

1987 Wholesale Power Rate Schedules

and General Rate Schedule Provisions

1	
/	
- Indiana in the contract of t	
	ή(
*	
ALEXANDER OF THE PROPERTY OF T	
A CANADA	
REPARALLE AND	
DEFINITION OF THE PROPERTY OF	
2000 grant and a state of the s	
inentiatific	
S Seventhal	
open	
Mentana in the second s	
i vedigilirer	
ightfoliasis.	
ericolita	
received and the second and the seco	
RDP charges	
Samman	
the same of the sa	
LEZEWANNE CONTRACTOR C	
\$5.00 0,100 0,100	
	ı
Tableton	
Comment of the Commen	

United States Department of Energy Bonneville Power Administration 905 N.E. 11th Avenue Portland, Oregon 97232

Bonneville Power Administration's 1987 Wholesale Power Rate Schedules and General Rate Schedule Provisions, contained herein, were approved on an interim basis effective October 1, 1987. These rate schedules and provisions were approved by the Federal Energy Regulatory Commission, United States Department of Energy, in a Commission Order issued September, 1987 (Docket No. EF87-2011-000).

These rate schedules and provisions supersede in their entirety the Administration's Wholesale Power Rate Schedules and General Rate Schedule Provisions effective July 1, 1985.



aluminum price shall be determined following the procedures set forth below:

- a. Each monthly billing aluminum price determined pursuant to section VII.A of these GRSPs for the period August 1, 1986, through June 30 immediately preceding the annual adjustment date, shall be escalated to the current year dollars using the Price Deflator procedures described in section VII.B.6 below.
- b. The sum of the escalated monthly billing aluminum prices shall be divided by the number of months in the period and rounded to the nearest tenth of a cent to obtain the Average Historical Aluminum Price.

5. Average Historical Lower Pivot Aluminum Price

Prior to the July 1, 1991, annual adjustment date and every annual adjustment date thereafter, the average of the Lower Pivot Aluminum Prices for the period the Variable Industrial rate has been in effect shall be calculated following the procedures set forth below:

- a. The Lower Pivot Aluminum Price in each month for the period August 1, 1986, through June 30 immediately preceding the annual adjustment date, shall be escalated to the current year's dollars using the Price Deflator procedures described in section VII.B.6 below.
- b. The sum of the escalated monthly Lower Pivot Aluminum Prices shall be divided by the number of months in the period, and rounded to the nearest tenth of a cent to obtain an Average Historical Lower Pivot Aluminum Price.

6. Price Deflator Procedures

For purposes of converting nominal dollars to real dollars in the calculation of the Average Historical Aluminum Price and the Average Historical Lower Pivot Aluminum Price, the following Price Deflator procedures shall be used:

- a. Monthly billing aluminum prices and Lower Pivot Aluminum Prices for any calendar months July through December shall be inflated by multiplying the price by the ratio of the GNP Implicit Price Deflator for the calendar year prior to the annual adjustment date divided by the Implicit Price Deflator for the calendar year in which the price occurred.
- b. Monthly billing aluminum prices and Lower Pivot Aluminum Prices for any

calendar months January through June shall be inflated by multiplying the price by the ratio of the Implicit Price Deflator for the calendar year prior to the annual adjustment date divided by the Implicit Price Deflator for the calendar year prior to the year in which the price occurred.

Each price shall be rounded to the nearest tenth of a

50

WHOLESALE POWER RATE SCHEDULES AND GENERAL RATE SCHEDULE PROVISIONS TABLE OF CONTENTS

Wholesale P	Power Rate Schedules	Page
PF-87	Priority Firm Power Rate	1
IP-87	Industrial Firm Power Rate	5
VI-87	Variable Industrial Power Rate	7
NF-87	Nonfirm Energy Rate	11
CF-87	Firm Capacity Rate	14
CE-87	Emergency Capacity Rate	15
NR-87	New Resource Firm Power Rate	16
SI-87	Special Industrial Power Rate	19
SP-87	Short-Term Surplus Firm Power Rate	22
SL-87	Long-Term Surplus Firm Power Rate	24
SS-87	Share-the-Savings Energy Rate	25
RP-87	Reserve Power Rate	26
General Rate	Schedule Provisions	
Section I	Adoption of Revised Rate Schedules and General Rate Schedule Provisions	30
Section II	Types of BPA Service	30
Section III	Billing Factors and Billing Adjustments	32
Section IV	Other Definitions	40
Section V	Application of Rates under Special Circumstances	44
Section VI	Billing Information	45
Section VII	Variable Industrial Rate Parameters and Adjustments	47

mid-point between the adjusted Upper Pivot Aluminum Price and the Average Historical Lower Pivot Aluminum Price described in section VII.B.5 below, except as limited to the greater of 65 cents per pound or the adjusted Lower Pivot Point for the year.

The Upper Pivot Aluminum Price shall equal the greater of:

(a) (2)(AAP) - ALP:

where

- AAP = the Average Historical Aluminum Price described in section VII.B.4 of these GRSPs.
- ALP = the Average Historical Lower Pivot Aluminum Price described in section VII.B.5 of these GRSPs.
- (b) 65.0 cents per pound escalated to current dollars using the Cost Escalator for the Upper Pivot Aluminum Price described in section VII.B.3.c of these GRSPs.

or

(c) The adjusted Lower Pivot Aluminum Price for the year.

The revised Upper Pivot Aluminum Price shall supersede the Upper Pivot Aluminum Price as stated in section III.B.2 of the rate schedule and shall be used to determine the energy rate in the subsequent 12 months.

3. Cost Escalators

a. The cost indices described below shall be used in calculating the appropriate cost escalators. Each index shall be rounded to the nearest one-tenth of a percent, or three significant places.

(1) Electricity Cost Index

The average VI-86 rate in mills per kilowatthour based on the Plateau Energy Charge and the Discount for Quality of First Quartile Service in effect on the April 1 preceding the annual adjustment date and a load factor of 98.5 percent; divided by 22.8 mills per kilowatthour (the average VI-86 rate assuming the plateau energy charge and the Discount for Quality of First Quartile Service in 1986).

(2) Labor Cost Index

The annual average hourly earnings for the U.S. primary aluminum industry

(SIC 3334) over the previous complete calendar year, from the Employment and Earnings, published by the U.S. Department of Labor, Bureau of Labor Statistics (BLS), divided by \$14.20 per hour (the value of SIC 3334 earnings reported for 1985).

(3) Alumina Cost Index

The annual average of the monthly billing aluminum prices described in section VII.A of the GRSPs for the previous 1-year period beginning July 1 through June 30 divided by 50.8 cents per pound (the average U.S. Transaction price over the period April 1985 through March 1986).

(4) Other Costs Index

The annual average GNP Implicit Price Deflator for the previous complete calendar year, as published by the U.S. Department of Commerce, Bureau of Economic Analysis, divided by 1.115 (the value of the GNP Implicit Price Deflator for 1985 with 1982 = 1.000).

In the event the indices delineated above are discontinued or revised in a manner that BPA determines renders them unusable for calculating a consistent cost index, BPA will adjust or substitute another similar price index, following advance notification and opportunity for public comment as described in section VII.B.1 of these GRSPs.

b. The Cost Escalator for the Lower Pivot Aluminum Price shall be a weighted average of the four indices contained in section VII.B.3.a above. The following weights shall be assigned each index:

Electricity Cost Index	.30
Labor Cost Index	.20
Alumina Cost Index	.20
Other Costs Index	.30

c. The Cost Escalator for the Upper Pivot Aluminum Price shall be a weighted average of the Electricity Cost and Other Cost Escalators as stated in sections VII.B.3.a.(1) and VII.B.3.a.(4) above. The following weights shall be assigned each index:

> Electricity Cost Index .25 Other Costs Index .75

4. Average Historical Aluminum Price

Prior to the July 1, 1991, annual adjustment date and every annual adjustment date thereafter, an average historical aluminum price shall be calculated for the period the Variable rate has been in effect. The average historical

3. Changes in Aluminum Price Indicators

In the event that BPA determines that factors outside its control render the monthly average U.S. Transaction Price unusable as an approximation of U.S. market prices, BPA may develop and substitute another indicator for prices in U.S. markets. BPA shall notify interested parties of its intent to do so at least 120 days prior to the billing month in which the change would become effective. In this notification, BPA shall explain the reason for the substitution and specify the replacement indicator it intends to use. BPA also shall describe the methodology to determine the monthly billing aluminum price to be used for billing purposes under this rate schedule and shall provide the necessary data to be used in the calculation. Interested persons will have until close of business 3 weeks from the date of the notification to provide comments. Consideration of comments and more current information may cause the final methodology and the substitute aluminum price index to differ from those proposed. BPA shall notify all affected parties, and those parties that submitted comments, of its final determination 90 days prior to the billing month the new indicator shall be effective.

B. Annual Adjustments to the Lower and Upper Pivot Aluminum Prices

On July 1, 1987, and every July 1 thereafter, the Lower and Upper Pivot Aluminum Prices, as stated in section III.B of the rate schedule, shall be subject to change for billing purposes as herein described. The term "annual adjustment date" shall refer to July 1 of each year.

1. Implementation Procedures

Beginning in 1987 and every year thereafter, prior to April 1 of that year, BPA shall provide the purchasers under this rate schedule preliminary written estimates of proposed adjustments to the Lower and Upper Pivot Aluminum Prices. By the last working day of the month of April, BPA shall notify interested parties in writing of BPA's revised determinations concerning changes to the Lower and Upper Pivot Aluminum Prices. BPA shall describe how the adjustments were determined and provide the data used in the calculations. In addition to written notification, BPA may, but is not obligated to, hold a public comment forum to clarify its determinations and solicit comments. Interested persons may submit comments on the determinations to BPA and other parties. Comments will be accepted until close of business on the last working Friday in May. Consideration of comments and more current information may result in the final adjustment differing from the proposed adjustment. By June 30 of each year, BPA shall notify all VI purchasers, those parties that submitted comments, and parties that requested notification, of the final determination.

2. Annual Adjustment Procedures

a. Annual Adjustment of the Lower Pivot Aluminum Price

Beginning with the July 1, 1987, annual adjustment date, for each year that the Variable Industrial rate is in effect, the Lower Pivot Aluminum Price as stated in section III.B.1 of the rate schedule shall be adjusted on the July 1 annual adjustment date. The Lower Pivot Aluminum Price shall be revised by multiplying 59 cents per pound by the Cost Escalation Index described in section VII.B.3.b of these GRSPs and rounded to the nearest tenth of a cent. The revised Lower Pivot Aluminum Price shall replace the Lower Pivot Aluminum Price as stated in section III.B.1 of the rate schedule and shall be used to determine the energy rate in the subsequent 12 billing months.

b. Annual Adjustment of the Upper Pivot Aluminum Price

For each year that the Variable Industrial rate is in effect, the Upper Pivot Aluminum Price as stated in section III.B.2 of the rate schedule shall be adjusted on the July 1 annual adjustment date.

(1) Annual adjustment for the period beginning July 1, 1987, and ending June 30, 1991

The Upper Pivot Aluminum Price shall be revised by multiplying 72 cents per pound by the Cost Escalation Index described in section VII.B.3.c of these GRSPs and rounded to the nearest tenth of a cent. The revised Upper Pivot Aluminum Price shall supersede the Upper Pivot Aluminum Price as stated in section III.B.2 of the rate schedule and shall be used to determine the energy rate in the subsequent 12 billing months.

(2) Annual adjustment for the period beginning July 1, 1991, and ending June 30, 1993

The Upper Pivot Aluminum Price will be adjusted such that the Average Historical Aluminum Price described in section VII.B.4 of these GRSPs is the

SCHEDULE PF-87

PRIORITY FIRM POWER RATE

SECTION I. AVAILABILITY

This schedule is available for the contract purchase of firm power or capacity to be used within the Pacific Northwest. Priority Firm Power may be purchased by public bodies, cooperatives, and Federal agencies for resale to ultimate consumers, for direct consumption, construction, test and start-up, and station service.

Utilities participating in the exchange under section 5(c) of the Pacific Northwest Electric Power Planning and Conservation Act (Northwest Power Act) may purchase Priority Firm Power pursuant to their Residential Purchase and Sale Agreements.

In addition, Bonneville Power Administration (BPA) may make power available to those parties participating in exchange agreements which use this rate schedule as the basis for determining the amount or value of power to be exchanged.

This schedule supersedes Schedule PF-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

This rate schedule includes the Preference rate and the Exchange rate. The Preference rate is available for the general requirements of public body, cooperative and Federal agency customers and includes credit attributed to the provision of section 7(b)(2) of the Northwest Power Act. The Exchange rate is available for all purchases of residential and small farm exchange power pursuant to the Residential Purchase and Sale Agreements.

A. Preference Rate

1. Demand Charge

- a. \$3.46 per kilowatt of billing demand occurring during all Peak Period hours.
- b. No demand charge during Offpeak Period hours.

2. Energy Charge

a. 18.4 mills per kilowatthour of billing energy for the billing months September through March;

b. 14.4 mills per kilowatthour of billing energy for the billing months April through August.

B. Exchange Rate

1. Demand Charge

- a. \$3.56 per kilowatt of billing demand occurring during all Peak Period hours.
- b. No demand charge during Offpeak Period hours.

2. Energy Charge

- a. 19.1 mills per kilowatthour of billing energy for the billing months September through March;
- b. 15.1 mills per kilowatthour of billing energy for the billing months April through August.

SECTION III. BILLING FACTORS

In this section, billing factors are listed for each of the following types of purchasers: computed requirements purchasers (section III.A), purchasers of residential exchange power pursuant to the Residential Purchase and Sale Agreements (section III.B), and metered requirements purchasers and those Priority Firm Power purchasers not covered by sections III.A and III.B (section III.C).

A. Computed Requirements Purchasers

Purchasers designated by BPA as computed requirements purchasers pursuant to power sales contracts shall be billed in accordance with the provisions of this subsection.

1. Billing Demand

The billing demand for actual, planned, and contracted computed requirements purchasers shall be the higher of the billing factors "a" and "b," below:

- a. the lower of:
- (1) the larger of the Computed Peak Requirement or the Computed Average Energy Requirement; or

(2) the Measured Demand, before adjustment for power factor.

b. the lower of:

- (1) the Computed Peak Requirement, or
- (2) 60 percent of the highest Computed Peak Requirement during the previous 11 billing months (Ratchet Demand).

2. Billing Energy

The billing energy for actual, planned, and contracted computed requirements purchasers shall be:

- a. for the months September through March, the sum of:
 - 78 percent of the Measured Energy (excluding unauthorized increase), and
 - (2) 22 percent of the Computed Energy Maximum;
- b. for the months April through August, the sum of:
 - (1) 57 percent of the Measured Energy (excluding unauthorized increase), and
 - (2) 43 percent of the Computed Energy Maximum.

B. Purchasers of Residential Exchange Power

Purchasers buying Priority Firm Power under the terms of a Residential Purchase and Sale Agreement shall be billed as follows:

1. Billing Demand

The billing demand shall be the demand calculated by applying the load factor, determined as specified in the Residential Purchase and Sale Agreement, to the billing energy for each billing period.

2. Billing Energy

The billing energy shall be the energy associated with the utility's residential load for each billing period. Residential load shall be computed in accordance with the provisions of the purchaser's Residential Purchase and Sale Agreement.

C. Metered Requirements Purchasers, Other Purchasers Not Covered by Sections III.A and III.B, Above

Purchasers designated as metered requirements customers and purchasers taking or

exchanging power under this rate schedule who are not otherwise covered by sections III.A and III.B shall be billed as follows:

1. Billing Demand

The billing demand shall be the Measured Demand as adjusted for power factor, unless otherwise specified in the power sales contract.

2. Billing Energy

The billing energy shall be the Measured Energy, unless otherwise specified in the power sales contract.

SECTION IV. ADJUSTMENTS AND SPECIAL PROVISIONS

A. Power Factor Adjustment

The adjustment for power factor, when specified in this rate schedule or in the power sales contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the General Rate Schedule Provisions (GRSPs). The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment, BPA shall increase the billing demand by 1 percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

B. Low Density Discount (LDD)

BPA shall apply a discount to the charges for all Priority Firm Power sold to purchasers who are eligible for an LDD. Eligibility for the LDD and the amount of the discount (3, 5, or 7 percent) shall be determined pursuant to section III.C.3 of the GRSPs.

C. Irrigation Discount

BPA shall apply an irrigation discount, equal to 4.6 mills per kilowatthour, to the charges for qualifying energy purchased under this rate schedule. The irrigation discount shall be applied after calculation of the Low Density Discount. The discount shall apply only to energy purchased during the billing months of April through October. Eligibility for the irrigation discount and reporting requirements shall be

2. Estimated Bills

At its option, BPA may elect to render an estimated bill for that month to be followed at a subsequent billing date by a final bill. Such estimated bill shall have the validity of and be subject to the same payment provisions as a final bill.

3. Due Date

Bills shall be due by close of business on the 20th day after the date of the bill (due date). This requirement holds also for revised bills (see section 6 below). Should the 20th day be a Saturday, Sunday, or holiday (as celebrated by the purchaser), the due date shall be the next following business day.

