

2018 Net Requirement Determination and Response to Comment.

September 15, 2017

Net Requirement Transparency Notice for FY 2018.

On August 10, 2017 BPA published Fiscal Year (FY) 2016 actual and FY 2018 forecast of Total Retail Load (TRL) and Dedicated Resource data for its Slice/Block and Block customers who buy on a planned load basis. BPA's notice to all customers and interested parties asked for comment on the Net Requirements as specified in BPA's 2007 Long-Term Regional Dialogue Final Policy (Regional Dialogue Policy) and section 17.7 of the Regional Dialogue Contract High Water Mark Contract (CHWM Contract). BPA noted that it would describe any changes from these initially published data used to calculate Slice/Block and Block customers' Net Requirements for FY 2018. In the FY 2018 Net Requirements data BPA highlighted the concern in forecasting the loads of Cowlitz Public Utility District No. 1 (Cowlitz), noting the change of 100 aMW in the Cowlitz load forecast.

Cowlitz had indicated that one of its consumers, North Pacific Paper Company, LLC (NORPAC) was evaluating a reduction in operations by 100 aMW effective at some point in October of 2017. BPA issued its Net Requirements public notice on August 10, 2017, eight business days later than anticipated by the CHWM Contract in order to accommodate NORPAC's request for time to communicate to its employees regarding the challenges they face and its potential affect. BPA's notice expressed its concerns that the proposed Cowlitz load forecast would significantly underestimate the load at the NORPAC facility, and that the facility may continue to take service and operate at up to current levels. BPA identified and sought comment on the following four load forecast options:

- *Option 1:* BPA could accept the new Cowlitz forecast of 80 annual aMW.
- *Option 2:* BPA includes the 180 annual aMW forecast of the load in our final forecast for Cowlitz.
- *Option 3:* To balance the load uncertainty with potential take-or-pay impact, BPA would seek settlement with Cowlitz including a liquidated damages contract provision that will offer BPA financial protection in the event the actual load at the facility exceeds Cowlitz's load forecast of 80 annual aMW. This would be designed to retain PF equivalent revenue for load amounts above 80 annual aMW.
- *Option 4:* Cowlitz's forecast is based on one of three lines at the facility not operating. Under this option BPA would require that Cowlitz purchase power at a PF equivalent price to serve the full amount of the third line load for the remainder of the fiscal year were it to operate prior to April 2018. If the line does not operate prior to April 2018 then there would be no requirement to purchase power for it during FY 2018.

BPA received comments from twenty-six stakeholders, including twenty-two comments from CHWM Contract customers and customer associations. Many comments including those of the Public Power Council (PPC) and Seattle City Light (Seattle) highlighted the importance of continued partnership in BPA's ongoing efforts to improve our competitive position and to help mitigate the challenging economic conditions that the region and customers like NORPAC face. The comments show a solid understanding of the BPA financial cost and rate implications embodied in the take-or-pay provision of the CHWM Contracts balanced with empathy to the challenges that Cowlitz, its consumer NORPAC, and the Longview community face. BPA understands that decisions made around this and other load forecast issues involve real impacts on the economic well-being of communities, in which BPA's utility customers serve their consumers. BPA has not previously deemed it necessary to have a public discussion around the Administrator's forecast decision on an individual customers' Net Requirement calculation. BPA has considered all comments on the options and the related issues prior to making BPA's Net Requirement determination.

Background and History.

BPA's Regional Dialogue Policy established policy and principles governing service to BPA's public utilities under the then newly proposed CHWM Contracts. In Section II.5 Net Requirement Calculations, BPA stated its policy on determining its contract requirement load obligations to public utilities and cooperatives under section 5(b)(1) of the Northwest Power Act that sets the amount of federal power the customer buys that is not being served by the customer's own Dedicated Resources. Page 11 of the Regional Dialogue Policy states in part:

“Consistent with BPA's historical utility practice and its obligations under the Northwest Power Act, BPA will calculate each customer's net requirement load annually to determine the amount of power it is eligible to purchase from BPA that year. For transparency, BPA will also make future net requirement amounts and calculations publicly available.”

BPA annually reviews its customer's TRL and Dedicated Resource information in a process beginning June 30 of each year, and consistent with section 1.1 of Exhibit A of the CHWM Contract, informs the customer of whether BPA determines the forecast submitted to be reasonable or not reasonable by July 31. For FY 2018, BPA accepted most forecasts or made minor adjustments to some. The forecast received from Cowlitz proposed a load reduction at the NORPAC paper mill from 209 aMW in FY 2017 to 80 aMW in FY 2018. The NORPAC load has been operating at around 180 aMW in FY 2017. Cowlitz purchases power at wholesale from BPA under the Slice/Block and Block CHWM Contract. BPA questioned this large reduction in load of 100 aMW. After several meetings with Cowlitz and NORPAC, BPA informed Cowlitz that it was questioning the reasonableness of its forecast of load for FY 2018 and that BPA may choose to substitute its own forecast.

The CHWM Contracts reserve the decision on what load forecast will be used for the BPA Administrator, based on the available information at the time. The Administrator is only allowed by statute to serve the Net Requirement load of the customer and therefore has to reserve the decision regarding the amount of power BPA provides to utilities purchasing on a planned load basis at the Tier 1 Rate firm power rates from BPA.

Under the Slice/Block and Block CHWM Contracts BPA establishes an annual load forecast for each Fiscal Year. Once that forecast is set the financial risk of the actual load being higher or lower is shifted to the individual customer because they pay for the power provided, regardless of what the load actually turns out to be. This approach meets the customers projected loads on a planned basis and actual loads within the year do not impact either what is provided or what the customer pays for the power. One challenge in this approach has always been the possibility that financial incentives could potentially cause a customer to skew a forecast in an economic advantageous direction for itself at the expense of BPA's other customers. High market prices can incentivize higher load forecasts and low market prices can incentivize lower forecasts.

During BPA's Subscription contracts from FY 2002 through FY 2011 there were times that customers purchasing on a planned basis were able to establish forecasts that consistently turned out to be higher than the actual loads the customer experienced, leaving the customer with surplus power to sell for their own financial advantage. Such customer's economic advantage also resulted in a cost-shift to other BPA customers because that value would otherwise have accrued to the other BPA customers but for the inflated forecast. During the Subscription contract period there was no transparency between customers regarding other customer's forecasts and the potential for costs-shifts.

