA) - PSS-6 <famohamoud@bpa.gov>
Subject: RE: January 7 PPC Meeting - Draft Slides for Provider of Choice update

Hi – I just spoke with Mike at PPC. This note summarizes two topics for you.

PPC and Summary of Customer Engagement:

PPC intends to submit comments on the summary document we generated – but not until some time into the new year. He said they haven't had sufficient board engagement. He also stated that PPC doesn't have material concerns regarding that document.

January 7 Executive Committee:

Mike is hoping for about 40 minutes total – mostly focused on discussion / Q&A. The slides you've prepared are good content around which to have that discussion – but if you can provide some early glimpse into topics you are hoping to include in the initial leanings discussion aid, I would value that. It will get us one step past process and begin some content discussion.

I can also use the session to probe for content the Executive Committee would prioritize us including.

Here's what he requested for content:

- Update on process / timing
- How we are thinking of approaching next steps and getting to design
- Tie to broader BPA strategy

Mike gave a preview of a few topics he believes will be critical path (below). Let me know how you are thinking about these topics vis-à-vis the initial staff leaning document:

- Length of commitment / contract
- Memorializing commitments to cost control (I take this to mean off-ramps if we cannot meet certain defined cost limits)
- Introducing resource flexibilities (he noted that some customers want to develop new resources or want options – so nailing down the parameters around this is critical)
- Interestingly, Mike felt that topics like LDD, IRD, and even transfer service would at the end of the day be far less material than the above.

Kevin – I would like you to attend the 1/7 meeting if you are available. I would like you there to note and bring back the key policy topics and perspectives we hear (I'm never good at presenting and noting key points simultaneously).

Best Regards,

Kim Thompson

Northwest Requirements Marketing | Vice President

Bonneville Power Administration
bpa.gov | P 503-230-3408 | C (b)(6)

From: Thompson,Kim T (BPA) - PS-6
Sent: Monday, December 21, 2020 8:16 AM
To: Farleigh,Kevin S (BPA) - PSW-6 <ksfarleigh@bpa.gov>
Cc: Olive,Kelly J (BPA) - PSS-6 <kjmason@bpa.gov>; Mohamoud,Farah A (BPA) - PSS-6 <famohamoud@bpa.gov>
Subject: RE: January 7 PPC Meeting - Draft Slides for Provider of Choice update

Kevin, Kelly and Farah – Thanks for the slides – they look good and cover the basics that are appropriate at this time. Mike Deen called me Friday afternoon while I was out to discuss the Executive Committee meeting. I plan to call him back today – and will circle back if that conversation reveals anything additional we should cover.

One thing I am interested in adding, is a sense of content that the envisioned staff leanings for rough design – I've already fielded a specific question from NRU on whether we'll tip our hand regarding transfer service. I think it would be very helpful if my talking points included some examples of scope we plan to include – not the leanings themselves, but the array of topics.

Is that something you can work up?

Best Regards,

Kim Thompson

Northwest Requirements Marketing | Vice President

Bonneville Power Administration
bpa.gov | P 503-230-3408 | C (b)(6)

From: Farleigh,Kevin S (BPA) - PSW-6 <ksfarleigh@bpa.gov>
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Please let us know if there's more we can help with on this. Thanks!

Kevin

503-230-4055

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 07:40:08 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Skamania notes

Importance: Normal

Attachments: 20201222_073706.jpg; 20201222_073714.jpg

Sent from Workspace ONE Boxer

BPA-2020-01144-F 0751

Concern w/ California

Concern w/

Help them sell the value of BPA vs Market

Concern

Skamania PUD

Themes for Post-2028 Conversations

1. **Products and Services** – Explore customer interest in contracting for similar products and services to today versus their interest in different products and services post-2028. Seek to understand product/service features that the customer values, and what could be improved.

2. **FCRPS Allocation and Rate Structure** - Explore customer's desire to retain TRM or TRM-like construct, or if they wish to explore alternative structures. Probe to understand customer's motivations or considerations for their perspective.

3. **Rate Case Frequency**- Get customer feedback on BPA current rate case frequency. If they prefer longer time between rate cases, seek to understand motivations.

4. **Contract Term** – Explore customer's interest in a long-term contract verses short-term, and whether there are features (e.g. off-ramps) or incentives that could encourage longer-term commitments.

5. **Cost control, competitiveness and Public Benefits** – Test the tensions between cost control/competitiveness and public benefit programs (such as IRD/LDD benefits).

6. **Carbon Free Products** – Assess customer interest or other perspectives around Carbon free resources in BPA's product offerings.

7. **Top Concerns** – Seek to gain insight on customer's top concerns as they look beyond 2028. Explore what is most critical in the utility decision to make BPA their provider of choice.

(a) % of Wind, Solar in System. Fuel Mix

BPA-2020-01144-F 0752

Skamania 2-10-20

1. - Biomass generation integration. Ease of Int.
   - Working ok. Don't know any better.
   ✓ Don't like Monthly changing values

3. Current rate cases ok. Just not monthly

2. TRM Working OK.

4. 10 yr Contracts (20 so long...)
   - Concern w/ Costs
   - Maybe off-ramps...?

5. LDD: They like it.

6. Hoxie for Tum. or Washington Utility

7. a) Cost Competitiveness. (Concern w/ 3rd Parties)
   - Batteries

BPA Favor → CETA, green.

SMRs

☆ Nuclear: Critical. Can't bridge gap. Good.
✓ Supportive of CGS license renewals,

✓ CGS becoming more efficient. Record Generation.

☆ Get BPA finances in line.

BPA-2020-01144-F 0753

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 07:47:07 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Cascade Locks notes

Importance: Normal

Attachments: 20201222_074516.jpg; 20201222_074529.jpg

Sent from Workspace ONE Boxer

BPA-2020-01144-F 0754

PSW/E Staff:

1. Connect Nancy/Scott → Stay out of HQ!

3/17/20 Cascade Locks: Post 28

✓ Small but Growing.

[redacted]

- More Certainty on Rates
- Would prefer longer-Term Rate Certainty.

✓ Works overall
✓ Long Term good
Nice to ✓ Simplify
✓ Load Growth focus - NLSL service

✓ - Biggest Problem
  ✱ Complexity of "17 rates"
    → Difficult to explain to Council
    → Would be great if there was a way to Simplify
  ✱ Carbon-Free Big for them.
    • Stay w/ genera
    • Hydro perfect.

Wind, Solar @ a premium
Not a focus

✓ - Term of Contract
  • 20 yr works

✓ Longer-Term Rate Preference

✓ TRM; Rate Allocation Works

✓ Maintain Public Benefits Program ^Like today

BPA-2020-01144-F 0755

NEW

★ Top Concerns
#1 Meeting Load Growth Challenges
#2 Snakes coming off / Res Adequacy

✓ Nuclear: Ok w/ where it is.
- Unlikely want it increased / decreased.

- EE: Need $ for

- Res Ex: Fine w/ Settlement

BPA-2020-01144-F 0756

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 08:29:52 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Hood River notes

Importance: Normal

Attachments: 20201222_082722.jpg; 20201222_082540.jpg; 20201222_082554.jpg

Sent from Workspace ONE Boxer

Hood River

2110

Themes for Post-2028 Conversations

1. **Products and Services** – Explore customer interest in contracting for similar products and services to today versus their interest in different products and services post-2028. Seek to understand product/service features that the customer values, and what could be improved.

2. **FCRPS Allocation and Rate Structure -** Explore customer's desire to retain TRM or TRM-like construct, or if they wish to explore alternative structures. Probe to understand customer's motivations or considerations for their perspective.

3. **Rate Case Frequency**- Get customer feedback on BPA current rate case frequency. If they prefer longer time between rate cases, seek to understand motivations.

4. **Contract Term –** Explore customer's interest in a long-term contract verses short-term, and whether there are features (e.g. off-ramps) or incentives that could encourage longer-term commitments.

5. **Cost control, competitiveness and Public Benefits** – Test the tensions between cost control/competitiveness and public benefit programs (such as IRD/LDD benefits).

6. **Carbon Free Products** – Assess customer interest or other perspectives around Carbon free resources in BPA's product offerings.

7. **Top Concerns** – Seek to gain insight on customer's top concerns as they look beyond 2028. Explore what is most critical in the utility decision to make BPA their provider of choice.

(A) Get 2nd FY Rim FY21

(B) Suggest Focus to Focus for Transmission

BPA-2020-01144-F 0758

Rivers 2/10/20

Mtg -

- Slowed
- Not good comms @ BPA
- Slow response (wks to answer painful questions)

1. New Engineer - Martin Wick
   - Transmission
   - June 2017 → July 18
   - Delayed Study: Super Short Term

$6.1 mm to start now

$5.1 but expected $2 mm.

- No Step down now. Just a T.P.
  - Still Waiting for final (But both)
    ⇒ Expd by end of Feb.

* Major frustration w/ Timing

Plan to start construction as soon as they have County Clearance

6 mths ± start construction

✓ Targeting Oct - 6 for 2021 Wildfire Season
✓ May/Jun 2022 target BIA work

[redacted]

Given local vision

Not sure what the alternati

2. Wouldn't OK → Take more risk to Allocate more to T1.
   ✓ Change from Critical, Lock in Utilities for more T1.

BPA-2020-01144-F 0759

3. Longer-Term Rate periods a smaller resource Commitment; but risk Trade off
   - ✓ Defer to PRC, NRU...

4. 20 yr. Long Term Key.

5. LDD, IRD, Transfer Service all important! Part of the deal.
   - ✓ Cost Protection for Those who rely on them less

6. Carbon: Don't need it yet, but... Likely coming though.
   - ✓ BPA good as is, but w/ easier Non-Fed small resource integration.
   - ✓ Local Solar

7. a) BPA Competitiveness
   b) Trans reliability
   c) Small resource Integration (ease)

✗ Following Concern about Transfer Costs going directly (LDD, IRD as well)
✗ Competitiveness.

Src: Combining Electric & Broadband functions legally

BPA-2020-01144-F 0760

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 08:44:10 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Forest Grove notes

Importance: Normal

Attachments: 20201222_084234.jpg; 20201222_084250.jpg

Sent from Workspace ONE Boxer

BPA-2020-01144-F 0761

Forest Grove
2/25/20

My Copy

✓ working ok. Don't love being on Market (like they are currently),
- Solar: If more $, then greater interest today } Maybe small community solar. (B
- But interest will likely continue }

Themes for Post-2028 Conversations

- **Products and Services** – Explore customer interest in contracting for similar products and services to today versus their interest in different products and services post-2028. Seek to understand product/service features that the customer values, and what could be improved.

- **FCRPS Allocation and Rate Structure** - Explore customer's desire to retain TRM or TRM-like construct, or if they wish to explore alternative structures. Probe to understand customer's motivations or considerations for their perspective.

- **Rate Case Frequency**- Get customer feedback on BPA current rate case frequency. If they prefer longer time between rate cases, seek to understand motivations.

options

Need to pol facts in front of Council

- **Contract Term –** Explore customer's interest in a long-term contract verses short-term, and whether there are features (e.g. off-ramps) or incentives that could encourage longer-term commitments.

- **Cost control, competitiveness and Public Benefits** – Test the tensions between cost control/competitiveness and public benefit programs (such as IRD/LDD benefits).

Big Interest

- **Carbon Free Products** – Assess customer interest or other perspectives around Carbon free resources in BPA's product offerings.
  ★ Real interest in Green resources (Solar, wind) – e.g. 5 aMW

- **Top Concerns** – Seek to gain insight on customer's top concerns as they look beyond 2028. Explore what is most critical in the utility decision to make BPA their provider of choice.

Other →

- Res Ex
  - Settlement Agreement
  ✓ Stability good, depends on conditions
- CGS / Nuc
  ✓ Below radar
- Energy Efficiency?
- Elements of Power Act to change?

#1 Stability (Don't like option)
Low risk, Stable rates

#2 Mix of resources (ability to add renewables)

#3 Bills
Simplicity:
- Need to make case to City Council for Their rate design

Meeting new Load growth ("new (e.g. Data Center would raise rates X%")

Renewable resource Costs ("Rate will go up x% if...")

cause/effect

BPA-2020-01144-F 0762

6. 2/24/20

① Get Data for WKT Commitment

② Look for interest in Vintage (under RD)

- Post 28: Interest in More T1.
  - Provide Cushion
  - Even @ '37
  - Easier product

- Rate Case Frequency: 5 yrs better, but really a BPA Call.
  (interest in Long Term Certainty)
  - Less work

Term: 20 yrs very long
✓ 10 probably better?
✱ Not much talking about offramps

③ Projects to help reduce Costs, etc...

