6450-01-P

DEPARTMENT OF ENERGY

Western Area Power Administration

Desert Southwest Customer Service Region Network Integration Transmission and Ancillary Services-Rate Order No. WAPA-84

AGENCY: Western Area Power Administration, DOE.

ACTION: Notice of Rate Order.

SUMMARY: Notice is given of the confirmation and approval by the Secretary of the Department of Energy (DOE) of Rate Order No. WAPA-84 and Rate Schedules DSW-SD1, DSW-RS1, DSW-FR1, DSW-EI1, DSW-SPR1, DSW-SUR1, PD-NTS1, and INT-NTS1 placing into effect provisional formula rates for the Desert Southwest Customer Service Region (DSW) network integration transmission services (NTS) for Parker-Davis Project (P-DP) and Pacific Northwest-Pacific Southwest Intertie Project (Intertie) and ancillary services for the Western Area Lower Colorado (WALC) control area. The provisional formula rates will remain in effect on an interim basis until the Federal Energy Regulatory Commission (FERC) confirms, approves, and places them into effect on a final basis.

DATES: The formula rates will be placed into effect from April 1, 1999, through March 31, 2004.

FOR FURTHER INFORMATION CONTACT: Mr. Maher A. Nasir, Rates Team Lead, telephone (602) 352-2768, or Mr. Tyler Carlson, Regional Manager, telephone (602) 352-2453, Desert Southwest Customer Service Region, Western Area Power Administration, P.O. Box 6457, Phoenix, AZ 85005-6457.

SUPPLEMENTARY INFORMATION: On December 7, 1998, the Administrator of Western Area Power Administration (Western) approved formula rate methodologies for short-term sales of NTS and ancillary services in the Western Area Lower Colorado (WALC) control area of the Desert Southwest Region. The six ancillary services include: scheduling, system control, and dispatch service; reactive supply and voltage control service; regulation and frequency response service; energy imbalance service; spinning reserve service, and supplemental reserve service. The provisional formula rates will replace the formula rates for short-term sales.

Provisional Rate Formula for Network Integration Transmission Service

NTS will be separately provided from P-DP and Intertie. The charge for NTS is the product of the transmission customer's load-ratio share times one-twelfth of the annual transmission revenue requirement. The customer's load-ratio share is calculated on a rolling 12-month basis (12-CP). The customer's load-ratio share is equal to the network transmission customer's hourly load coincident with Western's corresponding transmission system's monthly peak divided by the resultant value of the corresponding transmission system's monthly peak minus the coincident peak for all corresponding firm point-to-point transmission service plus corresponding firm point-to-point reservations.

Provisional Rates for Ancillary Services

Six ancillary services will be offered by DSW for WALC, two of which are required to be purchased by the transmission customer. These two are: (1) scheduling, system control, and dispatch service and (2) reactive supply and voltage control service. The remaining four ancillary services (3) regulation and frequency response service; (4)

energy imbalance service; (5) spinning reserve service; and (6) supplemental reserve service will be offered, but are subject to availability from DSW generation resources. If DSW is unable to provide these services from its own resources, it will provide the services by making market purchases and passing these costs directly to the customer plus a 10 percent administrative charge.

Scheduling, system control, and dispatch service costs are included in transmission service provided by DSW. The scheduling, system control, and dispatch formula rates apply only to non-transmission customers, and depending on the type of service, will vary between \$34.10 and \$56.20 per schedule per day.

Reactive supply and voltage control ancillary service is calculated by dividing the combined revenue requirement for the service by the sum of control area average firm power allocation, network transmission 12-CP and firm transmission reservations, yielding a rate of \$0.07/kWmonth.

Regulation and frequency response service is not available on a long-term basis from DSW. If available for short-term sales, the price will be equal to the firm-capacity rate of the specific power project supplying the service.

An energy imbalance account will be maintained for each customer scheduling energy in the WALC control area at no charge. DSW reserves the right to assess a penalty applied against deviations outside a 3 percent bandwidth (+ 1.5 percent deviations), with a 2 MW deviation minimum. A penalty charge of 100 mills/kWh may be assessed for under-deliveries (negative excursion) greater than 1.5 percent and occurring more than five times per month. Over-deliveries (positive excursion) will be credited to the customer for 50 percent of the market value of the over-delivery within 30 days, provided the over-deliveries do not impinge upon DSW operations.

No reserves of either spinning or supplemental are available from DSW resources.

The formula rates for DSW NTS and ancillary services are developed pursuant to the Department of Energy Organization Act (42 U.S.C. 7101 et seq.), through which the power marketing functions of the Secretary of the Interior and the Bureau of Reclamation under the Reclamation Act of 1902 (43 U.S.C. 371 et seq.), as amended and supplemented by subsequent enactments, particularly section 9(c) of the Reclamation Project Act of 1939 (43 U.S.C. 485h(c)), and other acts specifically applicable to the project involved, were transferred to and vested in the Secretary of Energy.

By Amendment No. 3 to Delegation Order No. 0204-108, published November 10, 1993 (58 FR 59716), the Secretary of Energy delegated (1) the authority to develop long-term power and transmission rates on a nonexclusive basis to the Administrator of Western; (2) the authority to confirm, approve, and place such rates into effect on an interim basis to the Deputy Secretary of Energy; and (3) the authority to confirm, approve, and place into effect on a final basis, to remand, or to disapprove such rates to FERC. By subsequent Order effective April 15, 1999, the Secretary rescinded all delegations of authority to the Deputy Secretary, whether contained in Delegation Orders, Departmental Directives, or elsewhere, concerning the Department's Power Marketing Administrations, including, but not limited to, authority delegated or affirmed in Delegation Order No. 204-108, as amended.

Rate Order No. WAPA-84 was prepared pursuant to Delegation Order No. 0204-108, the Secretarial Order rescinding delegations to the Deputy Secretary concerning the Power Marketing Administrations effective April 15, 1999, existing DOE procedures for public participation in power rate adjustments in 10 CFR part 903, and procedures for approving power marketing administration rates by FERC in 18 CFR part 300. Rate Order No. WAPA-84, confirming, approving, and placing the provisional formula rates for DSW NTS and ancillary services into effect on an interim basis, is issued, and the new Rate Schedules DSW-SD1, DSW-RS1, DSW-FR1, DSW-EI1, DSW-SPR1, DSW-SUR1, PD-NTS1, and INT-NTS1 will be submitted promptly to FERC for confirmation and approval on a final basis.

Dated:		
Bill Richardson		
Secretary		
DEPARTMENT OF ENERGY		
SECRETARY		
n the matter of:)	
Western Area Power Administration)		
Rate Adjustment for the) Rate Order No. WAPA-84	
Desert Southwest Customer Service)		
Region Network Integration)	
Transmission and Ancillary Services)		
ORDER CONFIRMING, APPROVING, AND PLACING THE		
DESERT SOUTHWEST CUSTOMER SERVICE REGION		
NETWORK INTEGRATION TI	RANSMISSION AND ANCILLARY	

SERVICES FORMULA RATES INTO EFFECT ON AN INTERIM BASIS

(April 1, 1999)

The Desert Southwest Customer Service Region (DSW) network integration transmission services (NTS) and ancillary services formula rates are developed pursuant to the Department of Energy (DOE) Organization Act (42 U.S.C. 7101 et seq.), through which the power marketing functions of the Secretary of the Interior and the Bureau of Reclamation under the Reclamation Act of 1902 (43 U.S.C. 371 et seq.), as amended and supplemented by subsequent enactments, particularly section 9(c) of the Reclamation Project Act of 1939 (43 U.S.C. 485h(c)), and other acts specifically applicable to the project involved, were transferred to and vested in the Secretary of Energy (Secretary).

