

BPA Tier 2

August 8, 2007

Background – Connection to Regional Dialogue Policy

- The Policy states the following regarding Tier 2 rate alternatives:
- **Notice & Commitment:** At contract signing BPA will require that customers commit to how their load will be served through at least FY 2016. BPA intends for the minimum commitment period and required notice period for switching to another Tier 2 rate or applying a non-Federal resource to be long enough to ensure that new resources can be acquired if necessary to comply with Regional Resource Adequacy Standards.
- **Tier 2 Rate Alternatives:** Although details of the Tier 2 rate alternatives will be developed in the TRM process, BPA intends to offer at least the following:
 - *New Renewables Alternative.* Tier 2 rate based on the cost of purchasing and integrating new renewable resources. BPA currently intends for the term of the purchase obligations to be at least 10 years.
 - *Default Alternative.* Tier 2 rate based on a portfolio cost of market purchases and possible BPA resource acquisitions made to serve load with this rate. Unless customers affirmatively choose a different Tier 2 rate alternative or commit non-Federal resources to serve load, the Default Alternative would apply.
 - *Vintaged Alternative.* BPA will explore separate Tier 2 rate(s) based on the costs of a specific resource(s) or to meet the load of a specific customer group. “Vintaging” would most likely be used for a renewable-based Tier 2 alternative, but could also be used for other resource types. BPA expects the term to be at least 10 years.



Tier 2 Construct

- **Flat Block:** Power sold at Tier 2 rates will be in the shape of a flat annual block of energy
- **Marginal Cost:** Tier 2 rates will be based on the marginal cost of new BPA purchases and resource acquisitions, including the costs of shaping and/or firming resources to a flat annual block
- **Commitment to Costs:** Customers who choose to purchase power at Tier 2 rates will commit to pay at rates tied to the costs of specific resources for the specified purchase duration.
- **Take-or-Pay:** Liquidated damages will apply for all Tier 2 rate alternatives where customers change service in violation of commitment requirements



Tier 2 Construct continued

- **Resource Acquisition Principle:** BPA must select resources consistent with statutory requirements for resource acquisitions when supplying all Tier 2 rate alternatives. BPA will do its best to accommodate customer needs when making those resource selections.
- **System Sales:** From a supply standpoint, like all PF sales, power at the Tier 2 rate is provided as a BPA system sale. Customers do not gain access to the output of specified resources.
- **Based on Forecasted Costs:** All Tier 2 rates will be set through a 7(i) rates process and based on forecasted costs. It is unlikely there will be a mechanism to “true-up” or otherwise recover actual costs that vary from forecasts.
- **No Acquisitions Beyond Customer Commitment:** When supplying Tier 2 through at least FY2016 BPA will not acquire resources ahead of customer commitments. Beyond FY2016 BPA may need to reconsider this approach given the possibility that the duration of resource acquisitions may be inconsistent with the remaining 12-year delivery window.



Timeline – Today through 2012 Delivery

- **FY 2007:** BPA works with customers to develop a forecast of their Contract High Water Marks (HWMs)
- **December 2008:** Customers sign contracts for the product of their choice (Load Following, Block, Slice/Block) and commit to whether they will supply load above their HWMs through at least FY2016 with non-Federal resources, a BPA Tier 2 alternative, or an established combination of the two
- **Mid 2011:** Contract HWMs finalized based on actual 2010 load, conservation adjustments, and forecasted FBS capability
- **Mid 2011:** Initial Rate Period HWM established – sets initial rate period take-or-pay obligation for Load Following customers who have not already committed to an amount of power
- **October 2011:** Power delivery begins