4. Late Payment

Bills not paid in full on or before close of business on the due date shall be subject to a penalty charge of \$25. In addition, an interest charge of one-twentieth percent (0.05 percent) shall be applied each day to the sum of the unpaid amount and the penalty charge. This interest charge shall be assessed on a daily basis until such time as the unpaid amount and penalty charge are paid in full.

Remittances received by mail will be accepted without assessment of the charges referred to in the preceding paragraph provided the postmark indicates the payment was mailed on or before the due date. Whenever a power bill or a portion thereof remains unpaid subsequent to the due date and after giving 30 days' advance notice in writing, BPA may cancel the contract for service to the purchaser. However, such cancellation shall not affect the purchaser's liability for any charges accrued prior thereto under such contract.

5. Disputed Billings

In the event of a disputed billing, full payment shall be rendered to BPA and the disputed amount noted. Disputed amounts are subject to the late payment provisions specified above. BPA shall separately account for the disputed amount. If it is determined that the purchaser is entitled to the disputed amount, BPA shall refund the disputed amount with interest, as determined by BPA's Office of Financial Management.

BPA retains the right to verify, in a manner satisfactory to the Administrator, all data submitted to BPA for use in the calculation of BPA's rates and corresponding rate adjustments. BPA also retains the right to deny eligibility for any BPA rate or corresponding rate adjustment until all submitted data have

been accepted by BPA as complete, accurate, and appropriate for the rate or adjustment under consideration.

6. Revised Bills

As necessary, BPA may render a revised bill. A revised bill shall replace all previous bills issued by BPA that pertain to a specified customer for a specified billing period if the amount of the revised bill is less than the amount of the original bill. If the amount of the revision causes an additional amount to be due BPA beyond the original bill, a revised bill will be issued for the difference.

The date of the revised bill shall be determined as follows:

- a. If the amount of the revised bill is equal to or less than the amount of the bill which it is replacing, the revised bill shall have the same date as the replaced bill.
- b. If the amount of the revised bill is greater than the amount of the bill which it is replacing, the additional amount will be billed on a separate bill, and the date of the revised bill shall be its date of issue.

SECTION VII. VARIABLE INDUSTRIAL RATE PARAMETERS AND ADJUSTMENTS

A. Monthly Average Aluminum Price Determination

1. Calculation of the Monthly Billing Aluminum Price

The monthly billing aluminum price shall be determined by BPA for each billing month. For purposes of this rate schedule, the monthly billing aluminum price shall be based on the average price of aluminum in U.S. markets during the third calendar month prior to the billing month. The average price of aluminum in U.S. markets shall be defined as the average U.S. Transaction Price reported for the month by Metals Week, in cents per pound, rounded to the nearest tenth of a cent.

2. Notification of the Monthly Average Aluminum Price

BPA shall provide, 45 days prior to the billing month, written notification to purchasers under this rate schedule of the monthly billing aluminum price to be used for billing purposes. Upon written request supporting documentation shall be provided.

B. Load Shift and Outage Reports

Load shift and outage reports must be submitted to BPA within 4 days of the corresponding load shift or outage. Reports may be made by telephone, mail, or other electronic processes where available. If customer reports are not received in a timely manner, BPA has the option to withhold load shift or outage credit.

C. Billing for New Large Single Loads

Any BPA customer whose total load includes one or more New Large Single Loads (NLSL) shall be billed for the NLSL(s) at the New Resource Firm Power Rate. The power requirements associated with the NLSL shall be established in a manner consistent with the provisions of this section.

The purchaser shall warrant to BPA that NLSLs are separately metered. The metering must include provisions for determining:

- 1. the NLSL demand during BPA's diurnal capacity billing periods,
- 2. the NLSL energy during BPA's energy billing periods, and
- 3. the NLSL reactive energy for the billing month.

The design for the metering equipment for the NLSL must be approved by BPA. Testing and inspections of such metering installations shall be as provided in the General Contract Provisions.

On a monthly basis, each purchaser of New Resource Firm Power shall report to BPA the quantity of power used by the NLSL during the purchaser's billing period. Data provided to BPA by the purchaser must be submitted to BPA within 2 normal working days of the date the purchaser reads the meters. BPA may elect to adjust the NLSL data for losses from the point of metering to the closest BPA point of delivery for the purchaser.

D. Determination of Measured Demand

- 1. For points of delivery with fully operational metering under the Revenue Metering System (RMS), demand shall be measured from 0000 hours on the first day of the billing period through 2400 hours on the last day of the billing period.
- 2. For points of delivery that do not have RMS metering, demand shall be measured from 0000 hours on the first complete (24 hour) day of the available metering data through 2400 hours on the last complete day of the available metering data. Billing demand will be determined from the period of available

metering data that most closely matches the official billing period of the customer.

E. Determination of Measured Energy

- 1. For points of delivery with fully operational metering under RMS, energy shall be measured from 0000 hours on the first day of the billing period through 2400 hours on the last day of the billing period.
- 2. For points of delivery that do not have RMS metering, measured energy shall be the quantity of usage recorded on the meter between meter readings.

F. Billing Month

Meters normally will be read and bills computed at intervals of 1 month. A month is defined as the interval between meter-reading dates which normally will be approximately 30 days. If service is for less than or more than the normal billing month, the monthly charges stated in the applicable rate schedule shall be adjusted appropriately.

The calendar month in which the purchaser's meter is scheduled to be read determines the billing month. (Thus, a bill associated with a meter scheduled to be read on April 10 would be an April bill.) The charges for the winter and summer periods identified in the rate schedules apply to the purchaser's billing months.

G. Payment of Bills

Bills for power shall be rendered monthly by BPA. Failure to receive a bill shall not release the purchaser from liability for payment. Bills for amounts due BPA of \$50,000 or more must be paid by direct wire transfer; customers who expect that their average monthly bill will not exceed \$50,000 and who expect special difficulties in meeting this requirement may request, and BPA may approve, an exemption from this requirement. Bills for amounts due BPA under \$50,000 may be paid by direct wire transfer or mailed to the Bonneville Power Administration, P.O. Box 6040, Portland, Oregon 97228-6040, or to another location as directed by BPA. The procedures to be followed in making direct wire transfers will be provided by the Office of Financial Management and updated as necessary.

1. Computation of Bills

Demand and energy billings for power purchased under each rate schedule shall be rounded to whole dollar amounts, by eliminating any amount which is less than 50 cents and increasing any amount from 50 cents through 99 cents to the next higher dollar.

determined pursuant to section III.C.4 of the GRSPs.

D. Conservation Surcharge

The Northwest Power Planning Council has recommended that a conservation surcharge be imposed on those customers subject to such surcharge as determined by the Administrator in accordance with BPA's Policy to Implement the Council-Recommended Conservation Surcharge. The Conservation Surcharge shall be applied pursuant to section III.C.7 of the GRSPs and subsequent to any other rate adjustments.

E. Cost Recovery Adjustment Clause

The Cost Recovery Adjustment Clause described in section III.C.5 of the GRSPs shall be applied to all purchases and exchanges under this rate schedule. The percentage increase or decrease calculated in section III.C.5.c and III.C.5.d of the GRSPs shall be applied uniformly to the demand and energy charges contained in section II.A and II.B and the irrigation discount contained in section IV.C of this rate schedule. An additional increase of .046 mills per kilowatthour shall be made to the irrigation discount for each percentage increase in the PF rates due to the Cost Recovery Adjustment Clause. An additional decrease of .046 mills per kilowatthour shall be made to the irrigation discount for each percentage decrease in the PF rates due to the Cost Recovery Adjustment Clause.

F. Outage Credit

Pursuant to section 7 of the General Contract Provisions, BPA shall provide an outage credit to any purchaser for those hours for which BPA is unable to deliver the full billing demand during that billing month due to an outage on the facilities used by BPA to deliver Priority Firm Power. Such credit shall not be provided if BPA is able to serve the purchaser's load through the use of alternative facilities or if the outage is for less than 30 minutes. The amount of the credit shall be calculated according to the provisions of section III.C.2 of the GRSPs.

G. Unauthorized Increase

BPA shall apply the charge for Unauthorized Increase to any purchaser of Priority Firm Power taking demand and energy in excess of its contractual entitlement.

1. Rate for Unauthorized Increase

67.3 mills per kilowatthour.

2. Calculation of the Amount of Unauthorized Increase

Each 60-minute clock-hour integrated or scheduled demand shall be considered separately in determining the amount that may be considered an unauthorized increase. BPA first shall determine the amount of unauthorized increase related to demand and shall treat any remaining unauthorized increase as energy-related.

a. Unauthorized Increase in Demand

That portion of any Measured Demand during Peak Period hours, before adjustment for power factor, which exceeds the demand that the purchaser is contractually entitled to take during the billing month and which cannot be assigned:

- (1) to a class of power that BPA delivers on such hour pursuant to contracts between BPA and the purchaser; or
- (2) to a type of power that the purchaser acquires from sources other than BPA and that BPA delivers during such hour,

shall be billed:

- (1) in accordance with the provisions of the "Relief from Overrun" exhibit to the power sales contract; or
- (2) if such exhibit does not apply or is not a part of the purchaser's power sales contract, at the rate for Unauthorized Increase, based on the amount of energy associated with the excess demand.

b. Unauthorized Increase in Energy

The amount of Measured Energy during a billing month which exceeds the amount of energy which the purchaser is contractually entitled to take during that month and which cannot be assigned:

- (1) to a class of power which BPA delivers during such month pursuant to contracts between BPA and the purchaser; or
- (2) to a type of power which the purchaser acquires from sources other than BPA and which BPA delivers during such month,

shall be billed:

(1) in accordance with the provisions of the "Relief from Overrun" exhibit to the power sales contract; or (2) as unauthorized increase if such exhibit does not apply or is not a part of the purchaser's power sales contract.

H. Coincidental Billing Adjustment

Purchasers of Priority Firm Power who are billed on a coincidental basis and who have diversity charges or diversity factors specified in their power sales contracts shall have their charges for billing demand adjusted according to the provisions of section III.C.6 of the GRSPs. Computed requirements purchasers are not subject to the Coincidental Billing Adjustment for scheduled power.

I. Energy Return Surcharge

Any purchaser who preschedules in accordance with sections 2(a)(4) and 2(c)(2) of Exhibit E of the power sales contract and who returns, during a single offpeak hour, more than 60 percent of the difference between that purchaser's computed peak requirement and computed average energy requirement for the billing month shall be subject to the following surcharge for each additional kilowatthour so returned:

- 1. 3.49 mills per kilowatthour for the months of April through October;
- 2. 1.48 mills per kilowatthour for the months of November through March.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different resource categories to the PF-87 rate is 78.5 percent FBS and 21.5 percent Exchange.
- **B.** The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

- 2. Power sold for test and start-up may be used prior to commercial operation both to bring the project on line and to ensure that the project is working properly.
- 3. Power sold for station service may be purchased at any time following commercial operation of the project. Station service power may be used for project start-up, project shut-down, normal plant operations, and operations during a plant shut-down period.

C. Application of Rates During Initial Operation Period—Transitional Service

1. Eligibility for Transitional Service

For an initial operating period, as specified in the power sales contract, beginning with the commencement of operation of a new industrial plant, a major addition to an existing plant, or reactivation of an existing plant or important part thereof, BPA may agree to bill the purchaser in accordance with the provisions of this section. This section shall apply to both:

- a. DSIs having new, additional or reactivated plant facilities, and
- b. utility purchasers serving industrial purchasers with power purchased from BPA. BPA will provide transitional service to utilities for only those industrial loads for which the demand can be separately metered by the utility and recorded on a daily basis.

2. Calculation of the Daily Demand

If the purchaser requests billing on a Daily Demand basis pursuant to its power sales contract and if BPA agrees to such billing, the billing demand for the billing month shall be the average of the Daily Demands as adjusted for power factor.

Demand for each day shall be defined as 100 percent of the Measured Demand for the day (regardless of whether such Measured Demand occurs during the Peak Period or the Offpeak Period).

3. Billing for Transitional Service

Utilities receiving transitional service shall provide BPA with Daily Demand information for the industrial consumer for whom transitional service is provided. To compute the power bill for the point of delivery which includes the load being served with transitional service, BPA shall, at its discretion, either:

a. determine the demand for the pertinent point of delivery without the industrial

load and then add the average daily demand for such industrial load; or

b. bill the entire point of delivery on a daily demand basis.

Daily demand billing shall not affect the level of any curtailment charge or energy charge assessed by BPA.

D. Changes in a DSI's BPA Operating Level

If a DSI requests a waiver regarding the notice requirements specified in the DSI's power sales contract for a voluntary change in its BPA Operating Level, and if BPA does not grant the waiver, or if the DSI fails to give notice of such a change and does not request a waiver, the DSI shall be billed as if no notice has been provided until such time as the number of days in the notice period have passed. If, however, BPA agrees to waive the notice requirement, the power bill shall reflect the requested changes as of the requested effective date specified in the notice or, at BPA's discretion, a date of BPA's choosing within the notice period.

E. Restriction of Deliveries

Deliveries of capacity or energy to any purchaser may be restricted when operation of the facilities used by BPA to serve such purchaser is:

- 1. suspended,
- 2. interrupted,
- 3. interfered with,
- 4. curtailed, or
- 5. restricted

by the occurrence of any condition described in the Uncontrollable Forces or Continuity of Service sections of the General Contract Provisions of the power sales contract.

SECTION VI. BILLING INFORMATION

A. Determination of Estimated Billing Data

If the amounts of capacity, energy, or the 60-minute integrated demands for energy purchased from BPA must be estimated from data other than metered or scheduled quantities, historical patterns, and pertinent weather data, BPA and the purchaser will agree on billing data to be used in preparing the bill. If the parties cannot agree on estimated billing quantities, derived by any method, a determination binding on both parties shall be made in accordance with the arbitration provisions of the power sales contract.

- (1) summing the reported netpetroleum generation for
 California, expressed in gigawatthours, from EPM for
 month t for the years beginning with calendar year 1982
 up to and including the prior
 calendar year. The sum of California's historical monthly
 consumption shall be divided
 by the number of years for
 which petroleum consumption was reported and
 rounded to the nearest
 gigawatthour.
- (2) summing the reported netpetroleum generation for
 California, expressed in gigawatthours, from EPM for
 month r for the years beginning with calendar year 1982
 up to and including the prior
 calendar year. The sum of California's historical monthly
 consumption shall be divided
 by the number of years for
 which petroleum consumption was reported and
 rounded to the nearest
 gigawatthour.
- (3) dividing the average consumption of petroleum in California for the month t as determined in (1) above by the average consumption of petroleum for the month r as determined in (2) above and rounding to the nearest one-tenth, or three significant places.

D. Determination of SL Floor Projection and Ceiling Projection

By October 1 of each year, BPA shall determine the present value of the forecasted Priority Firm rate or successor rate(s), BPA's opportunity cost of surplus power, and the cost of BPA's highest cost resource for each fiscal year of the succeeding 21-year period. This determination shall be used to calculate the Floor projection and Ceiling projection for any contract using the SL-87 rate schedule executed during the succeeding 12 months. The Floor projection and Ceiling projection shall be calculated as stated in Section II.A and II.B of Rate Schedule SL-87.

An initial determination of the present value of the Priority Firm rate, BPA's opportunity cost, and the cost of BPA's highest cost resource shall be published on or about August 1 of each year. Within 14 days of the date of BPA's notice, any interested parties shall notify BPA's Office of Public Involvement in writing that they request to be placed on a list of interested parties. The request shall state the name and address of the person, and shall designate no more than two persons on whom service shall be made. Thereafter, communications by and between BPA and interested parties will be limited to those parties appearing on the interested parties list.

Following BPA's notice of its initial determination, BPA shall afford interested parties the opportunity to:

- (1) Obtain or be provided reasonable access to nonproprietary and nonprivileged BPA financial data and support relevant to BPA's determination.
- (2) Submit written comments to BPA by September 15 regarding the determination. Interested parties shall mail copies of their comments to all parties appearing on the list of interested parties compiled by BPA.

Consideration of comments and more current information may result in a different calculation from that initially proposed. The final determination shall be published on October 1.

SECTION V. APPLICATION OF RATES UNDER SPECIAL CIRCUMSTANCES

A. Energy Supplied for Emergency Use

A purchaser taking Priority Firm or New Resource Firm Power shall pay in accordance with the Nonfirm Energy rate schedule, NF-87, and Emergency Capacity rate schedule, CE-87, for any electric energy or capacity which has been supplied:

- 1. for use during an emergency on the purchaser's system, or
- 2. following an emergency to replace energy secured from sources other than BPA during such emergency.

Mutual emergency assistance may, however, be provided and payment therefore settled under exchange agreements.

B. Construction, Test and Start-Up, and Station Service

Power for the purpose of construction, test and start-up, and station service shall be made available to eligible purchasers under the Priority Firm and New Resource Firm Power Rate Schedules. Such power must be used in the manner specified below:

1. Power sold for construction is to be used in the construction of the project.

SCHEDULE IP-87 INDUSTRIAL FIRM POWER RATE

SECTION I. AVAILABILITY

This schedule is available to direct-service industrial (DSI) customers for both the contract purchase of Industrial Firm Power and the purchase of Auxiliary Power if requested by the DSI customer and made available by BPA. If a DSI customer purchasing power under this rate schedule requests and BPA makes available power under another applicable wholesale rate schedule, the IP-87 rate schedule is available for that portion of power purchased not covered under the alternative rate schedule. This rate schedule supersedes Schedule IP-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

The following rates shall be applied when first quartile service is provided under this rate schedule in accordance with the terms of a purchaser's Power Sales Contract dated August 25, 1981. A separate billing adjustment for the reserves provided by the purchasers of Industrial Firm Power is not contained in this rate schedule; the value of reserves credit has been included in the determination of the demand and energy charges.