By Amendment No. 3 to Delegation Order No. 0204-108, published November 10, 1993 (58 FR 59716), the Secretary delegated (1) the authority to develop long-term power and transmission rates on a nonexclusive basis to the Administrator of the Western Area Power Administration (Western); (2) the authority to confirm, approve, and place such rates into effect on an interim basis to the Deputy Secretary of Energy; and (3) the authority to confirm, approve, and place into effect on a final basis, to remand, or to disapprove such rates to the Federal Energy Regulatory Commission (FERC). By subsequent Order effective April 15, 1999, the Secretary rescinded all delegations of authority to the Deputy Secretary, whether contained in Delegation Orders, Departmental Directives, or elsewhere, concerning the Department's Power Marketing Administrations, including, but not limited to, authority delegated or affirmed in Delegation Order No. 0204-108, as amended. Existing DOE procedures for public participation in power rate adjustments are found at 10 CFR part 903. Procedures for approving power marketing

administration rates by FERC are found at 18 CFR part 300.

Acronyms and Definitions

As used in this rate order, the following acronyms and definitions apply:

access: The contracted right to use an electrical system to transfer electrical energy.

<u>ancillary services</u>: Those services necessary to support the transmission of capacity and energy from resources to loads while maintaining reliable operation of the transmission provider's transmission system in accordance with FERC Order Nos. 888 and 889 and Western's Tariff.

<u>Basin Fund</u>: Upper Colorado River Basin Fund, established as part of Colorado River Storage Project Act of April 11, 1956, for defraying the costs of operation, maintenance, and replacement of and emergency expenditures for all facilities of the CRSP.

BCP: Boulder Canyon Project.

<u>capacity</u>: The rated continuous load-carrying ability, expressed in megawatts (MW) or megavolt-amperes (MVA), of generation, transmission, or other electrical equipment.

<u>control area</u>: An electric system or systems, bounded by interconnections metering and telemetry, capable of controlling generation to maintain its interchange schedule with other control areas and contributing to frequency regulation of the interconnection.

CRSP: Colorado River Storage Project (includes Seedskadee and Dolores Projects).

<u>CRSP CSC:</u> Western's Colorado River Storage Project Customer Service Center, in Salt Lake City, Utah.

customer: Any entity which receives transmission, or ancillary services under this rate order.

DOE: United States Department of Energy.

<u>demand</u>: The rate at which electric energy is delivered to or by a system or part of a system, generally expressed in kilowatts or megawatts, at a given instant or average over any designated interval of time.

DSW: Desert Southwest Customer Service Region.

<u>energy imbalance service:</u> Is provided when a difference occurs between the scheduled and actual delivery of energy to a load or from a generation resource within a control area over a single month.

FERC: Federal Energy Regulatory Commission.

<u>firm point-to-point transmission service</u>: Transmission service that is reserved between points of receipt and delivery.

FRN: Federal Register notice.

FY: Fiscal Year.

Glen Canyon: One of the storage units of the CRSP.

Intertie: Pacific Northwest-Pacific Southwest Intertie Project.

kW: Kilowatt; 1,000 watts.

kWh: Kilowatt-hour; the common unit of electrical energy, equal to a kW taken for a period of 1 hour.

<u>kWmonth</u>: Kilowatt-month; the common unit of electrical energy, equal to a kW taken for a period of 1 month.

kWyear: Kilowatt-year; the common unit of electrical energy, equal to a kW taken for a period of 1 year.

<u>load:</u> An end-use device or customer that receives power from the electric system.

<u>load-ratio share:</u> Ratio of a transmission customer's network load to the transmission provider's system peak load calculated on a rolling twelve-month basis.

mill: Unit of monetary value equal to .001 of a U.S. dollar; i.e., 1/10th of a cent.

mills/kWh: Mills per kilowatt-hour.

MW: Megawatt; equal to 1,000 kW or 1,000,000 watts.

NEPA: National Environmental Policy Act of 1969.

NTS: Network integration transmission service.

non-firm point-to-point Point-to-point transmission service under the Tariff that transmission service: is scheduled on an as-available basis and is subject to curtailment or interruption.

OASIS: Open Access Same Time Information System.

operating reserve: Spinning reserve service and supplemental reserve service.

P-DP: Parker-Davis Project.

PCF: Public comment forum.

<u>peak:</u> Those hours or other periods defined by contract or other agreements or guides as periods of higher electrical demand.

PIF: Public information forum.

PRS: Power repayment study.

<u>Rate Brochure:</u> A document prepared for public distribution explaining the background and purpose of this rate adjustment proposal.

reactive power: Portion of total power required to produce flux necessary to the operation of electromagnetic

devices (such as, transformers). The unit of measurement is the VAR.

reactive supply and Provides reactive supply through changes to generator voltage control: reactive output to maintain transmission line voltage and facilitate electricity transfers.

Reclamation: U.S. Bureau of Reclamation, Department of the Interior.

regulation and frequency Provides for following the moment-to-moment variations response service: in the demand or supply in a control area and maintaining scheduled interconnection frequency.

RMR: Rocky Mountain Customer Service Region.

SCADA: System Control and Data Acquisition.

<u>schedule:</u> An agreed upon transaction for delivery and receipt of power and energy between the contracting parties and the control area(s) or transmission provider involved in the transaction.

scheduling, system control, and dispatch service: Provides for (a) scheduling; (b) confirming and implementing an interchange schedule with other control areas, including intermediary control areas providing transmission service; and (c) ensuring operational security during the interchange transaction.

SLCA/IP: The Salt Lake City Area/Integrated Projects, which are the CRSP, Collbran, and Rio Grande projects.

spinning reserve service: Providing capacity that is available to serve load immediately in the event of a system contingency. Spinning reserve may be provided by generating units that are on-line and loaded at less than maximum output.

<u>supplemental reserve service</u>: Is needed to serve load in the event of a system contingency. This service is not available immediately to serve load but rather within a short period of time.

system: An interconnected combination of generation, transmission, and distribution components.

Tariff: Open Access Transmission Service Tariff.

<u>transmission:</u> The movement or transfer of electric energy between points of supply and points at which it is transformed for delivery to customers or is delivered to other electric systems.

<u>transmission customer</u>: An eligible customer (or its designated agent) that can or does execute a transmission service agreement or can or does receive transmission service.

<u>transmission provider</u>: Any public utility that owns, operates, or controls facilities used for the transmission of electric energy in interstate commerce.

transmission service: Point-to-point transmission service provided on a firm or non-firm basis.

<u>transmission system:</u> The facilities owned, controlled, or operated by the transmission provider that are used to provide transmission service.

WALC: Western Area Lower Colorado control area.

WACM: Western Area Colorado Missouri control area.

Effective Date

The formula rates will become effective on the first day of the billing period on or after April 1, 1999, and remain in effect until March 31, 2004, pending FERC's approval of them or substitute rates or until superseded. These formula rates will be applied to transmission service agreements under the Tariff and conform with the spirit and intent of FERC Order No. 888.

Public Notice and Comments

The following summarizes the steps taken by DSW to ensure the involvement of interested parties in the rate process:

- 1. During 1997 and the spring of 1998, DSW hosted a series of meetings presenting alternatives for ancillary services and taking comments from those who attended.
- 2. A Federal Register notice was published on June 19, 1998 (63 FR 118), officially announcing the proposed NTS and ancillary services rates adjustment, initiating the public consultation and comment period, announcing the public information and public comment forums, and outlining procedures for public participation.
- 3. On June 16, 1998, DSW mailed a copy of the "Parker-Davis Project, Boulder Canyon Project, Pacific Northwest-Pacific Southwest Intertie Project Transmission and Ancillary Services Rate Adjustment Brochure" to all firm transmission and power customers and interested parties of those projects and to the Salt Lake City Area/ Integrated Projects (SLCA/IP) firm power, and Colorado River Storage Project (CRSP) transmission customers who receive services from DSW's control area.
- 4. On June 30, 1998, DSW held a public information forum (PIF) in which the information contained in the Brochure was explained. After the presentation, participants questioned DSW personnel on the particulars of the proposed rates.
- 5. On July 30, 1998, DSW held a public comment forum (PCF). Participants gave statements of their concerns on the proposed rates.
- 6. On August 28, 1998, DSW sent a letter to all participants in the PCF and PIF answering any questions which were not answered in the PIF.
- 7. The consultation and comment period ended on September 18, 1998.

