

Informal Comments of PNGC Power
on BPA's Discussion Paper on Tiered Rated Methodology (TRM)
January 14, 2008

We would like to thank BPA staff for making this discussion paper available for comment. The TRM and the other topics discussed in the Discussion Paper are extremely complex. BPA's willingness to work with its customers in this sort of collegial fashion will certainly help create a better outcome, an outcome which we will all have to live with for years to come.

The rate case forum is particularly ill-suited for development of a methodology. We urge BPA to look hard at its schedule and do as much collaborative work on the TRM as possible prior to starting the TRM rate case.

Many issues normally addressed in contracts are included in the scope of the proposed TRM. BPA's approach may not provide its preference customers with an adequate measure of certainty concerning the significant terms and conditions of their long-term contracts. This approach may be inadequate to provide the kind of Tier 1 rate and Tier 1 quantity protection that PNGC Power was expecting.

1. Tier 1 rate protection afforded by the TRM needs to be bolstered

PNGC Power and other customers have worked with BPA during the past several months on Tier 1 rate design with the primary goals of separating Tier 1 and Tier 2 costs and improving the ability to deliver non-federal resources for load growth. The TRM needs to establish further limits on BPA's latitude to put a whole range of costs into Tier 1. BPA cost allocation principles are structured to protect BPA's revenue rather than 1) to accomplish separation of costs between Tier 1 and Tier 2 or 2) to build a tiered rate structure that encourages and accommodates new non-federal resources to serve loads above the High Water Mark (HWM).

Tier 2 risk

Tier 1 customers who are acquiring their own resources for over HWM load and bearing their own resource risks themselves should not also bear risk for those customers who choose BPA Tier 2.

BPA has not been clear about the sources of Tier 2 risk nor has it done a thorough examination of the methods of mitigating those risks. For example, undercollection from the individual customers has been identified as a risk. However, Tier 2 is only a rate construct. If a party does not pay its total power bill, it is not possible to say which part it did not pay, Tier 1, Tier 2, RSS, or another other particular portion of the bill. Principle 2, on page 32-33, explicitly allows inclusion of Tier 2 costs in Tier 1. BPA is

even considering putting a risk premium in Tier 1 rates to cover potential Tier 2 shortfalls (see section 5.3, page 35).

BPA should state in the TRM that it will pursue the numerous other means of collecting or mitigating uncollected revenue including prepayment, letters of credit from high risk customers, more stringent credit requirements, deposits for service, etc. By not being willing to use these measures, BPA has ensured that the only available means of collecting uncollected rates (be they Tier 1 or Tier 2) is with a risk premium which BPA has stated it will include in Tier 1.

The other risks associated with Tier 2 have to do with BPA errors in forecasts of costs or amounts of Tier 2. These risks may vary with each Tier 2 rate. BPA should use risk mechanisms that isolate these risks to each specific Tier 2 rate, just as a customer purchasing non-federal power bears its own resource-specific risk and does not get to socialize these risks to Tier 1. One tried and true risk mitigation mechanism for these types of risks is a CRAC specific to each Tier 2 rate. This would put BPA Tier 2 purchasers closer to the same risk profile as customers who purchase non-federal resources for load growth and protect all Tier 1 customers.

BPA should examine the sources of risk in Tier 2 and use measures other than simply including the costs in Tier 1, or worse yet, building Tier 2 risk into Tier 1 (see page 35).

Other costs

The Tier 1 rate is also the revenue collection mechanism for excess augmentation costs (page 28-29), capacity additions (page 31), RSS overages and shortfalls (page 55-56), and new cost categories (page 34) that can be added through BPA's 7(i) process. This sort of flexibility to add costs to Tier 1 does not bode well for Tier 1 stability over time.

BPA's right to change the TRM

BPA explicitly reserves the right to amend even the TRM allocation methodology and rate design in Cost Allocation Principle #4 (page 33). This flexibility coupled with the ability to add new cost categories and possibly add new resources and its ability to commit the federal system to other uses really gives little comfort to customers regarding stability of Tier 1 rates over the term of the Regional Dialogue contracts.

2. Defining federal resources – sources and uses

The TRM and the customers' ability to access low-cost Tier 1 priced power are absolutely dependent on the definition of the Tier 1 resources. For customers to feel confident that they are getting the value of the Tier 1 federal system, we make the following suggestions. BPA needs to look at all of the power sources and uses of the federal system, on both a capacity and an energy basis, as well the assignment of resources to Tier 1 and the assignment to everything else. Only with a full understanding of BPA's power system in these terms can we be confident that BPA is acquiring useful augmentation resources, capacity additions, and making other commitments with the federal system.

