REGIONAL DIALOGUE TECHNICAL WORKSHOP NOTES Wednesday, January 22, 2003 BPA Rates Hearing Room, Portland, Oregon

Approximately 15 people attended.

DSI Issues

Scott Wilson (BPA) said the purpose of the meeting was to continue discussing issues related to DSI service, including: eligibility criteria, loads, contract term, take or pay, interruptibility, and pricing.

Geoff Carr (NRU) said there ought to be consistency between requirements and DSI contracts on the issue of take or pay. Wilson said for BPA, the key is, "we want to get paid." He said that points to the need for a creditworthiness test and monthly billing to make sure there is not too much liability accruing.

The requirements customers pay for load variance service, Chuck Forman (BPA) pointed out. If a DSI wants to pay for it, would it be okay for BPA to offer that service to DSIs? he asked. It would be worth looking at, Carr replied.

That raises an interesting question about whether there will be a requirements-type product available to the DSIs, Paul Murphy (Golden Northwest) stated. He went on to object to monthly billing without some way to net "losses and gains" when remarketing or liquidated damages provisions are also included. BPA sets rates five years in advance based on forecasts, which are inevitably wrong, Murphy said. The notion of a monthly take or pay payment seems "grossly inequitable," he contended. During periods of economic downturn, there has to be a more equitable way to adjust the payments without imposing a penalty, Murphy said.

If there were liquidated damages provisions similar to those in the current contract, we'd net the payments within the year, Wilson responded. At the end of the year, we would "zero out the balance, if there's a positive amount," he said, adding that BPA has also heard the ideas about netting the DSIs' bills over a period of years, but is not currently inclined to set up a situation like remarketing of the past contract where payments could be made to DSIs if market prices exceed the BPA price. With monthly billing under a liquidated damages provision, any positive amount (if the market is considerably higher than the IP rate) turns into a windfall for BPA, and that is unacceptable, Murphy said.

Requirements customers have the same problem, Steve Weiss (NWEC) said. But that's a requirements product, not a take-or-pay contract, Murphy pointed out. With take or pay, you have an obligation whether the load is there or not, he said. A take-or-pay provision attached to a fixed quantity is inappropriate, Murphy stated.

Preference customers have a statutory right to federal power, Erick Johnson (PNGC) responded. There is not enough of that power to go around, he said. The DSIs have no

1

right to federal power, but if BPA decides to serve them with certain conditions attached, it may be okay with us, Johnson continued. "The idea these guys should have protection from BPA getting a windfall, doesn't have traction with us," he stated. The DSIs aren't paying their current take-or-pay contracts, and there is a question about whether BPA should serve them at all, Johnson indicated.

I'd urge you to be cautious about letting DSI customers pay a premium for load-following service, Marcus Wood (PacifiCorp) said. The DSIs represent a large amount of load that can be on or off line, and BPA could end up with a commitment to serve load under circumstances in which there is no economic justification, he said, adding that such a commitment would pose risk for BPA.

Murphy pointed out that some preference customers have industrial load to which they provide requirements service. It isn't uncommon for utilities to offer requirements service to their industrial end-use customers, he said.

Interruptibility

Wilson said BPA did a rough analysis of the value of interruptibility based on what an interruptible product for the DSIs might look like. Under the product, we considered a six-month term of interruption, since we need a period long enough to work with the DSIs' business needs, he explained. In addition, we considered there would be a maximum of one interruption in any year; a 12-month period between interruptions; and a maximum of two interruptions in a five-year period, Wilson said. We put the IP rate forecast at \$30 per MWh and the payment for interruption at \$20 per MWh, he added.

So the cost to BPA would be the equivalent of a \$50 per MWh purchase, Linc Wolverton (ICNU) clarified, a payment of \$20 and lost revenue of \$30.