Project Description

Western is a Federal power marketing administration. It was created in 1977 by section 302(a)(1)(E) and (F) of the Department of Energy Organization Act 42 U.S.C. 7152, to perform the power marketing and transmission functions previously performed by the Bureau of Reclamation (Reclamation) for the Secretary of the Interior. DSW markets approximately 2,243 MW of generation capacity from its two power projects--P-DP and BCP. DSW serves firm electric and transmission

customers in a three-State area, over a transmission system of approximately 2,097 miles and 74 substations.

Parker-Davis Project

In 1954, the Parker Dam Project and the Davis Dam Project were consolidated to form the Parker-Davis Project (P-DP). The major works include Davis Dam and Powerplant, Parker Dam and Powerplant, a high-voltage transmission system, and substations which sectionalize the long transmission lines.

Lake Havasu, formed by Parker Dam, provides a forebay and desilting basin from which the Metropolitan Water District pumps water into its Colorado River Aqueduct. Parker Dam Powerplant was added to provide low-cost electrical energy to Arizona and southern California. Davis Dam provides re-regulation of the Colorado River below Hoover Dam and facilitates water delivery beyond the boundary of the United States as required by treaty with Mexico. The Davis Dam portion of the project also provides for production and transmission of electrical energy, contributes to flood control, irrigation and municipal water supplies, navigation improvement, recreation, and wild waterfowl protection and related conservation purposes.

The firm point-to-point transmission service rate for P-DP calculated under rate schedule PD-FT6 is \$12.99/kWyear. The non-firm point-to-point transmission service rate for P-DP calculated under rate schedule PD-NFT6 is 2.47 mills/kWh.

Boulder Canyon Project

Authorized by the Act of December 21, 1928 (45 Stat. 1057), subject to the terms of the Colorado River Compact, the Boulder Canyon Project (BCP) was conceived for the regulation of the Colorado River to relieve the constantly recurring cycles of flood and drought for the residences of the Southwest. Hoover Dam facilities include a 1,344,800-kilowatt powerplant. The dam and high-voltage switchyards are located in the Black Canyon of the Colorado River, on the Arizona-Nevada State line. Lake Mead, the reservoir behind Hoover Dam, will hold the entire flow of the river for 2 years. This storage, in addition to providing for improvement of navigation, river regulation, and flood control, provides for the delivery of stored water for irrigation and other beneficial consumptive uses, and for the generation of electrical energy.

Pacific Northwest-Pacific Southwest Intertie Project

The Pacific Northwest-Pacific Southwest Intertie Project (Intertie) was authorized as part of a much larger alternating current and direct current combined transmission system, by Section 8 of the Act of August 31, 1964, 16 U.S.C. 837g. The basic purpose of the combined transmission system was to provide, through power transmission system interconnections, maximum use of the total power resources to meet the Nation's growing demands. This purpose was to be accomplished through: (1) the exchange of summer-winter surplus peaking capacity between the northwest and southwest to reduce capital expenditures for new generating capacity, (2) the sale of northwest secondary energy to the southwest, (3) the sale of southwest energy to the northwest to "firm" peaking hydroelectric sources during critical water years, (4) conservation of significant amounts of fuel through the use of surplus hydroelectric energy, and (5) increased efficiency in the operation of hydroelectric and thermal resources.

The Intertie facilities extend from Mead Substation in southern Nevada near Boulder City and Hoover Dam, southeast through Arizona, to the Phoenix area. The major features of the system are the Mead and Liberty Substations, a 260-mile Mead-Phoenix 500-kV AC Transmission Line from the Marketplace Substation to Perkins Substation, a 238-mile Mead-Liberty 345-kV Transmission Line, a 31-mile Liberty-Westwing 230-kV Transmission Line, and the 22-mile Westwing-Pinnacle Peak 230-kV Transmission Line.

The firm point-to-point transmission service rate for the Intertie calculated under rate schedule INT-FT2 is \$6.58/kWyear for service on the 230/345-kV transmission system and \$17.23/kWyear for service on the 500-kV transmission system. The non-firm point-to-point transmission service rate for the Intertie calculated under rate

schedule INT-NFT2 is 2.00 mills/kWh.

Discussion

Control Area Consolidation

On April 1, 1998, the Western Area Upper Colorado control area, within which SLCA/IP generation and most of the CRSP transmission system lies, was divided between with two other control areas, the Western Area Colorado Missouri (WACM) operated by Western's Rocky Mountain Customer Service Region (RMR), and the Western Area Lower Colorado (WALC), operated by DSW. SLCA/IP generation is consolidated by the DSW operations, and the transmission lines were divided at Four Corners Substation.

Network Integration Transmission Service

DSW will offer NTS to all eligible transmission customers. NTS is subject to availability. NTS will be offered separately for P-DP and Intertie. Annual power repayment studies (PRS), prepared separately for P-DP and Intertie, are used to derive the annual transmission revenue requirement for NTS. Annual transmission costs used to determine this revenue requirement are operation and maintenance expense, administrative and general expense, principal expense, and interest expense.

The monthly charge for NTS is the product of the transmission customer's load-ratio share times one-twelfth of the annual transmission revenue requirement. The customer's load-ratio share is calculated on a rolling twelve-month basis (12-CP). As outlined in DSW's rate adjustment brochure, the customer's load-ratio share is equal to the network transmission customer's hourly load coincident with the corresponding transmission system's monthly peak hour divided by the resultant value of the corresponding transmission system's monthly peak minus the monthly coincident peak for all corresponding firm point-to-point transmission service plus corresponding firm point-to-point reservations. In order to ensure the collection of the transmission systems' annual revenue requirement, the difference between the first two components of the resultant value outlined above constitutes the network transmission systems' monthly peak and is anticipated to be metered. Thus, an NTS customer, based on its 12-CP load, will pay its proportionate share of the revenue requirement for the month. Since DSW's point-to-point transmission customers are charged on a reservation and not a usage basis, for the purposes of determining the NTS charge, the transmission systems' monthly peak will coincide with the network transmission systems' monthly peak.

Based on updated financial and load data a recalculated revenue requirement will go into effect on October 1 of each year during the effective rate schedule period.

Ancillary Services

DSW has marketed the maximum practical amount of power from each of its projects, leaving little or no flexibility for provision of additional electric services from the projects. Changes in water conditions frequently affect the ability of hydroelectric projects to meet obligations on a short-term basis. The unique characteristics of the hydro resource, Western's marketing plans, and the limitations of the resource due to changing water conditions limit Western's ability to provide generation-related services, including ancillary services using Federal hydro resources.

Six ancillary services will be offered by DSW, two of which are required to be purchased by the transmission customer. These two are: (1) scheduling, system control, and dispatch service and (2) reactive supply and voltage control services. The remaining four ancillary services (3) regulation and frequency response service; (4) energy imbalance service; (5) spinning reserve service; and (6) supplemental reserve service--will be offered but are subject to availability from DSW generation resources. If DSW is unable to provide these services from its own resources, it will provide the services by making market purchases and passing these costs directly to the customer plus a 10

percent administrative charge.

