

June 20, 2005

Paul Norman
Senior Vice President, Power Business Line
c/o Helen Goodwin – PS-6
Bonneville Power Administration
P.O. Box 3621
Portland, OR 97208-3621

**Re: Response of the Slice Customers to BPA's Draft Slice Report and
Related Staff Papers**

Dear Mr. Norman:

The Slice Customers hereby provide the attached Response to BPA's Draft Slice Report and Related Staff Papers ("Response"). This Response is submitted by all of the Slice customers, each of whom endorses the comments made in the Response. The Slice customers agree with the major conclusion of the Draft Slice Report ("Draft Report") that "There is no clear indication of unintended cost shifts from Slice to non-Slice customers. . ." during the first three years under the Block/Slice Agreement.

However, as stated to you during the June 1, 2005 meeting to review the Draft Report, the Slice customers were surprised that BPA had already posted the Draft Report on its website before it was made available to the Slice customers. They were also disappointed that BPA did not use the collaborative approach of involving the Slice customers in the Draft Report development that has served BPA and the Slice customers so well, but instead elected to prepare the Draft Report with no Slice customer input.

As a result of this lack of participation by Slice customers, the Draft Report suffers from four serious deficiencies. First, it fails to consider the benefits that the Slice product provides to BPA and its other customers, such as the reduction in BPA's hydro risk and the enhanced probability of Treasury payment. Second, the Draft Report does not acknowledge that all uses of the Slice product flexibilities must be within limits set by BPA. Third, the Draft Study does not contain any analysis of the financial impacts of the Slice product, which omission is troubling given the detailed financial analysis of the product BPA performed before offering it to customers. And fourth, the Draft Report raises concerns about the Slice product that are not substantiated by the BPA staff papers setting out the analyses upon which the Draft Report is based. These deficiencies raise questions regarding the usefulness of the Draft Report as a basis for making any decisions about the Slice product in the post-2011 period.

The Slice customers are committed to re-establishing the collaborative approach that has served the Slice customers, BPA and all of its customers so well in analyzing and resolving the unique issues that the Slice product has presented. In particular, the Slice customers look forward to rectifying the deficiencies in the Draft Report, and to developing a fair, balanced and complete analysis of the performance of the Slice product to date, so that informed decisions can be made about this product in the post-2011 period. We are confident that such an analysis will convince BPA and its other customers of the benefits of expanding the availability of the Slice product in the post-2011 period.

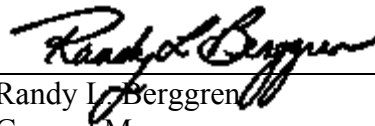
Yours truly,

PUBLIC UTILITY DISTRICT NO. 1 OF BENTON
COUNTY, WASHINGTON



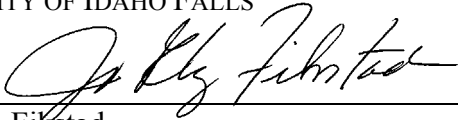
James W. Sanders
General Manager

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Randy I. Berggren
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CITY OF IDAHO FALLS



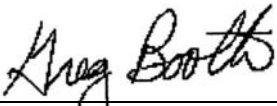
Jo Fikstad
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CITY OF SEATTLE, CITY LIGHT DEPARTMENT



Jorge Carrasco
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Greg Booth
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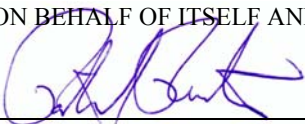
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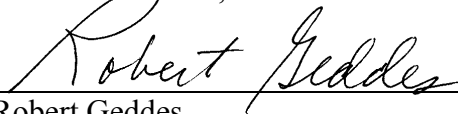
Chuck Berrie
Manager