Any contractual reference to the IP Premium Rate shall be deemed to refer to the demand and energy charges set forth below. Any reference to the IP Standard Rate shall be deemed to refer to the same demand and energy charges minus the Discount for Quality of Service.

A. Demand Charge

- 1. \$4.14 per kilowatt of billing demand occurring during all Peak Period hours.
- 2. No demand charge during Offpeak Period hours.

B. Energy Charge

- 1. 19.5 mills per kilowatthour of billing energy for the billing months September through March;
- 2. 15.6 mills per kilowatthour of billing energy for the billing months April through August.

SECTION III. BILLING FACTORS

A. Billing Demand

The billing demand shall be the BPA Operating Level during the Peak Period as adjusted for

power factor. If there is more than one BPA Operating Level during the Peak Period within a billing month, the billing demand shall be a weighted average of the BPA Operating Levels during the Peak Period for the billing month. The BPA Operating Level is defined in section III.A.10 of the General Rate Schedule Provisions (GRSPs). If BPA has agreed to serve a portion of a DSI load under an alternative rate schedule, the billing demand under the IP-87 rate schedule shall be specified in the contract initiating such arrangement.

However, if BPA has agreed, pursuant to section 4 of the direct-service industrial power sales contract, to sell Industrial Firm Power on a daily demand basis (transitional service), this section of the rate schedule shall not apply, and BPA shall bill the purchaser in accordance with the provisions of section V.C.3 of the GRSPs.

B. Billing Energy

The billing energy shall be the Measured Energy for the billing month, minus any kilowatthours on which BPA assesses the charge for unauthorized increase.

However, if BPA has agreed to serve only a portion of the DSI's load under the IP rate schedule, the billing energy for the power purchased under the IP rate shall be specified in the contract initiating such arrangement.

SECTION IV. ADJUSTMENTS AND SPECIAL PROVISIONS

A. Discount for Quality of First Quartile Service

1. Application and Amount of First Quartile Discount

If a purchaser requests discounted rate service, a discount of 0.6 mills per kilowatthour of billing energy shall be granted. This billing credit shall be applied to the monthly billing energy under section III.B for all power purchased under this rate schedule. No credit shall be applied to those purchases subject to unauthorized increase charges under section IV.D of this rate schedule.

2. Eligibility Requirements for First Quartile Discount

To qualify for the First Quartile Discount the purchaser must request discounted rate serv-

ice in writing by April 2 of each calendar year. By virtue of making such request, the Purchaser is agreeing to accept the level and quality of First Quartile service described in section 6 of the Variable Industrial Rate contract. Such acceptance includes the waiver of contract rights provided in section 6.a(2)(a) of said contract.

B. Curtailments

BPA shall charge the DSI for curtailments of the lower three quartiles in accordance with the provisions of section 9 of the power sales contract. BPA shall apply the demand charge in effect at the time of the curtailment in the computation of the amount of the curtailment charge. In the event that a purchaser is found to be eligible to have a portion of their load served under an alternative rate schedule, application of the curtailment charge shall be specified in the contract instituting such arrangement.

C. Cost Recovery Adjustment Clause

The Cost Recovery Adjustment Clause is described in section III.C.5 of the GRSPs and shall be applied to all power purchases under this rate schedule.

Application of the Cost Recovery Adjustment Clause shall result in a uniform adjustment applied to the demand and energy charges, contained in sections II.A and II.B of this rate schedule, and the first quartile discount, if applicable, contained in section IV.A.1 of this rate schedule. A uniform adjustment will be made only if it causes demand and energy charges and the first quartile discount to increase. No downward adjustment resulting from the Cost Recovery Adjustment Clause shall be made to any portion of this rate schedule.

The uniform percentage (CRAC%) determined in section III.C.5.c.(1) of the GRSPs shall be applied in the following manner:

(1 + <u>CRAC%</u>) * <u>22.8</u> times the demand, 100 23.5 energy, and first quartile discount charges.

where: 22.8 represents the average IP-87 margin-based rate in mills per kilowatthour, and 23.5 represents the average IP-87 floor rate in mills per kilowatthour.

D. Unauthorized Increase

1. Rate for Unauthorized Increase

67.3 mills per kilowatthour.

2. Application of the Charge

During any billing month, BPA may assess the unauthorized increase charge on the

number of kilowatthours associated with the DSI Measured Demand in any one 60-minute clock-hour, before adjustment for power factor, that exceed the BPA Operating Level for that clock-hour, regardless of whether such Measured Demand occurs during the Peak or Offpeak Period.

E. Power Factor Adjustment

The adjustment for power factor, when specified in this rate schedule or in the power sales contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the GRSPs. The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment, BPA shall increase the billing demand by one percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

F. Outage Credit

Pursuant to section 7 of the General Contract Provisions, BPA shall provide an outage credit to any DSI for those hours for which BPA is unable to deliver the full billing demand during that billing month due to an outage on the facilities used by BPA to deliver Industrial Firm Power. Such credit shall not be provided if BPA is able to serve the DSI's load through the use of alternative facilities or if the outage is for less than 30 minutes. The amount of the credit shall be calculated according to the provisions of section III.C.2 of the GRSPs.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different resource categories to the IP-87 rate is 99.3 percent Exchange and 0.7 percent New Resources.
- **B.** The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

one-tenth of a cent per million Btu, reported in EPM for month r for the years beginning with calendar year 1982 up to and including the prior calendar year. The sum of the historical monthly California petroleum prices shall be divided by the number of years for which monthly petroleum prices were reported and rounded to the nearest one-tenth of a cent.

- c. dividing the average monthly California petroleum price in a above, by the average monthly California petroleum price in b. above, and rounding to the nearest one-tenth of a percent, or three significant places.
- 0 = the factor for converting petroleum prices stated in cents per million Btu to mills per kWh. The factor assumes a heat rate of 10,000 Btu per kilowatthour.

8. Weighting Factors

For purposes of determining a California fuel prices for the month, gas and petroleum prices will be weighted based on California's historical use of these two alternative fuels.

a. Historical Gas Use in California

The following formula shall be used to determine the weighting factor for gas prices (WGU):

WGU €GU * HGU

Where:

- CGU = the monthly net gas-fired generation, expressed in gigawatthours, for California in the most recent monthly issue of *Electric Power Monthly* (EPM) published by the Energy Information Adminstration (EIA), U.S. Department of Energy.
- HGU = the historical relationship between gas consumptions in the effective month of the NF Rate Cap (month t) and the month for which gas consumption is reported in EPM (month r) using the following procedures:
 - (1) summing the reported net-gas fired generation for California, expressed in gigawatthours, from EPM for month t

for the years beginning with calendar year 1982 up to and including the prior calendar year. The sum of California's historical monthly consumption shall be divided by the number of years for which gas consumption was reported and rounded to the nearest gigawatthour.

- (2) summing the reported net gas-fired generation for California, expressed in gigawatt-hours, from EPM for month r for the years beginning with calendar year 1982 up to and including the prior calendar year. The sum of California's historical monthly consumption shall be divided by the number of years for which gas consumption was reported and rounded to the nearest gigawatthour.
- (3) dividing the average consumption of gas in California for the month t as determined in (1) above by the average consumption of gas for the month r as determined in (2) above and rounding to the nearest one-tenth, or three significant places.

b. Historical Petroleum Use in California

The following formula shall be used to determine the weighting factor for petroleum prices (WOU):

WOU = COU * HOU

Where:

- COU = the monthly net petroleum-fired generation, expressed in gigawatt-hours, in California in the most recent monthly issue of *Electric Power Monthly* (EPM) published by the Energy Information Adminstration (EIA), U.S. Department of Energy.
- HOU = the historical relationship between petroleum consumptions in the effective month of the NF Rate Cap (month t) and the month for which petroleum consumption is reported in EPM (month r) using the following procedures:

times the monthly California petroleum price (MOP) determined pursuant to section IV.C.7. rounded to the nearest tenth of a mill.

b. divided by the sum of the monthly gas use (WGU) and monthly petroleum use (WOU) developed in section IV.C.8.a. and b. respectively rounded to the nearest tenth of a mill.

6. California Gas Price

The monthly gas price (MGP) for purposes of calculating the decremental cost component of the rate cap shall based on the following formula:

$$MGP = \underline{AGP * HGP}$$

Where:

- AGP = the average gas price for California electric utility plants expressed in cents per million Btu as reported in the most recent monthly issue of Electric Power Monthly (EPM) published by the Energy Information Adminstration (EIA), U.S. Department of Energy. Prices shall be rounded to the nearest one-tenth of a cent.
- HGP = the historical relationship between gas prices in the effective month of the NF Rate Cap (month t) and the month in which the gas prices are reported in EPM (month r) using the following procedures:
 - a. summing all California gas prices, expressed in the nearest one-tenth of a cent per million Btu, reported in EPM for month t for the years beginning with calendar year 1982 up to and including the prior calendar year. The sum of the historical monthly California gas prices shall be divided by the number of years for which monthly gas prices were reported and rounded to the nearest one-tenth of a cent.
 - b. summing all California gas prices, expressed in the nearest one-tenth of a cent per million Btu, reported in EPM for month r for the years beginning with calendar year 1982 up to and including the prior calendar year. The sum of the historical monthly California gas prices shall be divided by the

number of years for which monthly gas prices were reported and rounded to the nearest onetenth of a cent.

- c. dividing the average monthly California gas price in a. above, by the average monthly California gas price in b. above, and rounding to the nearest one-tenth, or three significant places.
- 10 = the factor for converting gas prices stated in cents per million Btu to mills per kWh. The factor assumes a heat rate of 10,000 Btu per kilowatthour.

7. California Petroleum Price

The monthly petroleum price (MOP) for purposes of calculating the decremental cost component of the rate cap shall based on the following formula:

$$MOP = \underline{AOP * HOP}$$

Where:

- AOP = the last available average oil price for California electric utility plants expressed in cents per million Btu reported in *Electric Power Monthly* (EPM) published by the Energy Information Administration (EIA), U.S. Department of Energy. Prices shall be rounded to the nearest one-tenth of a cent.
- HOP = the historical relationship between petroleum prices in the effective month of the NF Rate Cap (month t) and the last month in which the petroleum prices are reported in EPM (month r) using the following procedures:
 - a. summing all California petroleum prices, expressed in the nearest one-tenth of a cent per million Btu, reported in EPM for month t for the years beginning with calendar year 1982 up to and including the prior calendar year. The sum of the historical monthly California petroleum prices shall be divided by the number of years for which monthly petroleum prices were reported and rounded to the nearest one-tenth of a cent.
 - b. summing all California petroleum prices, expressed in the nearest

SCHEDULE VI-87 VARIABLE INDUSTRIAL POWER RATE

SECTION I. AVAILABILITY

This schedule is available to direct-service industrial (DSI) customers for purchases under the Power Sales Contract implementing the Variable Industrial Power rate schedule (Variable Rate Contract) of: (1) Industrial Firm Power and (2) Auxiliary Power if requested by the DSI customer and made available by BPA. This schedule is available only for that portion of a DSI's load used in primary aluminum reduction including associated administrative facilities, if any. By virtue of incorporation of this rate schedule and associated General Rate Schedule Provisions (GRSPs) in the Variable Rate Contract. DSIs electing to purchase power under this rate schedule contractually agree to the terms and conditions of this rate schedule. A DSI further agrees to waive for that portion of their load designated to purchase power at the VI rate, all rights they might otherwise have to purchase power at the Industrial Firm Power Rate Schedule for the duration of the Variable Rate Contract. Section VI.J. supplements schedule VI-86. GRSPs effective July 1, 1985, as revised effective August 1, 1986, and as revised in the 1987 rate case and in subsequent wholesale rate filings are applicable to this rate schedule. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. TERM OF THE RATE

This rate schedule shall take effect on August 1, 1986, and shall terminate on midnight June 30, 1993, unless BPA elects to exercise its unilateral option to terminate the rate at midnight June 30, 1991. This termination right is described in section VI.E. of this rate schedule. Actions to invoke an early termination shall comply with section VI.E. of this rate schedule and with the provisions and stipulations set forth in the Variable Rate Contract.

SECTION III. RATE

A. Revised Rate Charges Subject to Rate Case Adjustments

The following rates shall apply to Industrial customers that meet the eligibility requirements and elect to purchase power under the Variable Industrial Power Rate Schedule. These rates shall remain in effect until the next Rate

Adjustment Date, at which point the rates shall be adjusted following the procedures set forth in section VI.C. of this rate schedule, unless the Cost Recovery Adjustment Clause triggers, at which point the rates shall be adjusted following the procedures set forth in section VI.I of this rate schedule. In addition, the Lower Rate Limit also will be subject to a biennial adjustment pursuant to section VI.B. of this rate schedule. The formula to be used in the calculation of the monthly power bill is contained in section IV. A separate billing adjustment for the value of the reserves provided by purchasers of Industrial Firm Power is not contained in this rate schedule; the value of reserves credit has been included in the determination of the Plateau Energy Charge.

1. Base Variable Industrial Rate

a. Demand Charge

\$5.33 per kilowatt of billing demand occurring during the Peak Period. No demand charge is applied during Offpeak Period hours.

b. Plateau Energy Charge

16.1 mills per kilowatthour of billing energy.

2. First Quartile Service Discount

0.5 mills per kilowatthour of billing energy.

3. Lower Rate Limit

8.3 mills per kilowatthour of billing energy.

4. Upper Rate Limit

21.9 mills per kilowatthour of billing energy.

B. Initial Rate Parameters Subject to Annual Adjustments

The following rate parameters shall be used in determining the power bills for customers electing to purchase power under the Variable Industrial Power rate schedule. These parameters will be adjusted annually starting on July 1, 1987, and every July 1 thereafter, in accordance with the procedures contained in section VII.B. of the GRSPs.

1. Lower Pivot Aluminum Price

60.8 cents per pound.

2. Upper Pivot Aluminum Price

73.4 cents per pound.

SECTION IV. FORMULA

The Variable Industrial Power rate is a formula rate tied to the U.S. market price of aluminum. Under this rate schedule, the monthly energy charge varies in response to changes in the average price of aluminum in U.S. markets.

A. Demand Charge

- 1. The Demand Charge, as stated in section III.A.1.a. of this rate schedule, remains constant over all aluminum prices. The demand charge is applied to billing demand occurring during all Peak Period hours for all billing months.
- 2. No demand charge during Offpeak Period hours.

B. Energy Charge

1. Plateau Energy Charge

When the monthly billing aluminum price (described in section VII.A. of the GRSPs) is between the Lower Pivot Aluminum Price and the Upper Pivot Aluminum Price inclusive (as stated in sections III.B.1. and III.B.2. of this rate schedule), the monthly energy charge shall be the Plateau Energy Charge as stated in section III.A.1.b. of this rate schedule.

2. Reductions to Plateau Energy Charge

When the monthly billing aluminum price is less than the Lower Pivot Aluminum Price, the monthly energy charge shall be the greater of:

- a. The Plateau Energy Charge (LP MAP)*(LS) where:
 - LP = the Lower Pivot Aluminum Price as stated in section III.B.1. of this rate schedule.
- MAP= the monthly billing aluminum price in cents per pound determined pursuant to section VII.A. of the GRSPs.
- LS = lower slope= 1 mill per kilowatthour 1 cent per pound

ΩI

b. the Lower Rate Limit as stated in section III.A.3. of this rate schedule.

3. Increases to Plateau Energy Charge

When the monthly billing aluminum price is greater than the Upper Pivot Aluminum Price, the monthly energy charge shall be the lesser of:

- a. The Plateau Energy Charge+(MAP-UP)*(US) where:
- MAP= the monthly billing aluminum price in cents per pound, as determined according to section VII.A. of the GRSPs.
- UP = the Upper Pivot Aluminum Price as stated in section III.B.2. of this rate schedule.

US = upper slope =

0.75 mills per kilowatthour

1 cent per pound

or

b. the Upper Rate Limit, as stated in section III.A.4. of this rate schedule.

SECTION V. BILLING FACTORS

A. Billing Demand

1. Billing Demand for Customers Whose Entire BPA Load is Served at the Variable Industrial Power Rate

The billing demand for power purchased shall be the BPA Operating Level during the Peak Period as adjusted for power factor. If there is more than one BPA Operating Level during the Peak Period within a billing month, the billing demand shall be a weighted average of the BPA Operating Levels during the Peak Period for the billing month. The BPA Operating Level is defined in section III.A.10 of the GRSPs.

2. Billing Demand for Customers When Only a Portion of Their Total BPA Load is Served at the Variable Rate

The Billing Demand shall be the portion of the BPA Operating Level attributable to the VI rate as determined by the method specified in the Variable Rate Contract.

3. Billing Demand During Periods of Transitional Service

If BPA has agreed, pursuant to section 4 of the direct-service industrial power sales contract, to sell Industrial Firm Power on a daily demand basis (transitional service), this sec-

of a displaceable thermal resource or end-user load with alternate fuel source to serve a purchaser's load that the purchaser is able to avoid by purchasing power from BPA, rather than generating the power itself or using an alternate fuel source; or

b. All identifiable costs (expressed in mills per kilowatthour) to serve the load of a displaceable purchase of energy that the purchaser is able to avoid by choosing not to make the alternate energy purchase.