The provisional formula rates for ancillary services are designed to recover only the costs incurred for providing the service(s). The rates for ancillary services are based on WALC control area costs. The formula rates will be recalculated every year, effective October 1, based on the approved formula and updated financial and load data. DSW will provide customer notice of changes in rates no later than September 1 of each year.

The six ancillary services are as follows:

Scheduling, System Control, and Dispatch Service

Scheduling, system control, and dispatch costs are included in the existing firm point-to-point transmission, firm power, and provisional network integration transmission service rates. The provisional scheduling, system control, and dispatch rate formulas apply only to non-transmission customers.

The formula rates for scheduling, system control, and dispatch are based on an annual cost of all capital costs (such as the dispatch center building) and labor costs associated with the service. The ancillary service is charged on a per schedule basis shown on Table 1 (below).

The cost per schedule per day was determined by multiplying the labor cost per minute, times the average number of minutes it takes to accomplish each type of schedule and adding the associated capital cost amortized over 32 years divided by the average number of schedules in a year. DSW will allow up to five schedule changes per transaction per day at no additional charge. The sixth schedule change will be charged as a new schedule.

The rates charged for scheduling, system control, and dispatch ancillary service are contingent on the type of service required (i.e., new versus existing schedule, SCADA versus no SCADA programming, and intra-bus transfer versus no intra-bus transfer).

The rates are shown in the table below.

Table 1

Schedule Type	Maximum Cost (\$) Per Schedule Per Day
Existing schedule, requires no SCADA	
programming or intra-bus transfer 1	34.10
New schedule, requires SCADA	
programming, no intra-bus transfer	37.50
Existing schedule, requires no SCADA	
programming, requires intra-bus transfer	46.85
New schedule, requires SCADA	
programming, and intra-bus transfer	56.20

1 Multiple exchange of ownership in an interchange schedule is known as intra-bus transfer schedule.

Reactive Supply and Voltage Control Service From Generation Sources

The transmission provider must offer this service to the transmission customer for each transaction on the transmission provider's transmission facilities. The transmission customer must purchase this service from the transmission provider or the control area operator. The rate for reactive supply and voltage control ancillary service is calculated by dividing the combined revenue requirement for the service of P-DP, BCP, and SLCA/IP, by the sum of the control area's average firm-power allocation transmission reservations, network transmission (12-CP) and average firm transmission reservations, yielding a rate of \$0.07/kWmonth. Revenues from this service will be allocated to each project based on a relationship to reactive power produced.

The rate presented at the PIF was \$.08/kWmonth. The difference in the two rates is due to the addition of the Intertie transmission reservations, which had been inadvertently excluded, to the denominator of the equation.

Regulation and Frequency Response Service

The transmission provider must offer this service when the transmission service is used to serve load within its control area. The transmission customer must either purchase this service from the transmission provider or make alternative comparable arrangements to satisfy its regulation and frequency response service (Regulation) obligation. Regulation is not available from DSW resources on a long-term firm basis.

Initially, DSW proposed a single control area charge. However, based on comments received and further analysis, DSW has determined, if available, it will charge the firm-capacity rate of the project providing the regulation. The effective firm-capacity rate for BCP is found under rate schedule BCP-F5. The effective firm-capacity rate for P-DP is found under rate schedule PD-F6. The effective firm-capacity rate for SLCA/IP is found under rate schedule SP-FR1. If unavailable, DSW, upon request, will obtain the service on the open market for the customer and pass through the cost of the service, plus a 10 percent administrative charge.

Energy Imbalance Service

An energy imbalance account will be maintained for each customer scheduling energy in the WALC control area. There will be no charge for maintaining an energy imbalance account. The transmission provider must offer this service when the transmission service is used to serve load within its control area. The transmission customer must either request this service from the transmission provider or make alternative comparable arrangements to satisfy its energy imbalance service obligation. DSW established guidelines for energy imbalance service as deviations outside a 3 percent bandwidth (+ 1.5 percent hourly deviations), with a 2 MW deviation minimum. These guidelines are consistent with FERC for this service. DSW reserves the right to assess a penalty applied against under-delivery (negative excursion) greater than 1.5 percent and occurring more than five times per month may be assessed a penalty charge of 100 mills/kWh; e.g., the sixth time an under-delivery occurs within a month, the 100 mills/kWh charge will be applied.

Any over-delivery (positive excursion) will be credited to the customer for 50 percent of the market value of the over-delivery within 30 days, provided the over-deliveries do not impinge upon DSW operations. Deviation accounting will be completed monthly on an hour-to-hour basis. The market value determinant will be the average monthly nonfirm price from DSW merchants operating within the WALC control area.

Operating Reserves - Spinning Reserve Service

Spinning reserves are unavailable from WALC resources. DSW, upon request, will obtain reserves on the open

market for the customer and pass through the cost of those reserves, plus a 10 percent administrative charge. Transmission customers will be responsible for the transmission service to get these reserves to their destination.

Operating Reserves - Supplemental Reserve Service

Supplemental reserves are unavailable from WALC resources. DSW, upon request, will obtain reserves on the open market for the customer and pass through the cost of those reserves, plus a 10 percent administrative charge. Transmission customers will be responsible for the transmission service to get these reserves to their destination.

Existing and Provisional Rates

This rate order seeks to place DSW's first NTS formula rates and ancillary service formula rates for long-term sales, and as such, no existing rates for comparative purposes can be displayed. The following table is a summary of the formula rates for NTS and ancillary services and rates for April 1, 1999, to September 30, 1999, based on these formulas:

Table 2

	Table 2	
Service Type 1999,	Service Description	Formula Rate with Rate for April 1, to September 30, 1999
Scheduling, System Control, rates.	Required to schedule the	Included in appropriate transmission
and Dispatch per	movement of power through,	For non-transmission customers, rate
for	out of, within, or into a control area.	schedule per day is between \$34.10
with		existing schedule and \$56.20 for new
		intra-bus schedule and SCADA
		programming.
Reactive Supply and Voltage	Reactive power support provided	\$0.07/kWmonth. Combined revenue
Control firm	from generation facilities that is	requirement for service/WALC average
	necessary to maintain transmission	transmission reservations, (includes
	voltages within acceptable system	electric service reservations and network
	limits.	reservations).

Regulation and Frequency Response Necessary for providing generation to match resources and loads on a real-time continuous basis. Rate will be applied to resources reserved for this service. Not available from DSW resources. If

available on short-term it will be priced at the capacity rate of the project supplying the service. If not available, the service will be purchased on the open market and the cost passed to the customer plus a 10 percent administrative charge.

Energy Imbalance Provided when a difference occurs between the scheduled and the actual delivery of energy to a load located within a control area over a single hour. No charge for maintaining an energy imbalance account. Under-deliveries outside a 3 percent bandwidth with a 2 MW deviation minimum may be assessed a penalty. Over-deliveries may be credited 50 percent of market within 30 days.

Spinning Reserve Needed to serve load immediately in the event of a system contingency. Not available from DSW resources. If requested, DSW will obtain on the open market and pass on cost plus a 10 percent administrative charge.

Supplemental Reserve Needed to serve load immediately in the event of a system contingency; however, it is not available immediately to serve load but, rather within a short period of time. Not available from DSW resources. If requested DSW will obtain on the open market and pass on cost plus a 10 percent administrative charge.

Network Integration Transmission Service Transmission service based on customer's load-ratio share. Revenue Requirement/12 x customer's load-ratio share.

P-DP = \$23,001,589.

Intertie = \$21,943,150.

Certification of Rates

Western's Administrator has certified that the DSW NTS and ancillary services formula rates placed into effect on an interim basis herein are the lowest possible consistent with sound business principles. The formula rates have been developed in accordance with agency administrative policies and applicable laws.

Comments

During the public consultation and comment period, Western received 19 written comments on the rate adjustment. In addition, customer representatives from 10 organizations asked questions during the June 30, 1998, PIF or commented during the July 30, 1998, PCF. All comments received during the consultation and comment period were reviewed and considered in preparing this rate order.