PACIFIC NORTHWEST GENERATING COOPERATIVE
ON BEHALF OF ITSELF AND THE PNGC MEMBERS



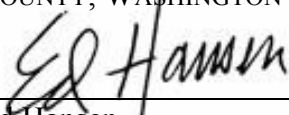
Patrick Reiten
President & CEO

PUBLIC UTILITY DISTRICT NO. 1 OF PEND
OREILLE COUNTY, WASHINGTON



Robert Geddes
General Manager

PUBLIC UTILITY DISTRICT NO. 1 OF SNOHOMISH
COUNTY, WASHINGTON



Ed Hansen
General Manager

Slice Customers' Response to BPA's Draft Slice Report and related Staff Papers

I. INTRODUCTION

On June 1, 2005, BPA posted on its website the *Draft Slice Report: Experience to Date and Initial Proposal for Future* ("Draft Report"). The Draft Report provides the agency's assessment of the Slice product's performance to date as well as going-forward options regarding the future of the product.

Since last summer, BPA has been conducting a review of the Slice product without the input of the Slice customers, despite numerous requests by the Slice customers to participate. The Slice customers were surprised to find the Draft Report posted on BPA's website before it was made available to them by BPA. They are disappointed that BPA did not use the collaborative approach of involving the Slice customers in development of the Draft Report – an approach that has served BPA and the Slice customers so well in resolving Slice issues.

This is the Slice customers' response to the Draft Report.

II. KEY FINDINGS

The Slice customers met with BPA management on June 1, 2005, to review the Draft Report, and with BPA technical staff on June 7, 2005, to review the BPA analysis which underlay the Draft Report. After careful study of the Draft Report and the staff analysis, the Slice customers have reached a number of conclusions about these documents, which are set out in this Response.

Our key findings include:

- Slice product is a resounding success.
- The Slice product offers significant benefits to BPA, non-Slice customers, Slice customers and taxpayers. These include:
 - Reduces BPA's hydro risk and helps ensure Treasury payment.
 - Stabilizes BPA's operations by matching BPA's deliveries to its available generation.
 - Encourages customers to acquire cost-effective renewable energy and to promote conservation.
- BPA's Draft Study correctly concludes that there has been no unintended cost shifts from Slice to non-Slice customers.

- Based on this success, BPA should continue to offer the Slice product as part of its post-2011 power sales options to any customer that requests it.
- The Draft Report suffers from four serious deficiencies that make it a dubious basis for making decisions about the Slice product for the post-2001 period. The Draft Report:
 - 1) Focuses almost exclusively on concerns about potentially detrimental impacts of the Slice product, and does not include any analysis of the Slice product's multiple beneficial impacts.
 - 2) Does not acknowledge that all uses of the Slice product flexibilities must be within limits set by BPA.
 - 3) Does not contain any analysis of the financial impacts of the Slice product. Such a financial analysis was a major factor in BPA's decision to offer the Slice product in 2000.
 - 4) Raises "concerns" about the Slice product that are not substantiated by, and find no support in, the technical analysis of the Slice product performed by BPA staff. Some of that technical analysis also suffers from analytical shortcomings.
- Slice customers agree that a fair, balanced and thorough analysis of the Slice product operation is timely, particularly in light of the Regional Dialogue discussions about BPA's future power supply role. The Draft Report, however, does not meet these standards.

The Slice customers are ready to work with BPA to rectify the deficiencies in the Draft Report. They are confident that an even-handed report will show that the real benefits of the Slice product far out-weigh any potential negative impacts, and that it should be offered to any preference customer that wants it in the post-2011 period.

III. SLICE PRODUCT BACKGROUND

After three years of operation under the Block/Slice Agreement ("Agreement"), the Slice customers' overall summary of the product is that it has been a resounding success for BPA, the Slice customers, the region as a whole and the taxpayers that rely on BPA for timely and complete payments to the U.S. Treasury.

As purchasers of BPA's Slice and Block products, the Slice customers have key interests in the efficacy of the Slice product. Slice customers have significant economic interests in both products, and continually monitor the economic performance of both products on an ongoing basis.

Based on this success and the provisions of the Agreement¹, BPA should continue to offer this product as part of its post-2011 power sales options to any customer that requests the product.

We base this assessment and conclusion on the following findings.