The CHWM Contracts are founded on the principle of equity and there is an explicit recognition that cost-shifts could occur if Net Requirement load forecasts are not reasonable for customers purchasing on a planned basis. For that reason BPA established the transparency process as a part of the annual Net Requirements process. Providing the customers an opportunity to see each Slice/Block and Block customer's forecast and Net Requirement numbers reinforces the importance of reasonable forecasts and gives those who could bear the risk consequences of any inaccuracy a chance to have their voices heard. As occurred with Cowlitz and NORPAC in this year's process, the Net Requirements transparency process also provides those most vested in a forecast an opportunity to explain their perspective and provide additional information.

BPA Analysis and Response to Comments.

This section provides analysis and responses to the comments BPA received on the four forecast options provided in the public notice. This section also addresses related issues and questions that were submitted by stakeholders.

Load Forecast Option 1: *Under this alternative BPA would accept the 80 aMW forecast for the NORPAC load included in the forecast load submitted by Cowlitz.*

Cowlitz strongly endorsed this alternative and encouraged BPA to accept this forecast as reasonable. Cowlitz referenced extensive work it has done since May to explain to BPA why its retail customer's load forecast projection is significantly less than in FY 2017. Notwithstanding this work, Cowlitz noted that BPA remains skeptical of the 80 aMW forecast. Cowlitz argued that BPA has not presented any facts to support its forecast other than the current operation level at NORPAC which is 180 aMW forecast. BPA expressed concern over the loss of revenue that would result due to the reduced load service and its impact on BPA's other regional power customers. Cowlitz also commented that NORPAC's August 16, 2017 announcement that one of the three paper lines at the plant would be idled supports the reasonableness of Cowlitz's load forecast and asserted that since that announcement, BPA's concern stated in its Net Requirements public notice announcement that Cowlitz's proposed forecast significantly underestimates the load and might operate at current levels was now "demonstrably unwarranted." Cowlitz further asserted that it has a track record of providing reasonable and accurate forecasts. The Cowlitz Economic Development Council (CEDC) supports Cowlitz's statement of its record of reasonable forecasts and the August 16, 2017 NORPAC announcement in their endorsement of the 80 aMW option.

NORPAC submitted extensive materials and comments. The comments discuss the paper production challenges NORPAC faces in a highly competitive business and the need for the changes in operations to best provide a profitable mix of products, citing the fact that the forecast NORPAC provided Cowlitz in FY 2017 was 209 aMW while the forecast for FY 2018 is 80 aMW. NORPAC then talked about forecast methodologies, the self-perceived reasonableness of their forecast and warned BPA against solely basing its forecast on historic usage. NORPAC suggested that to challenge the forecast of an operating facility without spending time understanding the basis for the forecast and various operating scenarios under consideration is inconsistent with BPA's own internal planning process methodology. NORPAC concluded that if BPA does not have a justifiable basis for rejecting the forecast it is required to accept it. From NORPAC's perspective this option is the only choice BPA can make.

Industrial Customers of Northwest Utilities (ICNU) also supports Load Forecast Option 1, asserting that BPA has not provided any justifiable basis to do anything but accept Cowlitz's forecast. ICNU notes Cowlitz's track record of reasonable forecasts and said BPA had not adequately justified its concerns. Thus, BPA was potentially creating an arbitrary decision making standard justified by merely affirming an unsubstantiated concern. ICNU concluded by noting that BPA should not reject the forecast by looking beyond the statements that Cowlitz has made and BPA's potential loss of revenue from the loss of 100 aMW of load has no bearing on the reasonableness of the Cowlitz forecast.

Comments from others highlighted the importance of the take-or-pay provision and that it not be circumvented by artful changes in the load forecast. Western Public Agencies Group (WPAG)

stated that if BPA determines that the Cowlitz forecast is unreasonable then BPA must reject this load forecast option. A failure to do so would clearly undercut the take-or-pay commitment assumed by Cowlitz. Snohomish Public Utility District No. 1 (Snohomish) noted that BPA would need to have a reasonable belief that the 80 aMW forecast is erroneous and that BPA should not reject the forecast as a “just in case” situation to try to protect other customers. Northwest Requirements Utilities (NRU) captured the essence of the issue stating:

“If Cowlitz is allowed to reduce its load forecast to reduce its Tier 1 purchase and instead serve that load with market purchases, there will be stranded costs associated with that unused Tier 1 power. Those costs will be inequitably borne by other preference customers at the expense of their own retail customers, including other businesses that are also sensitive to costs. This would set an unacceptable precedent where select customers can forgo Tier 1 power for market purchases and shift costs to other Tier 1 customers, who are already struggling under increasing Tier 1 rates.”

Because the potential cost-shift from Cowlitz to other customers is significant and comes at a time when BPA rates are already under tremendous pressure, Emerald People’s Utility District (Emerald) was pleased to see BPA question the Cowlitz forecast when it found the request to be unreasonable. Eugene Water and Electric Board (EWEB) stated that although customers have a right to adjust their forecasted load, they must “not be permitted to reduce their forecasted need due to a desire to access potentially less expensive market power to the detriment of other customers.” EWEB supports BPA’s continuing effort to enforce parties’ rights and obligations along with the foundational principle of equity in the CHWM Contracts and the Tiered Rate Methodology. Mason County Public Utility District No. 3 (Mason PUD 3) noted that they did not support load forecast option 1 because of the large risk of revenue loss. Peninsula Light Company (Peninsula) opposed this option because Cowlitz would be free to go to market to replace the power it did not buy from BPA, and BPA remarketing 100 aMW would represent a potential loss of \$11 million and result in a major cost-shift to other customers. Peninsula stated that option 1 would set a precedent that undermines the integrity of the take-or-pay obligation for all BPA customers.

Idaho Falls Power (Idaho Falls) expressed support for the ability to adjust load forecasts but states the contracts are not “options to purchase power from BPA” but rather are an obligation to purchase power to serve all of the customer’s Tier 1 Net Requirement from BPA. An option contract would allow a customer access to the market; the CHWM Contract does not include that right. Idaho Falls is concerned that allowing a customer to forego the Tier 1 Net Requirement take-or-pay purchase obligation and instead purchase power from the market would bring negative financial consequences to BPA’s other customers. Peninsula, Emerald, EWEB, Idaho Falls, WPAG, and Benton Public Utility District No. 1 (Benton PUD) all noted that the situation where a customer might want an option to substitute market prices for the Priority Firm Power (PF) rate is not unique and that other customers will want similar opportunities to Cowlitz.