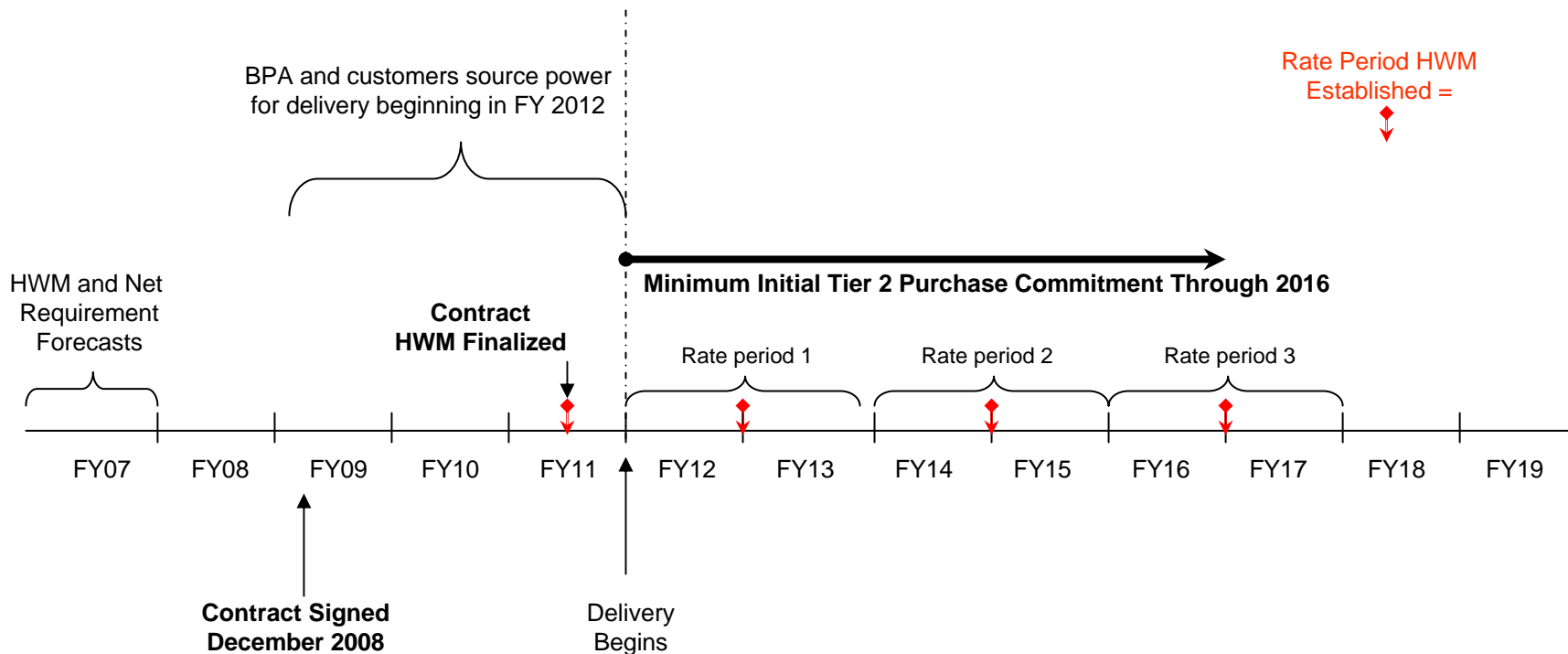


Initial Commitment Period

- **Initial Commitment:** At contract signing customers must commit to how they will serve load above their HWMs through FY2016
- **Block and Slice:**
 - These customers commit to purchase a predefined, fixed quantity of Tier 2 from BPA and will be unable to change that commitment amount for delivery years FY2012–16
- **Load Following:**
 - While Load Following customers do not generally have to commit to specific quantities of Tier 2, their commitments on who will supply load above their HWMs cannot be changed for delivery years FY2012-16



Rough Timeline for Regional Dialogue Contracts and Rates



For Regional Dialogue Discussion
 Purposes Only -- Pre-decisional



Proposed Tier 2 Rate Alternatives

- **Proposal:** BPA will offer a short-term Tier 2 alternative and several longer-term Tier 2 alternatives
- **“Short-Term” Tier 2 Rate (formerly known as “Default”):** For customers who do not choose another Tier 2 alternative or who do not commit non-Federal resources to supply load above their High Water Marks (HWMs)
 - Notice to purchase: Three-years
 - Minimum commitment: Five-years
 - Each five year commitment will be fixed, resulting in a parallel commitment to non-Federal resources
- **Long-Term Tier 2 Rates:** BPA currently intends to make available three approaches for long-term Tier 2 rates and will continue to refine these approaches
 - “Renewables Rate” – Rate alternative offered at contract signing based on the costs of renewable resources
 - “Load-Growth Rate” – Rate alternative offered at contract signing for Load Following customers who sign up for the term of the contract to have their above-HWM load served by BPA
 - “Specific Vintaged Rates” – Periodically offered rate alternatives based on the costs of a specific resource or groups of resources

For Regional Dialogue Discussion
Purposes Only -- Pre-decisional



Slide 8

Short-Term Tier 2 Rate

- What is it?
 - The shortest-commitment Tier 2 rate alternative for customers who do not choose another Tier 2 alternative or who do not commit non-Federal resources to supply load above their HWMs
 - BPA acts as portfolio manager layering resource costs over time to meet committed loads of these customers
- Why proposed?
 - Provides customers the flexibility to change their resource decisions every five years
 - Makes customers eligible to purchase Specific Vintaged rates
 - Provides customers the flexibility to bring in non-Federal resources when they expect to acquire them



Short-Term Rate - Details

- **Costs in Short-Term Rate:** The Short-Term Tier 2 rate is a single rate based on the costs of resources and/or market purchases, including the costs of shaping and/or firming the resources to flat annual blocks
- **Rate Level:** Actual rates will be set through a 7(i) rates process. Customers who choose this alternative will be committing to purchase at an unknown price, and over time, the price will vary depending on the costs of resources included in the portfolio.
- **Short-Term Combinations:** Customers can choose to combine Short-Term rate power with non-Federal resources or other BPA Tier 2 alternatives that are made available.
- **“Greenness” of Short-Term:** The Short-Term Tier 2 portfolio would have no specific rights to renewable resources. Renewable Energy Certificates (RECs) would not be included. BPA could offer RECs separately for an additional charge, if they are available.



