The BPA Low Density Discount in a Tiered Rate World

Background

The BPA has had a Low Density Discount in place since the first rate case following passage of the Northwest Power Act. The Northwest Power Act requires BPA to provide discounts, to the extent appropriate, to customers with low system densities.[1] The legislative history of the Northwest Power Act provides further detail as to the purpose of the LDD.[2] BPA has periodically revised the eligibility criteria and the method for calculating the LDD in its section 7(i) rate hearings.

"Currently 55 customers (39 Load Following, 15 Slice, and 1 Block) receive annual LDD benefits of about $18.4 million. LDD benefits are expected to average at least $19.2 million in the FY 2007-2009 rate period. The cost of these benefits is allocated to the following rate pools:
1. Preference Rate Pool
    a. the PF Preference rate (including Slice),
    b. the PF Exchange Program rate, and
2. NR Rate Pool (Currently there are no LDD recipients in this pool nor are any of the LDD costs associated with the Preference Rate Pool allocated to this pool.)"
(from BPA findings regarding the LDD Methodology, June 29, 2005)

Basic Structure

For Full Service customers, Block customers and the Block portion of the Slice/Block Product, the LDD is a percentage discount off a customer's HLH and LLH energy and demand and load variance purchases from BPA. Two factors are used in the calculation: (1) The customer's total retail load divided by the value of that customer's depreciated electric plant (excluding generation plant), and (2) the customer's number of consumers in the distribution system divided by the number of pole miles of distribution. Eligibly criteria must also be met to ensure that, for example, the value of the discount is passed on to the utility's customers and that the utility's average retail rate is significantly higher than the BPA PF rate. The above factors and eligibility criteria were developed to provide a discount based on the high level of investment needed by low-density systems to serve their customers.

For the Slice portion of the Slice/Block Product the LDD is a $/MWh discount applied to the customer's 12-month critical slice amount. Currently, a Slice customer's LDD

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[1] Northwest Power Act, 16 U.S.C. §§ 839-839h, Section 7(d)(1). "In order to avoid adverse impacts on retail rates of the Administrator's customers with low system densities, the Administrator shall, to the extent appropriate, apply discounts to the rate or rates for such customers."

[2] H.R. Rep. No. 96-976, Part II, 96th Cong., 2d Session 52 (1980) provides: "Section 7(d)(1) permits BPA to offer rate discounts to customers with low system densities such as rural electric cooperatives with high distribution costs resulting from sparsely populated service areas." Similarly, H.R. Rep. No. 96-976, Part I, 96th Cong., 2d Session 69 (1980) provides: "Section 7(d) permits the Administrator to apply constraints to the rates of customers with low system densities. This is intended to afford greater equity to consumers of small rural co-ops which have high distribution costs due to difficult terrain, remote service areas, or other factors."

discount is calculated using a comparative analysis with the LDD percentage category of the non Slice customers. With this approach the non-Slice, non-pre-Sub LDD customers are collected by percentage group and the cost by billing determinant is calculated and summed to a total. This total cost of all billing determinants is divided by the sum of the energy amounts in kWh to yield the $/MWh for each percentage group. The eligibility criteria described for non-Slice customers are applicable for Slice customers as well.

This calculation for Slice LDD benefits is complicated and depending on certain circumstances can skew the results to favor BPA or favor the Slice customer. To eliminate the undo complexity and create a more equitable result, we propose a simplified approach. Calculate the Slice customers LDD benefit as you would if they were a Full Service customer in total dollars, rather than a percent. The Slice customers would receive this equivalent dollar amount.

The 2007 rate case

In the 2007 to 2009 rate case a number of changes were made to the LDD.

- The purchaser's average retail rate for the reporting year must exceed the PF rate for the most closely corresponding fiscal year by 25 percent. This was increased from 10 percent in the prior rate schedules;
- Adjustments were made to reporting data for customers converting the pre-subscription contracts to subscription contracts;
- BPA accepted that the LDD (after the above changes) would remain the same from 2007 to 2009 rate case to the 2010 to 2011 rate case, unless BPA and the customers agree otherwise;
- BPA accepted that it would have a special forum to revise the LDD so the "Slice customers would not be advantaged or disadvantaged in the implementation of the LDD compared to non-Slice customers receiving the LDD." 2007 ROD, pages 14-1 and 14-2.