1. The Agreement was implemented successfully and the customers are meeting their load obligations with a combination of BPA Slice, BPA Block and other non-Federal resources. The Slice customers have effectively managed their load needs through a range of adverse weather and hydro conditions over the past three years, relieving BPA of this responsibility.
2. The Slice product has shifted significant hydro-system performance risk from BPA to the Slice customers, mitigating potential effects of this risk on other BPA customers. BPA has enjoyed revenue stability provided by the Slice product despite low water years, aiding in certainty of U.S. Treasury payments. In exchange, the Slice customers have enjoyed a greater degree of self-determination and the opportunity to develop the wherewithal to manage their individual system power needs. The Slice product has proven its utility in aiding the development of non-federal resources, which will be an essential element to the success of future regional allocation efforts.
3. Slice customers have operated and scheduled their Slice energy and power within the limits established in the Agreement, according to BPA's own analyses. This is contrary to concerns raised in the Draft Study. Slice customers believe these limits continue to be fair and reasonable to all of BPA's customers.

IV. BPA SLICE STUDY

Given the track record of operating under the Agreement, the Slice customers were surprised by the content and tone of the Draft Report. The customers and BPA staff meet on a regular basis and cooperatively administer this innovative and beneficial product. BPA made it known earlier this year it was performing a comprehensive review of the costs and benefits of the Slice Agreement after the first three years of operation. The Slice customers agree with BPA that it is important to critically and thoughtfully review all aspects, good and bad, of the Slice product as an integral step in making decisions about power products for the post-2011 period.

The Slice customers are concerned that BPA did not take advantage of repeated requests by Slice customers to review the study work and the analytical methods BPA employed in its review process. BPA ultimately chose to publish its Draft Report without any consultation with the Slice customers that could have provided valuable insight to this effort.

¹ The recitals section contains the following provision: "It is the present intention of BPA and <Customer Name> that prior to the expiration of this Agreement, BPA and <Customer Name> will mutually agree to renew this Agreement for an additional 10 years on the same terms and conditions as set forth herein."

Any proper review of the performance of the Slice product should be done as a comprehensive and even-handed quantitative assessment, including both the beneficial and detrimental impacts of the product. The Draft Report did not attempt to assess, or even acknowledge, the benefits of the Slice product.

Draft Reports lacks supporting analysis: Since the release of the Draft Report, Slice customers have met with BPA staff to review the underlying analyses and have found that many of the concerns contained in the Draft Report are not supported by the relatively modest amount of analysis and research that BPA has performed. In fact, many conclusions in the Draft Report had no supporting basis at all in the analyses performed by BPA, and at this point must be categorized as concerns without analytical substantiation.

BPA's Draft Report assesses only whether costs are shifted *from* Slice customers *to* customers using other BPA power products. Fairness would dictate a balanced look at cost shifts *between* all products, including cost shifts *to* the Slice product. These issues are currently being discussed by the Slice customers, non-Slice customers and BPA in the ongoing mediation process. We hope to successfully conclude those discussions in a way that gives appropriate recognition and resolution to issues of real and potential future cost shifts so as not to disadvantage either Slice or non-Slice customers.

Slice's significant benefits: More importantly, had the Draft Report and the analytical review included an assessment of the many significant benefits that BPA and its non-Slice customers have received from the sale of the Slice product to nearly a quarter of its preference customer load, it would have included the following benefits:

- **Risk reduction to BPA:** The transfer of the volatile hydro-electric generation supply risk to Slice customers translates into a significant improvement to BPA's ability to meet obligations to the U.S. Treasury as well as reduction in the rate risk to the non-Slice customers.
 - During the three completed operating years (FY-02 through FY-04) under the Agreement, the Columbia River system experienced below normal streamflows resulting in a lower level of surplus electric generation from the FCRPS. Using the January-July streamflows at The Dalles as an indicator, the three years saw runoff at 96%, 82%, and 76% of normal successively. Projections for the current runoff period place the 2005 January through July estimate at 75% of normal. Each year, BPA provides the Slice customers with projections of the federal output for the coming year. A comparison of the actual energy delivered to the Slice customers during this period with the average projected levels shows that there has been a negative impact of \$150 million dollars to the Slice customers as a result of the below normal streamflow conditions and resulting reduced hydro-electric output. The Slice customers have successfully dealt with this impact since this

risk was understood and analyzed prior to entering into the Agreement. This outcome does, however, represent a substantial benefit to BPA and non-Slice customers that must be weighed against the unsubstantiated concerns stated in the Draft Report.