Short-Term Rate – Details continued

- **Choice on Purchase Mix:** Customers can choose their Short-Term combination for each year of the five-year commitment period.
- **Flexibility for Resource Development:** Customers can use this flexibility to bring in resource amounts based on when they expect to acquire them (e.g. not just 2012 and 2017).
 - **Example:** Customer has a non-Federal resource that will not be on-line until FY2014
 - Customer's FY2012-13 Rate Period HWM: 10 MW
 - Net Requirement for FY2012-16: 15 MW (assumes no forecasted load growth)
 - Short-Term Tier 2 purchase commitment:
 - First two years: 5 MW
 - Final three years: 0 M (5 MW commitment to non-Federal resource)



Short-Term Rate – Notice and Commitment

- Notice and commitment after the initial FY2012-16 commitment period:
 - Minimum notice: **Three years**
 - Customers must notify BPA prior to October 2013 how they will serve load above their HWMs when their initial commitment expires in 2016
 - Minimum commitment term: **Five years**
 - Customer commitments to either BPA Tier 2 or non-Federal supply will not be able to be changed for five years
 - Rationale for notice and commitment periods: BPA and customers need the flexibility to maintain long-term, resource adequate sourcing of power to serve load above HWMs
 - Three year notice: Provides adequate time for either BPA or customers to take actions to acquire power they need to meet their respective obligations. If BPA is to acquire output from an undeveloped resource, three years minimum is needed for potential 6(c) hearings, Environmental Impact Statement processes, and to site and develop the resource.
 - Five year commitment: BPA believes five years is a bare minimum duration for a power purchase agreement with a resource developer.



Concern – Three Year Notice

- By constructing the Short-Term Tier 2 rate with a three year notice period to purchase power, customers that previously committed to meet their load above their HWM with non-Federal resources could return to BPA in as little as a three years
- **Concern:** Could this design lead to a scenario where customers transfer substantial load to BPA and the agency finds itself needing to source large amounts of power with only three year's lead time?
- Probably not:
 - **Price Advantage Gone:** The tiered rates construct all but eliminates the economic incentive to return the load to BPA. Returned load would face rates based on marginal market prices. If the tiered rates construct had been in place in 2000 there would not have been an economic incentive for customers to return to BPA.
 - **Market Robust:** Generally speaking, output from the departed resources would still be available and on the market for purchase. BPA could purchase power from those same resources, although such large acquisitions could be costly.



Short-Term Tier 2 – Load Following Customers

- **Specified Quantities Not Required:** Load Following customers are not required to specify fixed amounts of Short-Term Tier 2
 - Load Following customers can choose to commit to fixed quantities of Short-Term Tier 2 when structuring Tier 2 / non-Federal resource combinations
- **BPA Establishes Quantities Each Rate Period:** BPA will establish precise Short-Term Tier 2 amounts for each rate period based on the difference between a customer's net requirement and its Rate Period HWM. That precise amount becomes the customer's take-or-pay obligation for the rate period.
- **Annual Updates:** Prior to the second year of the rate period, BPA will update the customer's net requirement determination
 - If the customer experiences forecasted load growth relative to the prior year's forecast, additional load variance energy applied to Tier 1 will make up the shortfall for the second year
 - If the customer experiences forecasted load loss, BPA will remarket an amount of Tier 2 power equal to the difference in the annual net requirement forecasts and pass through the difference in value to the customer. This could result in a charge or a credit.



Load Following Example: Fixed non-Federal Combination

Example: Customer commits to supply its above HWM load with a pre-established 5 MW of non-Federal resources and the remainder with BPA Tier 2

- Forecast net requirement (2012): 15 MW
- Forecast net requirement (2013): 17 MW
- FY2012-13 Rate Period HWM: 10 MW
- Non-Federal resource applied in FY2012-13: 5 MW
- **Resulting Tier 2 purchase requirement for the rate period:**
 - 2012 = 0 MW
 - 2013 = 2 MW



Load Following Example continued

Using the same example, what if the Load Following customer experienced less load growth in 2012 than originally forecasted? The updated FY 2013 net requirement forecast, calculated prior to the second year of the rate case, is now only 16 MW instead of 17 MW.

Previously Established

- FY2012-13 Rate Period HWM: 10 MW
- Non-Federal resource: 5 MW
- Tier 2 take-or-pay obligation for FY2013: 2 MW

Updated for FY2013

- Updated FY2013 net requirement forecast: 16 MW
- Customer Choice:
 - a) Exercise resource removal right: Reduce their non-Federal resource amount by 1 MW and continue to purchase 2 MW of Tier 2, or
 - b) Remarket 1 MW of the Tier 2 purchase with the value passed through to the customer (could result in a net charge or credit)



Load Following Customers – Implications of Proposed Load Variance Rate Design

- **Load Variance Rate Design Proposal:** BPA is considering a load variance rate design that would involve a market-based true-up to forecasted amounts. Customers would accordingly be charged or credited on a monthly basis for any variation in actual energy consumption relative to forecasted amounts.
- **Remarketing May Not be Necessary:** Under such a rate design, excess Tier 2 energy would be credited back to the customer each month at BPA's Load Variance Rate for the entire rate period. This could affect the annual remarketing of excess Tier 2 power and may render it unnecessary.