All identifiable costs as used in the above definition may be reduced to reflect costs of purchasing BPA energy such as transmission costs, losses, or loopflow constraints that are agreed to by BPA and the purchaser.

C. NF Rate Cap

1. Application of the NF Rate Cap

The NF Rate Cap defines the maximum nonfirm energy price for general application. At no time shall the total price for nonfirm energy, including any applicable service charges or rate adjustment, sold under any applicable rate schedule exceed the NF Rate Cap. The level of the NF Rate Cap is based on formula tied to BPA's system cost and California fuel costs. The NF Rate Cap applies to all sales of nonfirm energy under any applicable rate schedule for a 12-year period beginning from the date the 1987 Wholesale Power Rates and associated GRSPs are made effective on an interim or final basis by the Federal Energy Regulatory Commission (FERC).

2. Monthly Notification of the NF Rate Cap

Prior to the beginning of a calendar month BPA shall perform the calculations contained in section IV.C.3. of these GRSPs to determine the effective NF Rate Cap for that calendar month. BPA is obligated to provide advance notification of the NF Rate Cap level to purchasers of nonfirm energy. BPA may waive this requirement only if BPA does not intend to offer Nonfirm Energy at prices above BASC at any time during a month. The notification will be given at least 10 calendar days prior to the first day of any calendar month in which the NF Rate Cap applies. BPA shall also maintain, on file for public review, a record of the NF rate Cap by month throughout the period the cap is in effect.

3. NF Rate Cap Formula

The NF Rate Cap shall be equal to the greater of the following:

a. BASC; or

b. BASC + .30(DEC — BASC)

Where

- BASC = BPA's average system cost, determined by dividing BPA's total system costs by BPA's total system sales. For this rate period BASC has been determined to be 23.2 mills per kilowatthour.
- DEC = The Decremental Fuel Cost as determined in accordance with section IV.C.5. of these GRSPs.

4. Determination of BPA's Average System Cost

For purposes of determining BPA's average system cost (BASC), the following definition shall apply:

- a. BPA's total system costs shall be the sum of all BPA's costs forecasted in each general rate case for the applicable rate period, including total transmission costs, Federal base system costs, new resource costs, exchange resource costs, and other costs not specifically allocated to a rate pool, such as section 7(g) costs.
- b. BPA's total annual system sales shall be the sum of all BPA's system firm and nonfirm sales forecasted each general rate case for the applicable test period.

BASC shall be redetermined in each subsequent general rate case according to the above formula and will be in effect for the entire rate period over which the rates are in effect.

5. Determination of Decremental Fuel Cost

The Decremental Fuel Cost shall be determined monthly by BPA. For purposes of calculating the NF Rate Cap, a weighted average of gas and petroleum prices for California will be used for approximating decremental fuel costs. The monthly decremental fuel cost shall be:

- a. the sum of:
 - (1) the average California price for gas determined by multiplying the monthly gas use (WGU) developed pursuant to section IV.C.8.a. times the monthly California gas price (MGP) determined pursuant to section IV.C.6 rounded to the nearest tenth of a mill; and
- (2) the average California price for petroleum determined by multiplying the monthly petroleum use (WOU) developed pursuant to section IV.C.8.b

to BPA.

- (9) On or about December 20, 1988, BPA shall notify interested persons and purchasers under each applicable rate schedule of the audited AFFO, the amount of the adjustment, the calculation of the adjustment and the resulting level of the adjustment to each applicable rate schedule. The notice shall also contain the data and assumptions prepared and relied upon by BPA, with references to additional documentation, if any, prepared and relied upon by BPA.
- (10) The rate adjustment shall be in effect from January 1, 1989, through September 30, 1989.

6. Coincidental Billing

Purchasers of Priority Firm Power and New Resource Firm Power shall be billed on a noncoincidental demand basis for power purchased at each point of delivery under the applicable rate schedule(s) unless the power sales contract specifically provides for coincidental demand billing among particular points of delivery. For the purpose of these rate schedules and GRSPs, the purchaser's noncoincidental demand is the sum of the highest hourly peak demands during the billing month for each of the purchaser's points of delivery. The purchaser's coincidental demand is the highest demand for the billing month calculated by summing, for each hour of every day, the purchaser's demands for power purchased under the applicable rate schedule at all coincidentally billed points of delivery. See the Special Provisions Exhibits of the Power Sales Contract, GCP, E, 17.

7. Conservation Surcharge

The Conservation Surcharge shall be applied monthly and shall equal 10 percent of the customer's total monthly charge for all power purchased under each rate schedule subject to the surcharge. The PF, CF, and NR rate schedules are subject to the Conservation Surcharge. If only a portion of the customer's service area is subject to the surcharge, then the amount of the surcharge shall equal 10 percent of the total charge for all power purchases multiplied by: (a) the portion of the customer's total retail load that is subject to the surcharge, divided by (b) the customer's total retail load.

D. Billing-Related Definitions

1. Peak Period

The Peak Period includes the hours from 7 a.m. through 10 p.m. on any day Monday

through Saturday inclusive. There are no exceptions to this definition; that is, it does not matter whether the day is a normal working day or a holiday. Any charges based on Peak Period hours shall be computed starting with the 8 a.m. meter reading since this reading applies to the 7 o'clock hour (7 a.m. to 8 a.m.). The 10 p.m. meter reading (for the 9 p.m. to 10 p.m. period) is the last meter reading of the day applicable to the Peak Period.

2. Offpeak Period

The Offpeak Period includes all hours which do not occur during the Peak Period. Thus, the Offpeak Period consists of the hours from 10 p.m. to 7 a.m., Monday through Saturday and all hours on Sunday. This definition does not apply to the Special Industrial Offpeak Rate.

SECTION IV. OTHER DEFINITIONS

A. Computed Requirements Purchasers

1. Designation as a Computed Requirements Purchaser

A purchaser shall be designated as a computed requirements purchaser if it is so designated pursuant to the provisions of its power sales contract.

When a purchaser operates two or more separate systems, only those systems designated by BPA will be covered by this section.

2. Purpose of the Computed Requirements Designation

Use of the computed requirements designation is intended to assure that each purchaser who purchases power from BPA to supplement its own firm resources will purchase amounts of firm capacity and firm energy substantially equal to that which the purchaser would otherwise have to provide on the basis of normal and prudent operations.

The amount of capacity and energy required for normal and prudent operations shall be determined pursuant to the purchaser's power sales contract.

B. Definitions Relating to Nonfirm Energy

Decremental Cost

Unless otherwise specified in a contractual arrangement, decremental cost as applied to Nonfirm Energy transactions shall be defined as:

a. All identifiable costs (expressed in mills per kilowatthour) associated with the use

tion of the rate schedule shall not apply, and BPA shall bill the purchaser in accordance with the provisions of section V.C of the GRSPs.

B. Billing Energy

The billing energy for power purchased shall be the Measured Energy for the billing month, minus any kilowatthours on which BPA assesses the charge for unauthorized increase.

SECTION VI. OTHER ADJUSTMENTS AND SPECIAL PROVISIONS

A. Lower and Upper Pivot Aluminum Prices

Effective July 1, 1987, and every July 1 thereafter, the Lower and Upper Pivot Aluminum Prices set forth in section III.B of the rate schedule shall be adjusted following the procedures set forth in section VII.B of the GRSPs. The adjusted Lower and Upper Pivot Aluminum Prices shall supersede the Lower and Upper Pivot Aluminum Prices contained in section III.B of the rate schedule. The revised Lower and Upper Pivot Aluminum Prices shall be used for billing purposes and subsequent adjustments to the Lower and Upper Pivot Aluminum Prices.

B. Lower Rate Limit

Beginning with the July 1, 1988 annual adjustment date and every second July 1 thereafter, the Lower Rate Limit as stated in section III.A.3. shall be increased by 1 mill per kilowatthour. The revised Lower Rate Limit shall supersede the Lower Rate Limit as stated in section III.A.3 of the rate schedule. This increase is in addition to rate adjustment increases in the Lower Rate Limit described in section VI.C of this rate schedule. In the event that a rate adjustment date and the annual adjustment date occur simultaneously. the Lower Rate Limit shall be adjusted first for changes in the Plateau Energy Charge pursuant to section VI.C. of this rate schedule, and then increased by 1 mill per kilowatthour. The revised Lower Rate Limit shall be used for billing purposes and subsequent rate adjustments.

C. Rate Adjustments

The overall rate level of this rate shall be subject to adjustment in BPA's general wholesale power rate case following the procedures and directives of the Northwest Power Act. The overall rate level consists of the Demand Charge, Plateau Energy Charge, and First Quartile Service Adjustment contained in sections III.A.1 and III.A.2; these shall be adjusted by a uniform percentage based on the percentage change in the overall rate level. The Lower and Upper Rate

Limits as stated in sections III.A.3 and III.A.4 of this rate schedule shall be adjusted by an amount equal to the change, in mills per kilowatthour, in the Plateau Energy Charge. The Lower and Upper Pivot Aluminum Prices shall not be adjusted in the rate case; rather, they shall be adjusted pursuant to the procedures described in section VII.B of the GRSPs. The lower and upper slopes shall not be adjusted. The rate for unauthorized increase shall be separately determined in each rate case.

D. Discount for Quality of First Quartile Service

If a purchaser requests First Quartile service with other than Surplus FELCC, a discount contained in section III.A.2 of this rate schedule shall be granted. This billing credit shall be applied to the monthly billing energy under section V.B. for all power purchased under this rate schedule. No credit shall be applied to those purchases subiect to unauthorized increase charges under section VI.G of this rate schedule. To qualify for the First Quartile Discount, the purchaser must request discounted rate service in writing by April 2 of each calendar year. By virtue of making such request, the Purchaser is agreeing to accept the level and quality of First Quartile service described in section 6 of the Variable Industrial Rate contract. Such acceptance includes the waiver of contract rights provided in section 6.a(2)(a) of said contract.

E. Termination Provision

The Administrator may terminate the Variable Industrial Power rate effective midnight June 30. 1991, upon a determination that significant changes in the conditions and expectations under which this rate was offered render the continuation of the Variable Industrial rate inconsistent with BPA's stated goals and objectives. BPA shall provide notification of such a determination pursuant to the provisions of the Variable Rate Contract. As part of the notification procedures, BPA shall provide a reasonable opportunity for interested parties to comment on BPA's determination, as well as to examine the comments submitted by other parties, prior to BPA taking final action to cancel the rate. If BPA determines that the Variable Industrial rate will remain in place until midnight June 30, 1993, BPA shall provide notice that so states and no additional action by BPA will be required.

F. Curtailments

BPA shall charge the customer for curtailments of the lower three quartiles in accordance with the provisions of section 9 of the power sales contract and the provisions contained in the Var

iable Rate Contract.

G. Unauthorized Increase

- 1. Rate for Unauthorized Increase 67.3 mills per kilowatthour.
- 2. Application of the Charge

During any billing month, BPA may assess the unauthorized increase charge on the number of kilowatthours associated with the DSI Measured Demand in any one 60-minute clockhour, before adjustment for power factor, that exceed the BPA Operating Level for that clock-hour, regardless of whether such Measured Demand occurs during the Peak or Offpeak Period.

H. Power Factor Adjustment

The adjustment for power factor, when specified in this rate schedule or in the power sales contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the GRSPs. The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment, BPA shall increase the BPA Operating Level by 1 percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

I. Outage Credit

Pursuant to section 7 of the General Contract Provisions, BPA shall provide an outage credit to any DSI to whom BPA is unable to deliver the full billing demand during that billing month due to an outage on the facilities used by BPA to deliver Industrial Firm Power. Such credit shall not be provided if BPA is able to serve the DSI's load through the use of alternative facilities or if the outage is for less than 30 minutes. The amount of the credit shall be calculated according to the provisions of section III.C.2 of the GRSPs.

J. Cost Recovery Adjustment Clause

The Cost Recovery Adjustment Clause described in section III.C.5 of the GRSPs shall be applied to all power purchases under this rate schedule consistent with the procedures to adjust the Variable Industrial rate and the provisions of the Variable Rate Contract. A uniform adjustment will be made only if it causes demand and Plateau Energy charges and the

First Quartile Service Discount to increase. No downward rate adjustment resulting from the Cost Recovery Adjustment Clause shall be made to any portion of this rate schedule.

The uniform percentage (CRAC%) determined in section III.C.5.c.(1) of the GRSPs shall be applied in the following manner:

(1 + CRAC%) * 22.4
100 *23.0 times the demand and Plateau Energy charges contained in section III.A.1 of this rate schedule and to the First Quartile Service Discount specified in section III.A.2 of this rate schedule.

where: 22.4 represents the average VI-87 margin-based plateau rate in mills per kilowatthour, and 23.0 represents the average VI-87 floor rate in mills per kilowatthour.

The Lower and Upper Rate Limits stated in sections III.A.3 and III.A.4 of this rate schedule shall be adjusted by an amount equal to the change, in mills per kilowatthour, to the Plateau Energy charge due to application of the Cost Recovery Adjustment Clause. The adjusted rate parameters shall be used for billing purposes and supersede the rate charges subject to the adjustment contained in section III.A of this rate schedule. The adjusted rate parameters shall also be used in subsequent rate adjustments pursuant to section III.B of this rate schedule and to subsequent biennial adjustments to the lower rate limit pursuant to section VI.B of this rate schedule.

SECTION VII. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different to resource categories to the VI-87 rate is 99.3 percent Exchange and 0.7 percent New Resources.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

lars. For the period January 1, 1989 through September 30, 1989, FR1 = \$964.0 million.

IP and VI revenues are excluded because rates for those customer classes are at the floor and thus receive no adjustment when CRV is positive.

e. Application to Irrigation Discount

In addition to the direct application of the Cost Recovery Adjustment percentage to the irrigation discount, an additional adjustment shall be made so that irrigation loads are not disproportionately affected by a 9-month adjustment period as compared to a 12-month adjustment period. This additional adjustment is reflected in the following formula which represents the total CRAC adjustment to the irrigation discount:

Adjusted Irrigation Discount (in mills per kilowatthour) =

where:

4.6 = Irrigation discount applicable to PF-87 and NR-87, in mills per kilowatthour;

CRAC% = Uniform percentage applied to PF-87 (Exchange and Preference), IP-87, VI-87, CF-87, and NR-87 rate schedules and the irrigation discount.

.046 = Mills per percentage CRAC adjustment; difference between 9- and 12-month CRAC adjustment periods.

f. Cost Recovery Adjustment Clause Implementation Process

- (1) Within 30 days of the end of Fiscal Year 1988, BPA shall make an initial calculation to identify the difference between preliminary unaudited AFFO and PFFO.
- (2) On or about November 1, 1988, BPA shall notify interested persons and the purchasers under each applicable rate schedule of BPA's initial findings concerning the difference between AFFO and PFFO for the evaluation period.
 - (a) If no adjustment is required, or if the Administrator waives implementation of an adjustment, BPA shall state in the notice the basis for its decision.

- (b) If BPA determines that an adjustment to applicable rates is required, BPA shall state in the notice the amount of the adjustment, the calculation of the adjustment and the resulting level of the adjustment to each applicable rate schedule. The notice shall also contain the data and assumptions prepared and relied upon by BPA, with references to additional documentation, if any, prepared and relied upon by BPA. Such documentation, if nonproprietary and/or nonprivileged, shall be available upon request unless unduly burdensome. The notice shall also contain the tentative schedule for the remainder of the implementation process.
- (3) On or about November 4, 1988, BPA shall conduct a public meeting in which interested persons and purchasers under each applicable rate schedule may seek off-the-record clarification of the adjustment amount, calculation, and application to specific rate schedules. For the purpose of further mailings, a list of the names and addresses of interested persons and purchasers (hereafter referred to as "mailing list") shall be compiled at this meeting.
- (4) On or about November 8, 1988, purchasers under each applicable rate schedule may submit information requests to BPA regarding the adjustment. The requests shall also be mailed to all persons on the mailing list. BPA shall respond to the requests within 2 working days of their receipt, or as soon as practicable if 2 days is insufficient time within which to respond.
- (5) On or about November 15, 1988, interested persons and purchasers under each applicable rate schedule may submit written comments to BPA regarding the adjustment. The comments shall also be mailed to all persons on the mailing list.
- (6) On or about December 1, 1988, commenters may respond to any comments.
- (7) On or about December 1, 1988, BPA may release, if available, revised preliminary unaudited AFFO and any resulting revised adjustment to applicable rate schedules.
- (8) On or about December 15, 1988, BPA shall conduct an on-the-record public comment forum in which interested persons and purchasers under each applicable rate schedule may present oral comments

- AFFO = Actual fiscal year 1988 funds from operations (in millions of dollars): BPA's reported fiscal year 1988 funds from operations calculated as the sum of net revenues, depreciation, and amortization of conservation and fish & wildlife investment;
- PFFO = Planned fiscal year 1988 funds from operations (in millions of dollars); PFFO = \$222.530.

c. Application if CRV is Negative

If the absolute value of CRV is greater than \$45 million, and if CRV is negative, the percentage increase, rounded to the nearest tenth of a percent, shall be calculated as follows:

- (1) If CRU is greater than \$28.9 million, then the CRAC% is the lesser of:
 - (a) CRAC% = (28.9 + CRU 28.9) * 100; or FR1 FR2
- (b) CRAC% = 10.0 percent.
- (2) If CRU is less than or equal to \$28.9 million, then, for PF, CF, and NR rate schedules (IP and VI are not adjusted):

$$CRAC\% = \frac{CRU}{FR1} * 100.$$

where:

28.9 = 3 percent of FR1.