BPA should establish a process for 1) defining BPA's FBS (Federal Base System) resources and the impacts of customers' nonfederal resource commitments to serve above HWM load, 2) defining all uses such as load, Resource Shaping Services (RSS), and other obligations, and 3) identifying system needs, loads and obligations, and 4) customer involvement in power or capacity acquisition and renewal of existing obligation decisions. This process should clearly identify such items in terms of both capacity and energy, and with allocations between Tier 1 resources and other uses. Tier 1 customers have a vested interest in the system, pay for the system, and are placed on the margin when the system shrinks.

There are four components that need clarity and understanding as part of this process.

a. BPA should establish a resource program to ensure that BPA only acquires augmentation resources that help the system.

BPA should develop standards in the context of a resource program for augmentation so that Tier 1 payers get the most bang for their augmentation buck. For example, if the system is short capacity, then BPA should acquire augmentation from high capacity factor resources.

A resource program will also have the effect of limiting the need for capacity additions. The worst case scenario for Tier 1 purchasers would be for BPA to buy low capacity value resources, like wind, and then have to make substantial capacity purchases as a result. Any additional augmentation ought to help with system operations and fill identified gaps in the power portfolio – not make the gaps in the portfolio wider! BPA should establish a resource program process with a customer advisory board for consideration of augmentation and capacity resources, as well as renewal or extension of other obligations.

b. BPA should have a well-defined process for identifying capacity needs and acquiring capacity additions.

BPA has defined its augmentation in terms of average energy. The workshops clearly indicated that amounts of capacity additions are not limited, nor are there limits on the term of capacity addition purchases. BPA's current approach reduces our confidence in the TRM as a means of protecting existing Federal resources. BPA's capacity sources and uses need to be clearly identified. This information would also be extremely valuable to both BPA and its customers in the rate cases which will implement the TRM.

The need for any additional capacity has to consider not just Tier 1 resources but also the capacity brought by any Tier 2 resources, non-federal resources used to serve above HWM load, other obligations, augmentation, and capacity additions. BPA should also thoroughly examine the demand requirements of its commitments including Tier 1, RSS, and other obligations.

c. Other Obligations need close examination and limits on renewal are needed

BPA should also use the suggested resource program when it considers renewal or extension of the “other contract obligations” currently on the federal system (Table 3.1 and 3.2) in the TRM. The TRM only states that as new contracts are signed, their inclusion in Tier 1 will be determined in future rate cases. To begin, BPA should explain how much power is involved with each contract, its expiration date, and any existing renewal or roll-over rights that must be honored. These obligations as well as any new over-one year obligations should use the resource program to be strictly vetted against an agreed upon set of principles regarding uses of the Federal system.

We should look closely at ancillary service power needs, treatment of RSS needs, transmission loss, and other “off the top” categories that are not defined by pre-existing contract, especially inter-business line transfers. These items have the ability, over time, to significantly erode the capability of Tier 1. Shrinking Tier 1 capability to provide ancillary services to support non-preference transactions is not acceptable. BPA should acquire resources it needs to support these activities and simply provide them at cost to TS.

d. BPA should clearly understand the demand and energy requirements of its preference obligations

BPA’s process for sources and uses should allow customers to clearly understand the demand and energy requirements placed upon BPA by its preference customers. BPA and the customers will have to work out a schedule which allows this process to take place in a timely manner so as to be useful in the pre-rate case setting of above HWM amounts and the rate case itself.

3. Goal of encouraging utilities to meet own load growth is not facilitated in the TRM.

The primary stated goal of the TRM is to minimize the dilution of the low-cost existing Federal system resources. However, as noted above, the door is open to the loading of costs and risks onto Tier 1 rates. This will discourage parties from developing their own resources since they will have to bear BPA’s Tier 2 risk as well as their own resource risk.

In Principle #3 BPA makes clear that it will operate all its resources, including Tier 2 resources, on a combined basis. BPA must then be sure to keep the advantages of this combined operation allocated to Tier 1 customers so that customers can compete with BPA Tier 2. To achieve both the benefit of combined operations and a level playing field for new resources, BPA should 1) ensure that each Tier 2 rate is always representative of marginal resource costs and includes all the RSS charges a non-federal resource would face and 2) institute risk mitigation measures that keep Tier 2 risks with Tier 2 customers. Combined operations should not confer subsidies for loads served at Tier 2 rates.