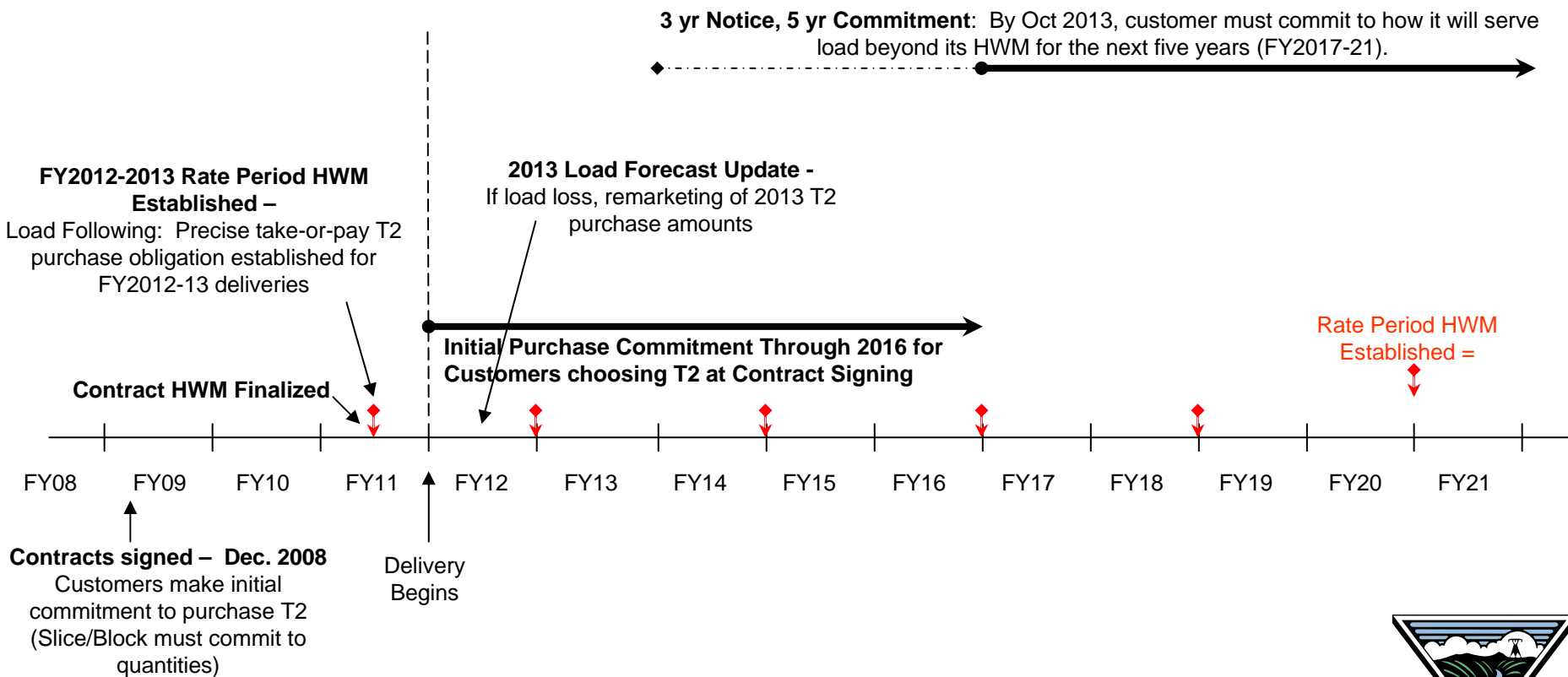
Short-Term Tier 2 – Slice/Block & Block Customers

- Note: The points on this slide also apply to Load Following customers who choose to commit to fixed quantities of Short-Term Tier 2
- **Specify Tier 2 Amounts:** Customers must specify fixed quantities of Short-Term Tier 2 for each 5-year commitment period
- **Corresponding non-Federal Resource Commitment:** Customers will be responsible for supplying increasing amounts of non-Federal resources themselves if they experience load growth
- **Load Loss:** If the customer experiences forecasted load loss relative to the prior year's forecast, BPA will remarket an amount of Tier 2 power equal to the difference in the annual net requirement forecasts and pass through the difference in value to the customer. This could result in a charge or a credit.



Short-Term Tier 2 – Timeline

Customer who takes Tier 2 initially:
 •Deadline to specify purchase mix for the FY2017-21 period is October 2013



For Regional Dialogue Discussion
 Purposes Only -- Pre-decisional



Renewables Rate

- What is it?
 - A rate pool available at contract signing for customers who want to commit to have BPA serve their load above their HWMs with renewable resources.
 - BPA acts as portfolio manager making renewable purchases and layering those resource costs over time to meet committed loads of these customers.
- Why proposed?
 - BPA and many of our customers are interested in purchasing the output of renewable resources to serve load beyond HWMs. Customers choosing this rate would pay Tier 2 rates based on the costs of renewable resources and associated RECs.



Renewables Rate - Details

- **Based on Renewable Resources:** Rate is intended to be based entirely on the costs of renewable resources.
- **Includes RECs:** Associated RECs would be included with the rate.
- **Full Contract Duration:** Available only at contract signing and for the full duration of the contract.
- **Commitment to Quantity:** Customers must commit at contract signing to specified quantities of power for the full duration of the contract. Quantities purchased in years FY2012-16 can increase consistent with a customer's net requirement forecast. Beyond FY2016 the annual quantity is limited to the amount purchased in FY2016.
- **Rate Level:** Rate level will vary (increase or decrease) over time as new resource costs are added to the pool and the cost of converting the resource output to a benchmark flat block change.