Three percent is the percentage that IP and VI floor rates exceed their respective margin-based rates. \$28.9 million is the revenue increase from PF-87, CF-87, and NR-87 classes for which there would be no corresponding revenue increase from IP-87 and VI-87 classes.

- CRAC% = Uniform percentage applied to PF-87 (Exchange and Preference), IP-87, VI-87, CF-87, and NR-87 rate schedules and the irrigation discount.
- CRU = Cost Recovery Underrun, in millions of dollars, beyond \$45 million: the absolute value of CRV greater than \$45 million;
- FR1 = the sum of the forecasted revenues from the PF, NR, and CF classes of service subject to the Cost Recovery Adjustment

Clause for the adjustment period in millions of dollars. For the period January 1, 1989 through September 30, 1989, FR1 = \$964.0 million.

FR1 does not include forecasted revenues from public exchange sales and sales from utilities where average system cost is deemed equal to BPA's PF rate. These two types of sales are subject to the Cost Recovery Adjustment Clause, but significant additional revenues could not be collected from them during the rate period through application of the Cost Recovery Adjustment Clause. IP and VI revenues are excluded because no revenue can be expected from these classes of service when the rate adjustment is less than 3 percent (CRU less than or equal to \$28.9 million).

FR2 = the sum of the forecasted revenue for PF, NR, CF, and IP and VI at margin based rates for the period January 1, 1989 through September 30, 1989. FR2 = \$1319.5 million.

d. Application if CRV is Positive

If CRV is greater than \$80 million, the percentage decrease rounded to the nearest tenth of a percent, unless otherwise specified in a rate schedule, shall be calculated as follows:

$$CRAC\% = \frac{CRO}{FR1} * 100$$

where:

- CRAC% = Uniform percentage applied to PF-87 (Exchange and Preference), CF-87, and NR-87 rate schedules and the irrigation discount;
- CRO = Cost Recovery Overrun in millions of dollars; the amount that (AFFO-PFFO) is greater than \$80 million.
- FR1 = the sum of the forecasted revenues from the PF, NR, and CF classes of service subject to the Cost Recovery Adjustment Clause for the adjustment period in millions of dol-

SCHEDULE NF-87 NONFIRM ENERGY RATE

SECTION I. AVAILABILITY

This schedule is available for the purchase of nonfirm energy to be used both inside and outside the United States including sales under the Western Systems Power Pool (WSPP) agreements and sales to consumers. This schedule also applies to energy delivered for emergency use under the conditions set forth in section V.A of the General Rate Schedule Provisions (GRSPs). BPA is not obligated to offer nonfirm energy to any purchaser that results in displacement of firm power purchases under BPA's Power Sales Contracts. The offer of nonfirm energy under this schedule shall be determined by BPA. Schedule NF-87 supersedes Schedule NF-85 which went into effect on an interim basis on July 1, 1985, and was subsequently revised on an emergency basis and approved on an interim basis on May 1, 1986. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATES

The average cost of nonfirm energy is 18.0 mills per kilowatthour. The NF-87 rate schedule provides for upward and downward pricing flexibility from this average nonfirm energy cost. All rates and any subsequent adjustments contained in this rate schedule shall not exceed in total the NF Rate Cap defined in section IV.C of the GRSPs.

A. Standard Rate

The Standard rate is any offered rate not to exceed 21.6 mills per kilowatthour.

B. Market Expansion Rate

The Market Expansion rate is any offered rate below the Standard rate in effect. BPA may have one or more Market Expansion rates in effect simultaneously.

C. Incremental Rate

The Incremental rate is the Incremental Cost of energy plus 2.0 mills per kilowatthour, where the Incremental Cost is defined as all identifiable costs (expressed in mills per kilowatthour) that BPA would have avoided had it not produced or purchased the energy being sold under this rate.

D. Contract Rate

The Contract rate is 14.9 mills per kilowatthour of billing energy.

SECTION III. ADJUSTMENTS TO RATES

A. Guaranteed Delivery Surcharge

A surcharge of 2.0 mills per kilowatthour of billing energy is applied to guaranteed delivery of nonfirm energy under the Standard rate and Market Expansion rate.

B. Intertie Charge

Rate offers, under any of the rates specified above, greater than or equal to 18.0 mills per kilowatthour shall be increased by 1.4 mills per kilowatthour for nonfirm energy scheduled for delivery over the Pacific Northwest-Pacific Southwest Intertie.

SECTION IV. BILLING FACTORS

The billing energy for nonfirm energy purchased under this rate schedule shall be the Measured Energy unless otherwise specified by contract.

SECTION V. APPLICATION AND ELIGIBILITY

Any time that BPA has nonfirm energy for sale, the Standard rate, the Market Expansion rate, the Incremental rate, the Contract rate, or a combination of these rates may be in effect.

A. Standard Rate

The Standard rate:

- 1. is available for all purchases of nonfirm energy; and
- 2. applies to nonfirm energy purchased pursuant to the Relief from Overrun Exhibit to the power sales contract.

B. Market Expansion Rate

1. Application of the Market Expansion rate

The Market Expansion rate applies when BPA determines that all markets at the Standard rate have been satisfied and BPA offers additional nonfirm energy.

2. Market Expansion Rate Qualification Criteria

In order to purchase nonfirm energy at the Market Expansion rate, a purchaser must:

- a. have a displaceable resource, displaceable purchase of electricity, or
- b. be an end-user load with a displaceable alternative fuel source.

In addition, a purchaser must demonstrate one of the following:

- a. shutdown or reduction of the output of the displaceable resource in an amount equal to the amount of Market Expansion rate energy purchased; or
- b. reduction of a displaceable purchase and the output of the resource associated with that purchase, in an amount equal to the amount of Market Expansion rate energy purchased; or
- c. shutdown or reduction of the identified output of the resource(s) indirectly in an amount equal to the amount of Market Expansion rate energy purchased (for example, the purchase may be used to run a pumped storage unit); or
- d. decrease of an end-user alternate fuel source in an amount equivalent to the amount of Market Expansion rate energy purchased.

3. Eligibility Criteria for Market Expansion rate

a. When only one Market Expansion rate is offered:

Purchasers qualifying under section V.B.2. who purchased nonfirm energy directly from BPA are eligible to purchase power under the Market Expansion rate offered if the decremental cost of the qualifying resource, purchase, or qualifying alternative fuel source is lower than the Standard rate in effect plus 2.0 mills per kilowatthour.

Purchasers qualifying under section V.B.2. who purchase nonfirm energy through a third party are eligible to purchase power under the Market Expansion rate offered if the cost of the qualifying alternative fuel source is lower than the Standard rate in effect plus 4.0 mills per kilowatthour.

b. When more than one Market Expansion rates are offered:

Purchasers qualifying under section V.B.2. who purchase nonfirm energy directly from BPA are eligible to purchase power under the Market Expansion rate if the decremental cost of the qualifying resource, purchase, or qualifying alternative fuel source is lower than the Standard rate in effect plus 2.0 mills per kilowatthour. The rate applicable to a purchaser shall be the highest Market Expansion rate offered that is below the purchaser's qualifying decremental cost minus 2.0 mills per kilowatthour.

Purchasers qualifying under section V.B.2. who purchase nonfirm energy through a third party are eligible to purchase power under the Market Expansion rate if the decremental cost of the qualifying alternative fuel source is lower than the Standard rate plus 4.0 mills per kilowatthour. The rate applicable to a purchaser shall be the highest Market Expansion rate offered that is below purchaser's qualifying decremental cost minus 4.0 mills per kilowatthour.

C. Incremental Rate

The Incremental rate applies to sales of energy:

- 1. that is produced or purchased by BPA concurrently with the nonfirm energy sale;
- 2. that BPA may at its option not produce or purchase; and
- 3. that has an Incremental Cost greater than the Standard rate (plus the Intertie Charge, if applicable) less 2.0 mills per kilowatthour.

D. Contract Rate

The Contract rate applies to contracts (except power sales contracts offered pursuant to sections 5(b), 5(c), and 5(g) of the Northwest Power Act) that refer to the Contract rate:

- 1. for the sale of nonfirm energy; or
- 2. for determining the value of energy.

E. Western Systems Power Pool Transactions

BPA may make available nonfirm energy for transactions under the Western Systems Power Pool (WSPP) agreement. WSPP sales shall be subject to the terms and conditions specified in the WSPP agreement and shall be consistent with regional and public preference. The rate for transactions under the WSPP agreement is any rate within the limits specified by the Stan

c. Initial Reporting Requirements

Requests for the Irrigation Discount must include the following information:

- (1) To receive an irrigation discount, a purchaser must file a request for the discount with its local BPA Area or District office by April 1 each year.
- (2) In the request, the purchaser must certify that the irrigation energy is sold exclusively for use in irrigation and drainage pumping on agricultural land and that the discount is passed, in its entirety, to the irrigation consumer, regardless of whether the utility has raised its rates. BPA retains the right to verify, in a manner satisfactory to the Administrator, that the discounted energy is used for the sole benefit of the purchaser's irrigation load.

d. Annual Reporting Requirements

Purchasers shall submit an annual irrigation report to their local BPA Area or District office in order to receive the irrigation discount. Purchasers are required to report information related to monthly irrigation energy sales. If a utility does not read its irrigation meters monthly, the utility must estimate its monthly irrigation sales. These estimates shall be reviewed by BPA area and/or district offices. Purchasers must read their meters within 3 working days of the beginning and ending of the irrigation discount period (April-October). In order to qualify for the discount, the purchaser must submit all data to BPA by December 31 of the calendar year in which the sales occurred. Irrigation reports to BPA shall include the following monthly information for the reporting period:

- (1) utility name and period for which the report is being made;
- (2) total irrigation sales and total qualifying irrigation energy sales (in kilowatthours) by month;
- (3) total qualifying irrigation sales (in kilowatt-hours) by month under 400 horsepower, for exchanging utilities;
- (4) total utility firm system requirements for other than full requirement customers by month (in kilowatthours);
- (5) total energy purchased from BPA under the Priority Firm or New Resource rate by month in kilowatthours: and
- (6) the Purchaser shall list each irrigation and drainage account number in its annual report and whether each irrigation con-

sumer is billed monthly, bimonthly, or seasonally. If the Purchaser is an exchanging utility, the Purchaser shall also identify the size (in horsepower) of the connected load for each active account. A utility may submit monthly reports, if it chooses. In that case, the active list of accounts should be included in the last monthly report submitted.

5. Cost Recovery Adjustment Clause

a. Terms and Conditions

The Cost Recovery Adjustment Clause applies to the Priority Firm Power (Exchange and Preference), Industrial Firm Power, Variable Industrial Power, Firm Capacity, and New Resource Firm Power rate schedules.

After September 30, 1988, BPA shall evaluate actual financial performance, by comparing BPA's actual fiscal year 1988 funds from operations (net revenues plus charges not requiring funds), to the fiscal year 1988 funds from operations that rates were designed to achieve. When this evaluation is performed, if actuals differ from planned funds from operations for the evaluation period (fiscal year 1988) as specified herein, BPA shall adjust applicable 1987 wholesale power rate schedules over an adjustment period beginning January 1, 1989, and ending September 30, 1989.

Rate schedules subject to the Cost Recovery Adjustment Clause shall be adjusted only if BPA's actual fiscal year funds from operations are either:

- (1) Greater than \$80 million above planned funds from operations, or
- (2) Greater than \$45 million below planned funds from operations.

Any resulting upward rate adjustment shall not be greater than 10.0 percent.

b. Cost Recovery Adjustment Formula

BPA shall determine the variance between actual and planned funds from operations for the evaluation period using the following formula:

CRV = AFFO — PFFO

where:

CRV = Fiscal year 1988 cost recovery variance (in millions of dollars):total underrecovery (if CRV is negative) or overrecovery (if CRV is positive) of planned funds from operations;

Revisions to the data used to calculate the amount of the LDD may be made by the purchaser for a period of up to 2 years from the first day to which the data apply. However, such revisions shall not apply to periods when the customer was ineligible for a discount due to late data submission.

b. Eligibility Criteria

To qualify for a discount, the purchaser must meet all six of the following eligibility criteria:

- (1) the purchaser must serve as an electric utility offering power for resale;
- (2) the purchaser must agree to pass the benefits of the discount through to the purchaser's consumers within the region served by BPA;
- (3) the purchaser's average retail rate for the reporting year must exceed the average Priority Firm Power rate in effect for the qualifying period by 10 percent. For CY 1987, the average Priority Firm Power rate shall be the average of the PF-85 rate for 9 months and the PF-87 Preference rate for 3 months. For CY 1988, the average Priority Firm Power rate shall be the PF-87 Preference rate.
- (4) the purchaser's kilowatthour-to-investment ratio (Ratio 3.a.(1)) must be less than 100:
- (5) the purchaser's consumers-per-mile ratio (Ratio 3.a.(2)) must be less than 12; and
- (6) the purchaser must qualify for a discount based on criteria in section c, below.

c. Discounts

The purchaser shall be awarded the greatest discount for which that purchaser qualifies. The discounts and the qualifying criteria for those discounts are listed below.

- (1) Three percent, for any purchaser for whom:
 - (a) the kilowatthour-to-investment ratio is equal to or greater than 25 but less than 35; or
 - (b) the consumers-per-mile ratio is equal to or greater than 5 but less than 7.
- (2) Five percent, for any purchaser for whom:
 - (a) the kilowatthour-to-investment

ratio is equal to or greater than 15 but less than 25; or

- (b) the consumers-per-mile ratio is equal to or greater than 3 but less than 5.
- (3) Seven percent, for any purchaser for whom:
 - (a) the kilowatthour-to-investment ratio is less than 15; or
 - (b) the consumers-per-mile ratio is less than 3.

4. Irrigation Discount

a. Basic Irrigation Discount Principles

A discount of 4.6 mills per kilowatthour shall be applied to the charges for qualifying irrigation energy purchased under the Priority Firm Power and New Resource Firm Power rate schedules, during the billing months of April through October. This discount shall be applied subsequent to calculation of the Low Density Discount, if applicable. Any energy on which the irrigation discount is claimed shall be metered separately by the Purchaser, and used exclusively for agricultural irrigation or drainage pumping.

b. Qualifying Energy Purchases

The qualifying irrigation energy shall be determined as follows:

- (1) All irrigation energy must be used exclusively for the purpose of irrigation and drainage pumping on agricultural land and be measured at the end-use irrigation customer's meter. The discount shall apply to the measured energy sales at the end-use.
- (2) Energy subject to the discount must be purchased during the billing months of April through October.
- (3) Purchasers of exchange energy under the Residential Purchase and Sale Agreement (RPSA) are eligible for the irrigation discount for the portion of their irrigation sales qualifying for the exchange under the RPSA contracts.
- (4) General requirements customers are eligible for an irrigation discount for a portion of their irrigation sales equal to the share of their total sales served by BPA firm purchases (i.e., total irrigation and drainage pumping sales multiplied by BPA billing energy for Priority Firm or New Resources firm purchases divided by the total firm utility system requirements for the billing month).

dard, Market Expansion, and Incremental rates but may differ from the actual rate offered for non-WSPP transactions in any hour. The rate for WSPP transactions is independent of any other rate offered concurrently under this rate schedule outside that agreement.

F. End-User Rate

BPA may agree to a rate or rate formula for nonfirm energy purchases by end-users. Such rate or rate formula shall be within the limits specified for the Standard and Market Expansion rates but may differ from the actual rates offered during any hour.

SECTION VI. DELIVERY

A. Rate of Delivery

BPA shall determine the amount of nonfirm energy to be made available for each hour. Such determination shall be made for each applicable nonfirm energy rate.

B. Guaranteed Delivery

1. Availability

BPA will determine the amount and duration of nonfirm energy to be offered on a guaranteed basis. Such daily or hourly amounts may be as small as zero or as much as all the nonfirm energy that BPA plans to offer for sale on such days.

2. Conditions

Scheduled amounts of guaranteed nonfirm energy may not be changed except:

- a. when BPA and the purchaser mutually agree to increase or decrease the scheduled amounts; or
- b. when BPA must reduce nonfirm energy deliveries in order to serve firm loads because of unexpected generation or transmission losses.

SECTION VII. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

A. The approximate cost contribution of different resource categories to the average cost of non-firm energy is 99.6 percent FBS and 0.4 percent New Resources.

- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

SCHEDULE CF-87 FIRM CAPACITY RATE

SECTION I. AVAILABILITY

This schedule is available for the purchase of Firm Capacity without energy on a Contract Demand basis. This schedule is available only to those purchasers holding Firm Capacity contracts executed prior to July 1, 1985. It supersedes Schedule CF-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

\$42.48 per kilowatt per year of Contract Demand, billed monthly at the rate of \$3.54 per kilowatt-month of Contract Demand.

SECTION III. BILLING FACTORS

The billing demand shall be the Contract Demand.