④ Send DER Cross Share Info

⑤ Training on RD When we know above RHWM Loads
- Rate Impacts Nonfed going on & off.
- Rate Impacts of 1 mw vs Not

Summer

BPA-2020-01144-F 0763

EWEB Post-2028 Meeting Notes – 1/21/20

Utility Attendees: Matt Schroettnig, Megan Capper, Cathy Gray, Susan Ackerman

Key Takeaways:

- **Happy with current deal.** Likes Slice, principles of RD (equity, holding others harmless to cost causation, etc.)
    - Current products could benefit from tweaks around shaping factors, etc.
    - Slice sheds risk, allows for hedging. Hourly flexibility good for load service. (don't need sub-hourly. And when pushed on daily product given edam, got sort of an "interesting consideration…" – maybe right... But would need to look at value proposition then…)
- Carbon a big deal. Today's world (one system mix) cant work. CETA a game changer. Slice should be 100% green.
- Key takeways: 1) Focus on competiveness – five big issues is their biggest concern (those that we have less control over), 2) Optionality important – Offramps important if long term contracts, Need to not be an impediment for a utility to meet compliance obligations, contract timelines need to comport with compliance and planning needs, 3) Price still king (though they feel we're likely to be well positioned)

Other Specifics:

- Concern with BPA's staffing levels to support EIM, EDAM, Post-2028
- Concerned with "big 5 issues" (those we have less control over such as F&W, Treaty, REP, and couple others)
    - We need to provide communications/updates on what's happening with these. They know we can't lobby, but providing updates provides customers **confidence**.
- Strongly opposed to continuation of REP benefits. Vows to fight it hard. Not legally sustainable, not fair. Residentials can always form new Public utilities.
- Transfer costs should be moved to Transmission rates
- Share concerns of Tacoma's regarding timelines in contract for resource additions/removals
- Good with long-term contracts (20-years, or even evergreen) assuming there are off-ramps
- LDD & IRD- tie to a specific resource need. E.g. For IRD, in exchange for credit they need to offer BPA access to demand Response type ability. Make it more conditional.
- EE: Still in favor of "minimizing round tripping" (i.e. 100% self fund), but acknowledge today's framework is working. Primarily the bilateral market for EE $s, which they are beneficiaries of.
- RE; NW Power Act, consider role of Council. Also consider if BPA should have ability to own resources. May be important to spur action on Res Adequacy front.
- Question around our long term debt plans. (Will we ever pay off WPSS debt?)
- Mentioned Snohomish dam replacement study – 7% annual rate increases for 20 years…

- PPC concern – (guess) maybe around IOUs dividing public power…?

SUB Post-2028 Meeting Notes – 1/15/20

Utility Attendees: Jeff Nelson, Tracy Richardson

Key Takeaways:

- Happy with current deal - products/deal working "well/great" (bills etc. all working well). Values transparency.
- Would stay Load Following going forward
- **Main change is inclusion of "Most Favored Nations" clause** (or something like it)
    - Why? Including this as an up-front philosophy will promote simplicity, fewer options, limit product jumping – ultimately more efficient contract implementation
- Principles: Low Cost T1, Certainly of Obligations, Legality
- Key Priorities: 1) Offer similar deal (products/services/rates to today), 2) measured cost control, 3) Carbon free power
- Big concerns: Resource Adequacy (Legislative pressures moving us from one problem to another), REP, Treaty

Other Specifics:

- Term: 10-20 years (emphasis on 20 yrs I think) with off ramps (around external cost drivers – treaty, f&w, etc)-
- Eliminate / scale back rate credit programs (LDD/IRD) and GTAs. Customers need to be more accountable. "BPA cant solve all problems".
- Favor similar structure to today (TRM, etc)
- OK with Slice
- Tiered rates ok, assuming no change to CHWMs. Consider melded rates if we have shorter contracts and/or are adjusting CHWMs based on recent load growth, etc.
- If we deviate from today's current structure, go with shorter term contracts. Too much uncertainty.
- Favors 2-yr rate case. If longer, too big of risk reserve rqts, etc. "lose attention"
- EE: Don't touch current structure! No self fund! A distraction, waste of time and resources considering it. Remains a BPA obligation. Bilateral options a good avenue for utilities to align $ with opportunities. Likes equity. Doesn't want to pay more if another utility wants greater access to $s.
- 2ndary rev credit: Stay with forecast if we have 2 year rate periods. If longer, then go with rebate approach (otherwise reserves rqts too high)
- Don't touch the NW Power Act. Too much risk opening the door.

- Much concern around REP, but not sure whether supports settlement. Depends. Much uncertainty.
- No bundled Power Transmission product! Focus on one bill. And stay with Tiered rates (though consider caveat earlier). Melded rates loses transparency.
- 100% carbon free: Be careful here. They don't want to get stuck with dirty power. Ensure that they get the option to go 100% carbon free if it exists. But bottom line: May be safest to stay with one-system mix and green up with RECs.
- Nuc: fine with it, but don't assign it all to SUB! (if other utilities don't want it)
- Willamettes: Walk away if necessary.
- CHWM determination: In general don't touch todays CHWMs. Not clear on this, but Jeff is also concerned about unintended consequences of buying to fill large resource losses (e.g. replacing Snakes with Wind).

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 09:10:55 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Nru 12/9/20

Importance: Normal

Attachments: 20201222_090916.jpg; 20201222_090926.jpg

Sent from Workspace ONE Boxer

BPA-2020-01144-F 0768

Jamie Nancy
Zakya
Blake
Megan

NRU: MES: 12/9/20

1. General Resource Investigation
   - Diff Contract Structure, Prices
   - ✓ Following to Bd for Approval – Quantitative
   ⇒ Stock Big Picture
   - is member Working Group
   - Active Participation Stats
   ★ November
   - Written Comments coming to us by end of CY20
   - ✓ No major disparities, but working to Clarify Main interests
   - ✓ Nuanced category for most issues.
   - Existing Sy
   - Allocation of System has monetary; but not a direct rollover
   e.g.: How to define "firm"? 1937? or Governing less Conservative?
   - Think broadly; don't get stuck on Specific terms we use today. (may be same; may be different)

Not taking positions. Teeing up for discussion. No position on allocation vs non-allocation.

2021 Work Plan:
Feb - GRI: Info. ~~Mar~~ Maybe in May have more of.

[redacted]

★ Megan: Allow for time in Schedule for Customers to work out stuff.

BPA-2020-01144-F 0769

Find Transmission

* Substantive Comments: Big Picture

- Proactive Collaboration between Power & Trans important

- EE: What is role? How does it fit if we allocate? → eg. Where do EE $s go? To or Somewhere else?

Grow Power Needs up

⇒

- Carbon: Much interest in carbon-free
- Spring: Rate Case, IRPs
  - Tons of work
  - Communicate in these arts.

Workload Challenge
Bandwidth.

Be Cognizant of Time

Request: [- Review our Conversation Starter]
- Helps w/ Process
- What does Concept Paper mean? Entail?
? What level of detail in it?

- They're not set their work Plan yet.
- They want to do some Outreach to other Utilities as well.

General Resource Investigation → Asking some Qs.

BPA-2020-01144-F 0770

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 09:24:39 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Nru 9/15

Importance: Normal

Attachments: 20201222_092132.jpg; 20201222_092152.jpg; 20201222_092206.jpg

Sent from Workspace ONE Boxer

BPA-2020-01144-F 0771

Previous mtg w/ NRU 9/15

- Megan:

Stress Test
Loads,

Blake - What do you do about uncertainty?
→ [sort of rhetorical question]

Megan - "Infrastructure Development"
2 Things in mind a) Transmission access sub grid
b) BPA acquiring resources to sell.

BPA-2020-01144-F 0772

Capacity Concerns → Be careful of actions & decisions now that will impact (precedent) the future

☆ Giving away part of System (Trans Losses, Gen Impacts MOU)

~~Non~~ Fed resource adjustments

☆ Low hanging fruit on Notice Comment

☆ Transfer: ~~Fed~~ & Non-Fed Big focus for NRU

"Equity ☆ Level Playing Field"

Consider When, How

Risk Mechanisms

Consider Address it

Megan: Miscellaneous: Risk Mechanisms "CRAC, FRP, Thresholds, Zedney..."

☆ Appropriate to address it.
- Rollover of Status quo

Next Step questions: Clarify timing in Paper

☆ Like our approach hearing did we hear you r.

Lay out process Timeline → longer Term good

☆ Like "longer Term Nature" of process, Questions

Qtrly Deadline: After May Mtg?

Feb Bd Mtg

May Bd Mtg helpful

Think Outside Box
100% Carbon Free product

Kelly: Highlighting This topic as single Theme.

BPA-2020-01144-F 0773

John

★ Wants us to keep it Slow.
- Don't rush process
- Take time to work thru issues
- Need Wholistic view.

Want Monthly Checkin → Open Channel

BPA-2020-01144-F 0774

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 09:32:00 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Nru 8-24

Importance: Normal

Attachments: 20201222_093030.jpg; 20201222_093041.jpg

Sent from Workspace ONE Boxer

BPA-2020-01144-F 0775

NRU
John F
Megan S
Blake W
Scott

BPA

Post 28 - Mtg w/ NRU 8/24/20

- Megan: "Post 28 load" → Rates & Policy Manager
  - ✓ 53 LF / NT members (all 7 states, except)
  - ✓ 3 - 180 mw = Total 27% T load
  - ✓ Transfer 2/3 Served. Key issue
  - ✓ "Affordability" → encompasses product but meets their needs.
  - ✓ LDD / IRD
  - ✓ EE
  - ✓ Organized Markets, Gov Rev Committee

- Blake — Transmission Issues
  - ✓ Transactional focused

- ✓ 2016: Education Series.
  - Similar Topics (7/8 issues)
    - ✓ Energy Crisis → How it led to RD Contracts
    - ✓ Ross
- ✓ Regional Mtgs:
  - What's working well, what's working Scott.
- ✓ Cost Compel:
  - → Now: 15 members (Representative group)
    - Working group: Diving in on
    - This yr: Diff Contract Structures, allocation, mix/meld?
  - ✱ Modeling exercise: Looking @ Power Supply Costs, looking @ different Portfolios

BPA-2020-01144-F 0776

- Process

21 in NEMS

- Blake: Non-Fed Resources. Above-Hour load mgt.
- Non Fed Issue: Analytical Deep Dive
Post 28
- Exhs
✓ Back in 2015: 1st analytical look
⇒ His in Details
✓ Transmission an often Thought
Be useful to address up front this time

- Sources: - TI Take knowledge
- Analytical Support

- John: Been 1 yr: 54 Members (1 new one)
Will a Thoughtful Convo

(A) Send Concept Paper R.D.
(B) " Contact info

- Transmission
- F.E. → Talk about during the process } Lessons learned - Structure Conversation

- Risk Mechanisms → FRR Crec

- Offer of Webinars: "Wait & See". Maybe topic Specific.
✓ Council "Products" well.
✓ Reg Ex may be more valuable

- Zoben New General Counsel

EV working on Education as well

BPA-2020-01144-F 0777

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 09:39:31 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: PPC Post-28 notes - 8/5, 9/17

Importance: Normal

Attachments: 20201222_093246.jpg; 20201222_093259.jpg; 20201222_092451.jpg

8/5/20

9/17

RDA
Scott
Me
Farah
Kelly

PPC
former
Mike

BPA PPC Call (Education, etc) 8/5/20

- Policy Director @ PPC
  - → 90 Members
  - → 21 members on Exec Committee

2007
↘ involved a bit in RD.
↘ also worked w/ Industrials
↘ Res Ex focus

- Turnover in Mngt & Staff
  -

★ Fall 2020 -
↳ "Interesting: Longer 1-5 Utilities
- Will have Community pressures for New renewables
- Timeline tricky: Need 2022-ish to make resource determinations
- Optionality to add/remove resources.

★ PPC:
- Webinars: They'd be happy to work w/ them on RPC forums
  ✓

★ - Carbon issue on Peoples mind
  - → Will we be staying w/ Current System allocation
  - → 1 system mix
  - → What are options

✓ Provide History on what Options were Considered & Why

BPA-2020-01144-F 0779

PPC: Can help highlight these issues going fwd.

Items:

- Can we put out our view of what parameters are under Statutes.

(1) Feedback from PPC in: Early September

BPA-2020-01144-F 0780

9/17/20 Preview Mtg w/ PPC

Mike 1. NR rate not likely to be a good idea
- ☆ Maybe a way to mechanically get at it.