- In aggregate, the 11 Slice customers pay \$502 million dollars² to BPA annually as their Slice payment. As mentioned, this payment does not fluctuate with variable hydro or load conditions, and includes true up provisions that allow recovery of actual costs by BPA without triggering complicated CRAC mechanisms. These fixed payments increase the probability of BPA meeting its payment schedule to the U.S. Treasury.
- In addition, the Slice customers pay \$230 million dollars to BPA annually for Block product power, bringing the overall annual payments to BPA by Slice customers under the Agreements to approximately \$732 million dollars. This amount represents nearly 25% of BPA's annual revenue from sales³, and also provides a guaranteed revenue stream to BPA as these payments are subject to contractual take or pay provisions. This total does not include additional revenues paid to BPA under pre-subscription contracts that many of the Slice customers hold as well, nor does it include revenue paid to BPA under transmission contracts held by all of the Slice customers.
- **Slice indexed to federal capability:** The Slice customers' rights to power from the FCRPS under the Agreement are continuously and unilaterally modified by BPA to match the actual capability of the FCRPS. This significantly reduces BPA's potential exposure to adverse market conditions. For example, if a generating project is taken out of service, either due to forced outages or planned maintenance, BPA's obligation to deliver power and energy to the Slice customers is commensurately reduced, eliminating any need for BPA to replace this lost generation to serve Slice purchasers. This includes the potentially sizable reductions related to changes in Columbia Generating Station output or large hydro unit output, such as the units at the Grand Coulee third powerhouse.

In addition, as streamflows vary, the obligation of BPA to deliver energy to Slice customers is adjusted accordingly. No other power sales contract executed by BPA permits BPA to tailor its energy delivery obligation to the customer to match the actual capabilities of BPA's generating resources. This provides a valuable risk mitigation mechanism to BPA and all of its customers.

² FY-2004 payment total.

³ Based on FY-2004 Operating Revenue from Sales of \$2,973,469 as indicated in BPA's 2004 Annual Report – page 33.

- **Resource development by Slice customers:** The Slice customers have found the Slice product to be very compatible with non-federal resource development, and as a consequence have successfully pursued the development of such resources. This has resulted in Slice customers investing in additional energy resources in the Northwest, enhancing the overall reliability of the Northwest power supply as well as increasing the regional investment in renewable resources. Examples of these investments include:
 - Benton PUD, Clatskanie PUD, Franklin PUD and Grays Harbor PUD investments in Frederickson and other peaking units, combined representing over 210 MW of installed capacity.
 - Benton PUD, Grays Harbor PUD, and Okanogan County PUD together purchase about 40% of Energy Northwest’s 64 MW Nine Canyon Wind Farm as additional diversification into renewable energy to supplement their Slice shares.
 - Seattle City Light has purchased 175 MW and the Eugene Water & Electric Board has purchased 25 MW from the Stateline Wind Project.

The Slice product has proven itself to be a sound BPA requirements product that has encouraged customers to acquire cost-effective renewable energy and conservation, and will be especially effective in doing so under an allocated BPA power system.