SECTION IV. ADJUSTMENTS AND SPECIAL PROVISIONS

A. Conservation Surcharge

The Conservation Surcharge shall be applied in accordance with section III.C.7 of the General Rate Schedule Provisions (GRSPs) and subsequent to any other rate adjustments.

B. Extended Peaking Surcharge

The monthly capacity rate specified in section II above shall be increased by the following extended peaking surcharge to compensate BPA for each hour that the purchaser's monthly demand duration exceeds 8 hours:

- 1. \$0.0908 per kilowatt per hour of extended peaking for the months April through October;
- 2. \$0.0512 per kilowatt per hour of extended peaking for the months November through March.

The charge shall be adjusted pro rata for each portion of an hour of extended peaking supplied to the purchaser.

The purchaser's monthly demand duration shall be determined by dividing:

1. the kilowatthours supplied to the purchaser under this rate schedule between the hours

of 7 a.m. and 10 p.m. on the day of maximum kilowatthour use during those hours, provided such day is not a Sunday, by

2. the purchaser's Contract Demand for such month.

The purchaser's extended peaking shall be the amount by which the purchaser's monthly demand duration exceeds 8 hours. The extended peaking surcharge shall not be applied during periods when BPA does not require the delivery of peaking replacement energy by the purchaser.

C. Energy Return Surcharge

The energy associated with the delivery of Firm Capacity must be returned to BPA in accordance with the terms of the purchaser's Firm Capacity Contract. Unless waived by BPA, any purchaser whose energy returns during any single hour exceed 60 percent of the purchaser's Contract Demand during any single hour shall be subject to the following surcharge for each additional kilowatthour so returned:

- 1. 3.49 mills per kilowatthour for the months April through October, and
- 2. 1.48 mills per kilowatthour for the months November through March.

D. Cost Recovery Adjustment Clause

The Cost Recovery Adjustment Clause described in section III.C.5 of the GRSPs shall be applied to all purchases under this rate schedule. The percentage increase or decrease calculated in sections III.C.5.a and III.C.5.b of the GRSPs shall be applied to the demand charges contained in sections II.A and II.B of this rate schedule.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different resource categories to the CF-87 rate is 75.1 percent FBS and 24.9 percent Exchange for contract year service.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

b. are provided under more than one rate schedule and it is impracticable to meter the kilowatthours and reactive kilovolt-amperehours for each class or rate schedule separately, the average power factor of the total deliveries for the month will be used, where applicable, as the power factor for all power delivered to such point of delivery.

To maintain acceptable operating conditions on the Federal system, BPA may, unless specifically otherwise agreed, restrict deliveries of power to a purchaser with a low power factor. Such restriction may be made to a point of delivery or to a purchaser's system at any time that the average leading power factor or average lagging power factor for all classes of power delivered to such point or to such system is below 75 percent.

2. Outage Credit

To the extent that BPA is unable to provide full service to a purchaser during the billing month as a result of interruptions in service due to reasons cited in the General Contract Provisions, BPA shall adjust the charges for those hours for billing demand for such purchaser to reflect BPA's inability to provide full service, provided such adjustment is mandated by the purchaser's power sales contract. The adjustment is provided on a point of delivery basis. To compute the adjustment for noncoincidentally billed systems, BPA shall determine the monthly demand charge(s) for the point(s) of delivery where the outage(s) occurred, multiply by the number of hours of outage, and divide by the total number of hours in the billing month. For coincidentally billed points of delivery, the adjustment shall apply only to those points of delivery at which BPA was unable to provide full service. For partial outages (such as an outage on one feeder in a substation with several feeders), BPA shall determine an equivalent interruption in order to arrive at the number of hours to be used in the calculation of the credit.

3. Low Density Discount (LDD)

a. Basic LDD Principles

A predetermined discount shall be applied each billing month to the charges for all power purchased under the Priority Firm Power rate schedule by eligible purchasers as defined in section b, below. The discount shall be calculated on an annual basis and shall become effective with the first billing period in the calendar year. Retroactive billing for the LDD may be required if the data are not available by the

January billing date. The level of the discount shall be determined from the following ratios:

- (1) the purchaser's total electric energy requirements during the previous calendar year (the purchaser's firm sales, nonfirm sales to firm retail loads, sales for resale, and associated losses, but excluding nonfirm sales to nonfirm retail loads, such as boiler loads served under BPA's alternate fuel policy) divided by the value of the purchaser's depreciated electric plant (excluding generation plant) at the end of such year, and
- (2) the average number of consumers (annual and seasonal consumers with residential, industrial, commercial, and irrigation accounts, but excluding separately billed services for water heating, electric space heating, and security lights) during the previous calendar year divided by the number of pole miles of distribution line at the end of such year. Distribution lines are defined as those that deliver electric energy from a substation or metering point, at a voltage of 34.5 kV or less, to the point of attachment to the consumer's wiring and include primary, secondary, and service facilities.

These calculations shall be based on data provided in the purchaser's annual financial and operating report. In calculating these ratios, BPA shall use data pertaining to the purchaser's entire electric utility system within the region. Results of the calculations shall not be rounded.

Customers who have not provided BPA with all four requisite pieces of annual data (see a.(1) and a.(2) above) by June 30 of each year shall be declared ineligible for the LDD effective with the June billing period for that year. BPA shall extend a customer's eligibility from the previous year through the June billing period of the following year and shall make any necessary retroactive adjustments once the new data have been processed. If no data have been received by December 31 for the previous calendar year, BPA shall assume that the utility did not qualify for an LDD for that year. Low Density Discounts issued from January 1 to June 30 shall be assumed to have been in error, and the utility shall be billed for any such discounts issued.

quested level of service will be the BPA Operating Level, provided BPA does not need to restrict the DSI and provided BPA agrees to supply any requested Auxiliary Demand. Each requested level of service may include a designation for both the Peak Period and the Offpeak Period. A DSI may request and BPA may agree to a level of service for the Offpeak Periods other than that in the Peak Period. If a DSI does not separately designate a requested level of service for the Peak and Offpeak Periods, the BPA Operating Level is the basis for determining if a DSI has incurred an unauthorized increase.

Any DSI whose Measured Demand, before adjustment for power factor, during any 1 hour exceeds the BPA Operating Level for that hour shall be subject to unauthorized increase charges for each kilowatthour of unauthorized increase associated with each overrun.

Only the BPA Operating Level applicable during the Peak Period will be used in determining the Billing Demand for power purchased under the Industrial Firm Power rate schedule, the Variable Industrial Power rate schedule, and the Standard Rate under the Special Industrial rate schedule. During the Peak Period the BPA Operating Level may be no greater than the Operating Demand for the billing month unless the customer has requested, and BPA has agreed to supply, the Auxiliary Demand.

B. Billing Factors for Energy

1. Measured Energy

Measured Energy shall be that portion of the metered or scheduled energy that is purchased from BPA under the applicable rate schedule. For those contracts to which BPA is a party and that provide for delivery of more than one class of electric power to the purchaser at any point of delivery, the portion of each 60-minute clock-hour integrated demand assigned to any class of power shall be determined pursuant to the power sales contract. The sum of the portions of the demands so assigned shall constitute the Measured Energy for each such class of power.

The Measured Energy shall be determined from the metered energy or the scheduled energy, as hereinafter defined.

a. Metered Energy

The metered energy for a purchaser shall be the number of kilowatthours that are recorded on the appropriate metering equipment, adjusted as specified in the power sales contract, and delivered to a purchaser:

- (1) at all points of delivery for which metered energy is the basis for determination of the Measured Energy, and
- (2) during any billing period.

The metered energy shall be determined from measurements made either in the manner specified in the power sales contract or as provided in section VI.A herein.

b. Scheduled Energy

The scheduled energy in kilowatthours shall be the sum of the hourly demands at which electric energy is scheduled for delivery to a purchaser:

- (1) for each system for which scheduled energy is the basis for determination of the Measured Energy, and
- (2) during any billing period.

Scheduled amounts are deemed delivered for the purpose of determining billing energy.

2. Computed Energy Maximum

The Computed Energy Maximum equals the product of the number of hours in the billing month and the Computed Average Energy Requirement.

3. Contract Energy

The Contract Energy shall be the maximum number of kilowatthours that the purchaser agrees to purchase and BPA agrees to make available, subject to any limitations included in the power sales contract.

C. Billing Adjustments

1. Power Factor Adjustment

The formula for determining average power factor is as follows:

Average Kilowatthours

Power = Kilowatthours

(Kilowatthours)²

(Reactive kilovoltamperehours)²

The data used in the above formula shall be obtained from meters that are ratcheted to prevent reverse registration. These data then shall be adjusted for losses, if applicable, before determination of the average power factor.

When deliveries to a purchaser at any point of delivery either:

a. include more than one class of power, or

SCHEDULE CE-87 EMERGENCY CAPACITY RATE

SECTION I. AVAILABILITY

This schedule is available for the purchase of capacity:

- A. when an emergency exists on the purchaser's system, or
- B. when the purchaser wishes to displace highercost firm capacity resources which are otherwise available to meet the purchaser's load, provided the purchaser requests such capacity and BPA has capacity available for such purpose.

This schedule supersedes Schedule CE-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

A. Demand Charge

\$1.06 per kilowatt of demand per calendar week or portion thereof.

B. Intertie Charge

The demand charge specified above shall be increased by \$0.15 per kilowatt per week for capacity made available at the Oregon-California or Oregon-Nevada border for delivery over the Pacific Northwest-Pacific Southwest (Southern) Intertie.

SECTION III. BILLING FACTORS

The billing demand shall be the maximum amount requested by the purchaser and made available by BPA during a calendar week. If BPA is unable to meet subsequent requests by a purchaser for delivery at the demand previously established during such week, the billing demand for that week shall be the lower demand which BPA is able to supply.

SECTION IV. BILLING PERIOD

Bills shall be rendered monthly.

SECTION V. SPECIAL PROVISION

Energy delivered with such capacity shall be returned to BPA within 7 days of the date of delivery and shall be returned at times and rates of delivery agreed to by both the purchaser and BPA prior to delivery. BPA may agree to accept the return energy after the normal 7 day return period provided that such delay has been mutually agreed upon prior to delivery.

SECTION VI. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different resource categories to the CE-87 rate is 75.1 percent FBS and 24.9 percent Exchange.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

SCHEDULE NR-87

NEW RESOURCE FIRM POWER RATE

SECTION I. AVAILABILITY

This schedule is available for the contract purchase of firm power or capacity to be used within the Pacific Northwest. New Resource Firm Power is available to investor-owned utilities (IOUs) under net requirements contracts for resale to ultimate consumers, direct consumption, or use in construction, test and start up, and station service. New Resource Firm Power also is available to any public body, cooperative, or Federal agency to the extent such power is needed to serve any New Large Single Load. In addition, BPA may make this rate available to those parties participating in exchange agreements that use this rate schedule as the basis for determining the amount or value of power to be exchanged. This schedule supersedes Schedule NR-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

A. Demand Charge

- 1. \$4.13 per kilowatt-month of billing demand occurring during all Peak Period hours.
- 2. No demand charge during Offpeak Period hours.

B. Energy Charge

- 1. 25.5 mills per kilowatthour of billing energy for the billing months September through March:
- 2. 21.2 mills per kilowatthour of billing energy for the billing months April through August;

SECTION III. BILLING FACTORS

In this section billing factors are listed for computed requirements purchasers (section III.A) metered requirements purchasers, and those purchasers not covered by section III.A. (section III.B.).

A. Computed Requirements Purchasers

Purchasers designated by BPA as computed requirements purchasers pursuant to power sales contracts shall be billed in accordance with the provisions of this section.

1. Billing Demand

The billing demand for actual, planned, and

contracted computed requirements purchasers shall be the higher of the billing factors "a" and "b," below:

a. the lower of:

- (1) the larger of the Computed Peak Requirement or the Computed Average Energy Requirement;
- (2) the Measured Demand, before adjustment for power factor; or

b. the lower of:

- (1) the Computed Peak Requirement; or
- (2) 60 percent of the highest Computed Peak Requirement during the previous 11 billing months (Ratchet Demand).

2. Billing Energy

The billing energy for actual, planned, and contracted computed requirements purchasers shall be:

- a. for the months September through March, the sum of:
- (1) 56 percent of the Measured Energy, and
- (2) 44 percent of the Computed Energy Maximum:
- b. for the months April through August, the sum of:
- (1) 39 percent of the Measured Energy, and
- (2) 61 percent of the Computed Energy Maximum.

B. Metered Requirements Purchasers and Other Purchasers Not Covered By Section III.A, Above

Purchasers designated as metered requirements customers and purchasers taking power under this rate schedule who are not otherwise covered by section III.A shall be billed as follows:

1. Billing Demand

The billing demand shall be the Measured Demand as adjusted for power factor, unless otherwise specified in the power sales contract. However, purchasers who previously used the Firm Energy rate schedule, FE-2, either in the computation of their power bills or in the determination of the value of an

sales contract. That specification is provided in:

- a. sections 16, 17(c), and 17(f), as adjusted by other sections of the contract, for actual computed requirements purchasers;
- b. sections 16, 17(a), and 17(f), as adjusted by other sections of the contract, for planned computed requirements purchasers; and
- c. sections 16 and 17(b), as adjusted by other sections of the contract, for contracted computed requirements purchasers.

5. Computed Average Energy Requirement

For computed requirements purchasers, the Computed Average Energy Requirement shall be determined as specified in the purchaser's power sales contract. That specification is provided in:

- a. sections 16, 17(c), and 17(f), as adjusted by other sections of the contract, for actual computed requirements purchasers;
- b. sections 16, 17(a), and 17(f), as adjusted by other sections of the contract, for planned computed requirements purchasers; and
- c. sections 16 and 17(b), as adjusted by other sections of the contract, for contracted computed requirements purchasers.

6. Operating Demand

The Operating Demand is that demand which is established by each DSI in accordance with section 5(b) of the DSI's power sales contract. Unless the DSI has requested, and BPA has granted, an Auxiliary Demand, the Operating Demand establishes a limit with respect to:

- a. the demand which the purchaser may impose on BPA; and
- b. the total amount of energy during a billing month which the DSI is entitled to purchase from BPA.

7. Curtailed Demand

A Curtailed Demand is the number of kilowatts of industrial power (Industrial Firm Power or Special Industrial Power) during the billing month which results from the DSI's request for such power in amounts less than the Operating Demand therefor. Each purchaser of industrial power may curtail its demand according to the terms of its power sales contract (which permits up to three levels of Curtailed Demand each month).

8. Restricted Demand

Restricted Demand is the number of kilo-

watts of industrial power (either Industrial Firm Power or Special Industrial Power) that results when BPA has restricted delivery of such power for one clock-hour or more. BPA shall make such restrictions according to the terms of the DSI's power sales contract. In a given billing month, there are as many possible levels of Restricted Demand for a DSI as there are number of restrictions.

9. Auxiliary Demand

Auxiliary Demand is the number of kilowatts of Auxiliary Power that a DSI requests and that BPA agrees to make available to serve a portion of the DSI's load during the period specified in the DSI's request. The DSI may request up to three levels of Auxiliary Demand during a billing month.

If BPA agrees to a request for Auxiliary Power but later becomes unable to supply such demand, the Restricted Demand for Auxiliary Power is deemed to be the Auxiliary Demand for such period of restriction. Auxiliary Power may be curtailed by the DSI according to the provisions of section 9(a) of the DSI's power sales contract.

BPA shall make Auxiliary Power available to Industrial Firm Power purchasers under the Industrial Firm Power Rate Schedule at the Standard Industrial Rate. Auxiliary Power sales to DSIs electing to purchase under the Variable Industrial Power Rate Schedule (VI-87) shall be made at the rate determined pursuant to section III of the VI-87 rate schedule. Auxiliary Power sales to DSIs purchasing under the Special Industrial Rate will be made only at the Standard Special Industrial Power Rate.

10. BPA Operating Level

The BPA Operating Level is, for the purpose of these rate schedules and GRSPs, an hourly amount of industrial power (Industrial Firm Power or Special Industrial Power) for a DSI that is equal to the lowest of the following demands during that hour:

- a. Operating Demand plus Auxiliary Demand, if any;
- b. Curtailed Demand; or
- c. Restricted Demand.

The weighted average BPA Operating Level for each DSI can be determined by summing the hourly BPA Operating Levels and dividing by the number of hours in the billing month.

Each DSI must request service from BPA for each billing month in accordance with the terms of the power sales contract. The re-

SECTION III. BILLING FACTORS AND BILLING ADJUSTMENTS

A. Billing Factors for Demand

1. Measured Demand

The purchaser's Measured Demand shall be determined in the manner described in this section. Measured Demand shall be that portion of the metered or scheduled demand that is purchased from BPA under the applicable rate schedule. For those contracts to which BPA is a party and that provide for delivery of more than one class of electric power to the purchaser at any point of delivery, the portion of each 60-minute clockhour integrated demand assigned to any class of power shall be determined pursuant to the power sales contract. The portion of the total Measured Demand so assigned shall constitute the Measured Demand for each such class of power.

The Measured Demand shall be determined from the metered demand or the scheduled demand, as hereinafter defined. The Measured Demand shall be determined on either a coincidental or a noncoincidental basis, as provided in the purchaser's power sales contract.

a. Metered Demand

The metered demand in kilowatts shall be the largest of the 60-minute clock-hour integrated demands, adjusted as specified in the power sales contract, at which electric energy is delivered to a purchaser:

- (1) at each point of delivery for which the metered demand is the basis for determination of the Measured Demand,
- (2) during each time period specified in the applicable rate schedule, and
- (3) during any billing period.