Scott eg - Market index product off TF

2. Surprises yet?
- ✓ No: Contract length

3. LDD & IRD: Not in PPC's wheelhouse.
- ☆ Characterize it as "cost count" & Misnomer.
- ✓ more of an allocation

4. Likely to be Some Conversation around
- EE - Self Fund
- TOCA.

5) Date Certain -
Any Major Changes -
- ✓ Rates & Contracts: Technical Mtgs

BPA-2020-01144-F 0781

From: Farleigh,Kevin S (BPA) - PSW-6

Sent: Tue Dec 22 10:24:33 2020

To: Farleigh,Kevin S (BPA) - PSW-6

Subject: Clark 7/22

Importance: Normal

Attachments: 20201222_102009.jpg; 20201222_102020.jpg; 20201222_102027.jpg; 20201222_102033.jpg; 20201222_102050.jpg

Sent from Workspace ONE Boxer

Clark Mtg

7/22/20 3. Comms a challenge. May be another yr. before I'm with all together again
- likely to

✓ 5b 9c

✓ See IRP → Presented Yesterday "Focus the way in to ~~2038~~ 2030.

✓ CEIP: How to show plan

✓ BPA Portfolio: Will we be replacing w/ wd w/ Solar?
- What about Nuclear?

✓ Curious about HLH & LLH

✓ Introductions → Clark
- Lisa new a yr → Supportive of BPA
-

Tom Heymeker: All trades, IRP focus, as well as Short Term.

✓ Slim a good fit. Last 9/10 yrs been a much better, more equitable, friendlier situation.

BPA-2020-01144-F 0783

- Looking forward to Continuing w/ Slice, but open to LF,

Tom: - Will we address/change 569c?
- Interest re: River Road
(Look @ Draft IRP → BPA the Preferred Provider)

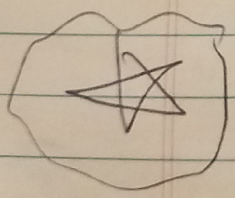
Kim: - We reluctantly offered Slice before
- More embraced it today.

Dan Intro. Eugene Guy → Copco, Priest Wenapum
- Been @ Clark 5 yrs

Slice: if Slice leave, is there a
?: Volume @ which we would offer Slice?
→ We have to be Cost Conscious, No actual answer

Kim: Ceta → They're not alone in wondering about

Tom: 569c: Major Concern → CETA carbon Neutral 2030 carbon free 2045



✓ $ Admin not a good Solution (Don't Want to Pay)
✓ Thus would BPA make them break low $ Pay
★ 35% of Load
→ Need to get it down to 20%
→ Will help you get to 15% more.
→ Not Sure 569c Captures Partial Shutdown
✓ They own it. more/less.

Can't run to Meet This Load

BPA-2020-01144-F 0784

- Loss, "partial reduction due to orders"

★ Changes to Sb9c → Looking for "assurance"
(Not the unknown determination from the Admin / Sb 9c Policies)

1. Want more BPA Power NOW (Due to loss of resource / higher NRgt) → Need planning assurance
2. If not, then next steps...

1) OK if They're given assurance.
2) If not, Then Sb 9c Policies need adjust to help us.
3) If No, Then they need to know not use WRD

70% Green Now.
- Need to move to 80%,
-

(a) Get Kim Sb9c background

★ Wouldn't need

[redacted]

W'in a year → Need to know from us
~~Or~~
Need to know before CEIP.

(b) Get Conversation going via a Casual
- Follow up w/ Don & Tom re: Scheduling

Fuel Mix: Right decisions. Stay w/ Statute,
- They agree. It's a Personal Issue for Seattle.

BPA-2020-01144-F 0785

- Question: About Unpurchased T1. Reallocation of T1.

- Kim: Strategically we need to Think Through More demand
  - IOUs Could Put regional Load on Us. Separate from REP. Looking @ Scenario planning around This.
  * There will be a Public engagement

? Is this right? IOUs can buy @ PF?

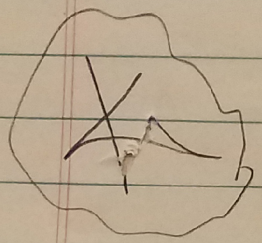
Tom: - They may get a rate of rtn on PPAs.

c) Confirm Kim's Read of the Act
- Any rate consideration
-

- Slim: Effort underway.
  - ✓ Still Supportive of those efforts, even if not on leading edge. The TE* Convo
  - ✓ Resource Adequacy → Peak Rgts.
    - Slim: They knew it wouldn't fully hit This Peak.
    → Were expecting Just how Short They'd be
    * New mechanism to calc Slim Peak on new product

They're Supportive

?



BPA-2020-01144-F 0786

RA concerns:

Move the PPC level (Not Slice)

- New Product: Sometning w/ CDQs, etc.
- Concern that the RA effort may put new rqts on them, & they're short now.
- If BPA will appl'y to LSE, pt to the Language in Contract

BPA-2020-01144-F 0787

From:	Gillman,Richard A (TFE)(BPA) - TSE-TPP-2
To:	Munz,Paul G (BPA) - PSW-SEATTLE
Subject:	FW: SCL-BPA Coordination Meeting Nov 5 Agenda DRAFT
Date:	Monday, November 2, 2020 1:03:08 PM
Attachments:	SCL-BPA Coordination Meeting Nov 5 Agenda DRAFT.docx

From: Gillman,Richard A (TFE)(BPA) - TSE-TPP-2
Sent: Monday, November 2, 2020 1:02 PM
To: Ko,Tina G (BPA) - TS-DITT-2 <tgko@bpa.gov>; Cathcart,Michelle M (BPA) - TO-DITT-2 <mmcathcart@bpa.gov>; Cook,Jeffrey W (BPA) - TP-DITT-2 <jwcook@bpa.gov>
Cc: Jackson,Melanie M (TFE)(BPA) - TSE-TPP-2 <mmjackson@bpa.gov>
Subject: SCL-BPA Coordination Meeting Nov 5 Agenda DRAFT

Good afternoon.

Attached is the proposed agenda from SCL for the Emeka meeting in the afternoon on the 5th. I will provide you talking points later this week.

For me this meeting reflects, in my opinion where Emeka has come with his team. This is a lot of Emeka telling us where SCL's planning and thinking is at. As such, there is not an expectation for us to present and for him to comment.

Jeff, I will get you some points he wants to make about the significance of being creative with CF. This is especially in light of their 33 requests are all sourced from various specific FCRPS sources that Power supplied as an allocation of the total capacity they were seeking to bring their Block power home and because they are impacting NOEL. --- more later

Michelle, I think during the discussion topic, Look Ahead at Winter 2021/2022 and Beyond is the opportunity to status ST ATC and to use some of the themes we used at meeting about gaining confidence about our methods and tools. --- more later.

Tina, the talk about debt can extend into the rate scenarios for different revenue financing alternatives. Emeka will make the point that he would like to better understand impacts of limiting capital spends or for that matter increasing them.

Let me know if you guys would like to add some topics or have any questions. And, I will have talking points in a day or two.

Rich

Seattle City Light

MEETING AGENDA

Thursday, October 5, 2020 – 3 to 4 p.m. PPT via teleconference DRAFT

MEETING PURPOSE

Monthly SCL-BPA Coordination Meeting

Phone Bridge: 503-230-4000

Passcode: 743 721 941 #

AGENDA

3:00 PM	BPA/SCL Provider of Choice update – Communications talk by BPA
3:10 PM	PSANI Update
3:20 PM	Update, Seattle City Light's Winter 2020/21 Firm PTP Positions
3:25 PM	Look Ahead at winter 2021/2022 and Beyond - What is SCL thinking about Winter 2021-2022? - Concurrent Conditional Firm Process - TSRs and Cluster Study Process - Parking Lot item for next meeting: Puget Sound Area Initiative (NWPP/NorthernGrid)
3:45 PM	More SCL thoughts on Debt Management
4:00 PM	Adjourn

From:	Anyanwu, Emeka
To:	Thompson,Kim T (BPA) - PS-6; Connolly,Kieran P (BPA) - PG-5; Cooper,Suzanne B (BPA) - PT-5; Cook,Jeffrey W (BPA) - TP-DITT-2; Cathcart,Michelle M (BPA) - TO-DITT-2; Cook,Joel D (BPA) - P-6; Munz,Paul G (BPA) - PSW-SEATTLE; Ko,Tina G (BPA) - TS-DITT-2; Gillman,Richard A (TFE)(BPA) - TSE-TPP-2; Alders,Kyna L (BPA) - PG-5
Cc:	Liechty, Joy M.; Cross, Robin; Espenhorst, Eric; Walter, Josh; Wright, Cindy M
Subject:	[EXTERNAL] RE: Emeka Anyanwu - Seattle City Light
Date:	Tuesday, November 3, 2020 2:34:53 PM
Attachments:	SCL-BPA Coordination Meeting Nov 5 Agenda.docx

BPA Team –
Please see attached the proposed agenda for Thursday, co-developed by SCL & BPA staff.

See you all then!

Emeka

EMEKA ANYANWU
SEATTLE CITY LIGHT
(he/him/his)
(206) 684-3718

-----Original Appointment-----
From: jlbas@bpa.gov <jlbas@bpa.gov> **On Behalf Of** Thompson,Kim T (BPA) - PS-6
Sent: Thursday, June 18, 2020 6:26 AM
To: Thompson,Kim T (BPA) - PS-6; Anyanwu, Emeka; Connolly,Kieran P (BPA) - PG-5; Cooper,Suzanne B (BPA) - PT-5; Cook,Jeffrey W (BPA) - TP-DITT-2; Cathcart,Michelle M (BPA) - TO-DITT-2; Cook,Joel D (BPA) - P-6; Munz,Paul G (BPA) - PSW-SEATTLE; Ko,Tina G (BPA) - TS-DITT-2; Gillman,Richard A (BPA) - TSE-TPP-2; Alders,Kyna L (BPA) - PG-5
Cc: Tramble, Jennifer; Louie, Shirley; Santos, Mary
Subject: Emeka Anyanwu - Seattle City Light
When: Thursday, November 5, 2020 3:00 PM-4:00 PM (UTC-08:00) Pacific Time (US & Canada).
Where: Bridge

Bridge: 503-230-4000
Passcode: [redacted] (b)(2)

From: Thompson,Kim T (BPA) - PS-6
Sent: Monday, November 18, 2019 10:34:46 AM (UTC-08:00) Pacific Time (US & Canada)
To: Thompson,Kim T (BPA) - PE-6; Connolly,Kieran P (BPA) - PG-5; Cooper,Suzanne B (BPA) - PT-5; Cook,Jeffrey W (BPA) - TP-DITT-2; Cathcart,Michelle M (BPA) - TO-DITT-2; Cook,Joel D (BPA) - P-6; Munz,Paul G (BPA) - PSW-SEATTLE; Ko,Tina G (BPA) - TS-DITT-2; Anyanwu, Emeka; Gillman,Richard A (BPA) - TSE-TPP-2; Alders,Kyna L (BPA) - PG-5
Cc: Tramble, Jennifer; Louie, Shirley; Santos, Mary
Subject: Emeka Anyanwu - Seattle City Light
When: Occurs every month on the first Thursday of the month from 15:00 to 16:00 effective 12/5/2019. Pacific Standard Time
Where: Bridge

CAUTION: External Email

Bridge: 503-230-4000
Passcode: [redacted] (b)(2)

BPA-2020-01144-F 0791

Seattle City Light

MEETING AGENDA

Thursday, November 5, 2020 – 3 to 4 p.m. PPT via teleconference

MEETING PURPOSE

Monthly SCL-BPA Coordination Meeting

Phone Bridge: 503-230-4000

Passcode: 743 721 941 #

AGENDA

3:00 PM	BPA/SCL Provider of Choice update – Communications talk by BPA
3:10 PM	PSANI Update
3:20 PM	Update, Seattle City Light's Winter 2020/21 Firm PTP Positions
3:25 PM	Look Ahead at winter 2021/2022 and Beyond - What is SCL thinking about Winter 2021-2022? - Concurrent Conditional Firm Process - TSRs and Cluster Study Process - Parking Lot item for next meeting: Puget Sound Area Initiative (NWPP/NorthernGrid)
3:45 PM	More SCL thoughts on Debt Management
4:00 PM	Adjourn

From:	Communications
To:	Communications Outreach
Subject:	Outreach requested: Provider of Choice Customer Engagement Summary
Date:	Thursday, October 8, 2020 11:05:28 AM

Internal outreach guidance

Power AEs, CAEs, TAEs: Please share with your customers, constituents and other interested parties, as appropriate.

Transmission AEs, D.C, BPA managers, EERs: FYI only.

A message box is available.

External information

BPA has published the Provider of Choice Engagement Summary on the Provider of Choice webpage.

