



**Cost Assignment Principles Applicable for Acquisitions and Services That Benefit Both Power and Transmission Functions
July 2012**

A. Purpose

The purpose of these principles is to form a foundation that guides BPA's assignment of costs incurred on power purchase agreements, energy storage devices, and demand-side management programs that provide benefits to both BPA's power and transmission functions. While initially applicable to power purchase agreements, energy storage devices, and demand-side management programs, these principles could be applied to include other acquisitions and services that benefit both power and transmission functions.

B. Background

BPA is actively researching/screening several non-wires solutions to transmission constraints. If a non-wires solution is determined to be the least cost solution to solve a transmission constraint, BPA will need to address a host of allocation questions that will naturally follow. These principles represent BPA's first response to those questions.

Traditionally, transmission congestion is solved through reinforcements to existing transmission lines or through the construction of an entirely new transmission line. These added costs are then allocated to the transmission revenue requirement and collected through transmission rates. Similarly, energy or capacity shortfalls between BPA's resources and load obligation are met through power purchases, the cost of which is allocated to the generation revenue requirement and collected through power rates. A non-wires solution, however, may not follow the traditional flow of cost allocation since non-wires solutions could consist of a power acquisition that delays or avoids the cost of building a new transmission line. In addition, some non-wires solutions have multiple benefits beyond that of the delayed or avoided transmission line, such as reduced transmission losses and power production.

While these principles address cost sharing between BPA's power and transmission functions, these principles do not preclude BPAT from entering into cost sharing arrangements from other qualified parties on a non-discriminatory basis.

The cost assignment principles are consistent with BPA's legal guidelines governing the establishment of rates, as described in the BP-12 rate case. *See* BP-12-A-02, section 1.1.2. These principles are also consistent with the cost allocation decisions made in power's Tiered Rate Methodology (TRM), BP-12-A-03.

C. External Feedback

BPA shared these cost assignment principles with external stakeholders on April 24th at the Public Power Council and on April 26th at a Transmission/Power rate case workshop. BPA used these two meetings to gain feedback on the overall construct of the draft principles. BPA also requested feedback on whether BPA should take these principles through the BP-14 rate case prior to having any costs in this category, or wait until BPA has costs to which they would apply and then go through the formal rate case process. BPA gained oral feedback at the meetings as well as three written comments. The written comments are attached and were provided by Puget Sound Energy, Snohomish PUD, and the Public Power Council.

Do not take through BP-14 rate case.

BPA received unanimous feedback that we should not take these principles through the BP-14 rate case. Other issues with the principles aside, stakeholders suggested that cost assignment principles should be used to internally guide business cases until a particular project was selected. Once a particular project was selected for investment, BPA would take the principles and the associated cost assignment through the 7(i) process. Overall, stakeholders were concerned about spending copious amount of time crafting general principles that may not fit the individual nature of a particular project. In addition, stakeholders also questioned whether premade 7(i) vetted principles would indeed provide any more certainty around cost responsibility of future applicable acquisitions and services.

BPA should use FERC Uniform System of Accounts to functionalize costs.

This comment appears to stem from a misunderstanding. BPA does use the FERC Uniform System of Accounts to functionalize costs to the extent practicable. These principles were not intended to change BPA's accounting practices, rather guide cost responsibility between transmission and power. These principles are meant to inform the creation of each business unit's revenue requirement. For example, these principles could be implemented through an inter-business line transfer, similar to the method used for generation inputs where transmission compensates power for the power function costs incurred to provide generation inputs. In order to address this misunderstanding, we have changed the title of the document from "cost functionalization principles" to "cost assignment principles" and rephrased certain portions to provide clarity on the intent.

Overall concern with cost assignment on option, public policy, and societal benefits.

We received oral and written concern over the broad range of benefits, most specifically principle 8(c), which speaks to option benefits, and 8(d), which speaks to public policy and societal benefits. We received oral comments such as, "you could drive a bus through that principle." PSE summed it up well in their written response when they

described these two particular sub-principles as “problematic, fraught with difficulty, and likely to lead to arbitrary and highly contentious outcomes.”

Concern with principle 10, the five-year time horizon.

Staff attempted to provide certainty and stability of cost responsibility through principle 10, but also acknowledged in the external meetings that this particular principle was not without drawbacks. Again, PSE summarized the drawback of this particular principle. This principle “would not allow the functionalization of assets to vary after the first five years, which suggest that the functionalization of an asset whose use changes in the fourth year may be treated differently than an asset whose use changes in the sixth year.”

D. BPA’s Response to External Feedback

BPA has determined that these principles will not be taken through the BP-14 rate case and will be used as a preliminary internal guide for applicable business cases that are determined to provide benefits to both BPA’s power and transmission functions. Refinements may need to be made to these principles as they are applied and tested against actual business cases. BPA will also remove principles 8(c), 8(d), and 10 from these guiding principles. BPA determined that these particular principles were unnecessarily specific for principles that were meant to provide general cost assignment guidance.