Such largest integrated demand shall be determined from measurements made either in the manner specified in the power sales contract or as provided in section VI.A herein. In determining the metered demand, BPA shall exclude any abnormal integrated demands due to or resulting from:

- (1) emergencies or breakdowns on, or maintenance of, the Federal system facilities, and
- (2) emergencies on the purchaser's facilities, provided that such facilities have been adequately maintained and prudently operated, as determined by BPA.

b. Scheduled Demand

The scheduled demand in kilowatts shall be the largest of the hourly demands at which electric energy is scheduled for delivery to a purchaser:

- (1) to each system for which scheduled demand is the basis for determination of the Measured Demand,
- (2) during each time period specified in the applicable rate schedule, and
- (3) during any billing period.

Scheduled amounts are deemed delivered for the purpose of determining billing demand.

2. Ratchet Demand

The Ratchet Demand in kilowatts shall be the maximum demand established during a specified period of time either during or prior to the current billing period. The demand on which the ratchet is based is specified in the relevant rate schedule or in these GRSPs. For utilities purchasing under the PF or NR rate schedules, the Ratchet Demand is based on the highest demand during prior billing months. When the Ratchet Demand is used as a billing factor, BPA shall have specified in the appropriate schedules or GRSPs:

- a. the period of time over which the ratchet shall be calculated,
- b. the type of demand to be used in the calculation, and
- c. the percentage (if any) of that demand which will be used to calculate the Ratchet Demand.

3. Contract Demand

The Contract Demand shall be the maximum number of kilowatts that the purchaser agrees to purchase and BPA agrees to make available, subject to any limitations included in the power sales contract. BPA may agree to make deliveries at a rate in excess of the Contract Demand at the request of the purchaser, but shall not be obligated to continue such excess deliveries. Any contractual or other reference to Contract Demand as expressed in kilowatthours shall be deemed, for the purpose of these GRSPs, to refer to the term "Contract Energy."

4. Computed Peak Requirement

For purchasers designated to purchase on the basis of computed requirements, the Computed Peak Requirement shall be determined as specified in the purchaser's power

exchange account, shall not be charged for demand under this rate schedule.

2. Billing Energy

The billing energy shall be the Measured Energy, unless otherwise specified in the power sales contract.

SECTION IV. ADJUSTMENTS AND SPECIAL PROVISIONS

A. Power Factor Adjustment

The adjustment for power factor, when specified in this rate schedule or in the power sales contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the General Rate Schedule Provisions (GRSPs). The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment, BPA shall increase the billing demand by one percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

B. Cost Recovery Adjustment Clause

The Cost Recovery Adjustment Clause described in section III.C.5 of the GRSPs shall be applied to all purchases and exchanges under this rate schedule. The percentage increase or decrease calculated in section III.C.5.a and II.C.5.b of the GRSPs shall be applied uniformly to the demand and energy charges contained in section II.A and II.B and the irrigation discount contained in section IV.C of this rate schedule. An additional increase of .046 mills per kilowatthour shall be made to the irrigation discount for each percentage increase in the NR rates due to the Cost Recovery Adjustment Clause. An additional decrease of .046 mills per kilowatthour shall be made to the irrigation discount for each percentage decrease in the NR rates due to the Cost Recovery Adjustment Clause.

C. Irrigation Discount

BPA shall apply an irrigation discount, equal to 4.6 mills per kilowatthour, to the charges for qualifying energy purchased under this rate schedule. The irrigation discount shall be applied after calculation of the Low Density Discount. The discount shall apply only to energy purchased during the billing months of April through October. Eligibility for the irrigation

discount and reporting requirements shall be determined pursuant to section III.C.4 of the GRSPs.

D. Conservation Surcharge

The Conservation Surcharge shall be applied in accordance with section III.C.7 of the GRSPs and subsequent to any other rate adjustments.

E. Unauthorized Increase

BPA shall apply the charge for Unauthorized Increase to any purchaser of New Resource Firm Power taking demand and/or energy in excess of its contractual entitlement.

1. Rate for Unauthorized Increase

67.3 mills per kilowatthour.

2. Calculation of the Unauthorized Increase

Each 60-minute clock-hour integrated or scheduled demand shall be considered separately in determining the amount which may be considered an unauthorized increase. BPA shall first determine the amount of unauthorized increase related to demand and shall then treat any remaining unauthorized increase as energy-related.

a. Unauthorized Increase in Demand

That portion of any Measured Demand during Peak Period hours, before adjustment for power factor, that exceeds the demand which the purchaser is contractually entitled to take during the billing month and that cannot be assigned:

- (1) to a class of power which BPA delivers on such hour pursuant to contracts between BPA and the purchaser; or
- (2) to a type of power which the purchaser acquires from sources other than BPA and which BPA delivers during such hour,

shall be billed:

- (1) in accordance with the provisions of the "Relief from Overrun" exhibit to the power sales contract; or
- (2) if such exhibit does not apply or is not a part of the purchaser's power sales contract, at the rate for Unauthorized Increase, based on the amount of energy associated with the excess demand.

b. Unauthorized Increase in Energy

The amount of Measured Energy during a billing month that exceeds the amount of energy which the purchaser is contractually entitled to take during that month and

that cannot be assigned:

- (1) to a class of power that BPA delivers during such month pursuant to contracts between BPA and the purchaser; or
- (2) to a type of power that the purchaser acquires from sources other than BPA and that BPA delivers during such month,

shall be billed:

- (1) in accordance with the provisions of the "Relief from Overrun" exhibit to the power sales contract; or
- (2) as unauthorized increase if such exhibit does not apply or is not a part of the purchaser's power sales contract.

F. Coincidental Billing Adjustment

Purchasers of New Resource Firm Power who are billed on a coincidental basis and who have diversity charges or diversity factors specified in their power sales contracts shall have their charges for billing demand adjusted according to the provisions of section III. C.6 of the GRSPs. Computed requirements purchasers are not subject to the Coincidental Billing Adjustment for scheduled power.

G. Outage Credit

Pursuant to section 7 of the General Contract Provisions, BPA shall provide an outage credit to any purchaser for those hours for which BPA is unable to deliver the full billing demand during the billing month due to an outage on the facilities used by BPA to deliver New Resource Firm Power. Such credit shall not be provided if BPA is able to serve the purchaser's load through the use of alternative facilities or if the outage is for less than 30 minutes. The amount of the credit shall be calculated according to the provisions of section III.C.2 of the GRSPs.

H. Energy Return Surcharge

Any purchaser who preschedules in accordance with sections 2(a)(4) and 2(c)(2) of Exhibit E of the Power Sales contract and who returns, during a single offpeak hour, more than 60 percent of the difference between that purchaser's estimated computed peak requirement and estimated computed average energy requirement for the billing month shall be subject to the following surcharge for each additional kilowatthour so returned:

- 1. 3.49 mills per kilowatthour for the months of April through October, and
- 2. 1.48 mills per kilowatthour for the months of November through March.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different resource categories to the NR-87 rate is 100.0 percent Exchange.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

- 1. the restriction applicable to deliveries of all firm power pursuant to the Uncontrollable Forces and Continuity of Service provisions of the General Contract Provisions of the power sales contract, and
- 2. the restrictions given in the Restriction of Deliveries section of the power sales contract.

D. Special Industrial Power

Special Industrial Power is electric power which BPA will make continuously available to any DSI that qualifies for the Special Industrial Power rate pursuant to section 7(d)(2) of the Northwest Power Act. This power is similar in nature to Industrial Firm Power, but is subject to greater restriction by BPA. Special Industrial Power is made available to the qualifying DSI upon adoption of, and subject to, an amendment modifying its power sales contract.

E. Auxiliary Power

Auxiliary Power is that power which a DSI requests and which BPA agrees to make available to serve that portion of the DSI's load which is in excess of the DSI's Operating Demand for Industrial Firm Power or Special Industrial Power.

F. Firm Capacity

Firm Capacity is capacity that BPA assures will be available in the amount(s) and during the period(s) specified in the power sales contract. The energy associated with this capacity must be returned to BPA. Firm Capacity may be restricted pursuant to the Restriction of Deliveries section of these GRSPs (section V.E).

G. Surplus Firm Power

Surplus Firm Power is firm power (capacity, energy, or capacity and energy) in excess of the amount required to meet BPA's existing contractual obligations to provide firm service. Surplus Firm Power may be used either for resale or direct consumption by purchasers both inside and outside the United States. Such power, however, may be restricted pursuant to the Restriction of Deliveries section of these GRSPs (section V.E).

H. Nonfirm Energy

Nonfirm Energy is supplied or made available by BPA to a purchaser under an arrangement that does not have the guaranteed continuous availability feature of firm power. Nonfirm energy is mostly sold under the Nonfirm Energy rate schedule, NF-87. Nonfirm energy also may be supplied under the Share-the-Savings rate schedule, SS-87, which is available as an experimental rate for contract purchase.

In addition, BPA also can make nonfirm energy available under the Nonfirm Energy rate schedule to the Western Systems Power Pool (WSPP) subject to terms and conditions agreed upon by the members participating in the WSPP and in accordance with BPA policy for such arrangements.

However, Nonfirm Energy that has been purchased under a guarantee provision in the Nonfirm Energy rate schedule shall be provided to the purchaser in accordance with the provisions of that schedule and the power sales contract if applicable. BPA may make Nonfirm Energy available to purchasers both inside and outside the United States.

I. Reserve Power

Reserve Power is firm power sold to a purchaser:

- 1. in cases where the purchaser's power sales contract states that the rate for Reserve Power shall be applied;
- 2. to provide service when no other type of power is deemed applicable; and
- 3. to serve the purchaser's firm power loads under circumstances where BPA does not have a power sales contract in force with the purchaser.

Sales of Reserve Power are subject to the Restriction of Deliveries section of these GRSPs (section V.E).

J. Firm Displacement Power

Firm Displacement Power is firm power (capacity, energy, or capacity and energy) that BPA makes available to Pacific Northwest utilities for use within the Pacific Northwest. The purchased power will replace the generation from resources that is exported from the Pacific Northwest on a firm basis for a period of at least 3 years. Such power may be restricted pursuant to the Restriction of Deliveries section of the GRSPs (section V.E).

SECTION I. ADOPTION OF REVISED RATE SCHEDULES AND GENERAL RATE SCHEDULE PROVISIONS

A. Approval of Rates

These 1987 rate schedules and General Rate Schedule Provisions (GRSPs) shall become effective upon interim approval or final confirmation and approval by the Federal Energy Regulatory Commission (FERC). BPA will request FERC approval effective October 1, 1987. BPA proposes that the following schedules, and the GRSPs associated with these schedules, be effective for two years: PF-87, IP-87, CE-87, CF-87, NR-87, SS-87, NF-87, and RP-87. The VI-87 rate schedule reflects adjustments of and supplements to the rate schedule VI-86 and associated GRSPs (which are to be in effect for 7 years). Sections III.A and VI.J of the VI-87 rate schedule are to be in effect for two years. BPA proposes that rate schedule SI-87 bé effective two years, except for the Special Industrial Offpeak rate provision, which is to remain in effect through June 30, 1990, pursuant to an Amendatory Agreement between BPA and Hanna Nickel Smelting Company executed July 1, 1985.

BPA proposes that the SP-87 rate schedule, and the GRSPs associated with this schedule, be effective for 5 years. BPA proposes that the Nonfirm Energy Rate Cap be effective for 12 years. BPA proposes that the SL-87 and the GRSPs associated with this schedule be effective for as long as BPA has surplus firm power available for sale.

B. General Provisions

These 1987 rate schedules, and the GRSPs associated with these rate schedules, supersede BPA's 1985 rate schedules (which became effective July 1, 1985) to the extent stated in the Availability section of each 1987 rate schedule. These schedules and GRSPs shall be applicable to all BPA contracts, including contracts executed both prior to and subsequent to enactment of the Northwest Power Act. All sales of power made under these rate schedules are subject to the following acts as amended: the Bonneville Project Act, the Regional Preference Act (P.L. 88-552), the Federal Columbia River Transmission System Act, and the Northwest Power Act.

SECTION II. TYPES OF BPA SERVICE

A. Priority Firm Power

Priority Firm Power is electric power (capacity, energy, or capacity and energy) that BPA will

make continuously available for resale to ultimate consumers, or for direct consumption, construction, test and start-up, and station service by public bodies, cooperatives, and Federal agencies. (Construction, test and start-up, and station service are defined in section V.B of these GRSPs.)

Utilities participating in the exchange under section 5(c) of the Northwest Power Act may purchase Priority Firm Power pursuant to their Residential Purchase and Sale Agreements.

In addition, BPA may make Priority Firm Power available to those parties participating in exchange agreements specifying use of the Priority Firm rate for determining the amount or value of power to be exchanged.

Power purchased under the power rate schedule is to be used to meet the purchaser's actual firm load within the Pacific Northwest. Such power may be restricted in accordance with the Restriction of Deliveries section of these GRSPs (section V.E). However, BPA shall not restrict Priority Firm Power until Industrial Firm Power has been restricted in accordance with the provisions of section II.C of these GRSPs.

Priority Firm Power is not available to serve New Large Single Loads.

B. New Resource Firm Power

New Resource Firm Power is electric power (capacity, energy, or capacity and energy) that BPA will make continuously available:

- 1. New Large Single Load,
- 2. for firm power purchased by investor-owned utilities pursuant to power sales contracts with BPA, and
- 3. for construction, test and start-up, and station service for facilities owned or operated by investor-owned utilities.

New Resource Firm Power is to be used to meet the purchaser's actual firm load within the Pacific Northwest. Such power may be restricted in accordance with the Restriction of Deliveries section of these GRSPs (section V.E). However, BPA shall not restrict New Resource Firm Power until Industrial Firm Power has been restricted in accordance with the provisions of section II.C of these GRSPs.

C. Industrial Firm Power

Industrial Firm Power is electric power that BPA will make continuously available to a direct-service industrial (DSI) purchaser pursuant to the DSI's power sales contract and subject to:

SPECIAL INDUSTRIAL POWER RATE

SECTION I. AVAILABILITY

This rate schedule is available to any DSI purchaser using raw minerals indigenous to the region as its primary resource and qualifying for this special power pursuant to the procedures established in section 7(d)(2) of the Northwest Power Act. This schedule is available for the contract purchase of this special class of industrial power and also for the purchase of Auxiliary Power if requested by the DSI and made available by BPA. The Special Industrial Offpeak rate available for Hanna Nickel Smelting Company pursuant to the Amendatory Agreement executed July 1, 1985, remains in force and is retained herein. Except for the Special Industrial Offpeak rate, schedule SI-87 supersedes schedule SI-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule Provisions.

SECTION II. RATE

This rate schedule contains the Standard Special Industrial Power Rate and the Special Industrial Offpeak Rate. The Standard Special Industrial Power Rate is available to any qualifying DSI for full service provided during all hours of the day. The Special Industrial Offpeak Rate is a lower rate available to the Hanna Nickel Smelting Company (Hanna) for service during periods specified by BPA. A separate billing adjustment for the value of the reserves provided by purchasers of this special class of Industrial Power is not contained in the rate schedule; the adjustment is reflected in the Standard Special Industrial Power Rate.

A. Standard Special Industrial Power Rate

1. Demand Charge

- a. \$3.08 per kilowattmonth of billing demand occurring during all Peak Period hours.
- b. No demand charge during Offpeak Period hours.

2. Energy Charge

- a. 16.9 mills per kilowatthour of billing energy for the billing months September through March;
- b. 12.9 mills per kilowatthour of billing energy for the billing months April through August.

B. Special Industrial Offpeak Rate

1. Demand Charge

No demand charge in any hour of the day.

2. Energy Charge

7.0 mills per kilowatthour of billing energy during all billing months.

SECTION III. BILLING FACTORS

A. Billing Demand

1. Standard Special Industrial Power Rate

The billing demand for power purchased under the Standard Special Industrial Power Rate shall be the BPA Operating Level during the Peak Period as adjusted for power factor. If there is more than one BPA Operating Level during the Peak Period within a billing month, the billing demand shall be a weighted average of the Peak Period BPA Operating Levels for the billing month. The BPA Operating Level is defined in section III.A.10 of the General Rate Schedule Provisions (GRSPs).

However, if BPA has agreed, pursuant to section 4 of the direct-service industrial power sales contract, to sell Special Industrial Power on a daily demand basis (transitional service), this section of the rate schedule shall not apply, and BPA shall bill the purchaser in accordance with the provisions of section V.C of the GRSPs.

2. Special Industrial Offpeak Rate

There is no billing demand for purchases under the Special Industrial Offpeak rate.

B. Billing Energy

The billing energy under both the Standard Special Industrial and Special Industrial Offpeak Rates shall be the Measured Energy for the billing month, minus any kilowatthours on which BPA assesses the charge for unauthorized increase.

The kilowatthours of billing energy shall be prorated among the respective billing demands for the billing month.