In 2016, BPA began talking with preference customers to learn about their needs and interests for post-2028 service. In 2019, BPA initiated a second round of discussions with customers and memorialized these findings in the Provider of Choice Engagement Summary that was just published. In 2021, BPA plans to start collaboratively formulating a policy framework to set the foundation for post-2028 Provider of Choice contracts and rates. This work will culminate in BPA's release of a concept paper, planned for late 2021

BPA-2020-01144-F 0793

From: Munz,Paul G (BPA) - PSW-SEATTLE
To: Thompson,Kim T (BPA) - PS-6
Cc: Gillman,Richard A (BPA) - TSE-TPP-2
Subject: SCL/BPA 10/1 Meeting; Update and Topics for Next Week
Date: Wednesday, September 30, 2020 11:03:00 AM
Attachments: SCL_Response_to_BPA_Post-2028_Survey.docx

Hi Kim,

It's amazing how fast the time is going. Rich and I have been working to clarify agenda topics for tomorrow's SCL/BPA meeting and received this reply from Emeka at the end of the day yesterday. The draft agenda topics Emeka refers to are mid-way down in Rich's 9/24 message below. I know that Emeka was interested in getting a read from you about the SCL letter (attached) that Joy Liechty sent in as their response to our Provider of Choice comment submittal.

I hope that helps.

Please let me know if you have questions.

Thanks,

Paul
(206) 496-4021

From: Anyanwu, Emeka <Emeka.Anyanwu@seattle.gov>
Sent: Tuesday, September 29, 2020 5:54 PM
To: Gillman,Richard A (BPA) - TSE-TPP-2 <ragillman@bpa.gov>
Cc: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>; Liechty, Joy M. <Joy.Liechty@seattle.gov>; Cross, Robin <Robin.Cross@seattle.gov>; Wright, Cindy M <Cindy.Wright@seattle.gov>
Subject: [EXTERNAL] RE: Update and Topics for Next Week

Rich –
Your topics are very similar to what we have put together – the only thing we have that is different would be the discussion of the losses. Happy to have some follow up discussion of those, though I doubt we'll have the time to be exhaustive. I think in general, we do have some questions about some of the assumptions attendant to the proposed policy changes.

I should have a final agenda draft over to you all tomorrow.

Thanks,
Emeka

EMEKA ANYANWU

SEATTLE CITY LIGHT
(206) 684-3718

From: Gillman,Richard A (BPA) - TSE-TPP-2 <ragillman@bpa.gov>
Sent: Thursday, September 24, 2020 7:40 AM
To: Anyanwu, Emeka <Emeka.Anyanwu@seattle.gov>
Cc: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>
Subject: Update and Topics for Next Week

CAUTION: External Email

Good morning Emeka.

I hope this finds you and your family well and safe.

I thought you would appreciate the letter associated with this link - https://www.electric.coop/oregon-co-op-leaders-letter-on-oregon-wildfires-restoration/ . The letter stirred some emotions for me – pride for the industry I have been a part of for almost 40-years, that there is care and support during this time of national division and unrest, and a feeling of hope for more strength for folks given the long run many have in front of them.

I wanted to provide you with a brief update on our Facility Ratings effort, especially since I canceled our meeting last week. As I trust you are aware, our teams have been meeting and sharing drafts of an operating plan that addresses roles and procedures and enables "co-operation" of our systems effecting the Puget Sound system. I think I had noted a sense that given the staffs, yours and ours, we would end up here. The upshot is that SCL will now feel comfortable with deploying emergency ratings. Pawel has been in touch with Michelle and the staff exchanges have extended to dispatch as well. I think the relationship at the grass roots level bodes well for all of us as we continue to look at and manage the Puget Sound Area. Kudos to BPA and SCL staffs!

It's that time to plan our next Management meeting again. It seems that we just finish meeting and acting on our action items and it becomes time to identify our topics for the next one. Does it make sense for Paul and I to get a conference call with you and your team? It served us well last time. Paul and I have shared the following ideas for topics:

1. Update on losses – SCL's thoughts and test BPA's next steps
2. Post-2028 Survey Provider of Choice
3. SCL's transmission needs

   b. Next steps
      i. Facility Ratings
      ii. ST availability

iii. Cluster Study
    1. CF
iv. Etc..

4. PSANI update on Broad Street Inductor
5. Other Topics???

Again, I hope this finds you well. Let Paul and I know if you would like to get together.

Best regards,

Rich Gillman

August 31, 2020

BONNEVILLE POWER ADMINISTRATION
909 1ST , SUITE 380
SEATTLE, WA 98104

Dear Paul Munz,

Seattle City Light ("SCL") appreciates the opportunity to provide feedback in response to the "Provider of Choice" survey regarding the Post-2028 BPA contract. While SCL will not offer direct answers to the survey, we do provide the following comments regarding a Post-2028 contract.

Current Industry Challenges

The energy industry has seen many developments and changes since the last BPA contract negotiations. Energy policies that were once focused on addressing the Western Energy Crisis have now shifted to concerns including addressing climate change and decarbonizing customers' generation portfolios. Other recent changes involve considering market expansions and studying and addressing regional resource adequacy. More specifically, the Clean Energy Transformation Act (CETA) has and will continue to require significant adjustments to utility business operations and planning. Preparation for and compliance with CETA will require time to implement and should be taken into consideration in the development of the post-2028 contracts. Furthermore, a resource adequacy program under development will affect BPA and preference customers. Implementation of these policies will be ongoing and will require flexibility from BPA.

Another industry change involves the implementation and integration of new technologies. With more customer and utility adoptions of distributed energy resources and local or on-site generation, BPA needs to consider how these resources should be incorporated within its ratemaking methodology and product offerings. BPA's power customers need mechanisms and innovative new designs to accommodate both the overall changes to regional power supplies and changing customer preferences. Like many utilities, SCL is working to offer customer-centric products and programs for its customers, and similarly we look to BPA to adapt and provide choices to preference customers in a future BPA contract.

Finally, due to the COVID-19 pandemic, new challenges and uncertainty have arisen for preference customers. The pandemic has demonstrated that flexibility is crucial in future BPA contracts and should be incorporated in order to allow customers to react and effectively manage such an unexpected event.

As a result, the current backdrop of post-2028 BPA contract negotiations is vastly different from those in previous BPA contract negotiations. Due to these changes, BPA's status quo requires changes to enable partnership between BPA and SCL to continue to provide benefits to the residents and businesses in the City of Seattle. Compliance with and implementation of CETA and other policies, as well as new technological advancements, will require a change from BPA's status quo to allow for customers to adequately adapt to changes within the industry.

SCL Comments

SCL offers comments to address three important elements to assist BPA and customers in accommodating these expected major changes, as well as unexpected events. First, SCL believes that BPA should update its current products and services offered for the upcoming contract period. Second, SCL would benefit from more flexibility in its post-2028 BPA contract. Specifically, SCL is interested in exploring a contract term less than 20 years. By having a shorter term, SCL will be better able to address arising issues within the utility or within the industry, such

as changing customer preferences and unexpected events like COVID-19. SCL may have additional requests regarding flexibility in future discussions. Finally, due to the uncertainty of the present environment, new contracts should account for and allow customers to adjust to changing circumstances. SCL believes that this uncertainty will cause future years to be dynamic; thus, post-2028 BPA contracts must allow for customers to acclimate to the changing nature of this industry. Part of developing these options will include consideration of appropriate cost implications and responses.

Products and Services

Regarding products and services, SCL offers the following discussion items (but is not limited to these items). First, SCL would like consideration of a product that is 100% compliant with CETA by 2030. Second, SCL would like assurance that any power product will be fully qualified for the NWPP RA program. Third, SCL anticipates much greater load variability due to rooftop PVs and EVs and is interested in what products or services BPA may be willing to offer to support greater load variability.

Flexibility

In addition to a contract term less than 20 years, SCL encourages BPA to consider other areas. One example includes revising the RHWM process to use information in more timely and realistic manner than at present. Additionally, SCL encourages BPA to consider and adopt means to ensure that any cost increases are passed on only if they provide greater customer value. This is not an exhaustive list, and SCL looks forward to discussions with BPA on other items to increase its customers' flexibility.

Future Changing Circumstances

SCL sees several areas of uncertainty (this is not an exhaustive list). A major source is the possibility of declining or increasing loads depending on electrification, economic changes, demographic changes, and other sources of uncertainty. SCL would like greater consideration given to provide customers' ability to modify its BPA purchase in light of changes to the customers' load and supply portfolio. Emergence of a more organized Western Energy Market may create new opportunities for generators and consumers, and SCL encourages BPA to consider future products that may accommodate these possibilities. As transmission constraints continue to emerge, SCL may need flexibility to take power from different points to ensure deliverability, and requests that BPA work with SCL to develop a product or products which provide better alignment between power purchases and durable deliverability.

Conclusion

Seattle City Light looks forward to upcoming discussions with BPA around the challenges SCL and other customers are facing today and expect in the future. Together we will work on the details of these contractual concepts and begin to give shape to the products and services we will require in post-2028 contracts.

Sincerely,

Joy Liechty
Director of Power Management
Seattle City Light

From:	Cross, Robin
To:	Munz,Paul G (BPA) - PSW-SEATTLE
Subject:	[EXTERNAL] RE: BPA Provider of Choice Survey Response Letter - SCL Draft Talking Points - SCL staff proposed
Date:	Friday, September 25, 2020 1:25:45 PM

Thanks. Glad to hear you think this might support an open dialogue for BPA Executives.

From: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>
Sent: Friday, September 25, 2020 1:09 PM
To: Cross, Robin <Robin.Cross@seattle.gov>
Subject: RE: BPA Provider of Choice Survey Response Letter - SCL Draft Talking Points - SCL staff proposed

CAUTION: External Email

Hi Robin,

Seattle's initial talking points are a good starting point for our communications and work going forward.

Thanks,

Paul
(206) 496-4021

From: Cross, Robin <Robin.Cross@seattle.gov>
Sent: Friday, September 25, 2020 10:01 AM
To: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>
Subject: [EXTERNAL] BPA Provider of Choice Survey Response Letter - SCL Draft Talking Points - SCL staff proposed

In response to direction to develop SCL talking points to support a dialogue with BPA. Staff have developed the following for consideration:

Proposed SCL Talking Points

- SCL values its relationship with BPA and wants BPA to offer products and services that bring value a continued relationship with BPA – positioning BPA to be the "Provider of Choice"
- The partnership between SCL and BPA has enabled SCL to provide benefits to the residents and businesses in the City of Seattle
- However, SCL has some concerns going into discussions and negotiations for Post-2028 contracts
    - Current Industry Challenges
        - Emerging markets
        - State and local policy changes, such as CETA
    - Future Challenges & Uncertainty
        - Effects of COVID-19
        - Increases and/or decreases in load due to:
            - Economic changes

        - Demographic changes
        - Electrification
    - Questions for BPA:
        - What are the major developments you, BPA, see for the time period affecting the next Power contract? What products, services, terms do you envision helping both BPA and customers manage these developments?
        - Do you envision legislative changes that may help BPA and customers navigate new markets, new regulations, BPA access to capital, other areas?
        - Would BPA consider a re-opener for major events, such as organized market development different from EDAM, new state-by-state regulations affecting your customers, other?
- Because of these challenges and uncertainties, SCL is interested in whether or not BPA may see these as material in planning the future products, services, and term for the post-2028 BPA contracts
    - SCL believes that flexibility and new products and services can assist in accommodating current challenges in the industry and future uncertainties
        - Term: Is less than 20 years something BPA will consider?
        - Resource additions and deletions: Will BPA consider changes to allow customers more flexibility to declare resources to serve load or not declare resources?

ROBIN H. CROSS | WHOLESALE CONTRACTS MANAGER
POWER MANAGEMENT DIVISION
Seattle City Light
robin.cross@seattle.gov
TEL (206) 684-3392 **FAX.** (206) 386-4555

From:	Munz,Paul G (BPA) - PSW-SEATTLE
To:	Wilson,Scott K (BPA) - PSW-6
Subject:	FW: Post 2028 Survey - BPA "Provider of Choice" - Potential agenda item for 10/1 BPA-SCL VP Mtg
Date:	Thursday, September 24, 2020 3:19:00 PM
Attachments:	SCL_Response_to_BPA_Post-2028_Survey.docx

Hi Scott,

Sorry for this late ask, but can you please read the attached SCL Provide of Choice letter and provide some initial (unofficial) BPA thoughts for talking point development for Emeka's senior staff, to prepare for the Emeka/BPA monthly meeting, scheduled for Thursday, Oct 1st? Emeka is hoping for a response/policy read from Kim T (and Joel?) on the points that Seattle made in the Provider of Choice letter.

FYI, Eric Espenhorst provided these additional questions for me to discuss tomorrow morning with Robin Cross (on a 9:30 a.m. phone call):

Subject: Draft Discussion talking points - SCL post 2028 BPA power survey response letter

Potential fodder for draft talking points:

What are the major developments you, BPA, see for the time period affecting the next Power contract? What products, services, terms do you envision helping both BPA and customers manage these developments?

Do you envision legislative changes that may help BPA and customers navigate new markets, new regulations, BPA access to capital, other areas?

