REGIONAL DIALOGUE TECHNICAL WORKSHOP NOTES Wednesday P.M., January 29, 2003 BPA Rates Hearing Room, Portland, Oregon

Approximately 18 people attended; two people joined by phone.

Requirements Service

Fred Rettenmund (BPA) said participants had a number of interests at the last meeting on requirements service, including how BPA would define a customer's base load in order to distinguish the base from load growth. The determination would be needed so a customer could give notice if it did not want BPA to serve its load growth and planned instead to take that load growth off BPA to be served by a non-federal resource, he explained. Another issue for today's discussion is the product mix that would be available for generating customers, including block service, Rettenmund indicated.

Carolyn Richardson (BPA) noted that BPA had seasoned account executives available for the discussion. She added the caveat that since "products and rates go hand-in-hand," some rate discussion could occur in the context of explaining a product. But all rates will be decided in the rate case, Richardson stated.

Chuck Forman (BPA) took on the first issue, determining a customer's base load. People asked how we would define the base load in order to have a base from which to measure load growth, he explained. BPA doesn't have a formal process for determining base load, but internally we define it in terms of the annual energy amount, Forman said.

He then described a proposal for determining base load and load growth. To determine the base, we would take the total annual energy amount for a given year and calculate the percentage of load that is served in each month, January through December; we would take each month's percentage and divide it into heavy load hours (HLH) and light load hours (LLH), Forman explained. We would end up with 24 numbers – the 12 months plus the diurnal splits, he said, adding that BPA would go through the numbers with the customer to see if there is any odd data present. (Forman noted that BPA would tend to take a multiyear average of the numbers to capture things like weather variations from year to year.) To determine load growth, we would take an actual metered amount for some future year, subtract the base numbers, and the difference between the two would be the load growth, Forman said. This is a simple mathematical, mechanical way to determine base load and load growth, and it is doable through forecasting, he added.

Jim Litchfield (IOUs) asked if the load-growth calculation would be made by customer or by customer pool. We've talked about applying this to a pool of load or to an individual customer, Forman responded. For purposes of billing, it would have to be at the customer level, but we'd use the pool for rate-setting purposes, he said.

With regard to headroom (difference between BPA's load and FBS resources), there might be some or there might not, Forman continued. In Figure 1 of the handout, we're

assuming there is headroom in FY 07 and FY 08, he pointed out. Steve Weiss (NWEC) asked if there could be headroom in some months and not in others. Yes, that could be, Forman answered.

In our example, we have a net requirements customer who has applied no resources and is relying on BPA for load growth, he said. The figure illustrates a very simple example in which there is a steady increase in load from year to year, Forman noted. We determine the base load in FY 07, presume there is headroom in FY 08, but in FY 09, the headroom is used up, and there is a little load growth above the FBS, he explained. If BPA serves the growth beyond FBS resources out of the spot market, we don't need much notice if a customer decides to take load growth off the system, Forman said. We could serve growth out of the spot market and price the energy at spot, or on an index of spot prices, he explained. If the customer doesn't mind the risk, it works, Forman stated, adding that for a customer with low load growth, the overall volatility as a result of the purchased power may be low. BPA would not be shifting costs or taking risks with this approach, he said.

This is not our proposal; we are just illustrating this as a possible approach, Rettenmund clarified.

Or we could ask for more notice, forecast the load and the price, and set a load-growth rate for the rate period, Forman continued. Are you referring to having an incremental rate for load growth? John Saven (NRU) asked. Yes, Forman responded. If the customers in the pool prefer, we could take that rate and have it as one component of a melded rate, he said. But the cost would be for the load-growth service, Forman said. If we went with the spot market approach, we wouldn't care if a customer chose to serve its past load growth, he said. If we aren't making a resource commitment, we wouldn't be harmed by that choice, Forman added.

This seems like the least likely alternative, Terry Mundorf (WPAG) commented. The customers are talking about this issue in terms of a new generating resource, which is at least a two-year proposition, he indicated. The spot market idea is interesting, but it's probably not relevant – the idea of a customer showing up with 30-days notice isn't likely, Mundorf said.

We're responding to an issue that came up at the last meeting, Rettenmund replied. There could be resources other than new generation, he added.

In our proposal, we talked about a hard resource, Mundorf replied. We didn't want people playing BPA against the market, he stated.

We have to deal with two uncertainties, Forman said: price and volumetric. If we go to the spot market, we don't have risk on either one, he said. And if a customer wants out of the volatility, they need to make another arrangement, Forman explained. With respect to notice, we are looking at the shortest notice we need, he added.

What do you mean by the spot market? Litchfield asked. If your notice requirement were three months, wouldn't you take on a three-month purchase? he asked. That's right, the spot is the most extreme example, Forman acknowledged. He suggested if there were enough load growth and BPA were confident it would not have stranded costs, it could start layering in longer-duration purchases.