WPAG discussed the potential precedential nature of the decision. WPAG stated it is no small secret that BPA's PF rate is currently above market and that acceding here would result in a financial impact far in excess of the NORPAC load. Peninsula agreed and provided a similar statement about the financial impact. Northern Wasco County People's Utility District (Northern Wasco) observed that customers like themselves that bear the costs also have loads that are quite sensitive to costs. Grays Harbor Public Utility District No. 1 (Grays Harbor) also stated a concern about the potential precedent of allowing a cost-shift. While noting its own loss of industry in recent years, Grays Harbor is concerned about the impact that additional upward pressure on BPA rates has had in their community, which already faces high unemployment.

BPA Comment Analysis and Response – Load Forecast Option 1.

Under this load forecast option 1, BPA would accept the Cowlitz forecast of 80 aMW for the NORPAC load and the reduction in Cowlitz's Net Requirement load of 100 aMW. BPA's general practice with all of the Slice/Block and Block customers, including Cowlitz, in all of the prior Net Requirements process load forecast decisions has been to review but ultimately accept the customer's projections and assumptions included in the load forecast. In spite of BPA's past approval of customer forecasts, the facts presented by Cowlitz and NORPAC do not permit such acceptance of the forecast.

Cowlitz and NORPAC, along with ICNU and CEDC emphasize Cowlitz's track record of providing reasonable and accurate forecasts. BPA agrees with this point and appreciates the mutually beneficial business relationship we have maintained throughout the years. The inertia of past practice by both BPA and Cowlitz could clearly result in a BPA decision to choose this option, but the facts this year are clearly different.

BPA appreciates the effort and time that Cowlitz and NORPAC have spent with BPA to explain the challenging economics involved in the production of paper and some of the difficult dynamics associated with the international production and markets for their products. BPA was convinced that operations at the plant were changing and that the FY 2018 load would be lower than the 209 aMW that NORPAC's comments noted was included in Cowlitz's FY 2017 forecast, thus BPA lowered the NORPAC forecast for FY 2018 to 180 aMW. However, being convinced that the load would be lower in FY 2018 does not necessarily mean that BPA should accept the 129 aMW reduction inherent in the Cowlitz 80 aMW forecast for NORPAC.

BPA has reviewed and evaluated the information that NORPAC has provided in meetings at BPA, in a BPA site visit to the NORPAC facilities in Longview, and the extensive exhibits included with and attached to NORPAC's comments. While BPA is persuaded that NORPAC faces uncertainty in its operations and is making adjustments in response to the paper industry's challenging times, the materials do not provide a compelling case to support and justify a reduction and an 80 aMW load forecast.

Cowlitz noted BPA has remained skeptical of its forecast, a statement echoed by the CEDC. Cowlitz, CEDC and ICNU all assert that the 80 aMW load is a reasonable forecast, that Cowlitz

has always presented accurate and trustworthy information on load to BPA, and that BPA has failed to provide any reason other than prior year usage as to why it will not accept Cowlitz's forecast. ICNU goes so far as to assert that BPA can do nothing other than accept the Cowlitz forecast and to fail to do so would be arbitrary and capricious. BPA disagrees with these arguments for two simple reasons.

First, NORPAC's own statements and documents belie the motivation behind its change in load. NORPAC demonstrate the pure economic rationale of seeking a better market price for power used to serve the 100 aMW load to be reduced from service under the Cowlitz CHWM Contract. Second, BPA has not received from Cowlitz or NORPAC a definite plan on the proposed closure and retooling of the paper line to account for the planned reduction nor any plausible explanation of how a total load with three paper production lines suddenly goes from 180 aMW in full production to only 80 aMW with one line down but two remaining paper lines still in production.

Regarding the first reason, BPA rejects Cowlitz's load forecast of 80 aMW because statements made by NORPAC in meetings in May and June clearly emphasized the intent and direction of the company to obtain power from the market regardless of Cowlitz's obligations to BPA. NORPAC asserted that only by going to market could it maintain its current level of operations. Unfortunately Cowlitz's contract does not allow Cowlitz to take just any load to market that has been served by BPA. Only Cowlitz's load growth can be served by new purchases from the market. Not only did BPA become concerned over the forecast after these meetings, but BPA still finds NORPAC's intent credible because these two statements were again repeated in the Net Requirements transparency process comments submitted by NORPAC.

As part of the background information BPA received from NORPAC on its plans for the facility under current market conditions, an Exhibit No. 7 was included. Though it appears there was information that was redacted the parts that were not redacted clearly state NORPAC's intent: "Will BPA allow NORPAC to purchase power on the wholesale market?" This is followed by the statement that "BPA should release NORPAC from an obligation to purchase Tier 1 electricity at substantially higher cost than the wholesale market." A similar statement regarding market priced power being needed for the load is repeated on page 19 of the same exhibit. NORPAC's intent is clear. Although NORPAC does not have a direct business relationship with BPA, BPA understands that Cowlitz has a "pass through" form of service contract with NORPAC.

Given these statements it is reasonable for BPA to question the reasonableness of Cowlitz's load forecast which appears to knowingly accede to a 100 aMW "planned reduction in load" at the NORPAC facility. Without ascribing any intent to Cowlitz it appears the sole purpose of this approach, as stated in the comment exhibits provided by NORPAC, is to reduce Cowlitz's obligation to purchase Tier 1 power. BPA clearly had and has more than a reasonable basis to question this load forecast. In fact, NORPAC's statement recently submitted is exactly the type of concern raised by many other BPA customers who do not want to bear the cost of Cowlitz's optionality for NORPAC.

Many BPA customers highlighted and rejected this potential cost to them if Cowlitz were to be able to reduce load and access the market in lieu of purchasing Tier 1 power from BPA. NRU perfectly sets out the risk of accepting a questionable load forecast that is too low, and the likely cost impacts to BPA's other customers. NRU, WPAG, EWEB, Peninsula, Emerald, NRU, Idaho Falls, and Benton PUD, all stated that if BPA were to allow Cowlitz and NORPAC to purchase power in the market rather than buy power at PF rates, then other customers would want comparable treatment, which would dwarf the revenue loss involved with Cowlitz. Other customers like Grays Harbor made it clear that the ensuing impacts on BPA rates would have devastating impacts in their communities.