The result of the 2007 case was to give stability to this program for the period through the end of the current contracts.

The LDD Post 2011

The July 2007 BPA Long Term Regional Dialogue Final Policy in its' discussion of the future of the LDD states:

"Section 7(d)(1) of the Northwest Power Act requires the Administrator to provide low density discounts (LDD) to the wholesale power rates of customers with low system densities 'to the extent appropriate.' The Administrator has discretion to establish the criteria under which the LDD is offered and to determine whether it is appropriate to offer an LDD based on the criteria adopted.

In future rate proceedings, BPA will propose the establishment of long-term LDD stability over multiple rate periods (or the contract period) to the extent permitted by

law. Also, in order to avoid biasing a customer's resource choices, BPA will advocate that the level of a customer's LDD benefits should not be affected by its choice between BPA's power sold at a PF Tier 2 rate and power from non-Federal resources.
BPA will use the Special Forum established in BPA's WP-07 rate proceeding (for reviewing the application of the LDD to Slice purchases) for a comprehensive review of all LDD issues, including whether or not the LDD will apply to power purchased at Tier 2 rates or power from non-Federal resources for load growth. In that forum, BPA will seek to establish consensus or extensive agreement regarding the myriad LDD issues and will include such consensus proposals in BPA's future wholesale power initial rate proposals." (page 23)

Given the above statement that "BPA will advocate that the level of a customer's LDD benefits should not be affected by its choice between BPA's power sold at a PF Tier 2 rate and power from non-Federal resources" it would appear that applying the LDD to a customer's Tier 2 federal power purchases from BPA would be a difficult proposition. This is because such a discount application would clearly lead to a situation where the customer receiving the discount would consider that discount as an important factor in its choice of BPA as its above HWM power provider. Also, since all Tier 1 customers pay for the cost of the LDD, the recovery of the discount applied to Federal Tier 2 could be viewed as a leakage of Tier 2 costs into Tier 1.

An alternative to this approach would be to apply the discount to purchases of federal and non-Federal power on an equivalent basis. This would have the effect of the customer not being "affected by its choice between BPA's power sold at a PF Tier 2 rate and power from non-Federal resources". However, such an approach would also have the appearance of allowing leakage of Tier 2 costs into Tier 1 by the amount of the discount.

In order to ally these concerns the following approach is proposed for determining the amount of load subject to the LDD. Instead of the current practice of basing the discount on a fixed percentage, the LDD would be reformulated. The percentage discounts in the LDD percentage discount table applicable to each customer would be adjusted each rate year for the amount by which each customer's net requirement increases above its HWM. For example, a customer that is receiving an LDD of 5 percent, the utility's HWM is 48 and it is above its HWM by 2 aMW, so its' net requirement is 50 aMW. The utility would have its percentage adjusted upward to 5.2 percent (or [2/48 plus 1] times 5%). This adjustment would also be applicable to the 7 percent cap. This updated LDD percentage would apply to all BPA Tier 1 purchases (customer charge, load shaping and the demand charge) of the customer receiving the LDD. These costs would be recovered from all Tier 1 purchasers. This adjustment would apply to Slice customers as well, based on the approach suggested above for Slice customers receiving LDD.

The rationale for this approach is the definition of equity that has been accepted by BPA and the customers. In moving to a tiered rates world customers should not be disadvantaged when compared to their current power supply relationship with BPA. So far this definition has served us well as we have worked on rate design and product flexibility. An LDD that does not apply to a customer's total load would be a significant negative departure from current practice. In addition, the approach described above would not affect a customer's choice between BPA's power sold at a PF Tier 2 rate and power from non-Federal resources. Federal and non-Federal above HWM power purchases would be treated on an equivalent basis.