Term: Is less than 20 years something BPA will consider?

Would BPA consider a re-opener for major events, such as organized market development different from EDAM, new state-by-state regulations affecting your customers, other?

Resource additions and deletions: Will BPA consider changes to allow customers more flexibility to declare resources to serve load or not declare resources?

City Light sees unprecedented uncertainty about load growth or loss even after the pandemic. How may BPA offer products, services, terms to allow customers to manage this uncertainty?

Thanks,

Paul
496-4021

From: Cross, Robin <Robin.Cross@seattle.gov>
Sent: Monday, September 21, 2020 6:40 AM
To: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>
Subject: [EXTERNAL] FW: Post 2028 Survey - BPA "Provider of Choice" - Potential agenda item for 10/1 BPA-SCL VP Mtg

Paul,
Emeka has requested that we develop discussion talking points for him to potentially use in the upcoming 10/1 BPA-SCL VP Mtg. Do you have a few moments to chat about our ideas so far and offer some thoughts of your own on setting it up for a successful conversation for Kim Thompson, Joel Cook and Emeka.
Thanks,
Robin

From: Cross, Robin
Sent: Wednesday, September 2, 2020 5:50 AM
To: Munz, Paul <pgmunz@bpa.gov>
Cc: Anyanwu, Emeka <Emeka.Anyanwu@seattle.gov>; Liechty, Joy <Joy.Liechty@seattle.gov>
Subject: Post 2028 Survey - BPA "Provider of Choice"

Paul,
Seattle City Light, ("Seattle") appreciates the opportunity to provide BPA early input on its post 2028 power sales agreements. Moreover, we value the time and effort the BPA Account Executives put into developing the "Post 2028" survey questions. That said, in an effort to provide BPA the broader context and drivers for Seattle's future needs, we've stepped back from answering the specific questions within the survey and focused on the key changes projected in the industry and the expectation that Seattle will need to be positioned to evolve and adapt. We look forward to the ensuing dialog and development process with BPA. If you have further questions, please feel free to contact Joy Liechty.

Thanks,
ROBIN H. CROSS | WHOLESALE CONTRACTS MANAGER
POWER MANAGEMENT DIVISION
Seattle City Light
robin.cross@seattle.gov
TEL (206) 684-3392 **FAX.** (206) 386-4555

From:	Thompson,Kim T (BPA) - PS-6
To:	Munz,Paul G (BPA) - PSW-SEATTLE
Cc:	Wilson,Scott K (BPA) - PSW-6
Subject:	FW: PNUCC SPC December 16 Meeting Materials
Date:	Wednesday, December 16, 2020 8:09:07 AM
Attachments:	PNUCC SPC packet 12.16.2020.pdf

Hi Paul – Sharing in case this is new to you too.

Best Regards,
Kim Thompson
Northwest Requirements Marketing | Vice President
BONNEVILLE POWER ADMINISTRATION
bpa.gov | P 503-230-3408 | C 971-352-2625

From: Cooper,Suzanne B (BPA) - PT-5 <sbcooper@bpa.gov>
Sent: Wednesday, December 16, 2020 8:01 AM
To: Thompson,Kim T (BPA) - PS-6 <ktthompson@bpa.gov>; Wilson,Scott K (BPA) - PSW-6 <skwilson@bpa.gov>
Subject: FW: PNUCC SPC December 16 Meeting Materials

FYI – Packet includes a presentation on Tacoma's 2020 IRP analysis including of RA and incorporation of CETA compliance.

From: Tomas Morrissey <tomas@pnucc.org>
Sent: Tuesday, December 15, 2020 3:08 PM
Subject: [EXTERNAL] PNUCC SPC December 16 Meeting Materials

To: The PNUCC System Planning Committee

As a reminder, we will meet tomorrow, December 16, from 9 AM to 11 AM, PST, via webinar only. The meeting materials are attached, the webinar information and agenda are below. The meeting will start with a presentation on the Tacoma Power 2020 IRP, have a first look at a new PNUCC project, and include a discussion on potential comments to the Northwest Power & Conservation Council on their forthcoming 2021 Power Plan.

Webinar info:

https://global.gotomeeting.com/join/316541557
United States: +1 (312) 757-3121
Access Code: 316-541-557

Agenda:

1. **Welcome & introductions (9:00 to 9:15 AM)**
   - Acknowledge PNUCC Antitrust Compliance Statement
   - Member news

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2. **Tacoma Power 2020 IRP (9:15 AM to 10:00 AM)**
   - *Ahlmahz Negash, Tacoma Power*

3. **Northwest trends project**

4. **Potential comments to the Power Council**

5. **Committee projects in 2021 (may get moved to January)**

Please contact me with any questions,

Tomás Morrissey
[redacted](mobile)

BPA-2020-01144-F 0804

From: Farleigh,Kevin S (BPA) - PSW-6
To: Munz,Paul G (BPA) - PSW-SEATTLE
Subject: RE: Tacoma Power SIG Slice PP
Date: Tuesday, December 8, 2020 10:18:46 AM
Attachments: Post-2028 slice product customer concepts v8.pdf

---

I think this is it. Enjoy!

From: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>
Sent: Tuesday, December 8, 2020 10:11 AM
To: Farleigh,Kevin S (BPA) - PSW-6 <ksfarleigh@bpa.gov>
Subject: FW: Tacoma Power SIG Slice PP

Hi Keven,

Do you have a copy of Tacoma Power's SIG PP that was shared with the other customers and the Slice team? The PP that communicates the wants of the Slice/Block customers for the Slice product for the new contracts?

Thanks,

Paul
(206) 496-4021

From: Munz,Paul G (BPA) - PSW-SEATTLE
Sent: Tuesday, December 8, 2020 9:55 AM
To: Bleifuss,Lindsay A (BPA) - PSW-6 <lableifuss@bpa.gov>
Subject: Tacoma Power SIG Slice PP

Hi Lindsay!

Do you have the Tacoma Power PP that was presented to the SIG recently covering the wants/needs of the Slice/Block customers for the Provider of Choice contracts?

I am looking for it!

Thanks,

Paul
(206) 496-4021

BPA-2020-01144-F 0805

From: Farleigh,Kevin S (BPA) - PSW-6
To: Munz,Paul G (BPA) - PSW-SEATTLE
Subject: RE: Tacoma Power SIG Slice PP
Date: Tuesday, December 8, 2020 10:18:46 AM
Attachments: Post-2028 slice product customer concepts v8.pdf

---

I think this is it. Enjoy!

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Sent: Tuesday, December 8, 2020 10:11 AM
To: Farleigh,Kevin S (BPA) - PSW-6 <ksfarleigh@bpa.gov>
Subject: FW: Tacoma Power SIG Slice PP

Hi Keven,

Do you have a copy of Tacoma Power's SIG PP that was shared with the other customers and the Slice team? The PP that communicates the wants of the Slice/Block customers for the Slice product for the new contracts?

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Paul
(206) 496-4021

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Sent: Tuesday, December 8, 2020 9:55 AM
To: Bleifuss,Lindsay A (BPA) - PSW-6 <lableifuss@bpa.gov>
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Hi Lindsay!

Do you have the Tacoma Power PP that was presented to the SIG recently covering the wants/needs of the Slice/Block customers for the Provider of Choice contracts?

I am looking for it!

Thanks,

Paul
(206) 496-4021

From: Munz,Paul G (BPA) - PSW-SEATTLE
To: Klumpp,Elizabeth C (BPA) - DIR-WSGL
Subject: RE: Washington Report: SCL conversation on BPA -CETA product; cap and trade bill in 2021
Date: Friday, November 20, 2020 2:28:00 PM

Nice edits and changes, Liz. Thanks!

From: Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>
Sent: Friday, November 20, 2020 2:06 PM
To: Thompson,Kim T (BPA) - PS-6 <ktthompson@bpa.gov>; Cook,Joel D (BPA) - P-6 <jdcook@bpa.gov>; James,Daniel M (BPA) - D-7 <dmjames@bpa.gov>; Cooper,Suzanne B (BPA) - PT-5 <sbcooper@bpa.gov>; Connolly,Kieran P (BPA) - PG-5 <kpconnolly@bpa.gov>; Spain,Alex J (MFE) (BPA) - PTF-5 <ajspain@bpa.gov>; Federovitch,Eric C (BPA) - PTM-5 <ecfederovitch@bpa.gov>; Wellschlager,John D (MFE)(BPA) - PTL-5 <jdwellschlager@bpa.gov>; Johnson,Anders L (BPA) - TPLE-TPP-2 <aljohnson@bpa.gov>; Kaseweter,Alisa D (BPA) - DI-7 <alkaseweter@bpa.gov>; Kitali,Salah H (BPA) - TP-DITT-2 <shkitali@bpa.gov>; Malin,Debra J (BPA) - PTL-5 <djmalin@bpa.gov>; Olive,J Courtney (BPA) - LP-7 <jcolive@bpa.gov>; Patton,Kathryn B (BPA) - PSS-SEATTLE <kbpatton@bpa.gov>; Bleifuss,Lindsay A (BPA) - PSW-6 <lableifuss@bpa.gov>; Farleigh,Kevin S (BPA) - PSW-6 <ksfarleigh@bpa.gov>; Hobson,Claire A (BPA) - PSW-6 <cahobson@bpa.gov>; Kruse,Pontip K (BPA) - PSE-MEAD-GOB <pkkruse@bpa.gov>; Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>; Normandeau,Mike (BPA) - PSE-RONAN <mrnormandeau@bpa.gov>; Perry,Marcus I (BPA) - PSW-SEATTLE <miperry@bpa.gov>; Rimmer,William T (BPA) - PSE-MEAD-GOB <wtrimmer@bpa.gov>; Ross,Hope E (BPA) - PSE-MEAD-GOB <heross@bpa.gov>; Schimmels,Nancy M (BPA) - PSE-MEAD-GOB <nmschimmels@bpa.gov>; Watts,Kirsten (BPA) - PSW-SEATTLE <rkwatts@bpa.gov>; Wilson,Scott K (BPA) - PSW-6 <skwilson@bpa.gov>
Subject: Washington Report: SCL conversation on BPA -CETA product; cap and trade bill in 2021

Wishing you a good weekend!

Washington Report November 20, 2020

Customer Conversations: How to Develop a BPA Power Product that Complies with CETA

At SCL's request, Paul Munz and I met with 13 managers and staff, including two officers – Emeka Anyanwu and Tom DeBoer to discuss how BPA plans to navigate CETA, in particular the 2026 no-coal requirement and our post-2028 contracts. It's pretty early to have any substantive answers and I emphasized that we don't yet. In part the conversation indicated that some of us are thinking along similar lines. CETA's no-coal requirement means BPA, as well as each Washington utility, will buy unspecified power in terms no longer than a month or will buy specified, non-coal resources - if BPA sells a compliant product. Washington utilities will pay $150/MWH for any power that is demonstrably not coal. SCL indicated that it will be looking for a BPA product to comply with CETA's 2045 carbon-free standard as its leadership will insist on SCL meeting the law. They asked about how we are going to handle our non-Washington customers' potential concerns about BPA's power product. We also discussed the potential for increased revenues from surplus sales to PSE, PAC, and Avista from selling a cleaner product. We discussed potential methods to approach compliance, and

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possible longer-term changes to the law, as well as the need to get resource planning and operation minds together to analyze possible pathways, and the need to discuss terms in contracts. Layered on top of this conversation is the reality that Washington legislators will re-introduce an economy-wide cap and trade bill in 2021. It's easy to imagine many more customer conversations along these lines.

Washington Legislators Expected to Re-introduce Economy Wide Cap and Trade Bill

The Washington legislature is expected to re-introduce an economy-wide cap and trade bill in January, 2021, and a Clean Fuels Standard for vehicles. Alisa Kaseweter and I have initiated conversations with PGP to start sorting out possible interactions between CETA and a cap and trade bill. Many of us can see *potential* value in having carbon regulations that 1. link to California's, and 2. establish economy-wide carbon regulations in Washington rather than just electricity regulations. Practically speaking, I hope a complex bill like cap and trade doesn't pass in a virtual legislative session given there have been no conversations among the parties on the language during the preceding months. Another update: the lead state lobbyists from PSE and Tacoma Power have left for new private sector lobbying positions.

Liz Klumpp
Washington Liaison | Bonneville Power Administration | o 360-943-0157 | m [redacted](b)(6)

BPA-2020-01144-F 0808

From: Munz,Paul G (BPA) - PSW-SEATTLE
To: Klumpp,Elizabeth C (BPA) - DIR-WSGL
Subject: RE: SCL - Nov. 20 11 a.m.: CETA Questions
Date: Monday, November 9, 2020 4:39:00 PM

Thanks!