As to the second reason, the 80 aMW load forecast seems unrelated to the operating levels of any of the production lines at the facility. A review of charts submitted to BPA by NORPAC on operations for its three production paper lines shows that paper line 1 does not operate at 100 aMW. Indeed paper lines 2 and 3 combined operate at a level of at least 105 aMW and potentially more. NORPAC has not said it is taking the remaining paper lines 2 and 3 out of operation for FY 2018. Although NORPAC issued a press release on closure of a paper line, NORPAC did not state the specific timing of its removing production paper line 1 from operation, the duration of the outage, or the restart of the paper line. The lack of a more definite time line for the actions that NORPAC would undertake does not comport with BPA's prior experience with the facility. BPA has some knowledge of the production processes at the NORPAC facility based on a \$21 million energy efficiency project BPA funded to upgrade the chip yard and thermomechanical pulping mills in 2012 and 2013.

Cowlitz and NORPAC have not supported the 80 aMW level and provided no operating plan that credibly explains how the paper mill would actually operate at that level. The August 16, 2017 NORPAC press release mentioned by Cowlitz does not justify the 80 aMW forecast, rather it announces the reduction in operation of one paper line and simultaneously notes NORPAC will be "expanding the remaining capacity to serve customers." The materials describing the electric usage in the meetings BPA has had with NORPAC establish the electric usage at the three paper lines as 50 aMW, 65 aMW, and 75 aMW. Any two of those paper lines operating at full capacity do not equate to 80 aMW, particularly when the press release suggests that the remaining operating paper lines would somehow have an "expansion of capacity."

Having seen no operational plan that justifies the 80 aMW forecast for NORPAC and with clear evidence of an intent to circumvent the take-or-pay requirements of the CHWM Contract, BPA cannot determine that Cowlitz's 80 aMW load forecast is reasonable. If BPA were to accept this 80 aMW forecast then Cowlitz would have the option to purchase power from the market instead of from BPA it needs to meet NORPAC's load. As WPAG stated, BPA's determination that the 80 aMW forecast is unreasonable leaves BPA no choice but to reject this option and to substitute BPA's own reasonable forecast.

Load Forecast Option 2. *Under this option BPA substitutes its forecasted load of 180 aMW for the 80 aMW forecast of Cowlitz.*

Under Option 2 BPA applies its 180 aMW forecast for the NORPAC load, as part of Cowlitz's Net Requirement for FY 2018 and substitutes its forecast for the Cowlitz 80 aMW load in the forecast. Cowlitz expressed a belief that BPA's 180 annual aMW forecast is completely unreasonable given the paper line shutdown described in the August 16, 2017 press release and NORPAC's operating plans. NORPAC asserts that its announcement of a paper line closure and the continued operation of two paper lines which produce high quality paper but "can only reasonably use" 80 aMW at BPA's rates, undercuts BPA's 180 aMW forecast. NORPAC argues that electrical use is critical for the paper industry and industry announcements of paper line closures are easy to find. By referring to a 1996 BPA rate case loads and resource methodology, NORPAC argues that BPA's 180 aMW forecast does not consider the factors stated in that methodology and that BPA has never just used historical use as a basis for forecasting load. NORPAC states historic usage is not a forecasting methodology. NORPAC argues that a forecast of 180 aMW would impose a significant penalty on Cowlitz and force it to purchase unwanted power for the sole benefit of BPA contrary to the terms of Cowlitz's contract. NORPAC strongly rejected this option calling it arbitrary.

Emerald stated it collaborates with BPA on a "most likely" forecast for its loads and was pleased to see BPA question the large change in Cowlitz's forecast. Although Emerald understands the difficult situation Cowlitz faces, Emerald has a strong preference for the 180 aMW load forecast option because it best aligns with take-or-pay principles. Grays Harbor also noted that as an alternative to its strong recommendation for Option 3, it would consider recommending load forecast Option 2. Cowlitz would then be responsible for managing any load uncertainty assigned to the NORPAC load. Grays Harbor does not want any cost-shift risk to it or other PF customers. EWEB supports BPA's effort to enforce obligations and rights under the CHWM Contract which means ensuring that the take-or-pay obligation is balanced with an adjustment to retail load. This balance means that customers must not be permitted to reduce forecasted load "to access potentially less expensive market power to the detriment of all Tier 1 customers." Western Montana G & T did not support either load forecast Option 1 (80 aMW) or load forecast option 2 (180 aMW) because they both ignore the inherent uncertainty in choices utilities make, stating that BPA should be concerned about the proposed forecast that significantly underestimates the load. WPAG and Mason PUD 3 state that if BPA has found the Cowlitz 80 aMW forecast to be unreasonable, under the terms of the CHWM Contract, then BPA must substitute its own reasonable forecast of Cowlitz's Net Requirement load. If BPA determines that the 180 aMW also is not a reasonable forecast then it must determine a reasonable forecast between 80 aMW and 180 aMW and use that amount as part of Cowlitz's Net Requirement load. They urged BPA to follow the terms of the contract and observed that BPA has the authority to establish a forecast at whatever level deemed reasonable between 180 aMW and 80 aMW. WPAG and Mason PUD 3 noted that rejection of the unreasonable customer load forecast and

substitution with the BPA load forecast is the specific treatment prescribed by the CHWM Contract.

BPA Comment Analysis and Response – Load Forecast Option 2.

As NORPAC noted in its comments, Cowlitz's forecast in FY 2017 established the NORPAC load at 209 aMW. In conversations with Cowlitz this last spring, BPA was shown information that NORPAC had changed its operations in a way that reduced its usage of power. BPA looked at the operational levels over the year and could see that there had been a shift in the electric use down to an operating level of 180 aMW. One of the main reasons for this was a shift in the amount of wood pulp that the NORPAC plant was purchasing from Weyerhaeuser, rather than creating it by use of an energy intensive process on-site. BPA reduced its forecast from the previous year by 29 aMW to 180 aMW because it could measure and verify the assumptions based on the information and meter data provided by Cowlitz.

In the information Cowlitz provided and in all of the presentations on their operations in FY 2018, NORPAC has consistently shown that it would expect to operate at 180 aMW if it runs all three paper lines as it currently does. It is clear in the information about the paper industry provided by NORPAC that it competes in a challenging environment, but that in itself is not evidence that NORPAC will reduce operations to any level below 180 aMW. Indeed the flexibility that NORPAC has shown by adapting operations to produce different and higher-value paper products shows a track record of innovating to keep the plant fully operational.