E. Costs Assignment Principles

1. **All costs collected through rates** - The cost assignment principles will be applied in a manner consistent with the Administrator's statutory responsibility to timely and reasonably recover BPA's costs through rates. 16 U.S.C. § 839e(a)(1).
2. **Cost established in Integrated Program Review (or its successor) with assignment of those costs established in a rate case** – A joint power and transmission rate case study will identify the costs recovered by the assignment principles.
3. **Applicable to new costs** – costs subject to these principles are those that are new and that BPA will recover through rates beginning October 2013 or later.
4. **Transparent causation** – For costs to be covered by these principles, the underlying causation for the costs should be identified, and acknowledged by both power and transmission organizations as providing a cross-agency benefit prior to being incurred.
5. **Forward-looking cost assignment** – Cost assignment will be based on the best available information at the time of the decision. Absent legal challenge with the initial assignment or if a significant change in circumstances¹ is demonstrated through a subsequent rate case, BPA will not revisit cost assignment decisions due to information provided after the time the decision is made. Such new information includes, but is not limited to, success of the underlying resource or asset, forecast error, and actual strategic use of the resource or asset. A decision to revise the assignment due to a significant change in circumstance will be applied prospectively.
6. **Costs assignment based on each business unit's needs and the associated benefits received from meeting those needs** – This principle is supported by principles 7, 8, and 9. Principles 7 and 8 are applied when benefits can be quantified. Principle 9 is a general approach applied when principle 7 and 8 cannot be reasonably applied.

¹ An example of a change in circumstances could be a fast-acting storage device with flexible active/reactive power capabilities that was originally used by the Power function to provide regulation and following as part of generation inputs for ancillary services (costs 100% assigned to Power). At a later date it is determined by BPA that the fast-acting storage device is better used to provide reactive support. The costs from that time forward would then be 100% assigned to Transmission.

Principles 7 and 8 are applicable when benefits can be reasonably quantified.

7. **Annual assignment percentage set on quantifiable benefits received relative to total quantifiable benefits** – A assignment percentage will be calculated for each function based on the total quantified benefits. Results will be rounded to whole percentage points and will total 100 percent.

8. **Quantifiable benefit measured with macro benefits²** – Measurement of the total quantifiable benefits will include macro benefits. Macro benefits are defined as those that are quantified to have or are expected to provide benefits equal to at least 2 percent of the annual cost. The following are examples of possible macro benefits:
 - a. Additional revenue benefit. Calculated with effective rates at time of calculation and market forecast prices consistent with the Power Risk and Market Price Study (or its successor) used in the most recent rate case (including rate case proposals). This would include any estimates of additional revenue from transmission sales, secondary energy sales, and sales of capacity-related services (such as ancillary services, Resource Support Services, and peak load service). Additional revenue benefits will take into account business unit revenue credits (such as generation inputs provided to transmission by power).
 - b. Transmission loss benefit. Loss reductions will be valued with the market prices consistent with the Power Risk and Market Price Study (or its successor) used in the most recent rate case (including rate case proposals).
 - c. Option benefit. ~~The value to a business unit of being able to make a choice in the future. Option value that cannot be reasonably quantified but is expected to provide a benefit equal to at least 2 percent of the annual cost will be deemed to be equal to 2 percent of the annual cost.~~
 - d. Public policy and societal benefits. ~~Public policy and societal benefits that cannot be reasonably quantified but are expected to provide benefits equal to at least 2 percent of the annual cost will be deemed to be equal to 2 percent of the annual cost. If there is no consistent, measurable method of assigning these benefits directly to the business unit benefactor, the calculated or deemed benefit will be distributed 50%/50%.~~

² See Appendix for examples of macro benefits and their relationship to within-business-unit cost allocation.

Principle 9 will apply when benefits are not reasonably quantified. This principle may also apply when the total annual benefits as quantified through principles 7 and 8 are substantially less than the annual cost incurred.

9. **General assignment of costs** – A general assignment will be used when a particular project, effort, acquisition, or service is determined to provide a cross-agency benefit but the necessary information is not available to reasonably apply principles 7 and 8. This principle may also be used when the total annual benefits as measured through principles 7 and 8 are substantially less than the annual cost incurred.
 - a. 100% assigned to business unit with primary need – if a particular business unit can be identified to have the primary need, such as a non-wires solution, 100% of the costs will remain with that business unit until principle 7 and 8 ,or 9(c) can be applied. For example, research and permitting costs incurred to explore and test the viability of a possible but unselected solution.
 - b. 50%/50% - Even Distributions – Costs incurred that are determined to serve the general purpose of the agency will be split 50% to power and 50% to transmission. This split is used when there is no consistent, measurable method of assigning costs directly to the benefactor through principle 7 and 8, or 9(c). Costs are general in nature and are not directly affected by changes in traditional cost drivers³. Collection of costs or measurement of driver is cost prohibitive – it is uneconomical to attempt more precise allocations. Lack of causal relationship to benefactors prevents a clear distinction for assigning the cost.
 - c. Directed Assignment – Costs that can be distributed with more precision than 9(a) or 9(b) by basing the allocation on specific cost drivers. Activities are managed and budgeted centrally, but methods exist to assign costs to benefactors. Functions can be linked to cost drivers and can change based on those drivers. Direction of effort studies or other means can be used to allocate in a cost-effective manner.

10. ~~**Five-year time horizon** – If annual functionalized cost shares are needed beyond 5 years, the percentage cost shares for the remaining life of the expense will be set equal to the 5th year's percentage cost share.~~

³ An example of a cost driver used by BPA to assign costs is Full-Time Equivalent levels in each of BPA's power and transmission functions.

Appendix [Principle 8]

Examples of macro benefits and their relationship to within-business-unit cost allocation:

- Benefit of deferred or avoided resource or asset purchase. Annual change in revenue requirement (this could include avoided system augmentation or power purchases made to support Tier 2 rates). The nature of this benefit will inform the within-business-unit allocation of costs to specific rates (such as power's Composite or Tier 2 Rate Pools or deferral of transmission infrastructure upgrades for a specific time period).
- Additional revenue benefit. The nature of the revenue source will inform the within-business-unit allocation of costs to specific rate pools (such as power's Composite or Non-Slice Cost Pools or specific segmentation of transmission-related costs).