Renewables Rate – Details continued

- **Short-Term Rate Backstop:** BPA will make best efforts to meet customer requests for power under this rate; however if BPA cannot acquire a sufficient renewables supply to meet demand for a rate period, BPA will supply any shortfall with power at the Short-Term rate. This also means BPA cannot guarantee that power sold at this rate will satisfy the RPS requirements of all states. BPA could consider an approach for allocating limited renewable attributes to customers who need them most while maintaining the value for all customers in the Renewables Rate pool.
- **BPA Managed:** BPA acquires resources and manages the rate pool's supply portfolio. BPA will work with customers to try and accommodate their specific RPS needs within the constraints of BPA's legal requirements for acquisitions.
- **Combinations with Other Tier 2:** Customers would be able to combine this alternative with other Tier 2 rates.
- **Combinations with non-Federal:** Customers would be able to combine this alternative with non-Federal resources.
- **Priority to Renewables Vintages:** Renewables Rate customers will have first priority to transfer Renewables Rate load to a renewables Vintaged rate offered by BPA for amounts to which BPA has not already committed renewable resource costs (for more detail see discussion on Specific Vintaged Rates).



Load-Growth Rate

- What is it?
 - A rate pool for Load Following customers who want to commit to have BPA serve their above-HWM load for the duration of the contract.
 - BPA acts as portfolio manager layering resource costs over time to meet committed loads of these customers.
- Why proposed?
 - Customers have asked for a long term Tier 2 rate option that offers rate stability and protection from the cost uncertainty associated with late-coming utilities who do not initially subscribe to such a rate.
 - Customers receive a rate based on the costs of a diversified resource mix that includes the benefits (and risks) of long term resources.



Load-Growth Rate - Details

- **Load Following Only:** Only for Load Following customers.
- **Full Contract Duration:** Only available at contract signing and for the full duration of the contract.
- **Access to Costs:** Costs of resources on which the Load-Growth Rate is based will remain in that specific cost pool. This includes potential costs (and benefits) associated with disposing of excess amounts of resources dedicated to the cost pool (e.g. due to load loss).
- **Customer Input:** BPA will solicit and consider customer input when making resource acquisition decisions for the rate pool's supply portfolio.
- **"Greenness" of Load-Growth:** The Load-Growth rate would have no specific rights to renewable resources. RECs would not be included. BPA could offer RECs separately for an additional charge, if they are available.



Load-Growth Rate – Details continued

- **Rate Level:** Rate level will vary (increase or decrease) over time as new resource costs are added to the pool.
- **No Commitment to Quantity:** Customers do not need to commit to specified quantities (i.e. BPA will meet a customer's increasing load over time).
- **One-time Opportunity for Other Tier 2:** Customers could combine this alternative with another Tier 2 rate alternative, but amounts of power purchased under the other Tier 2 rate must be specified at contract signing.
- **One-time Opportunity for non-Federal:** Customers could combine this alternative with its non-Federal resources, but the non-Federal resource amounts must be specified at contract signing.



Specific Vintaged Rates

- What are they?
 - Periodically offered Tier 2 rate vintages based on specific resource costs for customers that need power to be based on specific resource types or that want to know more about resource costs before they make a long-term commitment.
- Why proposed?
 - Specific Vintaged rates provide customers more information and choice when making power supply decisions
 - Customers have indicative rate information and know resource type prior to committing (e.g. can determine RPS compatibility)
 - Eligible customers only choose a vintage if it provides them what they need (BPA's acquisition requirements can be limiting)
 - Specific Vintaged rates provide more rate stability than other Tier 2 alternatives because they will be based on the costs of long-term resource acquisitions.



Specific Vintaged Rates - Details

- **Commitment to Specific Costs and Duration:** Customers commit to purchase power for a specified duration at a Tier 2 rate based on the costs of long-term resources acquired to supply that specific Tier 2 vintage rate pool.
- **Access to Costs:** Costs of resources on which a Vintaged rate is based will remain in the specific Tier 2 vintage cost pool.
- **Term:** The term of a given Vintaged rate will not exceed the term of the contract (could explore a liquidated damages “exit fee” to allow longer-term purchases)
- **Commitment to Quantity:** Customers must commit to purchase a specified quantity of power for load at a Vintaged rate.



Specific Vintaged Rates – Details continued

- **Eligibility:** Depends on prior commitment to purchase service from BPA at a Tier 2 rate. Specifically:
 - **Short-Term Tier 2:** Amounts committed at this rate are eligible for any Vintaged Rate (renewables vintages are only available to Short-Term purchasers after they are offered to eligible Renewables Rate customers)
 - **Renewables Rate:** Amounts committed at this rate have priority to Vintaged rates from renewable resources (but only to the extent BPA has not already established a renewables supply for loads under the Renewables rate). Amounts committed at this rate are not eligible for Vintaged Rates other than renewables.
 - **Load Growth:** Amounts committed at this rate are not eligible for Vintaged Rates.
- **“Greenness” of Vintages:** Vintaged rates could be based on the costs of renewable resources or non-renewable resources. BPA would specify the “greenness” of each vintage (e.g. whether RECs are included).



Specific Vintaged Rates – Timing

- **General Timing:** Customers commit to purchase power before BPA acquires a resource. Customers would have indicative rate information gained through the process described below.
 1. **Indicative BPA Offer:** BPA offers a prospectus for a Vintage rate or Vintage rates well before a potential acquisition. The prospectus specifies:
 - Purchase duration
 - Type of resource(s)
 - Range of initial costs
 - Maximum quantity available
 2. **Customer Commitment:** Customers commit to purchase under the rate for the specified term if BPA can purchase resources of the type established in the prospectus and within the allowable cost range. Customer then has 60 days to commit to shift a portion of their requirements power service from the Short-Term or Renewables Rate to the Vintaged formula rate(s) described in the prospectus before BPA buys. To the extent BPA has already sourced for the transferred load, the customer would face liquidated damages to hold the departed pool harmless.
 3. **BPA Purchase:** BPA acquires the resource up to amounts committed by customers only if BPA can meet the conditions stated.
 4. **Rate Setting:** Each rate period the Vintaged rates will be re-set based on the costs of the resources included in the pool and the projected costs of reshaping the resource output into the benchmark flat block Tier 2 shape.