The first public evidence that BPA has seen that an action might be taken to curtail the operations at the plant is found in NORPAC's August 16, 2017 press release, which indicated an expected reduction in the operations sometime in October 2017. That press release introduced additional uncertainty with a statement about circumstances with trade actions involving Canada that could change the decision to curtail operations. Further, the notice of intent to shut down a paper line also stated an expansion of the capacity of the other two paper lines may occur and the press release does not contain sufficient details on plant operations to justify a change in the BPA load forecast. In fact when NORPAC was presented with load forecast Option 4 below which was designed to allow a paper line shut down for six months and to purchase power in the market, NORPAC did not the expected shut down of that paper line. Instead, NORPAC argued that it is free to operate the paper lines in any manner it wants and that BPA has no authority to dictate operations that are optimal for NORPAC. NORPAC's statement on operational decisions does not support their evidence of a set course of action for the paper line. BPA has weighed these conflicting statements in considering this load in the BPA Cowlitz Net Requirement load forecast.

In BPA's annual forecasting process, the BPA load forecaster meets with the customer and the customer provides data and information on their consumers' loads that will comprise the customer's overall utility TRL forecast. Customers can provide proprietary information regarding the loads, such information is shared with the load forecaster but then the customer

retains possession over all of this information and takes the load forecaster's notes back at the end of the forecast meeting. For Cowlitz's FY 2018 NORPAC forecast, Cowlitz showed the current plant load was lower than the 209 aMW forecast in FY 2017. The current operating level of 180 aMW was the result of a change in the pulp production process where NORPAC reduced the amount of pulp produced on site by purchasing pulp from a third party.

The BPA load forecaster performed specific research on the paper industry to prepare for the forecast. The forecaster's research indicated that overall pulp production was forecasted to increase due to increased demand for cardboard. The forecaster noted there were some concerns about unfair trade practices from pulp and paper producers in Canada. The forecaster also noted that pulp and paper producers were in a dynamic market that is rapidly changing. The forecaster was provided information that the consumer was exploring opportunities to continue operating at current levels.

NORPAC has a single large customer, the Los Angeles Times, which accounts for a significant portion of the newsprint line output. The customer did not provide any evidence or indication to the BPA load forecaster that orders from the Los Angeles Times had in fact declined since FY 2017 or were projected to decline in FY 2018. Based on this information, the forecaster understood from the market research that information provided did not indicate that the load in FY 2018 would be lower than the currently observed level of 180 aMW. No evidence of an immediate shutdown in the newsprint line, nor any of the remaining paper lines at NORPAC, was presented.

BPA's experience in forecasting large loads is that when consumers experience a rapidly changing and dynamic market there is a typical pattern of events beginning with an effort to run the operation more efficiently to improve the financial position. This action is typically followed by the sale of the facility to a new owner if the financial position does not improve. The new owners typically continue to make additional changes to improve the financial performance of the business over a period of years. Ultimately, if financial conditions do not improve the new owner sells the business after a few years of operations. BPA forecasters have observed this type of pattern across a variety of industries over several years.

Based on this past experience, statements made by new owners about curtailing operations may have less weight in the forecast or ultimately are not reflected in the forecast absent a specific plan. The BPA load forecaster also takes information and experience with other similar loads into consideration. For example, Cowlitz's FY 2018 load forecast for NORPAC was compared with similar information forecasters received in FY 2017 that Ponderay Newsprint would reduce operations due to financial concerns in a dynamic and rapidly changing environment. However, even after Ponderay Newsprint made the curtailment announcement, the paper mill continued operations in FY 2017. This occurrence tends to support a position that although there are financial pressures on the paper manufacturers and the overall industry is in flux, absent a specific shutdown plan, there is not sufficient evidence to support reductions in operations from current levels.

When NORPAC issued its press release on August 16, 2017, BPA load forecasters understood a reduction was being considered for future implementation in October 2017 but could not rely upon the press release as definitive evidence that a shutdown would occur because other information from NORPAC and Cowlitz contradicted this position and no specific plan for a shutdown has been produced. Specifically, NORPAC's expressions of an intent to reduce Cowlitz's supply of firm power from BPA as a means to access and purchase market power; and NORPAC's statements about exploring or expanding other operating options; and the contradictions about future operating status in the press release create a high level of uncertainty about the implementation of the press announcement. Because the press release omitted a definitive date for the shutdown of the newsprint paper, and indicates NORPAC will expand the remaining paper line production capacity to serve its customers, the announcement introduces more uncertainties and contradictions about the planned load.

There is still a possibility that NORPAC could change its operations to decrease load, or alternatively to increase its load given developments in the market and its stated desire to expand other production in the remaining paper lines. Notwithstanding NORPAC's stated intent to buy power from the market as the purpose of its reduction of BPA load, it is reasonable for BPA to accept that full operation of the NORPAC facilities decreased from 209 aMW in the FY 2017 forecast to 180 aMW in the FY 2018 forecast. This is a demonstrable action supported by sufficient evidence and BPA agrees that NORPAC's operations in FY 2018 will most likely continue at this level.

While BPA understands that NORPAC is responding to market risk, NORPAC has stated several strategies and conditions which suggest a shift in operations or continued operation as well as a possible shutdown. As pointed out above, even a shutdown of paper line 1 would not necessarily equate to an 80 aMW load and NORPAC still has its primary newsprint customer. BPA has not been shown enough evidence to justify a further reduction in the 180 aMW forecast. BPA is adopting the 180 aMW forecast as the reasonable forecast for the NORPAC load after consideration of all the facts provided above. However, BPA is willing to consider load forecast Option 3 as discussed and described below, dependent upon Cowlitz being willing to consider that option and agree to the contract terms.