The main vehicle for minimizing dilution of the existing Federal resources was allowing customers to acquire resources to meet their own load growth. This essential part of the equation seems to have been lost in translation. The TRM does not set up a system that encourages customer acquisition of resources. Instead, the whole TRM anticipates that BPA will be the leading supplier of above HWM resources. The TRM is built to protect BPA's financial and operating conditions if a customer does chose to develop its own resources. The TRM is defensive instead of being inviting with regard to new customer-developed resources. In fact, if BPA proceeds with this TRM, it will be the primary supplier of power for above HWM load growth because the TRM tips the scales in favor of BPA's Tier 2.

For example, BPA has talked in the workshops about BPA's capacity constraints. They have built an extremely complex demand formula in order to ensure that some demand is always on the margin in order to send a marginal demand signal. However, by also incorporating the marginal demand signal into the RSS products, BPA makes it impossible to escape the demand signal from BPA and shows BPA's distrust of independent acquisition of resources by customers.

4. Slice option is less attractive

The Slice product is really the only product that puts BPA and its customers on a level playing field for acquisition of resources to serve above HWM load. However, the changes made to the Slice Product through the TRM make the Slice Product less attractive than the current Slice Product.

BPA has included the costing table for Slice in the TRM leaving it subject to change in each rate case. Second, in spite of BPA's proposal for a true-up to actuals of Slice costs, there is no ability to audit the actual costs. It is unacceptable to Slice customers to have a true-up to actuals without audit rights.

BPA also needs to include a discussion of how the capacity associated with capacity augmentation would be made available to Slicers.

PNGC Power also supports the "Informal Comments on the Draft Tiered Rates Methodology Power by the Block/Slice Product Purchasers."

5. Reducing Tier 1 capability and receiving market value does not leave customers whole

In general, we challenge the notion that getting market for Tier 1 capability leaves us whole. Decrements to Tier 1 resource capability, through operation of the Rate Period HWM (RHWM), expose us to Tier 2 or non-federal resources acquisition for above HWM load. The risks associated with above HWM service are not compensated for by simply receiving market value for the Tier 1 resources.

6. Behind the meter resources

PNGC Power's members have several resources that are behind the member's BPA POD meter and are run into load. Examples are Coffin Butte, Island Park, Buffalo Hydro, and Lake Creek Hydro. These resources are all dedicated to load and have been in our resource exhibits and are NT Network Resources. The impact of these resources will be reflected in our Contract HWM (CHWM). During any year, BPA should continue to allow these resources, which are not dispatchable, to run into load without need for any shaping or other services. These resources have impacted the shape of our load for years and so there should not be any additional shaping, flattening, or other charges to continue to do what we have always done and for BPA to serve the load that it has always served.

7. Shaped demand charge; memorialize super peak proposal in TRM

BPA should either return to a flat demand charge or allow shaping of non-federal above HWM energy into months with higher demand charges.

During all the workshop discussions of products and the TRM, BPA was clear that they would be using a flat-across-all-months demand charge. This greatly influenced our thinking on products, especially the discussion of the allowable shapes of non-federal above HWM energy. We requested the ability to apply our monthly non-federal above HWM energy to peak. BPA came up with the ingenious solution of allowing that energy to be shaped into a BPA-defined "super peak" and receive demand credit whether or not the customer's peak occurred during the super peak or not. This gave BPA the peak capability to complement its system needs and the customers the ability to limit their demand bills. We believe that this feature needs to be included in the TRM.

With the understanding that the demand charge was flat across all months, we did not push for more flexibility to shape our non-federal above HWM energy into months with more expensive demand charges. Our intention is to limit our exposure to incremental demand; we surely would have and will push for the ability to shape our non-federal above HWM energy into months with higher demand charges. Just as the super peak idea benefited both BPA and the customer, this proposal should benefit us both. BPA will avoid more of those market demand charges thanks to our shaped non-federal above HWM energy and customers will enjoy lower demand payments in high demand cost months.

8. Making it all work together

We need to be able to analyze simultaneously the product descriptions, contract templates and the TRM. What appear to us to be holes in one or the other document may in fact be covered in another document. Further, we need to be sure that all the pieces fit together.