According to our analysis, if market prices are in the expected range under low, medium, or high prices there is little value, and only if prices are at the highest end of the price range would the interruptibility have value to BPA, Wilson indicated. At a market price below \$50 per MWh, there isn't much benefit; above \$50, there is – with extreme prices, there is potential for great value, he reported.

Would there be an objective trigger for BPA to go for an interruption? Michael Early (Alcoa) asked. It would be discretionary with BPA, Wilson responded.

Murphy said he could foresee serious problems with the proposal. If power prices were forecast to be high and to persist over a six-month period, there would be a temptation to use the interruption, regardless of the consequences to the interrupted customer, he said. Those consequences could be serious, Murphy continued, particularly if a company has to resume take-or-pay obligations at the same time it is facing large startup costs. This shouldn't be done just to transfer benefits between customers, he said. As it's structured, you may just end up imposing costs on one set of customers to the benefit of others, Murphy added.

Terry Mundorf (WPAG) cited several reasons interruptibility has not worked, including the lack of correlation between power prices and metal prices; political fallout from putting workers out of a job; and payment for interruptibility that is embedded in rates, when the price for interruptions is prospective. These factors give the DSIs incentive to resist interruption, he indicated. There are circumstances under which interruption can have great value, Mundorf acknowledged, counseling "great caution" in shaping an interruptible product. Think about the workers, make the payment at the time the interruption is exercised, and establish a trigger event that is clear and treats both parties fairly, he recommended.

With the price, are you talking about an opportunity cost or an avoided purchase cost? Wolverton asked. Probably both, Wilson said. Wolverton questioned whether the opportunity cost was the right reason to interrupt. If you interrupt to avoid a purchase and the market is really high, it means the DSIs would be having trouble anyway, he indicated. If there is a low threshold for the trigger, I'd be concerned about the political repercussions of interrupting for the opportunity cost, Wolverton said.

Is this a product BPA would offer in the contract, or is it something you see as "a good idea"? Litchfield asked. You can do this without a contract provision, he pointed out. Wilson said BPA is thinking in terms of a provision in the contract that would say, "if we need to, we can pay you \$20 per MWh not to serve your load."

Litchfield pointed out the difficulty of getting the price correct. We've got experience with doing this, and it doesn't need to be part of the contract, he stated. It's within BPA's capability to enter this type of agreement with any of its customers, Litchfield said.

Johnson pointed out that BPA has a statutory obligation to put interruptibility into a DSI contract. So you need to deal with it, he added.

We have two different kinds of interruptibility, Wood said: reliability and economic. The reliability interruption would be short term and doesn't require payment, he said. Wood questioned economic interruptibility, noting that BPA isn't entering into a DSI deal "to create marketing opportunities." There may be circumstances under which it would be okay for the DSIs to close and give BPA the opportunity to sell the power, but there may be other approaches to cap BPA's exposure, he suggested.

I think interruptibility is valuable, and I support it, Weiss stated. But "this proposal is clunky and won't work," he said. It may be better than nothing, Weiss added.

Why is it better than nothing? Litchfield asked. Because of the possibility of the high-price scenario, Weiss responded. If the market price was \$300, a whole lot of customers would be willing to do this – there should be more competition in this, Litchfield said. He questioned whether an interruptibility product would end up matching the situations that might occur. There are a lot of details, and I don't think we can work them out, Litchfield added.

Murphy pointed out that when the Northwest Power Act was passed, the region expected shortages and contemplated the need to interrupt the DSIs. When you look at interruptibility, you can't look at it "in the abstract," but rather in the context of whether there are contingencies you could meet with an interruption, he stated. "If it isn't part and parcel of the larger planning process, it probably doesn't make sense" and you won't get value for it, Murphy indicated. Look at what kind of flexibility we need in planning and whether we can get there economically with interruptibility, he recommended.

In an emergency, you could have anyone bid in what they'd take for interruptibility, Wolverton suggested. We have a mechanism for offering a demand exchange, and we can offer it to anyone, Forman responded. We were considering whether there is something with interruptibility we could add to the DSI contract that would have value for BPA, Wilson commented.