Tier 2 Purchase Example – FY2012

- Four Load Following customers have the following identical HWM and net requirements profile for the contract term (assumes no load growth):
 - HWM = 50 MW
 - Net requirement = 60 MW
 - Above HWM load = 10 MW
 - Average market price for first five delivery years is ~\$60
 - Tier 1 rate = \$30 / MWh
1. **Utility A - Non-Federal:** Customer commits to supply its above-HWM load with 10 MW non-Federal resources for the first five delivery years (resource cost = \$60 / MWh).
 2. **Utility B - Short-Term:** Customer commits to purchase service at Tier 2 from BPA under the Short-Term rate for the first five delivery years. Results in a commitment to take 10 MW at \$60 / MWh (BPA's Short-Term rate based on a market purchase).
 3. **Utility C - Renewables:** Customer commits to purchase service at Tier 2 from BPA under the Renewables rate for the term of the contract. Results in a commitment to take 10 MW at \$70 / MWh (BPA's initial Renewables rate, including the RECs).
 4. **Utility D - Load-Growth:** Customer commits to purchase service at Tier 2 from BPA under the Load-Growth rate for the term of the contract. Results in a commitment to take 10 MW at \$55 / MWh (BPA's initial Load-Growth rate based on a long-term resource acquisition).



Wholesale Power Cost for Each Utility – FY2012

<u>Utility A</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	0	0	0
Resource	10	60	600
			2100
Average Wholesale Rate (\$/MWh) =			\$35
<u>Utility B</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	10	60	600
Resource	0	0	0
			2100
Average Wholesale Rate (\$/MWh) =			\$35
<u>Utility C</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	10	70	700
Resource	0	0	0
			2200
Average Wholesale Rate (\$/MWh) =			\$37
<u>Utility D</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	10	55	550
Resource	0	0	0
			2050
Average Wholesale Rate (\$/MWh) =			\$34

For Regional Dialogue Discussion
Purposes Only -- Pre-decisional



Tier 2 Purchase Example – FY2014

- BPA has a long term renewable resource opportunity for which BPA can make a potential Vintaged Rate available to eligible customers beginning FY2014. BPA followed the process described earlier which resulted in a Vintaged Tier 2 rate of \$40 / MWh.
1. **Utility A:** Customer was committed to supply its above-HWM load through 2016 with 10 aMW non-Federal resources (resource cost = \$60 / MWh) and was accordingly not eligible for the Vintaged Tier 2 rate.
 2. **Utility B:** As a Short-Term rate purchaser, Utility B chose to transfer its 10 aMW from the Short-Term to the Vintage offered (Tier 2 rate = \$40 / MWh).
 3. **Utility C:** As a Renewables rate purchaser, and because BPA had not yet committed to purchase for all of the Renewables Rate needs, Utility C chose to transfer its 10 aMW from the Renewables rate to the Vintage offered (Tier 2 rate = \$40 / MWh)
 4. **Utility D:** As a purchaser of the Load-Growth rate, customer was not eligible to take service at the new Vintaged Tier 2 rate. Customer remains committed to take 10 aMW at \$55 / MWh (BPA's Load-Growth rate)



Wholesale Power Cost for Each Utility – FY2014

<u>Utility A</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	0	0	0
Resource	10	60	600
			2100
Average Wholesale Rate (\$/MWh) =			\$35
<u>Utility B</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	10	40	400
Resource	0	0	0
			1900
Average Wholesale Rate (\$/MWh) =			\$32
<u>Utility C</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	10	40	400
Resource	0	0	0
			1900
Average Wholesale Rate (\$/MWh) =			\$32
<u>Utility D</u>	<u>aMW</u>	<u>Rate (\$/MWh)</u>	
Tier 1	50	30	1500
Tier 2	10	55	550
Resource	0	0	0
			2050
Average Wholesale Rate (\$/MWh) =			\$34