From: Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>
Sent: Monday, November 9, 2020 4:10 PM
To: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>
Subject: SCL - Nov. 20 11 a.m.: CETA Questions

This is all I've heard to date. Don't have actual invite yet.

From: Klumpp,Elizabeth C (BPA) - DIR-WSGL
Sent: Friday, November 6, 2020 1:37 PM
To: Munz,Paul G (BPA) - PSW-SEATTLE <pgmunz@bpa.gov>
Subject: SCL: CETA Questions

Hold Nov. 20. Your calendar was open at 11.

Have a good weekend!

From: Droke, Mendy <Mendy.Droke@seattle.gov>
Sent: Friday, November 6, 2020 11:24 AM
To: Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>
Subject: RE: CETA Questions

Thanks Liz and I've asked Tom DeBoer to schedule a WebEx and send it along to you and Paul.

Mendy

From: Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>
Sent: Friday, November 6, 2020 11:21 AM
To: Droke, Mendy <Mendy.Droke@seattle.gov>
Subject: RE: CETA Questions

CAUTION: External Email

Thanks. The 20th works for me and Paul. I think we'd have more success with WebEx. I tried Teams recently and got rejected by our system. So, if you can use WebEx, that's easier for us.

You'll send a meeting invite when you finalize the schedule?

Thanks,
Liz

From: Droke, Mendy <Mendy.Droke@seattle.gov>
Sent: Friday, November 6, 2020 11:17 AM
To: Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>
Subject: RE: CETA Questions

Hi Liz,

We discussed it and I think 11/20 starting at 11 AM would be the best date for us as several of us aren't around next Friday. We would like to discuss:

- No coal attestation
- Longer term purchases (post 2028)
- What thoughts do you have on how your customers can comply?

I'll forward the meeting invite to you. Are you able to join Teams or should I change it to a WebEx platform?

Mendy

From: Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>
Sent: Friday, November 6, 2020 10:54 AM
To: Droke, Mendy <Mendy.Droke@seattle.gov>
Subject: RE: CETA Questions

CAUTION: External Email

Hi Mendy,

Let me know if you want to schedule me and Paul Munz to discuss this with your team.

Hope you are well. Fingers crossed.

Liz
c.(b)(6)

From: Droke, Mendy <Mendy.Droke@seattle.gov>
Sent: Friday, October 23, 2020 1:37 PM
To: Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>
Subject: CETA Questions

Hi Liz,

Hope you're staying healthy and sane. On our internal CETA workgroup call today, Josh Walters was discussing the Carbon Workgroup meeting and some questions arose around BPA purchases in terms of coal. We were wondering if you would be able to join one of our calls to talk through this issue. Specifically we're wondering:

- What will BPA purchases mean in 2028?

We may have some other questions as well and were hoping that Paul Munz (sp) could join too.

We meet every Friday from 11-12 via Microsoft Teams and if you don't have access, you can call in. Happy to put you first on the agenda and likely we wouldn't need more than 30 minutes. The team consists of:

- Tom DeBoer
- Emeka Anyanwu
- Aliza Seelig
- Annette Pearson
- Josh Walter
- Eric Espenhorst
- Paul Nissley
- Brian Hawksford (working on the equity issue)
- Ronda Strauch (equity issue)
- Kate Engel

Just let me know if you're interested and a date that works for you.

Thanks!

MENDY DROKE | **STATE GOVERNMENT AND LEGISLATIVE AFFAIRS ADVISOR**
SEATTLE CITY LIGHT
mendy.droke@seattle.gov
TEL (206) 684-8261 CELL (b)(6)
The nation's greenest utility | LinkedIn | Facebook

Paul munz

From:	Watts,Kirsten (BPA) - PSW-SEATTLE
To:	Munz,Paul G (BPA) - PSW-SEATTLE
Subject:	FW: Tacoma Power"s 2020 IPR, Post 2028, EE, and CETA
Date:	Monday, October 26, 2020 12:53:45 PM
Attachments:	2020IRP_TechnicalDocument_FINAL.pdf IRP2020 Public Summary-FINAL.pdf

Hello Paul. As promised.

I shared the technical document with the Slice Management Team under separate cover.

Today, I will forward the attached public summary to all other recipients of the technical summary. >> Kirsten

R. KIRSTEN WATTS
Power Services Customer Account Executive
Bonneville Power Administration • Seattle Office
Desk: 206.220.6762 • Cell: [redacted] • Fax: 206.220.6803

From: Watts,Kirsten (BPA) - PSW-SEATTLE
Sent: Friday, September 25, 2020 3:33 PM
To: Farleigh,Kevin S (BPA) - PSW-6 <ksfarleigh@bpa.gov>; Mohamoud,Farah A (BPA) - PSS-6 <famohamoud@bpa.gov>; Olive,Kelly J (BPA) - PSS-6 <kjmason@bpa.gov>; Klumpp,Elizabeth C (BPA) - DIR-WSGL <ecklumpp@bpa.gov>; Kaseweter,Alisa D (BPA) - DI-7 <alkaseweter@bpa.gov>; Patton,Kathryn B (BPA) - PSS-SEATTLE (kbpatton@bpa.gov) <kbpatton@bpa.gov>; Villalobos,Daniel P (BPA) - PEJB-MEAD-GOB <dpvillalobos@bpa.gov>
Cc: Wilson,Scott K (BPA) - PSW-6 <skwilson@bpa.gov>; Booth,Glen S (BPA) - KSL-4 <gsbooth@bpa.gov>; Lewis,Margaret L (BPA) - PEJB-6 <mllewis@bpa.gov>; Gillman,Richard A (BPA) - TSE-TPP-2 <ragillman@bpa.gov>
Subject: Tacoma Power's 2020 IPR, Post 2028, EE, and CETA

Hello. I am sharing Tacoma Power's final 2020 Integrated Resource Proposal, or IRP, with you because it contains interesting and valuable information about the utility's positions on doing business with BPA post-2028, conservation, and CETA implementation. Check out the utility board resolution and the executive summary for concise insights.

Tacoma Power believes it and its customers will be best served by continuing to operate under the Slice/Block product going forward BUT will continue to explore other options. Detailed references to the BPA contract can be found throughout the document.

You will find nods toward the continued recognition and planned use of conservation as a least cost resource in this document. Demand response projects may be in Tacoma's future.

CETA and the current uncertainty about its impacts on customers are thoroughly addressed, starting in section 4.

Please let me know if you have any questions. Enjoy the weekend. >> Kirsten

R. KIRSTEN WATTS
Power Services Customer Account Executive

BPA-2020-01144-F 0812

Bonneville Power Administration • Seattle Office
Desk: 206.220.6762 • Cell: [redacted] • Fax: 206.220.6803

BPA-2020-01144-F 0813

2020
Integrated Resource Plan

TACOMA POWER
TACOMA PUBLIC UTILITIES

BPA-2020-01144-F 0814

RESOLUTION NO. U-11186

A RESOLUTION relating to the approval and adoption of Tacoma Power's 2020 Integrated Resource Plan.

WHEREAS Washington State regulations concerning Electric Utility Resource Plans, (Chapter 19.280 RCW), requires the Department of Public Utilities, Light Division (d.b.a. "Tacoma Power"), to develop and update integrated resource plans (IRP) and submit such plans to the State Department of Commerce by September 3, 2020, and

WHERES key findings from the 2020 IRP, on file with the Clerk of the Board, are summarized below:

1. It is not in the interest of Tacoma Power Customers to renew the Columbia Basin Hydro (CBH) contracts.

2. It is unlikely to be in the interest of customers for Tacoma Power to forego its access to a contract for BPA preference power and replace it with other non-emitting resources, but Tacoma Power should continue to explore this question.

3. Renewing the Slice/Block product is likely the lowest cost option and presents the lowest financial risk for our customers but adding 10MW of demand response is likely to be a low-cost, low-risk way to improve adequacy of the Slice/Block product in extreme low water conditions.

4. It is not in the interest of Tacoma Power customers to acquire a wind or solar resource immediately to partially offset BPA purchases come 2020, but Tacoma Power will continue to evaluate this question in future IRPs.

5. The IRP includes acquisition of the 10 and 20-year conservation potentials identified in Tacoma Power's 2020 Conservation Potential Assessment (CPA) and there may be a new promising role for a moderate demand response acquisition.

WHEREAS the 2020 IRP, on file with the Clerk of the Board, recommends the following components in the resource plan:

1. Acquire all economic achievable conservation identified in the 2020 CPA;
2. Do not renew CBH contracts when they expire;
3. Plan to renew the BPA Slice/Block product when it expires in 2028 but continue to explore this question in future IRPs; and
4. Acquire 10MW of demand response by 2024 if it is feasible to do so cost-effectively.

WHEREAS RCW 19.280.050 requires the governing body of the electric utility to approve such plan after public notice and hearing, and

WHEREAS the Board provided public notice and conducted a public hearing on the IRP on August 12, 2020, and

WHEREAS Tacoma Power requests that the Board approve and adopt the 2020 IRP that is on file with the Clerk; Now, therefore,

BE IT RESOLVED BY THE PUBLIC UTILITY BOARD OF THE CITY OF TACOMA:

Tacoma Power's 2020 Integrated Resource Plan, which is on file with the Clerk, is approved, and the appropriate officers of the City are directed to file such plan with the state of Washington in accordance with Chapter 19.280 RCW.

Approved as to form:

/s/
Chief Deputy City Attorney

Chair

Secretary

Clerk

Adopted 8-12-20

BPA-2020-01144-F 0816

Tacoma Power 2020 Integrated Resource Plan

Technical Document

1 EXECUTIVE SUMMARY

1.1 ABOUT TACOMA POWER AND OUR INTEGRATED RESOURCE PLAN

Tacoma Power is a national leader in providing renewable, reliable, and affordable energy. Virtually all the electricity we deliver to our retail customers comes from hydroelectric sources. A little more than half of comes from our long-term contract with the Bonneville Power Administration (BPA). We produce most of the rest ourselves at the four hydroelectric generation projects we own and operate. We also contract with hydroelectric projects in central Washington for a small amount of our power. Our portfolio is generally "carbon-negative", meaning that we generate more carbon-free power than our retail customers use, and we export the surplus to other customers in the region.

The Integrated Resource Plan (IRP) is a tool to help us plan for an uncertain future so that we can continue to meet our customers' needs for decades to come. Findings in the IRP represent our resource plan based on the best information available at the time of its creation. However, the plan may change as new information becomes available. We complete a full refresh of the IRP about every four years and make small updates in the interim every two years.

1.2 KEY FINDINGS

The 2020 IRP answers five questions to determine our preferred portfolio. Answers to the questions are below. We summarize the resource plan in Table 1.

1) **Should we renew our CBH contracts, which begin to expire in 2022?**

We receive a small amount of power from Columbia Basin Hydropower (CBH) through contracts for 50% of the output of five hydroelectric projects on irrigation canals. The irrigation season limits supply primarily to summer months. Our contracts start to expire in 2022 and terminate in 2027. The 2020 IRP analysis finds that renewing the CBH contracts does not improve resource adequacy and adds around $55.5 million in expected costs over the 20-year study period. As a result, it is not in the best interest of our customers to renew the CBH contracts.

2) **Should we renew our BPA contract in 2028?**

Our largest contract power purchase is with BPA. As a Washington State customer-owned utility, we are one of BPA's "preference customers" and have been a customer of BPA since 1940. The current contract with BPA ends on September 30, 2028. The 2020 IRP takes a first look at the question, "Should we renew our contract with BPA in 2028?" Based on our analysis, it is unlikely in the interest of our customers to forego our access to BPA preference power and replace it with other non-emitting resources. Replacing BPA with sufficient quantities of wind, demand response, and other generation to maintain reliability is very difficult and could cost between $13 and $30 million more per year on

average than the BPA options. However, we will continue to explore this question and other options available as 2028 draws near.

3) If we were to renew our BPA contract in 2028, which BPA product looks most promising?

We receive energy through a hybrid Slice/Block product under our current contract. Under the "Slice" portion of the contract, we receive approximately 3% of the wholesale power that BPA produces, an amount that varies by year and by season depending on streamflow conditions. Under the "Block" portion of the contract, we are guaranteed a certain amount of energy every month that does not change with streamflow conditions. About half of the firm power (i.e. power we can rely on under any water conditions) we receive from BPA comes from the Slice portion of the contract. Half comes from the Block portion.

In our 2020 IRP, we took a fresh look at the question of whether we might benefit from changing to a Block-only product (Shapeable Block[1]), which would give us a guaranteed amount of energy each month with some flexibility to determine the timing of when we receive the energy across certain hours of the day. Our analysis suggests that renewing our BPA contract with Slice/Block is the lowest cost option and presents the least financial risk but can present some minor adequacy risk in extreme low water conditions. We can temper these minor adequacy risks with small capacity additions at a lower cost than switching to the Shapeable Block product.

