

**UNITED STATES DEPARTMENT OF ENERGY  
WESTERN AREA POWER ADMINISTRATION**

**SALT LAKE CITY AREA INTEGRATED PROJECTS  
ARIZONA, COLORADO, NEVADA, NEW MEXICO, UTAH, WYOMING**

**SCHEDULE OF RATES FOR FIRM POWER SERVICE**

Effective:

The first day of the first full billing period beginning on or after October 1, 2005, and extending through September 30, 2010, or until superseded by another rate schedule, whichever occurs earlier.

Available:

In the area served by the Salt Lake City Area Integrated Projects.

Applicable:

To the wholesale power Customer for firm power service supplied through one meter at one point of delivery, or as otherwise established by contract.

Character and Conditions of Service:

Alternating current, 60 hertz, three-phase, delivered and metered at the voltages and points established by contract.

Monthly Rate:

DEMAND CHARGE: \$4.43 per kilowatt of billing demand.

ENERGY CHARGE: 10.43 mills per kilowatthour of use.

COST RECOVERY CHARGE: This charge will be recalculated annually before May 1 and Western will provide notification to the Customers. The charge, if needed, will be placed into effect from October 1 through September 30, and will be

calculated as follows:

<b>CRC CALCULATION</b>			
		<b>Description</b>	<b>Formula<sup>1/</sup></b>
<b>STEP ONE</b>	<b>Determine the Net Balance available in the Basin Fund.</b>		
	<b>BFBB</b>	Basin Fund Beginning Balance (\$)	Financial forecast
	<b>BFTB</b>	Basin Fund Target Balance (\$)	.15 * PAE (not less than \$20 million)
	<b>PAR</b>	Projected Annual Revenue (\$) w/o CRC	Financial forecast
	<b>PAE</b>	Projected Annual Expense (\$)	Financial forecast
	<b>NR</b>	Net Revenue (\$)	PAR - PAE
	<b>NB</b>	Net Balance (\$)	BFBB + NR
<b>STEP TWO</b>	<b>Determine the Forecasted Energy Purchase Expenses.</b>		
	<b>EA</b>	SHP Energy Allocation (GWh)	Customer contracts
	<b>HE</b>	Forecasted Hydro Energy (GWh)	Hydrologic & generation forecast
	<b>FE</b>	Forecasted Energy Purchase (GWh)	EA - HE
	<b>FFC</b>	Forecasted Avg Energy Price per MWh(\$)	From commercially available price indices
	<b>FX</b>	Forecasted Energy Purchase Expense (\$)	FE * FFC
<b>STEP THREE</b>	<b>Determine the amount of Funds Available for firming energy purchases, and then determine additional revenue to be recovered. The following two formulas will be used to determine FA, the lesser of the two will be used.</b>		
	<b>FA1</b>	Basin Fund Balance Factor (\$)	If (NB>BFBB,FX,FX -(BFTB - NB))
	<b>FA2</b>	Revenue Factor (\$)	If (NR>-.25*BFBB,FX,FX+NR+.25*BFBB)
	<b>FA</b>	Funds Available (\$)	Lesser of FA1 or FA2 (not less than \$0)
	<b>FARR</b>	Additional Revenue to be Recovered (\$)	FX - FA
<b>STEP FOUR</b>	<b>Once the FA for purchases have been determined, the CRC can be calculated, and the WL can be determined.</b>		
	<b>WL</b>	Waiver Level (GWh)	If (EA<HE,EA,HE+(FE*(FA/FX))), but not less than HE
	<b>WLP</b>	Waiver Level Percentage of Full SHP	WL/EA*100
	<b>CRCE</b>	CRC Energy (GWh)	EA - WL
	<b>CRCEP</b>	CRC Energy Percentage of Full SHP	CRCE/EA*100
	<b>CRC</b>	Cost Recovery Charge (mills/kWh)	FARR/(EA*1,000)

<sup>1/</sup> Some formulas in this table are based on standard Excel spreadsheet formatting.

## **Narrative of CRC Calculations**

### **STEP ONE: Determine the net balance available in the Basin Fund.**

**BFBB** – Western will forecast the Basin Fund Beginning Balance for the next FY.

**BFTB** – Determine the Basin Fund Target Balance for the next FY. The BFTB will not

be less than \$20 million. The target balance is 15 percent of projected annual expenses for the coming FY.

$$\text{BFTB} = 0.15 * \text{PAE}$$

**PAR** – Projected Annual Revenue is Western’s estimate of revenue for the next FY.

**PAE** – Projected Annual Expense is Western’s estimate of expenses for the next FY.

The PAE includes all expenses plus non-reimbursable expenses, which are capped at \$25 million per year plus an inflation factor. This limitation is for CRC formula calculation purposes only, and is not a cap on actual non-reimbursable expenses.