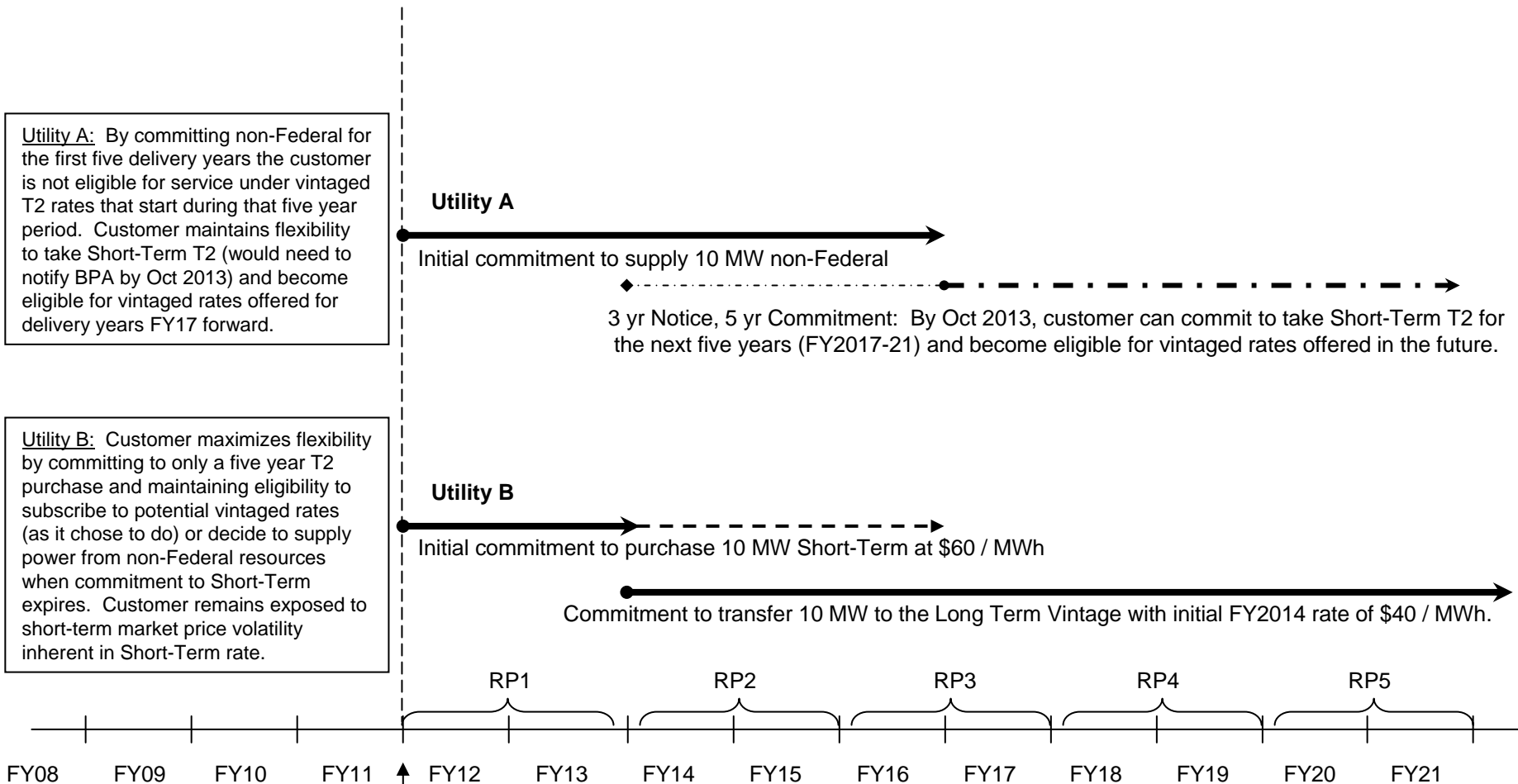
For Regional Dialogue Discussion
Purposes Only -- Pre-decisional



Tier 2 Purchase Example Illustration

Utility A: By committing non-Federal for the first five delivery years the customer is not eligible for service under vintaged T2 rates that start during that five year period. Customer maintains flexibility to take Short-Term T2 (would need to notify BPA by Oct 2013) and become eligible for vintaged rates offered for delivery years FY17 forward.

Utility B: Customer maximizes flexibility by committing to only a five year T2 purchase and maintaining eligibility to subscribe to potential vintaged rates (as it chose to do) or decide to supply power from non-Federal resources when commitment to Short-Term expires. Customer remains exposed to short-term market price volatility inherent in Short-Term rate.



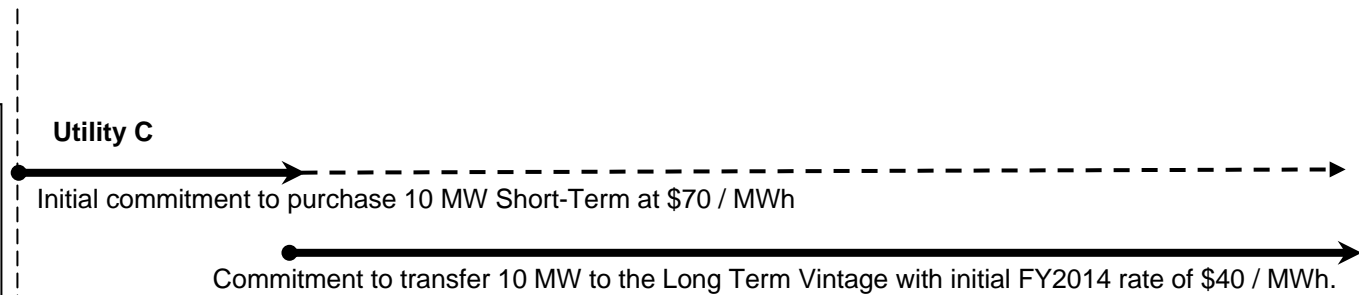
Contracts signed:
 Commitment to how load above HWM is served for at least FY2012-16
 Issued on August 3, 2007