A critical assumption in our 2020 IRP is that the BPA product options available under the current contract are the ones that BPA will offer again in the next contract. We will continue to tackle the question of BPA product choice in our future IRPs as more information about future products becomes available.

4) If we were to renew our BPA contract in 2028, could there be value in diversifying our portfolio by replacing part of our BPA contract with another source of non-emitting generation, like wind or solar?

We examine whether there might be value in some diversification of our BPA contract by acquiring another resource such as wind or solar and using it to reduce the amount of power we get from BPA. Our analysis finds that replacing BPA partially with wind or solar tends to worsen resource adequacy. If there is a desire to diversify with wind or solar, adding 80MW of wind without replacing BPA would be the lowest cost way to include wind or solar in our portfolio. Doing so would improve adequacy but at a much higher cost and financial risk than adding 10MW of demand response. Therefore it is not in the best interest of our customers to acquire a wind or solar resource immediately. We will continue to evaluate this question in our future IRPs.

5) What (if any) other resources should we acquire?

For years, conservation has been the only resource that we have acquired, and we remain committed to helping our customers reduce their energy use defer the need to invest in costly generation. Our resource plan includes the acquisition of the 10 and 20-year conservation potentials identified in our 2020 Conservation Potential Assessment (CPA).

[1] The actual name of this product is Block with Shaping Capacity, but we use the term Shapeable Block throughout the IRP.

BPA-2020-01144-F 0818

We also identify a new, promising role for a moderate amount of demand response in the 2020 IRP. Adding 10MW of demand response was found to be the lowest cost way to improve the adequacy of our Slice/Block portfolio and eliminate most potential adequacy risks – even under extreme low water conditions.

Table 1: Summary of Tacoma Power 2020 resource plan

Resource	Resource Plan
Tacoma Power hydro generation	Assume continued operation at current levels
Conservation	Acquire CPA economic potential: 26.7 aMW by 2029
BPA contract	Renewing Slice/Block at current resource levels in 2028 looks most promising
Columbia Basin Hydro (CBH) contract	Allow contracts to expire without renewal between 2022 and 2026
Demand Response	Add 10MW of DR by 2024

1.3 IRP ACTION ITEMS

Table 2 describes our resource plan action items over the next two years and the next ten years, categorized by type of action.

Action items relating to **resource acquisition or retirement** follow from our resource plan, which includes acquiring all cost-effective conservation, acquiring 10MW of demand response and allowing our Columbia Basin Hydro (CBH) contracts to expire.

Action items relating to **further resource investigation** over the next two year focus on the two resources we include in our resource plan—BPA products and demand response—and, in the longer run, on resources that may hold particular promise for the future, including pumped storage.

Two-year action items relating to the **continued improvement of our modeling tools** and analysis approach represent our priorities. Over the longer run, we will continue to make additional improvements.

Action items relating to **equity** are consistent with the City of Tacoma and Tacoma Public Utilities priorities to promote equity and include developing of a metric to take equity into account in resource decisions and continuing to improve the inclusiveness of IRP outreach efforts over the next two years.

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Table 2: 2020 IRP Action Items

	Next 2 years	Next 10 years
Resource Acquisition/ Retirement	1. Do not renew CBH and notify parties of CBH renewal decision 2. Acquire 2-year CPA potential	3. Acquire our 10-year CPA target 4. Pilot cost-effective demand response options and acquire 10MW of demand response
Further Investigation into Resources	5. Actively participate in discussions with BPA about future product options 6. Conduct a demand response (DR) "potential assessment"	7. Continue to evaluate BPA renewal options 8. Continue to investigate the value of pumped storage 9. Continue to follow the development of new technologies
Continue Improving Modeling & Analysis	10. Refine climate change modeling 11. Refine approach to modeling DR 12. Model EE as a resource in system model 13. Refine modeling of storage in WECC model & system model 14. Analyze additional scenarios: vehicle & building electrification, ban on natural gas generation in WA, lower Snake River dam removal	15. Continue improving functionality of our system model (SAM)
Equity	16. Develop metric(s) to account for equity in resource acquisition decisions 17. Continue to improve inclusiveness of stakeholder outreach	18. Fully incorporate equity into resource acquisition decisions

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2 INTRODUCTION

2.1 ABOUT TACOMA POWER

Tacoma Power has been publicly-owned since 1893. We are a division of Tacoma Public Utilities, which is governed by a five-member Public Utility Board. We were established in 1893 when the citizens of Tacoma voted to buy the privately-owned Tacoma Light & Water Company. Local citizens believed that public ownership and local control would give them a higher caliber of services and the ability to maintain control over them. That decision paved the way for us to build one of the finest and most reliable electric systems in the United States.

Today, we generate, transmit, and distribute electricity and provides energy and telecommunication services in an increasingly competitive marketplace. We provide electric service to nearly 179,000 customers across 180 square miles of service area in the cities of Tacoma, Fircrest, University Place, Fife, parts of Steilacoom, Lakewood, Joint Base Lewis-McChord, and unincorporated Pierce County as far south as Roy.

2.1.1 Current resource portfolio

We are a national leader in providing renewable, reliable, and affordable energy to electricity customers. Virtually all the electricity delivered to retail customers comes from hydroelectric sources. We produce a little less than half at four hydroelectric generation projects that we own and operate: the Cowlitz River Project, Cushman Hydro Project, Nisqually River Project, and Wynoochee River Project. We contract with other hydroelectric projects for the remainder. Our portfolio is generally "carbon-negative", meaning that we generate more carbon-free power than our retail customers use, and we export the surplus to other customers in the region.

For years conservation has been the only resource that we have acquired, and we remain committed to helping our customers reduce their energy use and defer the need to invest in costly generation. We are a leader in energy conservation and have a long history of working with our customers to identify and acquire cost-effective energy efficiency measures. Thanks to our investments in conservation, our utility and customers have accumulated enough savings since 2007 that each year we save an amount equivalent to the power we generate at Mayfield Dam.

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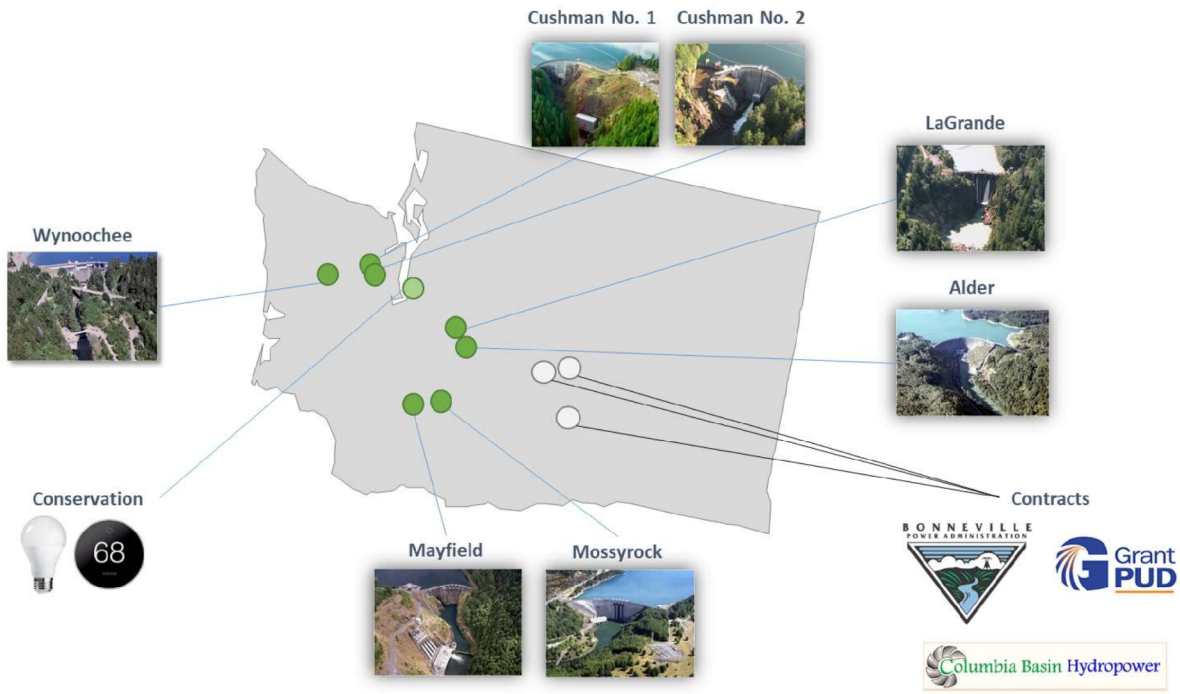

Figure 1: Tacoma Power's resource portfolio

Our resources usually provide more electricity than needed to serve retail load. When we have surplus electricity, we sell it in the wholesale market. The revenue from these sales helps us maintain electric rates that are among the lowest in Washington and the nation. We also occasionally enter into short-term purchases when system generation is not well matched with loads, or to take advantage of wholesale market pricing differentials.

2.1.2 Transmission

We own and operate a transmission system comprised of 115 and 230 kV facilities in select portions of Western Washington. The network interconnects our retail distribution network with the BPA regional transmission system, adjacent utility systems, and three of our major hydroelectric generation projects. As a result, it plays an essential though incomplete role in facilitating the delivery of energy from the resources in our energy portfolio.

BPA is the dominant provider of transmission service in the Pacific Northwest, owning and operating roughly three quarters of the high voltage transmission facilities in the four-state region. For many, BPA transmission service is the means to receive and deliver power. BPA markets transmission service through an Open Access Transmission Tariff (OATT) framework and we currently purchase 801 MW of long-term, point-to-point (PTP) transmission service from BPA. Of this quantity, we reserve 701 MW for delivery of energy from certain resources in our portfolio (i.e., BPA federal generation resources, CBHP, Grant County PUD, and Wynoochee) to our local transmission system. We use the remaining 100 MW to market surplus energy to others when surplus energy is available. The BPA transmission system also supports the Cowlitz Exchange, which allows us to deliver energy from the Cowlitz River Project without needing to purchase PTP transmission service.

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2.2 About the Integrated Resource Plan

The Integrated Resource Plan (IRP) is a tool to help us plan for an uncertain future so that we can continue to meet our customers' needs for decades to come. Our IRP looks out over 20 years. Findings in the IRP represent our resource plan based on the best information available at the time of its creation. However, the plan may change as new information becomes available. We complete a full refresh of the IRP about every four years. We also revisit and make small updates to the plan in the interim every two years. We conducted our last full IRP refresh in 2015, and made an update to it in 2017.

2.2.1 Key questions in the 2020 IRP

We set out to answer several priority questions in the 2020 IRP:

1) **Should we renew our CBH contracts, which begin to expire in 2022?**

We receive a small share of our power (roughly 3% of our generation in an average year) from Columbia Basin Hydropower (CBH) through contracts for 50% of the output from five hydroelectric projects on irrigation canals. Supply is limited to the irrigation season (mainly summer months). Our contracts begin to expire in 2022 and fully terminate in 2027. Because our contracts begin to expire in the near future, a key question for this IRP is whether we should renew our contracts with CBH or let them expire.

2) **Should we renew our BPA contract in 2028?**

Our largest power purchase contract is with Bonneville Power Administration (BPA). BPA sells power from federally-owned hydropower projects on the Columbia and Snake rivers, several renewable projects in the Pacific Northwest and the Columbia Generating Station, the region's sole nuclear power plant. The Northwest Power Act requires BPA to provide power to each requesting preference customer (municipal, PUD, and cooperative utilities) to meet its firm "net requirement". Each utility's need (i.e. the difference between its load and its existing supply of other generating resources) serves as the basis for this calculation. As a municipal utility, we are one of BPA's "preference customers" and have been a BPA customer since 1940.

Our current contract with BPA ends on September 30, 2028. This IRP takes a first look at the question "should we renew our contract with BPA in 2028?" The next few IRPs will continue to evaluate this question as the 2028 date approaches.

3) **If we were to renew our BPA contract in 2028, which BPA product looks most promising?**

We receive energy through a hybrid Slice/Block product under our current contract. Under the "Slice" portion of the contract, we receive approximately 3% of the wholesale power that BPA produces, an amount that varies by year and by season depending on streamflow conditions. Under the "Block" portion of the contract, we are guaranteed a certain amount of energy every month that does not change with streamflow conditions. About half of the firm power (i.e. power we can rely on under any water conditions) we receive from BPA comes from the Slice portion of the contract. Half comes from the Block portion.

A significant challenge associated with the "Slice" portion is that water inflows are hard to predict. Rainfall and snowmelt can vary from month to month and year to year. As a result, operating the "Slice"

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part of the contract is complex and requires specialized computer programs and a constant stream of updated information.