Load forecast Option 3. *Under this option BPA would apply the 80 aMW forecast of Cowlitz as a floor with a new contract provision to measure the actual load and apply a liquidated damages calculation to any amounts taken by the load above that amount.*

Load Forecast Option 3 balances load uncertainty with potential take-or-pay impacts. Under this option BPA would accept Cowlitz's load forecast of 80 aMW, even though this forecast may understate planned load amounts, but only if Cowlitz will agree to include a new liquidated damages provision in its Exhibit D, Special Provisions. The liquidated damages provision will provide BPA financial protection of PF revenues in the event the actual load at the NORPAC facility exceeds the load forecast and protects BPA's revenue if NORPAC operates at BPA's forecast of 180 aMW. Most commenters expressed strong support for this alternative and many

commented that it struck an important balance between the utility's estimate of load and protecting against a cost-shift resulting from knowingly underestimating such load. Several parties believe this option provides a fair resolution of Cowlitz's uncertain load situation while avoiding a cost-shift to BPA's other power customers, including Northern Wasco, Ferry County, Peninsula, Pacific Northwest Generating Cooperative (PNGC), Grays Harbor, EWEB, NRU, PPC, Idaho Falls, Western Montana G&T, Clatskanie People's Utility District, Franklin Public Utility District (Franklin), Tacoma Power, Benton PUD, Mason PUD 3, Snohomish, and Lane Electric Cooperative, Inc. (Lane Electric). Emerald also conditionally supported this option if customers had a chance to review the liquidated damages language and it could be applied in other circumstances as well.

The PPC felt that of the options presented in BPA's public notice that Option 3 presents the best balance of all of the parties' rights and obligations. Snohomish noted that this option respects the forecast that Cowlitz submitted and protects BPA's other customers. NRU noted that this option appears to maintain and balance the interests, rights, and obligations of all preference customers making it a reasonable alternative. Peninsula, Northern Wasco, and EWEB noted the approach allows Cowlitz to remove the full 100 aMW load without any harm if the plant operations are indeed reduced, while protecting BPA's other customers if the plant's operational load exceeds the 80 aMW Cowlitz forecast. PPC, Snohomish, and EWEB noted that if the load exceeds the forecast 80 aMW, parties are held in a financial position as if the forecast was accurate. Lane Electric agreed saying that in light of the fluid and dynamic operational situation for Cowlitz, this option would best account for changes that undoubtedly will come. PNGC noted some of the risk benefits Cowlitz would receive under this option because it provides certainty on the price that they will pay if the load remains on-line and the certainty of a reduced BPA bill if NORPAC does in fact reduce operations.

Western Montana G&T observed that this option was superior to the current contract language which requires a choice between the first two options because that choice completely ignores the uncertainty inherent in the operating choices that the utility and its customers are still making. WPAG acknowledged the appeal of this alternative but pointed out the practical challenges that it cannot happen without the agreement of Cowlitz; that the agreement would need to be enforceable, and that there may be insufficient time to implement it. NORPAC also was clear that this option could not happen without the agreement of Cowlitz and asserted that the contract already addresses what happens to any load that might exceed a properly developed forecast.

BPA Comment Analysis and Response – Load Forecast Option 3.

Load Forecast Option 3 was well supported by almost all of the parties filing comments with BPA. Parties correctly assessed that Option 3 strikes a balance between protecting the foundation of BPA's take-or-pay CHWM Contracts and removing the binary choice between two load forecasts that are 100 aMW apart. Option 3 provides a clean and accurate way to resolve a potential dispute, because it is based on actual load. PNGC points out that this approach provides certainty for Cowlitz and NORPAC because they have the economic certainty that they

pay the PF rate only for the BPA power they use, without any chance of having to pay for power they did not need or use. Thus, Option 3 helps avoid the additional take-or-pay costs that Cowlitz faced during FY 2017 when NORPAC operated below the load forecast. BPA agrees with the parties who support this Option 3 that it is a balanced approach to resolving the load uncertainty NORPAC has presented Cowlitz with. As noted above there are several reasons why Cowlitz's forecasted load of 80 aMW is not reasonable, when the actual operations of the plant are considered, even in light of the NORPAC press release and given its lack of specific information on the timing, duration, and "capacity expansion" in the two remaining paper lines.

Similarly, BPA believes that its forecast of Cowlitz's FY 2018 Net Requirement including 180 aMW of load at NORPAC, is a reasonable forecast due to industry trends noted above, the lack of specific details on the paper line shutdown, and the additional uncertainties stated above. BPA is also aware that Option 3 would be a change from the current structure and operation of the CHWM Contract provision on the Net Requirement, and appreciates WPAG's concern that Option 3 may suggest a change in the nature of the product sold to Slice/Block customers. However, BPA does not consider the current issue to be affecting more than a single customer's load calculation for the upcoming FY 2018. BPA also agrees that if this Option 3 is pursued, a clear and robust provision must comprehensively deal with the circumstances of a possible shut down, refit, and restart such that energy provided to and used by NORPAC is fully accounted for and that BPA's other customers are not facing a cost-shift.

Based on the reasons described above in the customer comments and BPA's analysis, BPA is willing to consider Option 3 as a means to achieve balance and fairness. BPA agrees there is uncertainty in the NORPAC operations in FY 2018. Cowlitz, NORPAC, and ICNU commented that BPA was overly concerned about its own financial situation and that was why BPA was concerned about accepting Cowlitz's 80 aMW forecast. The fact that BPA is willing to offer the liquidated damages provision nullifies this argument as BPA would experience the same revenue loss under Option 3 if the actual metered load at NORPAC in FY 2018 is equal to Cowlitz's 80 aMW load forecast.

As can be seen from the overwhelming majority of BPA's utility customer comments, BPA's concern is shared by the other customers. They are not willing to pay for Cowlitz and NORPAC's optionality on the source of its power or on the amount of power to serve the facility. All other customers clearly rejected Cowlitz's 80 aMW forecast because of the potential cost-shifts this forecast could allow. PNGC rightly stated that the risk of forecast error can be a shared risk under Option 3 instead of single party bearing all the forecast risk as proposed in Options 1 and 2. If Cowlitz chooses to accept Option 3 and its forecast is accurate at 80 aMW, then BPA's revenue will be the same as if BPA had accepted their forecast. Under Option 3, if the NORPAC load is close to BPA's forecast then the other customers will not face the additional cost of lost revenue and Cowlitz will pay only for NORPAC's actual load. This approach allows for a more accurate reflection of the PF load for FY 2018 despite the uncertainty in NORPAC's operations. However, as WPAG and others commented Cowlitz must agree to

include a provision in its contract and WPAG correctly points out that Cowlitz has already rejected making any change to its contract.