V. CONCLUSIONS

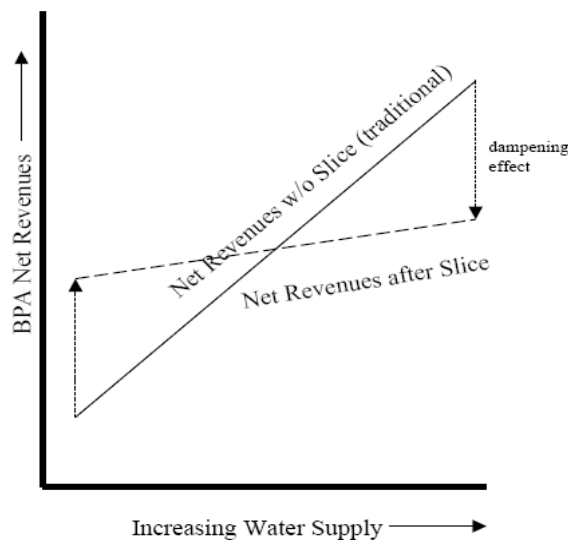
Lack of financial analysis: Slice customers were surprised and disappointed to find that BPA produced and issued the Draft Report without any comprehensive financial analysis of the Slice product. As BPA considered whether to offer the Slice product in the late 1990s, there was a concerted effort by BPA to quantify the impact of the Slice product to BPA’s revenues and revenue certainty as part of that decision process.

The following slide (next page) was published by BPA in March 2000 and demonstrates that BPA does have a grasp of the main financial risk driver that should have been analyzed again as part of the Draft Report.

Despite this lack of financial analysis, BPA concluded in the Draft Report that “There is no clear indication of unintended cost shifts from Slice to non-Slice customers during the first three years of operation. As intended, Slice customers appear to have borne the appropriate percentage of water and market variability risks during the low water and low market in 2002, and have taken reduced hydro generation due to low water conditions through 2005.” The Slice customers agree with this conclusion and are confident that detailed financial analysis would quantify and confirm the significant benefits this represents to BPA, its other customers and the region.

The Draft Report in the same section suggests, "...there is concern about transfers of costs and risks in connection with operational flexibility." The Slice customers have examined the analysis BPA performed that led to this conclusion, as set out in the "*Draft Slice Report – Staff Papers*" ("Staff Papers"). We agree with the statement on page 6 of the Staff Papers that "Quantifying the long-term impact on operations and secondary revenue would be difficult, if not outright impossible." These "transfers of costs and risks," if they exist at all, are very small. When compared with the benefits discussed above, they would not be a factor in an objective evaluation.

Slice Impacts on BPA's Revenues



- BPA's traditional revenue stream varies with water supply (higher water conditions, higher revenues)
- BPA's revenues from Slice are independent of water condition. With Slice, BPA's revenues will vary less with varying water conditions.
- If BPA signs Slice contracts, BPA's ability to meet its treasury payment obligations under poor water conditions should improve. This comes at the expense of higher revenues during times of above average water conditions.

The Draft Report identified several "Capacity and operating flexibility" concerns, which were supposedly identified by the Staff Papers. However, as we have already indicated, most of the concerns were not supported by the analysis described in the Staff Papers. The attached appendix contains our specific observations and comments on the issues raised in the Staff Papers.

Need to work collaboratively with customers: The Slice customers have worked collaboratively with BPA for the last three and a half years to solve technical issues identified by both BPA and the customers. Several of the technical issues raised in the Staff Papers are similar to challenges that our staffs have solved innovatively in the past, and we are confident these issues can be addressed to BPA's and the Slice customers' satisfaction. It would greatly aid such joint efforts to understand and resolve BPA's concerns regarding the Slice product if BPA would release the technical data that underlies the Staff Papers, which serve as the basis for the Draft Report.

In summary, the Slice customers believe that a proper financial assessment by BPA will lead to the conclusion by BPA and all of its customers that the Slice product has been, and will continue to be, beneficial to the Slice customers, to non-Slice customers, to BPA, to the region, and to the taxpayers of the United States. The experience of the Slice customers leads us to believe that the region will benefit from continued and expanded offerings of this innovative product. The Slice customers stand ready to work with BPA staff to develop a thorough report to the region on the Slice product and its attributes in the spirit that the opportunity to continue this innovative partnership between BPA and its customers not be overlooked.