Our 2015 IRP tackled the question of whether our utility might benefit from changing products when we had the opportunity to switch from Slice/Block to a different, more stable Block-only product (Shapeable Block[2]), which would give us a guaranteed amount of energy each month with some flexibility to determine the timing of when we receive the energy across certain hours of the day. The 2015 analysis found that, despite the complexities of the Slice product, Slice/Block was projected to provide a net value of $6.8 million per year to our customers.[3] We take a fresh look at this question in our 2020 IRP.

We make the critical assumption in our 2020 IRP that the BPA product options available in our current contract will be offered again in the next contract. We will continue to tackle the question of BPA product choice in future IRPs as more information becomes available about future products.

4) **If we were to renew our BPA contract in 2028, could there be value in diversifying our portfolio by replacing part of our BPA contract with another source of non-emitting generation, like wind or solar?**

We rely on BPA for about half of our power supply in an average year. Another question that we start to examine in the 2020 IRP is whether there might be value in some diversification of our BPA contract by acquiring another resource such as wind or solar and using it to reduce our BPA net requirement.

Like us, BPA must charge cost-based rates. The advantage of this approach is that rates are not designed to maximize BPA profits but rather just to cover costs. However, a risk exists that BPA rates could begin to increase substantially if BPA costs begin to rise in the future due to factors such as increased fish protection costs, removal of hydrogenation dams or poor financial management. This IRP starts to examine whether there is some value in diversifying our power supply as a way to mitigate this risk.

5) **What (if any) other resources should we acquire?**

Are there any other resources (for example, conservation) that we should include in our resource plan?

2.2.2 Community input

Community input is an integral part of the development of each IRP. The community input process for the 2020 IRP centered on a series of stakeholder workshops about the IRP between February and July. All IRP workshops were open to the public, and we posted meeting materials (including video recording of each workshop) on our IRP webpage.[4] Due to COVID-19, we held three of the four workshops virtually. We sent meeting reminders to known stakeholders with interest in the IRP process and advertised meetings on TPU's homepage card and on TPU's social media sites. Attendance ranged from 13 to 15 external stakeholders. We addressed and considered all comments provided by our stakeholders and incorporated some suggestions into our modeling in this IRP (i.e. included demand response as a resource) or, due to time constraints, committed to include their suggestions in the next IRP.

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[2] The actual name of this product is Block with Shaping Capacity, but we use the term Shapeable Block throughout the IRP.

[3] https://www.mytpu.org/wp-content/uploads/2015TechnicalAppendix_BPA-Products-Analysis.pdf

[4] https://www.mytpu.org/about-tpu/services/power/integrated-resource-plan/#pattern_1

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3 REVIEW OF THE LAST IRP

We completed our last full IRP in 2015 and updated it in 2017. The 2017 update examined the impact of revised input assumptions, provided a progress report on our 2015 action plan, and teed up the focus for the next IRP. Ultimately, the update to our 2017 IRP indicated that we would be able to meet our expected customer demand for electricity over the next 20 years with our existing resource portfolio plus projected energy conservation acquisition. However, given the impending expiration of long-term power contracts representing over 50% of our generation portfolio, the 2017 IRP also recommended that future analyses consider alternatives to our existing contracts.

3.1 ACTION ITEMS FROM 2017 IRP

We developed our 2017 IRP action plan to address uncertainty in our future planning landscape. These short-term action items called on us to:

1) Acquire 9.4 average megawatts of conservation in the 2018-2019 biennium
2) Investigate the future value of flexible capacity
3) Explore expansion of the IRP to include Distributed Energy Resource (DER) planning
4) Investigate resource planning tools and analysis methodologies

For each of these 2017 action items, we have either met or are on track to meet the specified objectives.

Action Item 1 - Acquire 9.4 average megawatts of conservation in the 2018-2019 biennium: We consistently meet or exceed our conservation targets. For the 2018-2019 biennium, we acquired 14aMW of conservation, nearly 40% more than our I-937 conservation target of 9.4aMW. Conservation acquired in excess of the target can carry over to the next biennium and allows us to manage uncertainty. Figure 2 compares our targeted and achieved conservation for the past four biennia.

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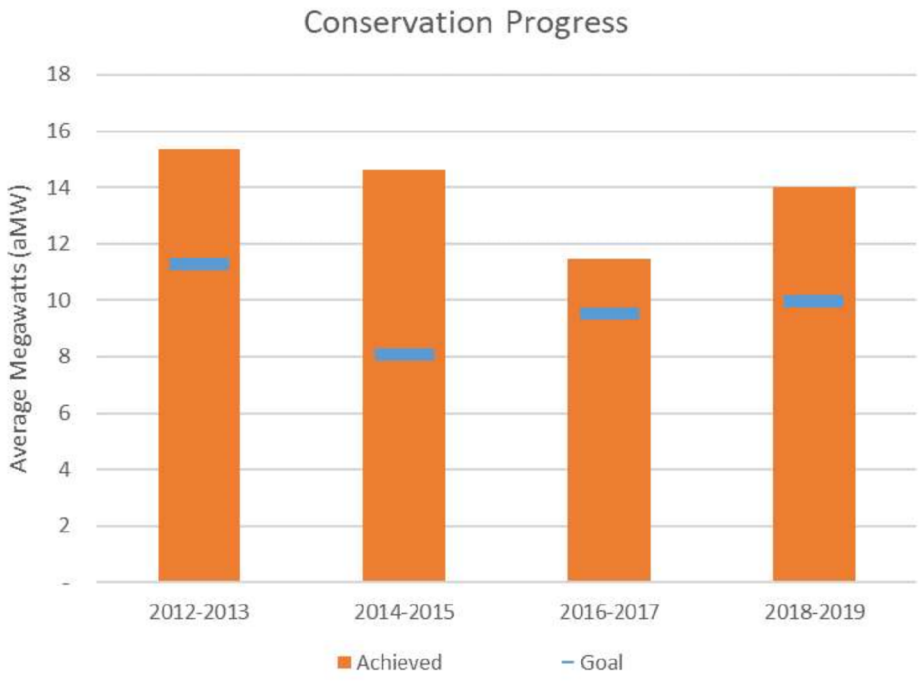

Figure 2: Conservation acquisition 2012-2019

Action Item 2 - Investigate the future value of flexible capacity: In 2018, Power Management explored various methodologies for estimating the value of capacity in order to more consistently value both traditional resources as well as new, emerging resources. Appendix A provides a discussion of the study and its methodology. Since the completion of the 2018 study, we have continued to improve modeling tools in order to more accurately assess the value of flexible capacity.

Action Item 3 - Explore expansion of the IRP to include Distributed Energy Resource (DER) planning: Over the past few years, there has been an increased interest from our customers in various types of distributed energy resources, particularly demand response (flexible load). Given the potential value of these distributed energy resources to provide capacity value, it has become necessary to consider these resources in our IRP. While we have made considerable progress towards developing the modeling capability to perform DER valuation analyses, we still have quite a bit more work to do to fully accomplish this goal.

Incorporating a variety of DERs in the IRP will require extensive improvements to our system model (called SAM). Due to time and human resource constraints, the current version of SAM only models a simple type of industrial demand response that is always available and can reduce load on short notice. However, future versions will be able to model more complex price-based demand response as well as managed charging loads and highly flexible loads, such as electrolyzer loads. We also expect the SAM model to include conservation as a potential resource that can be adjusted rather than as a predetermined adjustment to load. By incorporating these resources into our modeling tools, we can

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more appropriately address our statutory requirement to consider supply-side resources and demand-side resources on an equal footing.

Our development of the SAM model has made expansion of the IRP to include a variety of DERs possible. Still, for DERs to be fully incorporated into planning, a parallel analysis of the distribution system will be necessary. As of now, the IRP models do not include distribution-level analysis capabilities.

Action Item 4 - Investigate resource planning tools and analysis methodologies: Prior to 2015, we relied on AURORA XMP, a production cost model software, for wholesale electric price forecasting. Although this software was sufficient for modeling the bulk power system as a whole, it was not very accurate in modeling reservoir hydro systems. The AURORA software does not model hydro as systems of rivers and reservoirs. Rather, hydro generation is modeled as monthly buckets of energy with various operational constraints. Given Tacoma's portfolio is nearly 100% hydro, the planning group in 2015 began to use a new production cost model software from Energy Exemplar called PLEXOS. Unlike AURORA, PLEXOS can model complex systems of rivers and reservoirs as well as both built-in and custom operational constraints. The 2015 and 2017 IRP analyses were performed using PLEXOS. Unfortunately, PLEXOS had a number of issues. It proved difficult to model hydro constraints in PLEXOS without running into solution infeasibilities. Furthermore, the long-term capacity expansion feature was time consuming and seemingly intractable.

In 2018, the planning group explored alternatives to PLEXOS, including a suite of tools from ABB as well as AURORA from EPIS (now Energy Exemplar). In terms of grid-level production cost modeling, all of the potential software options were comparable. But for modeling Tacoma's hydro systems accurately, none of the tools showed promise.

Given the performance issues with off-the-shelf modeling tools, Power Management's operations group developed an in-house model of our hydro system (SAM). This allowed us to revert back to AURORA for our price forecast and capacity expansion modeling. AURORA was selected because it is the tool of choice for most Northwest utilities and regional entities and would allow for straightforward regional collaboration and comparison of modeling setup and results. For our system resource adequacy and portfolio optimization modeling, we use SAM coupled with various analytical and data visualization tools such as Excel, R, Python, MATLAB, and Tableau.

4 WHAT'S NEW SINCE THE LAST IRP?

4.1 CHANGES TO THE PLANNING ENVIRONMENT

4.1.1 Clean Energy Transformation Act (CETA)

On May 7, 2019, Governor Jay Inslee signed into law the Clean Energy Transformation Act (CETA) (E2SSB 5116, 2019)[5], which commits Washington to an electricity supply free of greenhouse gas emissions by 2045. This landmark Act imposes three major clean energy mandates on Washington electrical utilities, including both investor-owned and consumer-owned utilities, as well as planning and reporting

[5] https://lawfilesext.leg.wa.gov/biennium/2019-20/Pdf/Bills/Session%20Laws/Senate/5116-S2.SL.pdf

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requirements discussed in detail below. CETA outlines a number of new requirements for utilities, including new compliance standards and new planning and reporting requirements.

4.1.1.1 Compliance standards

There are four key compliance standard under CETA.

- **Coal elimination standard:** This first compliance standard goes into effect on December 31, 2025, and mandates that electric utilities must eliminate coal–fired resources from their allocation of electricity used to serve retail customers. CETA provides an exemption from this standard for purchases of electricity where the source is unknown at the time of purchase for a term that does not exceed one month.
- **Greenhouse gas neutral standard:** Beginning January 1, 2030 through December 31, 2044, all sales of electricity to retail customers must be greenhouse gas neutral. To achieve compliance with this standard an electric utility must use electricity from renewable resources and non-emitting electric generation in an amount equal to one hundred percent of the utility's retail electric loads over each multi-year period. To comply with the GHG Neutral Standard, an electric utility must pursue all cost-effective, reliable and feasible conservation and efficiency resources to reduce or manage retail electric load. Alternative compliance activities may use up to 20 percent of a utility's compliance obligation. Alternative compliance includes the use of unbundled renewable energy credits (RECs)[6], including EIA qualifying RECs, energy transformation projects, or alternative compliance payments. For example, beginning in 2030, if a utility meets 100 percent of their load with renewable resources, non-emitting resources or I-937 RECs, they are considered in compliance with this act and I-937.
- **100% Clean standard:** By January 1, 2045, all electricity sold in Washington, 100 percent of all electricity sales to retail electric customers must be from non-emitting and renewable resources. Utility compliance is demonstrated on an annual basis. In planning to meet this standard, an electric utility must pursue all cost-effective, reliable, and feasible conservation and efficiency resources and demand response. Additionally, in making new investments targets should be achieved at the lowest reasonable cost considering risk.
- **Cost cap:** An investor-owned utility or a consumer-owned utility is considered in compliance with the GHG Neutral or 100 Percent Clean standards of CETA if, over a compliance period, the average annual incremental cost of meeting the standard meets or exceeds a two percent increase of the utility's retail revenue requirement above the previous year.

4.1.1.2 Planning and reporting requirements

CETA also outlines several new planning and reporting requirements, including new IRP requirements and a requirement to develop a Clean Energy Implementation Plan (CEIP).

- **Integrated Resource Plans (IRP):** CETA expands current requirements of the state IRP law. Beginning in 2022 utilities must include additional assessments and forecasts in their IRP process to ensure that utilities are appropriately planning to meet CETA clean energy standards. Our

[6] Renewable energy credits represent the renewable attributes of energy sources like solar or wind power. When buying unbundled RECs, one pays only for the renewable attributes of that power but does not pay the cost of the power itself. Once a REC has been unbundled (or stripped) from energy produced by a renewable resource, that energy is no longer considered "clean".

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