Rates and the NWEC Pricing Proposal

With regard to a DSI rate, BPA was planning on an average price for the IP rate that follows the rate directives, Wilson continued. Are you still thinking about \$30 per MWh? Carr asked. Yes, Wilson responded, but added that some DSIs have indicated that at \$30, operation "starts to be marginal."

Weiss offered a NWEC pricing proposal that he said tries to deal with the take-or-pay issue for BPA and at the same time provides some way for the DSIs to safely sign long-term contracts. The proposal, he explained, is to: calculate the traditional IP melded rate in each rate case; using a forecast of the average market price for the rate period, calculate the delta between the IP melded rate and the market; set BPA's DSI rate as the actual market price less the delta. For example, if the IP melded rate from the rate case is 30 mills per kWh and the market forecast is 38 mills, the DSI would pay 8 mills below the market, Weiss said. The DSIs could decide whether they can run at that rate or not, he continued. If they do shut down, BPA has no stranded costs, and as long as the delta is positive, BPA has no risk, Weiss added. We think this approach would work in lieu of interruptibility, he stated.

How often would you set the delta? Murphy asked. Whenever there is a rate case – every two, three, or five years, Weiss responded. It seems the DSIs could run more often with this approach, he added. Weiss also suggested that the pricing formula would have benefits for the market and dampen the swings.

What market price would you use? Forman asked. Weiss said it would be a forward-looking index on a monthly or quarterly basis. But no one knows what that forward price will be, Litchfield pointed out.

"The idea is not without merit," but I see a problem with defining the delta in the rate case, Murphy stated. If the delta could be developed and tied to some measure that

relates to other customers, it might be possible to make this work, he said, suggesting the rate could be set using "a phantom CT" as part of the formula.

Wilson pointed out that BPA has had a flexible IP rate in the past. Why didn't anyone use it before when it was available? he asked. What drives the companies is not what's happening in the power market, Murphy responded. It's the average price of power and what they are getting for their product, he said. Weiss is right about the desirability of selling power, depending on the value of its use, and also about structuring something that could counter the swings and dampen the volatility in the market, Murphy said. There is merit to this idea, but the question is whether it can be made to work, he continued. The value to the companies is it could curtail operations without a take-or-ay problem, Murphy said.

David Hoff (Puget) pointed out that the formula has implications for BPA's revenue stream. Every time the market falls, BPA's revenues go down, he said.

It would only be flexible within the 700 MWs of DSI load, Weiss responded. But BPA's revenues would still be less than they would otherwise be, Hoff said. And "there is no market," and who knows when it will be back again, Lyn Williams (PGE) added.

The theory has merit, but there are technical problems, Wood stated. He cited three concerns: trying to avoid having things based on BPA forecasts; a delta based on the market means parties don't know what will happen; and whether the formula would work if BPA has the chance to lock in a forward purchase. He suggested there could be pricing approaches used to keep the DSIs on line, but he added that there are circumstances in which there would be no justification for the delta.

If you want BPA to come up with a power supply for the term of the contract, take or pay becomes quite important, Wood continued. If we're trying to settle something with the DSIs, it might work to look at this in a slightly different way, he added. For instance, Alcoa proposed bringing a power supply and having a take-or-pay contract that terminates with the supply, Wood pointed out.

Murphy suggested BPA staff talk with its operations people on the interruptibility issue. There might be creative arrangements that would create value for the region, he said.

Going down this road may have merit, but don't do it in isolation – let other customers participate, Mundorf recommended. He pointed out that BPA spent money on the smelters to get conservation savings long term, but because of some companies' financial problems, those savings will not be realized. Making financial investments with long-term payback "are of dubious value," Mundorf stated.

Wilson said BPA's operations people could be brought into the discussion to see if there are ways to capture additional value.

Adjourn: 11:55 a.m.