Representatives from the following organizations made oral comments during either the PIF or the PCF:

Arizona Electric Power Cooperative, Arizona

Arizona Power Authority, Arizona

Arizona Public Service Company, Arizona

Colorado River Energy Distributors Association, Arizona

Irrigation & Electrical District Association of Arizona, and others

K.R. Saline & Associates, Arizona

Metropolitan Water District, Arizona

Meyer, Hendricks, Phoenix, Arizona

Resource Management International, Phoenix, Arizona

Wellton-Mohawk Irrigation and Drainage District, Arizona

Representatives from the following organizations submitted written comments:

Aguila Irrigation District, Arizona

Arizona Electric Power Cooperative, Arizona

Arizona Power Authority, Arizona

Arizona Public Service Company, Arizona

Buckeye Water Conservation & Drainage District, Arizona

Colorado River Commission, Nevada

Colorado River Energy Distributors Association, Arizona

Electrical District No. 2, Pinal County, Arizona

Electrical District No. 3, Maricopa County, Arizona

Electrical District No. 4, Pinal County, Arizona

Electrical District No. 6, Pinal County, Arizona

Electrical District No. 8, Maricopa County, Arizona

Harquahala Valley Power District, Arizona

Irrigation & Electrical District Association of Arizona, and others

Maricopa Water District, Arizona

McMullen Valley Water Conservation & Drainage District, Arizona

Metropolitan Water District of Southern California, California

Roosevelt Irrigation District, Arizona

Salt River Project, Arizona

San Tan Irrigation District, Arizona

City of Stafford, Arizona

The following comments were received during the public comment period. DSW paraphrased and combined comments when it did not affect the meaning. Several comments are outside the scope of this rate order. In response to these comments, DSW has either indicated the proper forum for the comment or generalized DSW policy for clarification. DSW's response follows each comment.

Network Integration Transmission Service

Comment: Several commentors want to know the level of NTS that Western expects to have available in P-DP and Intertie, and if Western has received any requests for that service. A commentor stated that Western should offer NTS.

Response: At the time this rate order was published, DSW had not received any requests for NTS and no studies have been done to determine availability of NTS for any customers.

Comment: A commentor expressed concern about the effect NTS will have on dispatch of SLCA/IP, P-DP, and BCP generation resources (e.g., redispatch obligation during a transmission constraint). A commentor requests explanation of the process to be undertaken when assessing NTS, and is concerned whether or not Western will consider potential legal, environmental, and operational issues related to providing NTS as part of the impact study prepared for requests for NTS. A commentor questions if the process to assess NTS is in a descriptive form and can it be accessed through the OASIS.

Response: This question is outside the scope of this rate order process because it does not speak to the pricing of the service. Redispatch is discussed in section III of the Tariff. Requests for NTS will be evaluated on a case-by-case basis. The process for this evaluation is discussed in the Tariff, which is available by hot links in the OASIS. Furthermore, Western will evaluate its ability to provide NTS under section 32 of the Tariff and will continue to meet its firm contractual obligations. Western will not enter into any agreements which cause it to operate outside its operational, legal, and environmental parameters.

Comment: A commentor wants clarification of how Western will allocate the cost of a load across two systems when the delivery is from a receipt point to a delivery point for a customer taking NTS.

Response: Each project is treated as a separate transmission system. A customer requesting NTS from two different transmission systems, would have to make separate requests for this service from the respective transmission system's provider, and each transmission system would have to be evaluated for its capability to provide network service. If both transmission systems have the availability to provide NTS, then the transmission customer would have to pay for the network service on each of the transmission systems. DSW's NTS formula rates for the P-DP and Intertie transmission systems are the same, but the variable values for annual revenue requirement and loads are unique for each project. Therefore, a transmission customer receiving NTS on both the P-DP and Intertie transmission systems would receive monthly charges from each project based on the resultant formula calculation for each individual project.

Ancillary Services

Scheduling, System Control, and Dispatch

Comment: A commentor stated that the rate for scheduling, system control, and dispatch service is too high.

Response: Scheduling, system control, and dispatch service costs are included in all types of transmission service

provided by DSW. The formula rate presented in this rate order uses an incremental cost approach and is applicable to non-transmission customers.

Comment: A commentor believes that using a per schedule instead of a rate based on megawatts discriminates against small customers and is not comparable to what DSW is charging under its bundled services to its statutory service customers since firm customers are charged on a per kilowatt basis.

Response: DSW's methodology for developing a rate for scheduling, system control, and dispatch service applies incremental cost recovery for services supplied to non-transmission customers. It allows DSW to differentiate between requests that require no programming or intra-bus transfers from those that do. Ultimately, DSW's intent is to recover the costs for providing the service. This intent is consistent with what DSW charges under its bundled services.

Reactive Supply and Voltage Control

Comment: A commentor does not know how Western will determine power factor for customers passing through the system as opposed to serving loads within the control area.

Response: This comment is outside the scope of this rate order process. However, the power factor may be measured at the customer's demarcation points to the WALC control area provided that they can be discretely identified.

Regulation

Comment: A commentor wants to know how and under what conditions does Western expect to have regulation service available to offer on a long-term and short-term basis.

Response: This question is outside the scope of the rate order. DSW has stated in this rate order that it does not expect to have regulation available for sale from its project generation on a long-term basis. However, there may be short-term, hourly regulation available which would be priced at the firm-capacity rate of the project providing the service.

Comment: A commentor wants clarification on how Western plans to price regulation provided by SLCA/IP resources (CRSP CSC rate or DSW rate) and to credit revenues to SLCA/IP resources for regulation provided (CRSP CSC rate or DSW rate).

Response: This comment is addressed in the CRSP CRC rate process. Initially, DSW proposed single control area rate which included SLCA/IP, P-DP, and BCP generation costs. Since that time, DSW has determined it will apply the firm-capacity rate of the generation project providing the regulation service. If unavailable, DSW, upon request, will purchase this service from the market, plus a 10 percent administrative charge.

As approved by FERC at 84 FERC 61 ¶ 039 in the CRSP CSC rate process, the price for regulation will be determined under the SP-FR1 rate schedule. The rate schedule provides for CRSP CSC to "...obtain regulation on the open market for the customer and pass through the costs, plus a 10 percent administrative charge, if unavailable from SLCA/IP resources. If available for sale, the SLCA/IP firm-power capacity rate, currently in effect, will be charged."

If a transmission customer purchases this service from SLCA/IP generation, those revenues will go directly to the Basin Fund.

Comment: A commentor expressed a preference for regulation revenue being allocated to the unit (or at least the

project) that supplies the service rather than having an allocation based on the installed capacity. A commentor gave an example that if Hoover is providing the regulation, revenue should be credited toward the Hoover project. Another commentor requests that Western consider allocating the revenues assigned to DSW on the same basis as they are allocated between DSW and CRSP CSC, that is, based on the capacity used to provide the service.

Response: Western considered these comments and agrees. Western has changed the basis for the regulation service charge. The regulation service rate will be equal to the capacity charge for the project which supplies the service and revenues will be credited to that project.

Energy Imbalance

Comment: A commentor expressed concern that it may be risky for Western to allow up to five "free" energy imbalance deviations based on deviation during the most costly hours of the month.

Response: DSW has included in its energy imbalance compensation methodology a provision which allows the transmission customer to exceed the 1.5 percent bandwidth "five times" per month without penalty. DSW included this provision in its proposed methodology because it believes it is fair and reasonable. If DSW determines that exceeding the bandwidth more than "five times" without penalty is not reasonable, it may revise its rate schedule to include a more appropriate penalty. However, given that five times results in 5 hours out of an average of 730 hours in a month, DSW does not believe this is unreasonable and would not result in a significant risk.