Load forecast Option 4. Under this option BPA would accept Cowlitz's forecast based on one of three lines at the facility not operating. BPA would require that Cowlitz purchase power at a PF equivalent price to serve the full amount of the third line load for the remainder of the fiscal year, if it were to operate prior to April 2018. If the line does not operate prior to April 2018 then there would be no requirement to purchase power for it during FY 2018.

Option 4 is similar to the liquidated damages treatment for load in excess of 80 aMW stated in Option 3. However, Option 4 has the possibility of not applying take-or-pay for requirements load that served a shutdown paper line if it had been idled for at least six months. Option 4 would take the August 16, 2017 press release at its face value without more specific information and assumes a shutdown of 6 months. This option further assumes that any restart of the paper line would occur by April 2018 and if a restart did not occur, then no additional PF revenue would be collected for the remainder of the fiscal year, which has a financial impact to BPA that is equivalent to a full year shut down of the paper line.

BPA Comment Analysis and Response – Load Forecast Option 4

Many customers soundly dismissed Option 4 as unworkable except for a commenting individual identified as Pace who thought it was fair. Salmon River Electric Cooperative, Inc. (Salmon River), Peninsula, PNGC, EWEB, NRU, Western Montana G&T, Mason PUD 3, WPAG, and even NORPAC (who asserts the line will be shut down), all opposed this option. PNGC noted that providing an option for NORPAC to resume operations for the back half of FY 2018 without any financial coverage for the other BPA customers did not meet their expectations of coverage for negative financial effects. NRU noted that it only provided protection against cost-shifts to other Tier 1 customers for the first six months of the Fiscal Year. WPAG felt that allowing Cowlitz to go to market in the latter half of the year left other preference customers holding the “financial bag” and expressed concern that it might encourage other loads to try similar second-half-of-the-year-only operations to reduce their power costs. Mason PUD 3 declared this option the “least palatable of all.” NORPAC lamented that operation of a paper facility is complex and said that the option was unworkable because it would impose an arbitrary operating schedule.

Although BPA appreciates the complexity of load management at NORPAC given its economic variability and product viability issues, BPA proposed Option 4 in the belief that this option might provide Cowlitz and NORPAC time to settle on a plan for the future modifications to the paper line if NORPAC actually shut production down for a significant period of time. NORPAC's comments clearly stated that it values the flexibility to operate at its sole discretion more than the potential benefits it would receive from Option 4. Option 4 was thoroughly rejected by all of the customers, including Cowlitz, and NORPAC, thus BPA no longer considers it a viable option.

Other Issues.

Some customers raised additional issues in their commentary that were either making the assumption that Option 3 would be pursued, were regarding future actions or were needing correction. The following discussion responds to those statements or issues.

Additional Issue 1: *What level of transparency will BPA adopt for the liquidated damages provision it offers?*

NRU asked for an opportunity to provide feedback on the proposed liquidated damages language to ensure it appropriately retains PF equivalent revenue and will be clear and enforced. Salmon River, Emerald, and Franklin also asked for a chance to comment on the language. PPC, Salmon River, and Franklin asked that BPA make the liquidated damages provision robust, fair and enforceable. PNGC asked that the contract and calculations be transparent, noting particular concerns BPA should keep in mind in negotiating the language. WPAG noted concerns with BPA's track record around liquidated damages and that any clause could include conditions or out clauses that could make the approach ineffective in keeping the other customers whole.

WPAG noted a concern that there may be insufficient time to follow the process used to modify Slice/Block and Block CHWM Contract obligations in the past. WPAG noted that when other preference customers requested changes in their power sales contract obligations BPA employed a more detailed process, citing the process BPA used to change to Pend Oreille's CHWM Contract.

BPA Response.

BPA agrees that deciding to offer liquidated damages in this circumstance is only the first part of the decision and that the approach agreed to in contract language will have a material impact on whether the intent of the decision is fully realized and enforceable. BPA sees value in providing transparency, gathering ideas and hopefully providing reassurance to customers that would ultimately be financially impacted by the decision. BPA shares the interest stated in the customer comments of ensuring that liquidated damages language be clear, enforceable, and provide revenue equivalent to PF.

For this reason BPA decided to share draft the draft liquidated damages provision at an informal meeting with public representatives working through PPC. BPA and representatives from PPC met on September 14, 2017. In addition, BPA will publicly post the final liquidated damages provision on our website.

BPA disagrees with WPAG that there is not time to modify the contract to implement any liquidated damages language. There is certainly not time for an extended long-term contract change process but the approach provided above to share draft and final language balances the business need for expediency with an opportunity for stakeholder input and transparency. The approach BPA is taking in this case is not about a change to a customer's long-term contract, but

instead is that could potentially solve a one year discrepancy between BPA and a customer's load forecast in an already established Net Requirements transparency process. This logically calls for a more streamlined process that fits within the contractual requirements already established.

Additional Issue 2: *Will BPA calculate liquidated damages based on a predetermined upward adjustment?*

WPAG suggested an approach to liquidated damages that did not rely on the actual loads at the NORPAC facility but instead was based on a predetermined upward adjustment if the load were to exceed 80 aMW. WPAG suggested using the BPA forecast level to set the upward adjustment. WPAG felt that this approach was more in line with the take-or-pay provisions of the Slice/Block customers because it tied closer to the forecast methodology.

BPA Response.

BPA appreciates WPAG's thoughts around an approach to implement liquidated damages. An approach with ratchets to a higher level if the load exceeds 80 aMW does have the merit of being more like a predetermined block of power. One challenge though is that it lacks the flexibility that a liquidated damages based on actual load could provide in a time of potential uncertainty in NORPAC's operations. The actual load approach would result in what is for all intents and purposes a perfectly accurate forecast which meets the true intent of the forecast for the contract, which is to be as accurate as possible. There are a number of other approaches with their own merits and challenges but at this point BPA expects to pursue an approach that is based on actual load.

Additional Issue 3: *What is the applicability of the Cowlitz liquidated damages to other customers?*

NRU asked BPA to consider as a test of reasonableness whether BPA would offer the liquidated damages approach in other similar situations. NRU believes it is a reasonable approach that could serve as a constructive precedent to resolve future similar situations, calling it a durable and repeatable solution to address similar situations in the future. Emerald requested that BPA make the liquidated damages approach a generally available option for changes in load, resources or other forecast variables. Western Montana G&T urged that the approach developed have broader applicability to other circumstances. WPAG asked that any liquidated damages clause keep BPA's other preference customers whole and dissuade others from submitting unreasonably low load forecasts in the future. They expressed concern about the risk shifts that would occur if Slice/Block customers could effectively change their take-or-pay obligation from forecast to actual use, noting that customers wanting this treatment might be incentivized to submit low forecasts to try to get the liquidated damages treatment. Mason PUD 3 agreed with WPAG's comment and expressed concern about the potential for others to want the liquidated damages approach once it is established.