**NR** – Net Revenue equals revenues minus expenses.

$$\text{NR} = \text{PAR} - \text{PAE}$$

**NB** – Net Balance is the Basin Fund Beginning Balance plus net revenue.

$$\text{NB} = \text{BFBB} + \text{NR}$$

**STEP TWO: Determine the forecasted energy purchase expenses.**

**EA** – The Sustainable Hydropower Energy Allocation. This does not include Project Use Customers.

**HE** – Western’s forecast of Hydro Energy available during the next FY developed from Reclamation’s April 24-month study.

**FE** – Forecasted Energy purchases are the difference between the sustainable hydropower allocation and the forecasted hydro energy available for the next FY, or the anticipated firming purchases for the next year.

$$\text{FE} = \text{EA} - \text{HE}$$

**FFC** – The forecasted energy price for the next FY per MWh.

**FX** – Forecasted energy purchase power expenses based on the current year April

24-month study, representing an estimate of the total cost of firming purchases for the coming FY.

$$FX = FE * FFC$$

**STEP THREE: Determine the amount of Funds Available to spend on firming energy purchases, and then determine additional revenue to be recovered. The following two formulas will be used to determine FA, the lesser of the two will be used. Funds available shall not be less than zero.**

A. Basin Fund Balance Factor (FA1)

The first formula ensures that the Net Balance will not go below 15 percent of the total expenses for that FY. If the Net Balance is greater than the Basin Fund Target Balance, then use the value for forecasted energy purchase power expenses. If the net balance is less than the Basin Fund Target Balance, then reduce the value of the Forecasted Energy Purchase Power Expenses by the difference between the Basin Fund Target Balance and the Net Balance.

$$FA1 = \text{If } (NB > BFTB, FX, FX - (BFTB - NB))$$

If the Net Balance is greater than the Basin Fund Target Balance, then

$$FA1 = FX$$

If the Net Balance is less than the Basin Fund Target Balance, then

$$FA1 = FX - (BFTB - NB)$$

B. Basin Fund Revenue Factor (FA2)

The second factor ensures that net revenue does not result in a loss that exceeds 25 percent of the Basin Fund Beginning Balance. If the Net Revenue is greater than minus 25 percent of the Basin Fund Beginning Balance, then use the value for

forecasted energy purchase power expenses. If the Net Revenue is less than a minus 25 percent of the Basin Fund Beginning Balance, then add the Net Revenue and 25 percent of the Basin Fund Beginning Balance to the forecasted energy purchase power expenses.

$$FA2 = \text{If } (NR > -0.25 * BFBB, FX, FX + NR + 0.25 * BFBB)$$

If the Net Revenue does not result in a loss that exceeds 25 percent of the Basin Fund Beginning Balance, then

$$FA2 = FX$$

If the Net Revenue results in a loss that exceeds 25 percent of the Basin Fund Beginning Balance, then

$$FA2 = FX + NR + 0.25 * BFBB$$

**FA** - Determine the funds available for purchasing firming energy by using the lesser of FA1 and FA2.

**FARR** - Calculate the additional revenue to be recovered by subtracting the Funds Available from the forecasted energy purchase power expenses.

$$FARR = FX - FA$$

**STEP FOUR**: Once the additional revenue to be recovered has been determined, the Cost Recovery Charge (CRC) can be calculated, and the Waiver Level (WL) can be determined.

A. Cost Recovery Charge (CRC)

The CRC will be a charge to recover the additional revenue required as calculated in Step 3. The CRC will apply to all Customers who choose not to request a waiver of the CRC, as discussed below. The CRC equals the additional revenue to be recovered

divided by the total energy allocation to all Customers for the FY.

$$\text{CRC} = \text{FARR} / (\text{EA} * 1,000)$$

B. Waiver Level (WL)

The WL provides Customers the ability for Western to reduce purchase power expenses by scheduling less energy than their contractual amounts. Therefore, Western will establish an energy WL. For those Customers who voluntarily schedule no more energy than their proportionate share of the WL, Western will waive the CRC for that year.