Weiss asked how an unusually cold winter would be treated in determining the base. Would it be above or below the base load/growth line? he asked. There was some discussion about whether the issue was pricing or load variance. This isn't a load growth question; it's about how you meet load variance, Stuart Clarke (BPA) stated. Our load variance charge would take that into account, Forman clarified. We don't want the base load to vary based on degree-days or to have to revisit the base load question depending on whether it's a warm or cold year, he stated.

Figure 2

Figure 2 illustrates a situation in which a customer adds a non-federal resource to serve load growth, Forman explained. If a customer wants to serve its own load growth, we would look at the circumstances with the customer, and if we decide the growth is not less than the proposed resource, we would sit down with the customer and amend the contract just like we do now, he said.

If the load growth does not happen, the customer has the resource risk – it could not dip down into the base amount, Rettenmund clarified. The customer forecasts the load growth, gets a resource to meet the load growth, and if the load growth doesn't occur, the customer can't dip into the base, Tim Johnson (BPA) agreed.

You won't have anyone here developing a resource under that rule, Mundorf stated. If you want customers to bring resources, BPA has to take some risk, he said. As a policy matter, I'd ask you to think about this – no one knows where load is going to go, and BPA is better equipped than the utilities to take the risk, Mundorf said.

The customer proposal contemplated a customer having to deal with this situation, Rettenmund pointed out. Mundorf responded that a utility could well have to make a 10 MW purchase to get in on a resource, but could not bring it in under such a BPA load-growth rule. If a resource dips down into the base, that's not harmful to BPA if there is an alternative home for those megawatts, Forman commented. One way to deal with this is on a case-by-case basis, he stated.

How you deal with this depends on your policy objective, Mundorf said. From the customers' point of view, they can build a resource and bear the risk or not build a resource and have BPA bear the risk, he said. It depends on the incentives you want to set up, Mundorf added.

So you would say that a customer should be able to apply a resource that is larger than its load growth, which puts BPA's base revenue at risk, Forman said. I'd look at it this way

- the pool would benefit by members not bringing in new load – it would keep the cost of serving load growth out of the pool and would stretch the longevity of the low-cost resource, Mundorf responded. The other pool members ought to be willing to absorb the risk of load diverging from the base on the low side, since it's also possible to diverge on the up side, he said.

An important consideration is that we are talking about a utility bringing a resource and not just "a fly-by-night market purchase," Saven pointed out. If a customer wants to bring a resource to its load, the federal resource pool is bigger by that amount of megawatts, and others aren't harmed, he said, noting that BPA has taken on major new costs as a result of serving load beyond FBS resources. If you don't take the risk, it is too risky for small rural customers to develop a resource, he said. They might have a resource as small as 2 MW and have no access or way to market it, Saven stated.

You could tie the notice provision to the times BPA is doing a rate case, so it takes the risk off BPA, Clarke suggested.

If we have a two-year rate period, is it the logical conclusion that the notice must be sufficiently in advance of the rate case so we could factor it into the rate for service? Forman asked. In that case, it seems we would build a portfolio that wouldn't look long-term, but to each rate case – it would give the customers an option more often, he commented.

"Anyone would wait until they're out there with load growth," before they add a hard resource, Weiss observed. Your risk would be having some FBS to sell, and "that's not too hard," he added.

Rettenmund said he understood that the customer proposal was geared toward meeting prospective load growth and not to covering load growth in the past. The proposal was ambiguous on that point, Charlie Grist (NPPC) responded. It talked about prospective load growth, but it didn't reject the other, Saven said. In either case, it has to match what we do in our portfolio. Forman commented.

Block Product

Clarke described BPA's proposal for the block product, which was illustrated on a graph called "Block Product/Year 1." I am talking about a partial-service, non-Slice customer with some resources, but not enough to cover its entire load, he said. That customer could purchase a block to sit on the bottom of its resource stack, Clarke explained. In the first year, we would set up the block, forecasting the customer's load by month and by heavy and light load hours, and the customer would sign a contract with BPA making the block a take-or-pay obligation, Clarke continued. The customer would preschedule the block, and "on top of the block," the utility would use its own resources to meet load variance, he said.

So a utility could buy 20 MW of HLH and 10 MW of LLH, month to month? Lyn Williams (PGE) asked, referring to the graph. That's correct, Clarke answered. To shape the block, we would calculate the customer's load factor and that would provide the basis for the shaping service, he said.

With regard to shaping, can you return the energy in various configurations, Williams asked. Yes, Clarke said. Your load could vary up to a predetermined amount, but you would then have to reduce your take in enough hours so the average is the amount of the block purchase, he explained.

Clarke moved to the graph entitled "Block Product/Year 2." In the second year, the block purchaser could buy an additional amount of HLH energy in a take-or-pay agreement, with the price based on all PBL costs to provide the additional power, he said. The rate would be based on our market forecast, according to Clarke. Before each rate case, a utility would tell BPA how much take-or-pay power it wants, he said. The point is BPA would know about any additional amount of power it was going to serve, so the information could be factored into the rate case, Clarke indicated.