Comment: A commentor suggests Western's assessment for under-delivery should be based on the greater of 100 mills/kWh or the real-time cost of dealing with the imbalance and requests that DSW consider imposing a penalty upon entities which continually under-deliver their schedule, even if they remain within the proposed 1.5 percent allowance.

Response: DSW believes 100 mills/kWh is adequate to cover costs. The energy will be returned in addition to the penalty, if DSW determines it should be assessed. Within normal operations, it is reasonable to expect some amount of under-delivery throughout a month.

Spinning and Supplemental Reserves

Comment: A commentor wants to know if Western intends to provide short-term spinning and supplemental reserve services. If so, at what rate?

Response: DSW does not expect to have short-term spinning and supplemental reserve services. DSW will offer to purchase this service for a transmission customer, and pass through the cost, plus a 10 percent administrative charge.

Comment: A commentor requested clarification that Western would obtain reserves only upon the request of specific customers and that those costs would be borne entirely by the requesting customers.

Response: This is correct. The costs to the requesting customer will also include a 10 percent administrative charge.

General

Comment: A commentor wants to know how Western will determine what excess ancillary services are available for the market.

Response: This comment is outside the scope of this rate process. The method for determining excess ancillary services will be determined in the implementation process.

Comment: Several commentors questioned Western's ability to account for and properly allocate across the DSW projects the costs incurred in providing ancillary services.

Response: DSW believes it has allocated costs appropriately among all projects. Costs are in the rates expressed as the revenue requirement. The method for accounting for the costs was developed in an informal work group.

Comment: A commentor suggests that the rate order should document Western's limited ability to provide NTS and ancillary services and recommends adoption of language previously stated by CRSP CSC.

Response: Western recognizes its limited ability to provide generation-related services from all its projects, as reflected in its Tariff which states, "Western has marketed the maximum practical amount of power from each of its projects, leaving little or no flexibility for provision of additional power services."

DSW recognizes the fact that it has limited ability to provide NTS and ancillary services and has stated this fact in this rate order. For those ancillary services that DSW is unable to provide from its own resources, DSW, upon customer request, will purchase the service and pass through the costs to the customer plus a 10 percent administrative charge.

Comment: A commentor stated Western does not have any services available because of its legal and statutory obligations. Several commentors questioned Western's ability to provide these services without contracting away resources which contractually belong to its statutory customers.

Response: As stated in Western's Tariff, Western is, at the request of the Secretary of DOE, undertaking to comply with the principles of FERC Order Nos. 888 and 889 to the extent consistent with applicable law, and accordingly will provide NTS and ancillary services to the extent it has the capability to do so. As stated in the Tariff, "Nothing in this tariff shall alter, amend, or abridge the statutory or contractual obligations of Western to market and deliver Federal power resources and to repay the Federal investment in such projects."

Comment: A commentor wants to know what role the current customers will have when applications for services are entertained. A commentor suggests Western adopt specific processes which would include something like notification of current customers so they can protect their interests by some monitoring function. A commentor requests that Western consider ways to best use existing customer processes.

Response: These questions are outside the scope of this rate order. However, DSW will not implement a new process for customer input on individual requests for firm or non-firm transmission. DSW believes that existing processes (such as Joint Planning) are still the best mechanisms for continuing customer communication.

Comment: A commentor requests Western maintain a record of transactions to identify how the ancillary services are identified and provided, and how the revenues and costs are allocated. A commentor requests clarification on how Western plans to track the services provided by each office and allocate the revenues appropriately. Some recommendations made were that Western adopt a process which documents provider, cost, recipient, and revenue flow, and that there be a record that clearly identifies the flow of these revenues into the Basin Fund. Several commentors questioned Western's ability to properly allocate any revenues that may be received from ancillary service sales.

Response: The comments are outside the scope of this rate order. However, Western has the ability and knowledge to properly allocate any revenues received from the sale of ancillary services to the appropriate project account. For each transaction, Western's financial records will indicate the entity that received the service, the type of service provided, the amount of revenues received, and which fund received the revenues. Western has established a separate code for each transmission and ancillary service. The flow of funds into the Basin Fund will be clearly

identified in Western's financial records.

Comment: A commentor requests that Western's OASIS postings and operating procedures reflect the nature of the availability of services.

Response: This request is outside the scope of this rate order. However, the Tariff outlines Western's limited ability to provide generation-related services, and the Tariff is the governing document under which all OASIS transactions will be conducted.

Comment: Several commentors questioned what policies, procedures, or guidelines has Western developed to ensure that if these additional services are marketed and provided that they will have no adverse operational or financial effect on CRSP CSC customers.

Response: This comment is outside the scope of this rate order. DSW does not anticipate having a substantial amount of ancillary service sales from its Federal generation. Because Western recognizes this fact, and is committed to its statutory obligations, Western has included in its Tariff provisions for purchases from other sources to satisfy requests for specific ancillary services.

DSW will continue to operate in the same manner as it has in the past. That is, it will continue to meet its firm-power obligations and its firm-transmission obligations, all within allowable operational constraints. DSW will continue to review individual requests taking these factors into consideration. Western will also continue to not make any sales of generation-related services from the Federal generators if it does not have the capability to do so.

Western will identify and track services provided by SLCA/IP and ensure that SLCA/IP is being compensated for those services appropriately.

Comment: A commentor wants to know the revenue potential and overhead incurred if Western segregates the merchant function.

Response: This comment is outside the scope of the rate order because, the rate proposal does not include merchant function costs. It is unknown at this time what costs may be incurred for overhead or what revenue potential exists if Western should separate the function.

Comment: A commentor observed that many questions and comments at both the PIF and PCF were about the marketing of services, and not the pricing. A commentor requests Western address the questions related to marketing and marketing activities. A commentor recognizes that many of the questions will not be answered in final decision on rates.

Response: Western agrees that many comments are outside the subject of this rate order but DSW has, when possible, addressed those questions and comments which relate to the marketing of NTS and ancillary services. Those questions or comments which were not addressed will be resolved as Western implements its Tariff, within the limits of its marketing plan.

Comment: A commentor noted that the revenue stream from NTS and ancillary services seem to apply to a revenue requirement which is already being covered by existing DSW customers and appears to be profit.

Response: For the immediate future, these revenue streams were not included in the rate study projections. However at the end of each year, money from NTS and ancillary services will be included as "other revenue" in the PRS, thus offsetting the revenue requirement.

Comment: A commentor requests that DSW take into consideration the importance of looking at current commitments, and statutory obligations under existing arrangements to understand Western's ability to provide the proposed services.

Response: This rate order presents a methodology for determining rates for each service if it were to be sold. As part of implementing Western's Tariff, it will be determined if resources exist to supply any individual request. All requests will be looked at thoroughly to determine viability in a manner not detrimental to present commitments.

Comment: A commentor questions Western's ability to provide NTS since Western would have to integrate loads and other generators into its control area, causing a change in the operation of its generators. A commentor asserts that integration would result in the violation of a generation project's environmental assessment and marketing plan, and that a change in the operations has not been studied in any of Western's marketing plans. As a result, the commentor requests Western state clearly in its documentation that it cannot provide NTS or ancillary services. A commentor expressed similar concerns. A commentor is concerned about any additional marketing by Western of generation-related services because of the potential increase and magnitude of violations of operating criteria established for Glen Canyon Dam. A commentor is concerned that Western has some unique obligations and legal requirements, particularly related to operations at Glen Canyon Dam, that the commentor wants to ensure are not impinged upon.

Response: Western has committed to providing NTS, to the extent it has the capability to do so. When an application for NTS is received by Western, Western must evaluate its ability to provide the service considering existing contractual firm obligations.