There are a whole slew of items that need to be coordinated to make the TRM and the products work together, especially in terms of timing. The capability of the Tier 1 resources for calculation of RHWM, net requirements, Total Retail Load (TRL) shape,

resource or Tier 2 commitments, Tier 1 capability are just some of the items that need to come together on a schedule that allows customers to make informed decisions under their new contracts. We request that BPA develop a timeline identifying all the important rate and contract actions called for in the TRM and other parts of the Regional Dialogue.

In particular we are concerned that the timelines or schedule implied by the TRM and products gives BPA certainty about all the items it needs but places a great deal of uncertainty on the customers in terms of non-federal resource operation and acquisition. For example, having to commit to shaping of an above HWM resource prior to knowing the shape of the demand charge is a substantial problem. Also, having net requirements determinations done one year after RHWM resource commitments puts all the risk for load under-performance on the customer, a risk BPA Tier 2 customers don't face.

9. DSI augmentation

The Discussion Paper says “BPA is exploring a number of approaches to provide service benefits to [DSIs] after 2011” including a mechanism similar to that under which it currently hands out subsidies to Alcoa, Inc. and other DSIs. The Discussion Paper states, “Also, BPA reserves the option to provide some level of physical power to the DSIs under a Regional Dialogue contract.”

The current approach to “DSI service benefits” is subject to litigation and awaits the decision of the Ninth Circuit. For reasons set forth in the briefs filed by PNGC Power in that litigation, these service benefits are illegal. BPA should not repeat the error of offering such benefits.

10. Conservation comments

BPA's current proposal for the conservation adjustment to the HWMs results in treating small utilities and those with largely residential loads inequitably. This inequity manifests itself in that these smaller utilities will conduct conservation activities and not receive equal benefit as larger utilities and those with more commercial and industrial loads. PNGC Power believes that this inequity should and can be remedied in a manner that is consistent with BPA's policy objective of promoting conservation.

By equity, in terms of the conservation HWM adjustment, we mean that all utilities receive a fair and equal treatment for the conservation they achieve. In other words, each utility should get equal credit, on a percentage of load basis, for their conservation achievements. To understand how this works PNGC offers the following analysis.

In a perfect world all utilities would have equal access to cost-effective conservation and achieve that conservation in an equal percentage to their 2010 load. Using that assumption utility A has a load in 2010 of 100 aMW and verified conservation savings of 7 aMW and utility B has a load of 10 aMW and verified conservation savings of .7 aMW. Based on achieving the same percentage of conservation for their load, each utility would receive an equal percentage of their total conservation as credit towards

their HWM, 53 percent based on the BPA calculator, so neither party is worse off. Unfortunately we need to deal with the issues mentioned above; i.e. utilities do not achieve an equal percentage of conservation relative to their load for a variety of reasons. The issue now is, how to account for the ability of some to spend and accomplish more and not leave others worse off, as the current BPA approach does.

PNGC Power proposes addressing this issue by setting a floor so that no less than 50 percent of a utility's total conservation savings will be added back to that utility's HWM. To see the impact take the example above with these assumptions: now utility A has 15 aMW in verified savings and utility B has .3 aMW. Without PNGC's proposal, Utility A would get approximately 70 percent credit and Utility B would get a 3 percent reduction. With PNGC's proposal in place Utility A would still get its 70 percent credit but Utility B would receive the floor amount, 50 percent credit, .15 aMW, instead of a reduction and thus be no worse off.

We believe this proposal satisfy's BPA policy goal for conservation and the HWM and contains the fairness sought by its customers.

The TRM Section 2.1.4 is not clear on the whether or not conservation will be counted on a whole aMW basis (e.g. 1aMW, 5aMW) only or if fractions will count as well (e.g. 1.2aMW, 5.32aMW). The language in this section should be clear that fractions will count.

11. HWM normalization comments

BPA should use the best analysis available for each system. BPA seems to recognize this principle when it says that it will use the most appropriate time period and most appropriate degree day base for each system but seems somewhat resistant to using the best analysis otherwise. We heard four concerns:

a. One was to use an "industry standard" approach for weather normalization. Itron's Metrix ND is commonly used by a number of systems for short-term load forecasting, one day to two weeks. However, most systems that do long-term load forecasting and long-term historical weather normalization use home grown custom-built systems. Additionally, of course, is the fact that Metrix ND only provides a structure for doing the analysis. It doesn't determine the variables used or how they're measured nor normalized. Any software can do the structuring. We use a combination of SPSS and Excel. Surely those are "industry standards."