The idea here is we would offer block with load growth, Rettenmund stated. But the utilities asking for it would pay the cost of the service, Clarke said. The same is true with all load growth, Rettenmund added.

The customer proposal was to offer no load growth with the block, Williams pointed out. We understand that, Rettenmund responded.

In a new long-term relationship, the customer proposal has customers choose between Slice or requirements, Litchfield joined. If a customer wants load growth, we say the customer takes requirements, he added. Customers can always enter a bilateral transaction with BPA, Litchfield pointed out. But offering block with load growth begs the question of how to set the rate, and no matter how you do it, you'll likely be wrong, he stated.

A preference utility has the right to buy its 5(b) net requirements from BPA, Clarke responded.

The issue of block with load growth came up when we got into the Slice true up, and the Slice product had clearly become more risky, Litchfield said. We are speaking here to the block alone, with or without Slice, Rettenmund responded.

Geoff Carr (NRU) asked about the purchase price for the Year 2 HLH. I don't have an answer on that, but it would not be at a marginal rate, Rettenmund responded. This would hurt "a carefully crafted compromise" among customers, Carr said. Block with load growth "quickly chomps into the headroom" in the FBS, he said.

No one may want the product, Rettenmund replied. Are you recommending if we go forward with this that we reserve the headroom for one class of customers and price it accordingly? he asked.

You don't have a rate problem if you don't offer the product, Williams stated. The customer proposal makes things more level between block and Slice block, so Slicers and non-Slicers would buy the same block, she added. It also reduces BPA's risk and its footprint in the market, Williams said.

You wouldn't necessarily change the footprint if the customer could buy another product with load growth, John Hirsch (BPA) pointed out. But the customer proposal wouldn't make another product with load growth available, Rettenmund said. But, he added, we have a problem with not offering something that would have us meet the load-growth needs of block customers. We have concerns that it may not be good policy, and we have a legal obligation to allow preference customers to take their net requirements over time, Rettenmund stated. We would say, take the requirements product with load growth or the block without it, Williams responded.

The problem is this, Litchfield said: the original idea for the customers was to limit BPA's risk in having to meet too much load. People are finally willing to take an allocation from the system and meet their own load growth, he said. The large customers that take block have the ability to meet their load growth, but if BPA offers it with the block, these customers "can lean on BPA to meet their growth as a hedge against the market," Litchfield indicated. And they would "suck up the headroom" in the FBS, he added. If you offer the block with load growth, how do you price it and who bears the risk? Litchfield asked.

"We cemented down the lid on this can of worms,' and now you are opening it, Carr agreed. If you give load growth with the block, and the headroom is priced below market, someone will take it, Weiss added.

But one group of preference customers has no right to reserve the power in the FBS, Tim Johnson stated. I think we need to round out the package, including the on and off ramps, so people can calibrate this idea with what else is available, Rettenmund said.

I would urge you to reconsider offering block with load growth, Erick Johnson (PNGC) stated. It undermines the customer proposal and it puts risk on BPA, he said. In addition, BPA doesn't benefit from it – it only benefits certain customers "who are influential and can sway BPA," Johnson contended. This whole notion came in late in the game – "it is not welcome and it is not endorsed" by the long-term proponents of the customer proposal, he said.

The joint customer proposal doesn't have any block, except with Slice, Rettenmund pointed out. But you have heard for some time that we want a non-Slice block, Litchfield responded.

If you offer block with load growth, you'll never know what your obligation is going to be – you could build resources and no one would take them, Scott Brattebo (PacifiCorp) said. That's presuming we would build long-term resources, Forman replied. Our goal is to have BPA remain in its current form, Brattebo said. Any increased load would be a small amount if load growth were only offered to full requirements customers, he stated.

If we put this on the table, will there be big interest? Rettenmund asked. Some customers will take it – "it's a recipe for a mess," Erick Johnson responded. "It's a recipe for business as usual," Williams added.

It poses a big problem between the customer groups, Litchfield stated. It pits the large load-growth customers against the small full-requirements customers, he said. And we don't want the scenario again where you have large uncertainty, Brattebo said.

You still have the footprint issue, Rettenmund said. But it's a cost issue too, Erick Johnson answered.

The basic value of the federal system is in hydro – the more we dilute that with market purchases or new resources, the more the benefits will diminish, Litchfield stated. The attempt is to get back to the basic system, he said.

With respect to your view of our meeting our statutory obligation, as long as we offer a product that meets full requirements, a customer can take it even if they don't like it, Forman clarified. We tried in Subscription to have a block without load growth, but customers said they wanted us to meet load growth, Tim Johnson pointed out.

In its comments, the Council said it favored offering the block without load growth, Grist said. The Council said that if you offer load growth, it again introduces risk in the form of who pays and it muddies the question of who's obligation it is to meet future load, he clarified. We supported offering load growth to the full-requirements customers because it would be a small amount, Grist added.

Adjourn: 2:55 p.m.