The CRSP CSC, in its Notice of Rate Order, stated, "Western has allocated most of its SLCA/IP power resources to preference entities under long-term commitments. Western will determine if any of its SLCA/IP resources are available to provide the ancillary service requested at the time of the request. If Western does not have the resources available from the SLCA/IP, the CRSP CSC will offer to purchase the resource from the open market or from a control area operator, and pass the cost through to the customer." Since Glen Canyon Dam is a large component of SLCA/IP, no additional sales of generation-related services will be made from Glen Canyon Dam if the resources are not available.

Operational constraints at Glen Canyon Dam will not be violated to provide sales of ancillary or transmission services. DSW and Reclamation ensure that operational constraints are adhered to and when resources are required beyond the operational capability of those facilities, purchases of supplemental resources are made by Western. In recognition of the resource limitations and restrictions of the generation facilities, Western included a provision in its Tariff, that provides

Western the option to purchase ancillary services and pass through the cost to the transmission customer.

Regulatory Flexibility Analysis

The Regulatory Flexibility Act of 1980 (5 U.S.C. 601 et seq.) requires Federal agencies to perform a regulatory flexibility analysis if a proposed rule is likely to have a significant economic impact on a substantial number of small entities and there is a legal requirement to issue a general notice of proposed rulemaking. Western has determined that this action does not require a regulatory flexibility analysis since it is a rulemaking of particular applicability involving rates or services applicable to public property.

Environmental Compliance

In compliance with the National Environmental Policy Act of 1969, 42 U.S.C. 4321, et seq.; Council On

Environmental Quality Regulations, 40 CFR parts 1500-1508; and DOE NEPA Regulations, 10 CFR part 1021, Western has determined that this action is categorically excluded from the preparation of an environmental assessment or of an environmental impact statement.

Determination Under Executive Order 12866

Western has an exemption from centralized regulatory review under Executive Order 12866; accordingly, no clearance of this notice by the Office of Management and Budget is required.

Submission to Federal Energy Regulatory Commission

The formula rates herein confirmed, approved, and placed into effect on an interim basis, together with supporting documents, will be submitted to FERC for confirmation and approval on a final basis.

ORDER

In view of the foregoing and pursuant to the authority vested in me as the Secretary of Energy, I confirm, approve, and place into effect on an interim basis, effective April 1, 1999, formula rates for transmission and ancillary services under Rate Schedules DSW-SD1, DSW-RS1, DSW-FR1, DSW-EI1, DSW-SPR1, DSW-SUR1, PD-NTS1, and INT-NTS1. The rate schedules shall remain in effect on an interim basis, pending FERC confirmation and approval of them or substitute formula rates on a final basis through March 31, 2004.

Dated:

Bill Richardson

Secretary Rate Schedule DSW-SD1

SCHEDULE 1 to Tariff

UNITED STATES DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

DESERT SOUTHWEST CUSTOMER SERVICE REGION

SCHEDULING, SYSTEM CONTROL, AND DISPATCH SERVICE

Effective:

The first day of the first full billing period beginning on or after April 1, 1999, through March 31, 2004.

Applicable:

This service is required to schedule the movement of power through, out of, within, or into the Western Area Lower Colorado control area (WALC). The charges for scheduling, system control, and dispatch service are to be based on the rate referred to below. The formula rate used to calculate the charges for service under this schedule was promulgated and may be modified pursuant to applicable Federal laws, regulations, and policies.

This formula rate is applicable to transactions with entities not taking transmission service in WALC. Charges for

scheduling, system control, and dispatch service are included in the transmission rate. The Desert Southwest Customer Service Region's charges for scheduling, system control, and dispatch service may be modified upon written notice to the customer and any change to the charges for the service shall be as set forth in a revision to this rate schedule promulgated pursuant to applicable Federal laws, regulations, and policies and made part of the applicable service agreement.

Formula Rate:

Cost per schedule =

annual capital costs per schedule + (hourly labor rate x avg time to execute schedule).

Rate:

The rates charged for the scheduling, system control, and dispatch service are contingent on the type of service required. The maximum rates that can be charged for the various schedule types are shown in the table below:Schedule Type

Maximum Cost (\$) Per

Schedule Per Day

Existing schedule, requires no SCADA

programming or intra-bus transfer 1 34.10

New schedule, requires SCADA

programming, no intra-bus transfer 37.50

Existing schedule, requires no SCADA

programming, requires intra-bus transfer 46.85

New schedule, requires SCADA

programming, and intra-bus transfer 56.20

1 Multiple exchange of ownership in an interchange schedule is known as intra-bus transfer schedule.

The above rates are based on FY 1997 financial and load data, and will be in effect April 1, 1999, through September 30, 1999. Based on updated financial and load data, a recalculated rate will go into effect on October 1 of each year during the effective rate period. Rate Schedule DSW-RS1

SCHEDULE 2 to Tariff

UNITED STATES DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

DESERT SOUTHWEST CUSTOMER SERVICE REGION

REACTIVE SUPPLY AND VOLTAGE CONTROL FROM

GENERATION SOURCES SERVICE

Effective:

The first day of the first full billing period beginning on or after April 1, 1999, through March 31, 2004.

Applicable:

In order to maintain transmission voltages on all transmission facilities within acceptable limits, generation facilities under the control of the Western Area Lower Colorado control area (WALC) are operated to produce or absorb reactive power. Thus, reactive supply and voltage control from generation sources service (VAR Support) must be provided for each transaction on the transmission provider's transmission facilities. Generation sources under WALC are the Parker-Davis Project, the Boulder Canyon Project and the Salt Lake City Area/Integrated Projects. This service is required to be offered to the transmission customer by the transmission provider in order to maintain transmission voltages on the transmission provider's transmission facilities within acceptable limits.

The customer must purchase this service from the WALC operator. The charges for such service will be based upon the rate referred to below.

The formula rate used to calculate the charges for service under this schedule was promulgated and may be modified pursuant to applicable Federal laws, regulations, and policies. The Desert Southwest Customer Service Region (DSW) charges for VAR Support may be modified upon written notice to the customer. Any change to the charges for VAR Support shall be as set forth in a revision to this rate schedule promulgated pursuant to applicable Federal laws, regulations, and policies and made part of the applicable service agreement. DSW shall charge the customer in accordance with the rate then in effect.

Formula Rate:

WALC

VAR Support = Total Annual Combined Revenue Requirement for Service (TACRRS)

Rate WALC Transmission Reservations

WALC Transmission Reservations = Average firm power allocation transmission

reservations + average firm transmission

reservations.

TACRRS is determined by combining, for each generation project, the product of the percentage of resource capability used for reactive supply and the total generation projects revenue requirement.

Rate:

The rate to be in effect April 1, 1999, through September 30, 1999, is:

Monthly: \$0.07/kWmonth.

Weekly: \$0.02/kWweek.

Daily: \$0.00237/kWday.

Hourly: 0.0986 mills/kWh.

This rate is based on the above formula and on FY 97 financial and load data. Based on updated financial and load data, a recalculated rate will go into effect on October 1 of each year during the effective rate period. Rate Schedule DSW-FR1

SCHEDULE 3 to Tariff

UNITED STATES DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

DESERT SOUTHWEST CUSTOMER SERVICE REGION

REGULATION AND FREQUENCY RESPONSE SERVICE

Effective:

The first day of the first full billing period beginning on or after April 1, 1999, through March 31, 2004.

Applicable:

Regulation and frequency response service (Regulation) is necessary to provide for the continuous balancing of resources, generation, and interchange, with load and for maintaining scheduled interconnection frequency at sixty cycles per second (60 Hz). Regulation is accomplished by committing on-line generation whose output is raised or lowered, predominantly through the use of automatic generating control equipment, as necessary to follow the moment-by-moment changes in load. The obligation to maintain this balance between resources and load lies with the transmission provider. The transmission customers and customers on others' transmission systems within WALC must either purchase this service from WALC or make alternative comparable arrangements to satisfy its Regulation obligation. The charges for Regulation are referred to below. The amount of Regulation will be set forth in the service agreement.