b. Second, was the concern to use a method that could pass muster in the BPA rate case. As many of these custom-built systems pass muster in those systems' rate cases there shouldn't be any problem with BPA's rate case. Particularly if these methods are more detailed, precise and with a better fit (higher R²).

c. Third, was the desire to use a consistent method across all of BPA's customers. However, as pointed out above BPA is going to use somewhat different analyses to get "best fit" across its many customers. We would point out that a better, more detailed analysis should get a better fit.

d. And fourth, was data availability. There are only a couple of pieces of additional data needed from individual systems to perform our analysis: rate class accounts, and retail prices (revenues and load). Additional helpful system information, but not strictly required, would include major load usage and limited survey data. We accomplished the survey with a simple and inexpensive return post-card. Everything else is available from government, commercial or other public sources. And, as was pointed out in the public meeting, on November 7, 2007, to not use accounts as an explanatory variable is very unusual.

We are particularly concerned about the normalization method for irrigation loads. Using the average of three or more historical years as "normal" presents a number of problems:

a. First is the double counting that will occur with the BPA-indicated method for total load. Since Cooling Degree Days (CDD) is an important driver for both irrigation and non-irrigation loads, the CDD normalization will already include some normalization for irrigation. Depending on the direction of the two indicated adjustments, this double counting could lead to a neutralization of the overall adjustment.

b. Second is that the average of three or more years may in fact not be normal. We know that we have at least one system that had above normal loads for five years running in one period. We have another system that had below normal usage due to exceptional precipitation in two years running. Either year on either side of that two year period was markedly "normal" in comparison. "Normal" adjustments on these fact-patterns would not lead to "normal" loads.

c. And third, is that any bias in irrigation will either advantage or disadvantage systems with substantial irrigation loads versus other systems. As we have both types of systems our concern is overall fairness. Again, the best approach is to use the best weather normalization method available for each system. A more detailed weather normalization method for irrigation heavy systems is certainly fair and appropriate.

We have conducted an analysis for PNGC Power's members with BPA's method and the method we propose. The analysis confirms that BPA's method will induce error into the HWM calculations.

12. New public limiter – page 17, line 10-11

We believe that the denominator in this formula needs examination and revision. The denominator should take into account new non-federal resources and Tier 2 that existing customers have acquired.

13. Transition

While we understand the timing issue created by using 2010 as the year for high water mark basis, we think the transition needs more discussion among BPA and the customers. One of our concerns is that the establishment of above HWM need for the first 3 years of the contract will be done without any of the protections, checks and balances that we build into the calculation of CHWM and RHW. Perhaps a more detailed explanation of the process for arriving at the above HWM load which clearly delineates the rights of the customers to have input and dispute results would calm some of these fears.

14. Combination non-federal and Tier 2 above HWM options, page 47

In previous BPA workshops, BPA indicated that there were 3 options for serving above HWM load and the customer had to choose one option at the commitment period. The options were: 1) all BPA Tier 2, 2) all non-federal, or 3) some combination of each. In the presentation made on August 3, 2007, slide 32, BPA indicated that a customer could “fix either the amount of power from a non-federal resource and have BPA meet the additional above-HWM load.”

This was a valuable option but one that may have been lost in the translation to the TRM. On pages 47 and 48 of the TRM, it seems to imply that an unspecified amount of Tier 2 can not be used with a fixed amount of non-federal. BPA should clarify that a customer can chose a fixed amount of non-federal resource and chose Tier 2 to meet any residual above HWM amounts at the time RHWs are determined.

15. Page 24, line 14

BPA should clarify that the future obligations and acquisitions that BPA is dealing with in this section are only augmentation, capacity additions, and balancing purchases.

16. Augmentation for Slicers, page 31

This is a new idea that showed up in the TRM – augmentation being a separate flat block scheduled to Slicers. We appreciate BPA’s intent which is to make sure that Slicers actually get their share of augmentation but would like to work more with BPA as to whether this is the best way to do it.

17. Capacity additions and Slice, page 31

This issue is how capacity additions will impact Slice. BPA indicated that they were not clear that Slicers would pay for capacity additions. If BPA does want Slicers to pay for capacity additions, we need to work out a way to ensure that Slicers get access to capacity additions. This is another issue that we should work through with the Slicers and BPA.

18. Hungry Horse

Northern Lights Inc (NLI) has a 4 MW allocation of Hungry Horse which will be dedicated to load through 2010. Post 2010 NLI will not have access to this energy. We request that CHWM for Northern Lights be calculated by adding back in the amount of the Hungry Horse allocation used to serve load in 2010.