After the Funds Available have been determined, the WL will be set at the sum of the energy that can be provided through hydro generation and purchased with Funds Available. The WL will not be less than the forecasted Hydro Energy.

$$\text{WL} = \text{If } (\text{EA} < \text{HE}, \text{EA}, \text{HE} + (\text{FE} * (\text{FA} / \text{FX})))$$

If SHP Energy Allocation is less than forecasted Hydro Energy available, then

$$\text{WL} = \text{EA}$$

If SHP Energy Allocation is greater than forecasted Hydro Energy available, then

$$\text{WL} = \text{HE} + (\text{FE} * (\text{FA} / \text{FX}))$$

PRIOR YEAR ADJUSTMENT: The CRC PYA for subsequent years will be determined by comparing the prior year's estimated firming-energy cost to the prior year's actual firming-energy cost for the energy provided above the WL. The PYA will result in an increase or decrease to a Customer's firm energy costs over the course of the following year. The table below is the calculation of a PYA.

PYA CALCULATION			
		Description	Formula
<b>STEP ONE</b>	<b>Determine actual expenses and purchases for previous year's firming. This data will be obtained from Western's financial statements at the end of FY.</b>		
	<b>PFX</b>	Prior Year Actual Firming Expenses (\$)	Financial Statements
	<b>PFE</b>	Prior Year Actual Firming Energy (GWh)	Financial Statements
<b>STEP TWO</b>	<b>Determine the actual firming cost for the CRC portion.</b>		
	<b>EAC</b>	Sum of the energy allocations of Customers subject to the PYA (GWh)	
	<b>FFC</b>	Forecasted Firming Energy Cost – (\$/MWh)	From CRC Calculation
	<b>AFC</b>	Actual Firming Energy Cost – (\$/MWh)	PFX/PFE
	<b>CRCEP</b>	CRC Energy Percentage	From CRC Calculation
	<b>CRCE</b>	Purchased Energy for the CRC (GWh)	EAC*CRCEP
<b>STEP THREE</b>	<b>Determine Revenue Adjustment (RA) and PYA.</b>		
	<b>RA</b>	Revenue Adjustment (\$)	(AFC-FFC)*CRCE*1,000
	<b>PYA</b>	Prior Year Adjustment (mills/kWh)	(RA/EAC)/1,000

### Narrative PYA Calculation

**STEP ONE: Determine actual expenses and purchases for previous year's firming. This data will be obtained from Western's financial statements at end of FY.**

**PFX** - Prior year actual firming expense

**PFE** - Prior year actual firming energy

**STEP TWO: Determine the actual firming cost for the CRC portion.**

**EAC** - Sum of the energy allocations of Customers subject to the PYA

**CRCE** - The amount of CRC Energy needed

**AFC** - The Actual Firming Energy Cost are the PFX divided by the PFE

$$AFC = (PFX / PFE) / 1,000$$

**STEP THREE: Determine Revenue Adjustment (RA) and Prior Year Adjustment (PYA).**

**RA** - The Revenue Adjustment is AFC less FFC times CRCE

$$RA = (AFC - FFC) * CRCE * 1,000$$

**PYA** = The PYA is the RA divided by the EAC for the CRC Customers only.

$$PYA = (RA / EAC) / 1,000$$

The Customer's PYA will be based on their prior year's energy multiplied by the resulting mills/kWh to determine the dollar amount that will be assessed. The Customer will be charged or credited for this dollar amount equally in the remaining months of the next year's billing cycle. Western will attempt to complete this calculation by December of each year. Therefore, if the PYA is calculated in December, the charge/credit will be spread over the remaining 9 months of the FY (January through September).

Billing Demand:

The billing demand will be the greater of:

1. The highest 30-minute integrated demand measured during the month up to, but not more than, the delivery obligation under the power sales contract, or
2. The Contract Rate of Delivery.

Billing Energy:

The billing energy will be the energy measured during the month up to, but not more than, the delivery obligation under the power sales contract.

Adjustment for Waiver:

Customers can choose not to take the full SHP energy supplied as determined in the attached formulas for CRC, and they will be billed the Energy and Capacity rates listed above, but not the CRC.

Adjustment for Transformer Losses:

If delivery is made at transmission voltage but metered on the low-voltage side of the substation, the meter readings will be increased to compensate for transformer losses as provided in the contract.

Adjustment for Power Factor:

The Customer will be required to maintain a power factor at all measurement points between 95 percent lagging and 95 percent leading.

Adjustment for Western Replacement Power:

Under the Customer's Firm Electric Service Contract, as amended, Western will bill the Customer for its proportionate share of the costs of Western Replacement Power (WRP) within a given time period. Western will include in the Customer's monthly power bill the WRP cost and the incremental administrative costs associated with WRP.

Adjustment for Customer Displacement Power Administrative Charges:

Western will include in the Customer's regular monthly power bill the incremental administrative costs associated with CDP.