BPA Response.

As BPA noted in the response to Additional Issue 1, BPA views the current decision to offer the liquidated damages approach as a solution to a one-time, one-year discrepancy on a potential forecast dispute. While this is true it bears viewing this decision through the lens of precedent for future similar circumstances, as several of our customer commenters did.

BPA agrees with the somewhat paradoxical perspectives expressed by NRU and WPAG. NRU suggests that a reasonableness test for the decision to offer liquidated damages is to view it in the light of whether BPA would offer the same liquidated damages provision in the case of other similar situations. WPAG provides the caution that offering the liquidated damages provision might provide incentives for other customers to game the system by submitting overly low forecasts in order to get liquidated damages treatment. While BPA is not interested in providing a general liquidated damages provision to customers, BPA is comfortable that if other intractable forecasts where distinct loads created a large disparity, like the NORPAC situation, the approach could fairly address the situation and could be considered. Where there is load uncertainty involving a specific large load the liquidated damages provision removes the potential financial incentive in low markets to under-forecast the load and in high markets to over-forecast load. BPA appreciates the idea expressed by both Emerald and Western Montana G&T about making the approach more generally available but BPA does not believe it is needed at this time. BPA would be open to further thought around that, particularly as we contemplate the development of future products when the current CHWM Contracts expire.

BPA also agrees with WPAG that any approach should not incent behaviors that might be detrimental to other customers. Considering liquidated damages as a one-time or situational only approach helps ensure that does not happen. BPA is not willing to decide now that liquidated damages provisions will be generally available for future forecast disputes. The CHWM Contract requires that customers provide BPA a reasonable forecast and obligates BPA to substitute its own reasonable forecast if it does not find the customer's forecast to be reasonable. BPA is not interested in changing its Net Requirement forecast process as a general matter and would only consider liquidated damages going forward if BPA determines a specific situation warrants it.

Additional Issue 4: *Providing absolute clarity on the fact that Cowlitz is BPA's customer NOT NORPAC.*

In the conclusion of its comments NORPAC says that it has been a fully performing pass through customer of BPA under the Cowlitz contract since it went into effect in FY 2012.

BPA Response.

BPA needs to be unequivocally clear that Cowlitz is BPA's customer and NORPAC is not BPA's customer, nor a beneficiary of the BPA CHWM Contract. The issue is what Net Requirement load forecast BPA should establish for Cowlitz and there is an issue around how

much power to provide Cowlitz based on Cowlitz's load forecast for NORPAC. This has put a spotlight on the load at NORPAC and required discussion around the merits of that part of Cowlitz's forecast.

NORPAC is not a party to the BPA contract, pass through or otherwise. In fact section 24.4 of Cowlitz's CHWM Contract specifically addresses the fact that the agreement is entered into for the sole benefit of BPA and Cowlitz and that no other person or entity shall be a direct or indirect beneficiary of the agreement. NORPAC may be addressing its retail arrangement with Cowlitz in its comment, to which BPA is not a party. BPA is unfamiliar with the Cowlitz/NORPAC contract and Cowlitz establishes rates and charges applicable to the service Cowlitz provides to NORPAC. Cowlitz has discretion in setting its retail rates to create any financial incentive it would like to potentially bolster operations at NORPAC's facilities by simply adjusting their rates.

Additional Issue 5: *How will BPA treat NORPAC load in future Net Requirements processes?*

Salmon River and NRU noted that should Cowlitz's load return in future years it needs to be included in its Net Requirement so that it could be served at the Tier 1 rate.

BPA Response.

BPA agrees with the comment of Salmon River and NRU that all of Cowlitz's Net Requirement load (up to its Rate Period High Water Mark) should be served by power at Tier 1 rates going forward. BPA will work with Cowlitz in BPA's future Net Requirements processes to improve the forecast accuracy. NORPAC's load levels will be a part of that forecast at whatever level it is expected to operate.

Additional Issue 6: *How will BPA market any power not used by Cowlitz?*

PPC, NRU, Seattle, and Franklin exhorted BPA to aggressively remarket surplus power that Cowlitz might be unable to use for maximum value and to capitalize on its carbon free attributes. Mason PUD 3 urged BPA to financially hedge its risks for this power. PNGC encouraged BPA to take into account the reduced value of the power that might occur because the plant could come back on-line.

BPA Response.

BPA's has been marketing power for 80 years. BPA's trading floor will market any power that is made available as surplus power for the highest value that can be achieved considering usual factors of the timing of the power available and any premiums that can be gained by marketing the green and/or carbon free attributes of the Federal system. The trading floor is skilled at managing all kinds of load variations, weather variations, and the ever changing inventory impacts of different water years.

Conclusion.

BPA has carefully reviewed the information and comments provided by all parties, particularly Cowlitz and its consumer, NORPAC. For the reasons stated above BPA finds the load forecast proposed by Cowlitz to be unreasonable and given the uncertainties enumerated above regarding operations at NORPAC for the upcoming year BPA will substitute its forecast of 180 aMW as part of Cowlitz's Net Requirement load obligation under their CHWM Contract. BPA has also decided to offer Cowlitz a contract provision implementing Option 3. The option maintains the take-or-pay financial foundation of BPA's CHWM Contracts and offers additional flexibility to Cowlitz that recognizes the uncertainty it faces around NORPAC's operations in FY 2018. Under Option 3, Cowlitz will only pay for the actual load at the NORPAC plant. Option 3 will only be implemented if Cowlitz accepts and implements the contract provision for liquidated damages in its Exhibit D, Special Provisions. In the event that Cowlitz accepts Option 3 and signs the Exhibit D revision, BPA will reduce the FY 2018 forecast for the NORPAC load from 180 aMW to 80 aMW.

BPA did not receive any comments on any other customer's FY 2018 forecasts. Minor revisions were made to Lewis's FY2018 Total Retail Load Monthly Energy and Benton's FY 2018 Total Retail Load Monthly Energy and Monthly Customer System Peak to correct a minor rounding error.