Delivery Begins

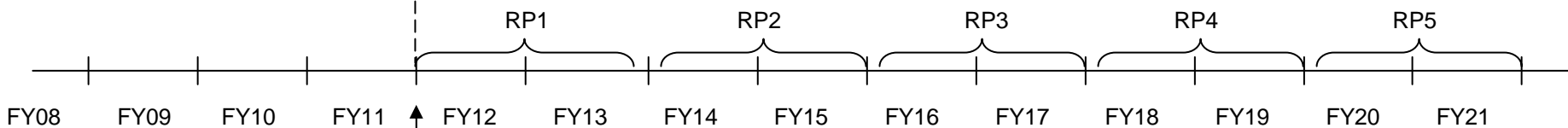
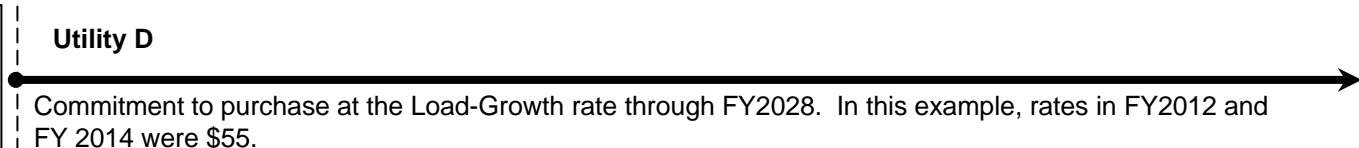
For Regional Dialogue Discussion
 Purposes Only -- Pre-decisional

Tier 2 Purchase Example Illustration

Utility C: Customer committed to take 10 MW Renewables T2 for the term of the contract. BPA determined that the customer was also eligible to transfer that load to a renewables vintage (as it chose to do).



Utility D: Customer committed to take Load-Growth T2 for the term of the contract. The initial rate was favorable relative to the other rates, but over time, the Load-Growth rate may be higher or lower than the other rates including potential Vintaged rates. The customer will not have access to these other rates.



Contracts signed:
 Commitment to how load above the Power Administration Issued on August 20, 2009

Delivery Begins

For Regional Dialogue Discussion
 Purposes Only -- Pre-decisional

Long-Term Tier 2 Rate Alternatives – Additional Considerations

- **Limits on Buying Resource Amounts Ahead of Need:** BPA will work with customers to develop limits around resource acquisitions ahead of customer purchase commitments (e.g. load in the *Load-Growth Rate* pool would likely start very small and be several times larger by the end of the contract).
 - One idea is that BPA could buy ahead of need for a Long-Term Tier 2 rate alternative only as long as there is sufficient load in the Short-Term pool to absorb the excess. The practical implication of this approach is that BPA would be unable to acquire excess resource amounts for a Long-Term Tier 2 rate alternative beyond the commitment term of the Short-Term pool.
 - Another idea would be to set an amount BPA could buy ahead of need based on an assumption there will always be some amount of load in the Short-Term Tier 2 rate pool.



Long-Term Tier 2 Rate Alternatives – Additional Considerations continued

- **Disposing of Over-Purchased Amounts:** In a scenario where BPA acquires a resource for a given Tier 2 rate pool that exceeds the near-term load served from that rate pool, BPA would “lay off” the excess power with the Short-Term pool.
 - For Example – *Load-Growth Rate*:
 - 2012 Load-Growth pool load forecast: 50 MW
 - 2016 Load-Growth pool load forecast: 100 MW
 - BPA acquires for the Load-Growth pool 100 MW through a 10 year PPA
 - 2012 surplus of 50 MW – lay off in Short-Term pool
- **Accounting Systems:** BPA’s cost accounting systems will place and maintain the costs of long term resources within the proper cost pool or vintage where they will remain for the term of the agreement.



Tier 2 Alternatives - Summary

Tier 2 Alternative	Notice to Purchase	Minimum Commitment	Eligibility	When Offered
Short-Term	3-years	5-years	All	At contract signing, then every five years
Renewables	Contract signing	Contract duration	All	Only at contract signing (new offerings possible in future after 2016)
Load-Growth	Contract signing	Contract duration	Load Following	Only at contract signing
Specific Vintages	Load transfer from Short Term or Renewables	Varies, generally long-term	Short Term purchaser (any vintage) and Renewables purchaser ("renewable" vintage only, & only if load is unsupplied)	Periodically

Tier 2 Alternative	Indicative Rate / Resource Details	Priority to Renewable Vintages	"Greenness"	Additional Features/Req's
Short-Term	No	2nd	None	Option to Transfer load to Vintage
Renewables	No	1st	RECs included	Backstopped by Short-term, Option to Transfer load to Vintage (see Eligibility)
Load-Growth	No	Not eligible	None	
Specific Vintages	Yes		RECs included depending on vintage	

Tier 2 Alternative	Required to Specify Quantity		Combinable w/	
	Load Following	Block/Slice	Non-Federal	Other Tier 2 Alternatives
Short-Term	No, but can choose to. If so, specify for every 5 yrs.	Yes, Specify for every 5 yrs	Yes	Yes
Renewables	Yes. Growing or flat quantities ok through 2016. Beyond 2016 limited to 2016 level.	Yes. Growing or flat quantities ok through 2016. Beyond 2016 limited to 2016 level.	Yes	Yes
Load-Growth	No	Not Eligible for rate	1 time, @ contract signing	1 time, @ contract signing
Specific Vintages	Yes, for length of commitment	Yes, for length of commitment	Yes	Yes

For Regional Dialogue Discussion
Purposes Only -- Pre-decisional