The formula rate used to calculate the charges for service under this schedule was promulgated and may be modified pursuant to applicable Federal laws, regulations, and policies.

The Desert Southwest Customer Service Region's (DSW) charges for Regulation may be modified upon written notice to the Customer. Any change to the Regulation charges shall be as set forth in a revision to this rate schedule promulgated pursuant to applicable Federal laws, regulations, and policies and made part of the applicable service agreement. DSW shall charge the customer in accordance with the rate then in effect.

Formula Rate:

Regulation will not be available on a long-term basis from DSW resources. If this service is requested, and DSW determines that it is available on a short-term basis, it will be priced at the firm-capacity rate in effect for the

generation project supplying the service. Otherwise, DSW, upon request, will obtain Regulation on the open market for the customer and pass through the cost, plus a 10 percent administrative charge.

Rate:

DSW

Regulation = market price + 10 percent

Rate

OR

= Capacity Rate of Generation Project Supplying Service

(depending upon availability)

The effective firm-capacity rate for Parker-Davis Project is found under rate schedule PD-F6. For Boulder Canyon Project, the effective firm-capacity rate is found under BCP-F5. For Salt Lake City Area/Integrated Projects, the effective firm-capacity rate is found under rate schedule SP-FR1.

Rate Schedule DSW-EI1

SCHEDULE 4 to Tariff

UNITED STATES DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

DESERT SOUTHWEST CUSTOMER SERVICE REGION

ENERGY IMBALANCE SERVICE

Effective:

The first day of the first full billing period beginning on or after April 1, 1999, through March 31, 2004.

Applicable:

Energy imbalance service is provided when a difference occurs between the scheduled and the actual delivery of energy to a load located within the Western Area Lower Colorado control area (WALC) over a single hour. The transmission customer and customers on others' transmission system within WALC must either obtain this service from WALC or make alternative comparable arrangements to satisfy its energy imbalance service obligation.

The WALC shall establish a deviation band width of +/- 1.5 percent (with a minimum of 2 MW) of the scheduled transaction to be applied hourly to any energy imbalance that occurs as a result of the customer's scheduled transaction(s). Deviation accounting will be completed monthly on an hour-to-hour basis.

The formula rate used to calculate the charges for service under this schedule was promulgated and may be modified pursuant to applicable Federal laws, regulations, and policies.

The energy imbalance service compensation may be modified upon written notice to the customer. Any change to the customer compensation for energy imbalance service shall be as set forth in a revision to this schedule promulgated pursuant to applicable Federal laws, regulations, and policies and made part of the applicable service agreement. The Desert Southwest Customer Service Region (DSW) shall charge the customer in accordance with the rate then in effect.

Formula Rate:

For negative excursions (under-deliveries) outside the bandwidth and occurring more than five times per month, DSW reserves the right to assess a penalty charge of 100 mills/kWh.

For positive excursions (over-deliveries) outside the bandwidth, the customer will be credited on the customer's bill, lagged by 1 month. The credit will be 50 percent of the market value of the over-delivery, provided the over-deliveries do not impinge upon WALC operations. For example, during times of high water or operating constraints, DSW reserves the right to eliminate credits for over-deliveries.

Rate:

The bandwidth in effect is 3 percent (+/- 1.5 percent hourly deviation) with a 2 MW deviation minimum. Rate Schedule DSW-SPR1

SCHEDULE 5 to Tariff

UNITED STATES DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

DESERT SOUTHWEST CUSTOMER SERVICE REGION

OPERATING RESERVE - SPINNING RESERVE SERVICE

Effective

The first day of the first full billing period beginning on or after April 1, 1999, through March 31, 2004.

Applicable:

Spinning reserve service (Reserves) is needed to serve load immediately in the event of a system contingency. Reserves may be provided by generating units that are on-line and loaded at less than maximum output. The transmission customer must either purchase this service from the Western Area Lower Colorado control area (WALC), or make alternative comparable arrangements to satisfy its Reserves requirements. The charges for Reserves are referred to below. The amount of Reserves will be set forth in the service agreement.

Formula Rate:

No long-term Reserves are available from WALC resources. The Desert Southwest Customer Service Region, upon request, will obtain the Reserves on the open market for the customer and pass through the cost, plus a 10 percent administrative charge.

Rate:

Cost for Reserves = market price + 10 percent. Rate Schedule PD-NTS1

ATTACHMENT H-1 to Tariff

UNITED STATES DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

DESERT SOUTHWEST CUSTOMER SERVICE REGION

SCHEDULE OF RATE FOR

NETWORK INTEGRATION TRANSMISSION SERVICE

ON THE PARKER-DAVIS PROJECT

Effective:

The first day of the first full billing period beginning on or after April 1, 1999, through March 31, 2004.

Applicable:

The transmission customer shall compensate the Parker-Davis Project each month for network integration transmission service (NTS) pursuant to the applicable Network Integration Transmission Service Agreement and annual revenue requirement referred to below. The formula for the annual revenue requirement used to calculate the charges for this service under this schedule was promulgated and may be modified pursuant to applicable Federal laws, regulations, and policies.

The Desert Southwest Customer Service Region (DSW) may modify the charges for NTS upon written notice to the transmission customer. Any change to the charges to the transmission customer for NTS shall be as set forth in a revision to this rate schedule promulgated pursuant to applicable Federal laws, regulations, and policies and made part of the applicable service agreement. DSW shall charge the transmission customer in accordance with the revenue requirement then in effect.

Formula Rate:

Monthly Charge = Transmission Customer's Load-Ratio Share x

(Revenue Requirement / 12)

Rate:

The projected annual revenue requirement allocated to transmission for FY 1999 for the Parker-Davis Project is \$23,001,589. Based on updated financial and load data, a recalculated revenue requirement will go into effect on October 1 of each year during the effective rate schedule period. Rate Schedule INT-NTS1

ATTACHMENT H-2 to Tariff

UNITED STATES DEPARTMENT OF ENERGY

WESTERN AREA POWER ADMINISTRATION

DESERT SOUTHWEST CUSTOMER SERVICE REGION

SCHEDULE OF RATE FOR

NETWORK INTEGRATION TRANSMISSION SERVICE

ON THE PACIFIC NORTHWEST-PACIFIC SOUTHWEST INTERTIE PROJECT

Effective:

The first day of the first full billing period beginning on or after April 1, 1999, through March 31, 2004.

Applicable:

The transmission customer shall compensate the Pacific Northwest-Pacific Southwest Intertie Project (Intertie) each month for network transmission service (NTS) pursuant to the applicable Network Integration Transmission Service Agreement and annual revenue requirement referred to below. The formula for the annual revenue requirement used to calculate the charges for this service under this schedule was promulgated and may be modified pursuant to applicable Federal laws, regulations, and policies.

The Desert Southwest Customer Service Region (DSW) may modify the charges for NTS upon written notice to the transmission customer. Any change to the charges to the transmission customer for NTS shall be as set forth in a revision to this rate schedule promulgated pursuant to applicable Federal laws, regulations, and policies and made part of the applicable service agreement. DSW shall charge the transmission customer in accordance with the revenue requirement then in effect.

Formula Rate:

Monthly Charge = Transmission Customer's Load-Ratio Share x

(Revenue Requirement / 12)

Rate:

The projected annual revenue requirement for FY 1999 for the Pacific Northwest-Pacific Southwest Intertie Project is \$21,943,150. Based on updated financial and load data, a recalculated revenue requirement will go into effect on October 1 of each year during the effective rate schedule period.