SECTION IV. SELECTION OF THE SI-87 RATE FOR THE HANNA NICKEL SMELTING COMPANY

All purchasers, except for Hanna, shall purchase power under the Standard Special Industrial Power rate. Hanna shall have the option to select one of two types of service, standard service or offpeak service. In this case, BPA will provide standard service under the Standard Special Industrial Power Rate and offpeak service under the Special Industrial Offpeak Rate. Unless BPA receives a formal request from Hanna for service under the Special Industrial Offpeak Rate, all service will be standard service provided under the Standard Special Industrial Power Rate. To change the type of service provided and the associated rate, Hanna shall submit a formal request for service under the preferred rate option in accordance with the terms of the power sales contract providing for purchases under this rate schedule. Once Hanna has elected to purchase under one of the two options, all purchases of Special Industrial Power shall be subject to the terms and conditions of that rate option until such time that Hanna requests the other type of service.

SECTION V. SERVICE UNDER THE SPECIAL INDUSTRIAL OFFPEAK RATE

BPA shall designate the hours during which offpeak service will be available, and shall provide at least 2 weeks' notice before changing those designated hours. BPA shall identify at least 10 and up to 13 hours on each day Monday through Friday, 15 hours on Saturday, and 24 hours on Sunday, during which offpeak service will be available to the purchaser.

If Hanna has elected to be served under the Special Industrial Offpeak Rate, Hanna may request, during the designated offpeak periods, service in an amount not to exceed the purchaser's Contract Demand. During all other hours Hanna shall curtail service to a level not to exceed 15 percent of Contract Demand.

SECTION VI. ADJUSTMENTS AND SPECIAL PROVISIONS

A. Curtailments

BPA shall charge the DSI for curtailments in accordance with the provisions of the DSI's power sales contract. Any curtailment charge levied shall be computed using the Standard Special Industrial Power Rate.

B. Unauthorized Increase Charge

1. Rate for Unauthorized Increase

67.3 mills per kilowatthour.

2. Application of the Charge

During any billing month, BPA may assess the unauthorized increase charge on the number of kilowatthours associated with the DSI Measured Demand in any one 60-minute clock-hour, before adjustment for power factor, that exceed the BPA Operating Level for that clock-hour, regardless of whether such Measured Demand occurs during the Peak or Offpeak Period.

If BPA is providing service to Hanna under the Special Industrial Offpeak Rate, the amount by which Hanna's Measured Demand exceeds 15 percent of its Contract Demand during any hour other than the specified special hours shall be considered unauthorized increase.

C. Power Factor Adjustment

The adjustment for power factor, when specified in this rate schedule or in the power sales contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the GRSPs. The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment for service under the Standard Special Industrial Power Rate, BPA shall increase the billing demand by one percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. For service under the Special Industrial Offpeak Rate, BPA shall increase the billing energy by one percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

D. Outage Credit

Pursuant to section 7 of the General Contract Provisions, BPA shall provide an outage credit to any purchaser for those hours for which BPA is unable to deliver the full billing demand during that billing month due to an outage on the facilities used by BPA to deliver Special Industrial Power. Such credit shall not be provided if BPA is able to serve the purchaser's load through the use of alternative facilities or if the outage is for less than 30 minutes. In addition,

OUTLINE FOR GENERAL RATE SCHEDULE PROVISIONS (Cont.)

		Page
/11.	Variable Industrial Rate Parameters and Adjustments	47
	A. Monthly Average Aluminum Price Determination	47
	1. Calculation of the Monthly Billing Aluminum Price	47
	2. Notification of the Monthly Average Aluminum Price	47
	3. Changes in Aluminum Price Indicators	48
	B. Annual Adjustments to the Lower and Upper Pivot Aluminum Prices	48
	1. Implementation Procedures	48
	2. Annual Adjustment Procedures	48
	a. Annual Adjustment of the Lower Pivot Aluminum Price	48
	b. Annual Adjustment of the Upper Pivot Aluminum Price	48
	3. Cost Escalators	49
	4. Average Historical Aluminum Price	49
	5. Average Historical Lower Pivot Aluminum Price	50
	6. Price Deflator Procedures	50

OUTLINE FOR GENERAL RATE SCHEDULE PROVISIONS (Cont.)

		Page
	d. Application if CRV is Positive e. Application to Irrigation Discount f. Cost Recovery Adjustment Clause Implementation Process 6. Coincidental Billing Adjustment 7. Conservation Surcharge D. Billing-Related Definitions 1. Peak Period 2. Offpeak Period	. 39 . 39 . 40 . 40 . 40
IV.	Other Definitions A. Computed Requirements Purchasers 1. Designation as a Computed Requirements Purchaser 2. Purpose of the Computed Requirements Designation B. Definitions Relating to Nonfirm Energy C. NF Rate Cap 1. Application of the NF Rate Cap 2. Monthly Notification of NF Rate Cap 3. NF Rate Cap Formula 4. Determination of BASC 5. Determination of Decremental Fuel Cost 6. California Gas Price 7. California Petroleum Price 8. Weighting Factors a. Historical Gas Use in California b. Historical Petroleum Use in California D. Determination of SL Floor and Ceiling Rates	. 40 . 40 . 40 . 41 . 41 . 41 . 41 . 42 . 42 . 43 . 43
V.	Application of Rates Under Special Circumstances A. Energy Supplied for Emergency Use B. Construction, Test and Start-up, and Station Service C. Application of Rates During Initial Operation Period- Transitional Service 1. Eligibility for Transitional Service 2. Calculation of the Daily Demand 3. Billing for Transitional Service D. Changes in a DSI's BPA Operating Level E. Restriction of Deliveries	. 44 . 44 . 45 . 45 . 45 . 45
VI.	Billing Information	. 45 . 46 . 46 . 46 . 46 . 46 . 47 . 47 . 47

no credit shall be applied to purchases under the Special Industrial Offpeak Rate. The amount of the credit shall be calculated according to the provisions of section III.C.2 of the GRSPs.

E. Extended Service Provision

The terms of this rate schedule may be extended for a period not to exceed June 30, 1990, in accordance with the Amendatory Agreement effective July 1, 1985, with the Hanna Nickel Smelting Company (Hanna). The Amendatory Agreement contains Hanna's agreement to make certain investments in a wet screening process at its Riddle facility.

SECTION VII. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The SI-87 rate is not based on the cost of resources.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

1708

De COS

SCHEDULE SP-87

SHORT-TERM SURPLUS FIRM POWER RATE

SECTION I. AVAILABILITY

This rate schedule is available for the purchase of Surplus Firm Power for the period ending September 30, 1992, including purchases under the Western Systems Power Pool (WSPP) agreements. BPA is not obligated to make power or energy available under this rate schedule if such power or energy would displace sales under the IP-87, VI-87, PF-87, or NR-87 rate schedules. Schedule SP-87 supersedes schedule SP-85 and associated GRSPs, except in the case of contracts for sales under schedule SP-85 which become effective on or before September 30, 1987. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

A. Contract Rate

1. Demand Charge

- a. For contracts that specify 12 months of service per year, \$51.48 per kilowatt per year of Contract Demand billed monthly at the rate of \$4.29 per kilowatt of Contract Demand occurring during all Peak Period hours in each billing month.
- b. For contracts that specify service for fewer than 12 months per year, the monthly demand charge shall be assessed only for the specified service months at the rate of \$4.29 per kilowatt of Billing Demand occurring during the Peak Period plus:

\$4.29 (12 - specified service months) .25 specified service months

c. No demand charge during Offpeak Period hours

2. Energy Charge

24.3 mills per kilowatthour of Billing Energy.

B. Flexible Rate

Energy charges or demand and energy charges may be specified at a higher or lower average rate as mutually agreed by BPA and the purchaser. In no case shall the rate exceed 100 percent of the fixed and variable unit costs of generation and transmission of BPA's highest cost resource including exchange resources. No resource cost determination is needed for sales at less than or equal to the Contract rate.

C. Intertie Charge

Rates in sections II.A and II.B that equal or exceed the Contract rate shall be increased by the following charges for transactions over the Pacific Northwest-Pacific Southwest Intertie.

- 1. \$.36 per kilowatt per month of billing demand and
- 2. 0.69 mills per kilowatthour of billing energy.

Rates in section II.B having an energy-only charge that equals or exceeds 30.2 mills per kilowatthour shall be increased by 1.4 mills per kilowatthour for transactions over the Pacific Northwest-Pacific Southwest Intertie.

SECTION III. BILLING FACTORS

The billing factors shall be the Measured Demand and Measured Energy, unless otherwise specified in the contract.

SECTION IV. ADJUSTMENTS AND SPECIAL PROVISIONS

Power Factor Adjustment

The adjustment for power factor for BPA customers that are billed for Short-Term Surplus Firm Power on metered amounts, when specified in this rate schedule or in the contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the General Rate Schedule Provisions (GRSPs). The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment, BPA shall increase the billing demand or energy by one percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

OUTLINE FOR GENERAL RATE SCHEDULE PROVISIONS

		Page
1.	Adoption of Revised Rate Schedules and General Rate Schedule	
	Provisions	30 30 30
II.	Types of BPA Service A. Priority Firm Power B. New Resource Firm Power C. Industrial Firm Power D. Special Industrial Power E. Auxiliary Power F. Firm Capacity G. Surplus Firm Power H. Nonfirm Energy I. Reserve Power J. Firm Displacement Power	30 30 30 30 31 31 31 31 31 31
III.	Billing Factors and Billing Adjustments A. Billing Factors for Demand 1. Measured Demand a. Metered Demand b. Scheduled Demand 2. Ratchet Demand 3. Contract Demand 4. Computed Peak Requirement 5. Computed Average Energy Requirement 6. Operating Demand 7. Curtailed Demand 8. Restricted Demand 9. Auxiliary Demand 10. BPA Operating Level B. Billing Factors for Energy	32 32 32 32 32 32 32 32 33 33 33 33 33 3
	1. Measured Energy a. Metered Energy b. Scheduled Energy 2. Computed Energy Maximum 3. Contract Energy C. Billing Adjustments	34 34 34 34 34 34
	 Power Factor Adjustment Outage Credit Low Density Discount Basic LDD Principles Eligibility Criteria Discounts Irrigation Discount Basic Irrigation Discount Principles Qualifying Energy Purchases Initial Reporting Requirements Annual Report Requirements Cost Recovery Adjustment Clause Terms and Conditions Cost Recovery Adjustment Formula Application if CRV is Negative 	34 35 35 36 36 36 36 37 37 37 37 37

SCHEDULE RP-87 RESERVE POWER RATE

SECTION I. AVAILABILITY

This schedule is available for the purchase of power:

- A. in cases where a purchaser's power sales contract states that the rate for Reserve Power shall be applied;
- B. for which BPA determines no other rate schedule is applicable; and
- C. to serve a purchaser's firm power load in circumstances where BPA does not have a power sales contract in force with such purchaser, and BPA determines that this rate should be applied.

This rate schedule may be applied to power purchased by entities outside the United States. This rate schedule supersedes Schedule RP-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

A. Demand Charge

- 1. \$3.64 per kilowatt of billing demand occurring during all Peak Period hours.
- 2. No demand charge during Offpeak Period hours.

B. Energy Charge

25.3 mills per kilowatthour of billing energy.

SECTION III. BILLING FACTORS

The factors to be used in determining the billing for power purchased under this rate schedule are as follows:

A. Billing Demand

If applicable, the billing demand shall be the Contract Demand as specified in the power sales contract. Otherwise the billing demand shall be the Measured Demand as adjusted for power factor.

B. Billing Energy

The billing energy shall be the Contract Demand multiplied by the number of hours in the billing month, if use of the Contract Demand for determining billing energy is specified in the power sales contract. Otherwise the billing energy for such purchasers shall be the Measured Energy.

SECTION IV. POWER FACTOR ADJUSTMENT

The adjustment for power factor, when specified in this rate schedule or in the power sales contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the General Rate Schedule Provisions (GRSPs). The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment, BPA shall increase the billing demand by one percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The RP-87 rate is not based on the cost of resources.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different resource categories to the SP-87 rate is 99.3 percent Exchange and 0.7 percent New Resources.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

SCHEDULE SL-87

LONG-TERM SURPLUS FIRM POWER RATE

SECTION I. AVAILABILITY

This rate schedule is available for the long-term purchase of Surplus Firm Power and Firm Displacement Power under BPA contracts. This rate schedule shall be offered for an amount of purchases not to exceed 1350 MW peak and 725 MW average, less purchases under the SC-86 rate schedule. This rate schedule shall not be available for contracts that obligate BPA to acquire energy resources to support the sale. Schedule SL-87 supersedes schedule FD-85 and associated GRSPs except in the case of contracts for sales under FD-85 that become effective on or before September 30. 1987. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATES

The rate for the long-term purchase of Surplus Firm Power and Firm Displacement Power shall be mutually agreed by the parties, provided that the present value of the forecasted revenue under the contract rate, as projected for the contract term at the date of contract execution, shall be equal to or greater than the forecasted revenue under the Floor projection, specified in subsection A below, and less than or equal to the forecasted revenue under the Ceiling projection, specified in subsection B below.

A. FLOOR PROJECTION

For firm power sales, the Floor projection shall be the greater of BPA's average Priority Firm rate or BPA's opportunity cost of surplus firm power, as projected for each year of the contract term in accordance with section IV.D. of the GRSP's. The average PF rate or successor rate(s) shall be calculated at the load factor of the proposed sale and assume a uniform demand in all months. If there is more than one PF rate, the average shall be determined by a weighting based on forecasted sales in the relevant rate case.

For firm capacity sales, the Floor projection shall be the Priority Firm demand charge, as projected for each year of the contract term in accordance with section IV.D. of the GRSP's.

B. CEILING PROJECTION

The ceiling projection for firm power sales shall be the fully-allocated cost of BPA's highest cost resource including transmission costs, as projected for each year of the contract term in accordance with section IV.D. of the GRSP's. For firm capacity sales, the ceiling projection shall be the demand component of BPA's highest cost resource including transmission costs, as projected.

SECTION III. BILLING FACTORS

The billing factors shall be the Contract Demand and Measured Energy, unless otherwise specified in the contract.

SECTION IV. ADJUSTMENTS AND SPECIAL PROVISIONS

Power Factor Adjustment

The adjustment for power factor for BPA customers that are billed for the long-term purchase of Surplus Firm Power and Firm Displacement Power on metered amounts, when specified in this rate schedule or in the contract, shall be made in accordance with the provisions of both this section and section III.C.1 of the General Rate Schedule Provisions (GRSPs). The adjustment shall be made if the average leading power factor or average lagging power factor at which energy is supplied during the billing month is less than 95 percent.

To make the power factor adjustment, BPA shall increase the billing demand or energy by one percentage point for each percentage point or major fraction thereof (0.5 or greater) by which the average leading power factor or average lagging power factor is below 95 percent. BPA may elect to waive the adjustment for power factor in whole or in part.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The approximate cost contribution of different resource categories to the SL-87 rate is 99.3 percent Exchange and 0.7 percent New Resources.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.

SCHEDULE SS-87 SHARE-THE-SAVINGS RATE

SECTION I. AVAILABILITY

This rate schedule is available for the contract purchase of Nonfirm Energy under an experimental rate and is limited to the term of the rate experiment. Nonfirm Energy will be made available under this rate schedule for use both inside and outside the United States for the displacement of a qualifying resource, displaceable purchase of electricity, or end-user load that can be served with alternate fuel sources. This rate schedule is only available to purchasers who execute a contract with BPA specifying use of the Share-the-Savings Rate. BPA is not obligated to offer Nonfirm Energy to any purchaser that results in displacement of firm power purchases under BPA's Power Sales Contracts. Schedule SS-87 supersedes Schedule SS-85 which went into effect on an interim basis on July 1, 1985. Sales under this schedule are made subject to BPA's General Rate Schedule Provisions.

SECTION II. RATE

The rate shall be a formula rate based solely or in part on decremental cost information submitted by the purchaser. The rate formula and decremental cost, for purposes of establishing charges under this rate schedule, shall be defined in the applicable contract. The rate formula agreed upon by BPA and the purchaser shall in no event result in a rate higher than the NF Rate Cap defined in section IV.C. of the GRSPs or lower than one mill per kilowatthour.

SECTION III. BILLING FACTORS

The billing energy for Nonfirm Energy purchased under this rate schedule shall be the Measured Energy unless otherwise specified in the Share-the-Savings Rate contract.

SECTION IV. APPLICATION AND ELIGIBILITY

A. General Requirements

In order to purchase Nonfirm Energy under the Share-the-Savings Rate, the purchaser must:

- 1. have executed a contract specifying application of the Share-the-Savings Rate Schedule.
- 2. have a displaceable resource, displaceable

purchase of electricity, or be an end-user load with a displaceable alternate fuel source. End-user loads with alternate fuel sources may not use the Decremental Cost of a displaceable purchase of electricity to qualify for this rate.

B. BPA Service Priority

Offers of Nonfirm Energy under this rate schedule shall be made pursuant to the terms and conditions setforth in the Share-the-Savings rate contract. BPA will sell Nonfirm Energy under this rate schedule consistent with regional and public preference.

SECTION V. RESOURCE COST CONTRIBUTION

BPA has made the following determinations:

- A. The SS-87 rate is not based on the cost of BPA resources.
- B. The forecasted average cost of resources available to BPA under average water conditions is 17.7 mills per kilowatthour.
- C. The forecasted cost of resources to meet load growth is 28.7 mills per kilowatthour.