Appendix - Slice Customer Response to BPA's Draft Slice Report and related Staff Papers June 2005

In its Staff Papers, BPA identified areas of potential concern with the technical aspects of Slice. They are:

- a) Concerns related to BPA's difficulty forecasting the Slice schedules
- b) Reliability Concerns
- c) Ancillary Services
- d) Exhibit J Amendments

For items b through d, either the *Staff Papers* concluded that there was no concern related to the area identified, or the concern discussed in the *Staff Papers* did not appear in the *Draft Report*. We have concluded that the analyses in these sections of the *Staff Papers*, therefore, did not raise concerns or issues with BPA management related to the central question regarding potential cost-shifts between the Slice customers and non-Slice customers.

The only remaining issues deal with BPA's ability to forecast Slice schedules. The *Staff Papers* contain a retrospective on the use of flexibility and a modest attempt to quantify impacts to the Federal System based on the scheduling practices of Slice customers. Unfortunately, these areas of analyses are either not applied properly within the context of the Slice Agreement, or draw conclusions from scant research.

One conclusion in the *Staff Papers* is that the Slice customers have realized a benefit from flexibility that was not anticipated in the WP-02 rate case cost shift analysis. A real success story of cooperation by the TBL, PBL and the Slice customers is the self-supply of ancillary services that fully satisfy TBL's requirements. PBL chose to bundle ancillary services in its full requirements products and priced these ancillary services above market. The Slice customers realized the cost based benefit for this flexibility that is paid for by their 22.8% share of BPA's costs. Realizing this contract right, which is also provided under the TBL OATT, is not a cost shift. There are third parties eager to compete with the PBL for sales of ancillary services. In fact more Slice customers buy these services from third parties than choose to self-supply.

1) Retrospective on Use of Flexibility

BPA staff compared the differences in actual hourly Slice schedules from both 22.6% of the Actual Net Slice System Generation (ANSSG) and the preschedules submitted by the customers. Comparisons were drawn by contrasting these results with BPA's system

load forecast accuracy, or by showing the raw deviation amounts. The analyses failed to consider the following factors:

- a) Flexibility was specifically offered as part of the Slice Agreement. Particularly salient is the understanding that the Slice purchaser would utilize the flexibility within the capabilities of the Federal System, but would take on the obligation to balance their resource portfolio to their own load and absorb the costs and risks when there is an imbalance.

A balanced review would have analyzed the customer's compliance to contract limits and would have balanced any identified costs against the broader costs and benefits attributable to this contract. As an example, the chart titled "Rolling Sum of Slice under-/over-run" on page 3 of the *Staff Papers* shows the cumulative Slice customer ANSSG over a 2 year period. No analysis was made of the combined Slice customer Slice System Storage Energy (SSSE) and Pondage account balances. When a Slice customer schedules less than the rest of the Federal System, they store additional energy in their SSSE account and take on the responsibility to manage that storage position effectively – complete with the risk of spill or Unauthorized Increase (UAI) charges if this deviates over or under the storage or pondage limits. It is important to recognize that the Slice customers share the same non-power obligations and follow the same rules that BPA is obligated to follow in their use of storage flexibility. This diversity of use was a recognized benefit of Slice and the appropriate risks and obligations are passed to the Slice customers through the Agreement.

- b) The incremental financial impact on BPA from the Slicer's combined use of flexibility was not quantified. There will always be load variability in BPA's system, with or without Slice and without an incremental financial impact. The BPA staff who worked on the *Staff Papers* found that no conclusion can be drawn regarding financial impacts associated with load variability.
- c) It is difficult to understand how changes in Slice schedules can have a significant impact on system efficiencies since BPA does not accept schedule changes any later than 30 minutes prior to the start of the schedule hour. This leaves BPA with a significant amount of time to balance the system and determine an hourly unit dispatch strategy that incorporates the unit efficiency curves and short term hydrology. Any potential impact is likely to be small in nature.
- d) The statistical analysis of the deviation between the Slice load and BPA's system load is an apples-to-oranges comparison. Attempting to support any meaningful interpretation or conclusion is without logical basis. The deficiencies are three-fold:

- i) Slice schedules include both load serving and surplus components, while BPA's firm system load excludes surplus transactions (i.e. excluding its own interchange schedules with neighboring control areas).
 - ii) In the *Staff Papers* Slice schedules are compiled and analyzed without the accompanying BPA block schedules. The Slice customers contracted with BPA a 10-year Slice-Block contract. Both components, the Slice and Block, are firm load serving requirements products. They interact with each other. One should not examine the effect of one component without including the other.
 - iii) The Slice variations in the *Staff Papers* are computed by comparing the Slice schedule to either a normalized ANSSG or to the preschedule. As mentioned in item a), the Slice Agreement contains certain flexibilities that allow individual Slice customers to schedule their contract differently than the rest of the system; therefore it would be a bigger concern if the Slice schedules exhibited little difference from the ANSSG. Likewise, the activities of the Slice customers in realtime are no different than what BPA would do. A realtime change may be responding to a combination of change in load, resource, and market conditions. Therefore, the preschedules are not a good surrogate for a Slice schedule forecast.
- e) Realtime Slice-to-load schedule changes by Slice customers who are in BPA's control area also do not impact BPA's overall load variability. This is load volatility that BPA would have with or without the Slice Agreement. The customers' load will always be served just the same – whether by its Slice-to-load schedule or by Energy Imbalance from BPAT or by a combination of the two. The generation input for both service scenarios comes from the Federal System.
- f) The chart on page 5 titled “Within Day Use of Slice Flexibility” shows the hourly difference between the Slice customer schedule and the combined system schedule. An inference was made that the customers are shaping their energy deliveries under the contract to hours of higher value. BPA understood as early as 1998 that one feature of Slice Agreements was that the Slice purchasers would be motivated to shape their deliveries to the hours of highest value and minimize their overall power costs. This is exactly one of the benefits the customers recognized and sought to achieve through their purchase of Slice. To identify the extent to which the Slice customers may be using this important facet of the Agreement and claim it as an unintended benefit is disingenuous. Also, no impact from this activity on BPA was identified. (Reference b) above.)

2) Impact to the Federal System from Scheduling Activities

In the *Staff Papers*, BPA computes the size of realtime schedule changes made in aggregate by the Slice customers. Results are presented as observations of changes in different ranges (greater than 5% change, and greater than 20% change). Duration curves and histograms are also presented.

- a) As cited above, the preschedule is not always, and should not always, reflect the best projection for schedules under the Slice Agreement. As such, changes are to be expected.
- b) The incremental impact of these changes is not quantified; therefore it is difficult to draw conclusions. The findings in the *Staff Papers* state that the increased Slice demand volatility has increased risk to BPA. This finding is not supported by the analysis. A fundamental principle of the Slice Agreement is that the Slice customers schedule rights should reflect their share of the system capabilities on any hour. As such, schedule changes that are within the capability of the Federal System do not create additional risk to BPA.
- c) The findings infer that there may be some linkage between contract changes related to Section 7(i) (of Exhibit J) and the use of real-time flexibility. A recent review by BPA of the use of flexibility under 7(i) of Exhibit J has shown that these provisions are not used to a significant degree and the speculative linkage in the *Staff Papers* should be removed.
- d) A significant percentage of real-time changes by Slice customers improve BPA's operation. These occur during periods when the Slice customers are instructed to make realtime adjustments due to major resource outages, changes in Federal System conditions and changes in Federal System operation to meet non-power objectives.
- e) There appears to be an issue with the duration curves on pages 9-11. At the extremes, the combined HLH/LLH change percentage is lower (on an absolute value basis) than both the HLH and LLH change independently. One would expect the combined change amount to fall between the HLH and LLH values.

In conclusion, BPA's technical study seems to be assembled with some diligence and the data and charts may be factually correct (although without access to the data, it is difficult to ascertain the later), but it is difficult to draw any meaningful conclusion from the analysis presented so far. The study did not establish a link between the Slice customers' use of operational flexibility with any degradation of the value of the remaining majority non-Slice portion of the Federal System. In fact, the study seems to imply that a significant portion of BPA's customers made the most logical and efficient use of the operational flexibility of the Federal System and are achieving the benefits of this contract arrangement that were originally envisioned. In doing so, the Federal System

was operated fully within its normal and legal parameters while the Slice customers were operating within their contractual rights.