

TRANSMISSION CONTROL AGREEMENT

APPENDIX A

Facilities and Entitlements

**(The Diagrams of Transmission Lines and Associated
Facilities Placed Under the Control of the ISO
were submitted by the ISO on behalf of the Transmission Owners
on March 31, 1997– any modifications are
attached as follows)**

Modification of Appendix A1

Diagrams of Transmission Lines and Associated Facilities Placed Under the Control of the ISO

**(submitted by the ISO on behalf of Pacific Gas and Electric Company
Transmission Owner)**

The diagrams of transmission lines and associated facilities placed under the control of the ISO submitted by the ISO on behalf of PG&E on March 31, 1997 are amended as follows.

Item 1: Port of Oakland 115 kV Facilities

Operation Control of the transmission facilities, shown on operating diagram, East Bay Region (East Bay Division), Sheet No. 1, serving the Port of Oakland and Davis 115 kV (USN) is not to be transferred to the ISO. These are special facilities funded by and connected solely to a customer's substation and their operation is not necessary for control by the ISO pursuant to the specifications of Section 4.1.1 of the TCA.

As of the date of execution of the TCA, the California ISO and PG&E are discussing further modifications to the diagrams of transmission lines and facilities placed under the control of the ISO. A new version of the diagrams is to be filed with FERC prior to April 1, 1998. This subsequent version of the diagrams will reflect all modifications (including those described herein).

APPENDIX A2

List of Entitlements Being Placed under ISO Operational Control

(Includes only those where PG&E is a service rights-holder)

Ref. #	Entities	Contract / Rate Schedule #	Nature of Contract	Termination	Comments
1.	Pacific Power & Light, SCE, SDG&E	Transmission Use Agreement - PP&L Rate Schedule with FERC	Transmission	Upon 40 years beginning approx. 1968	
2.	SCE, SDG&E	California Power Pool - PG&E Rate Schedule FERC No. 27	Power pool	Terminated	5/6/97
3.	SCE, SDG&E	Calif. Companies Pacific Intertie Agreement - PG&E Rate Schedule FERC No. 38	Transmission	4/1/2007	Both entitlement and encumbrance.
4.	SCE, Montana Power, Nevada Power, Sierra Pacific	WSCC Unscheduled Flow Mitigation Plan - PG&E Rate Schedule FERC No. 183	Operation of control facilities to mitigate loop flows	Evergreen, or on notice	No transmission services provided, but classify as an entitlement since loop flow is reduced or an encumbrance if PG&E is asked to cut.
5.	TANC	Coordinated Operations Agreement - PG&E Rate Schedule FERC No. 146	Interconnection, scheduling, transmission	1/1/2043	Both entitlement and encumbrance.
6.	WAPA	EHV Transmission Agreement - Contract No. 2947A - PG&E Rate Schedule FERC No. 35	Transmission	1/1/2005, but service to continue for a period and at charges to be agreed subject to FERC acceptance.	Both entitlement and encumbrance.
7.	Various - See Attachment A	Western Systems Power Pool Agreement - WSPP Rate Schedule FERC No. 1	Power sales, transmission	Upon WSPP expiration	Both entitlement and encumbrance.
8.	Vernon (City of)	Transmission Service Exchange Agreement - PG&E Rate Schedule FERC No. 148	Transmission	7/31/2007, or by extension to 12/15/2042	Both entitlement and encumbrance. PG&E swap of DC Line rights for service on COTP

Supplement To PG&E's Appendix A

Notices Pursuant to Section 4.1.5

Pursuant to the Transmission Control Agreement Section 4.1.5 (iii), the transmission system¹ Pacific Gas and Electric Company (PG&E) is placing under the California Independent System Operator's Operational Control will meet the Applicable Reliability Criteria in 1998,² except (1) for the transmission facilities comprising Path 15, which do not meet the Western Systems Coordinating Council's (WSCC) Reliability Criteria for Transmission Planning with a simultaneous outage of the Los Banos-Gates and Los Banos-Midway 500 kV lines (for south-to-north power flow exceeding 2500 MW on Path 15),³ and (2) PG&E has not yet re-assessed its reliability performance for any reliability criteria issued or revised after it performed its assessment, e.g., the new North American Electric Reliability Council (NERC) Planning Standards and Guides, released in September, 1997.⁴

¹ Including upgrades and operational plans for the transmission lines and associated facilities.

² Based upon PG&E's substation and system load forecasts for study year 1998, historically typical generation dispatch and the Applicable Reliability Criteria, including the current applicable WSCC Reliability Criteria for Transmission Planning issued in March 1997, the PG&E Local Reliability as stated in the 1997 PG&E Transmission Planning Handbook Criteria (submitted to the California ISO Transmission Planning, in writing, on October 20, 1997), and the NERC Reliability Performance Criteria in effect at the time PG&E was assessing its system (as of June 1, 1997). PG&E may not meet the WSCC's Disturbance Performance level 'D' (e.g. outage of three or more circuits on a right-of-way, an entire substation or an entire generating plant including switchyard), where the risk of such an outage occurring is considered very small and the costs of upgrades very high.

³ The ISO will operate Path 15 so as to maintain system reliability. In accepting this notice from PG&E, the ISO agrees to work with PG&E and the WSCC to achieve a resolution respecting the WSCC long-term path rating limit for Path 15, consistent with WSCC requirements. Pending any revision to the WSCC long-term path rating limit for Path 15, the ISO will continue to operate Path 15 at the existing WSCC long-term path rating limit unless, in the judgment of the ISO:

(a) the operating limit must be reduced on a short-term (e.g., seasonal) basis to maintain system reliability, taking into account factors such as the WSCC guidelines, determination of credible outages and the Operating Capability Study Group (OCSG) study process; or

(b) the operating limit must be reduced on a real-time basis to maintain system reliability.

In determining whether the operating limit of Path 15 must be changed to maintain system reliability, the ISO shall, to the extent possible, work with the WSCC and the PTOs to reach consensus as to any new interim operating limit.

⁴ PG&E will submit its reassessment, subject to the condition below, to the ISO as soon as possible but not later than August 1, 1998. If, after the exercise of reasonable diligence by PG&E in completing the reassessment, such submittal cannot be provided to the ISO by August 1, 1998, PG&E shall notify the ISO of the delay and shall specify an alternative date for submission.

Pursuant to Section 4.1.5(i), PG&E does not believe that transfer of Operational Control is inconsistent with any of its franchise or right of way agreements to the extent that ISO Operational Control is implemented as part of PG&E utility service pursuant to AB 1890. However, PG&E can't warrant that these right of way or franchise agreements will provide necessary authority for ISO entry or physical use of such rights apart from PG&E's rights pursuant to its physical ownership and operation of transmission facilities.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
1.	California Companies Pacific Intertie Agreement (CCPIA)	PG&E, SDG&E	40	July 31, 2007	<ul style="list-style-type: none"> 43% of the California Companies entitlements on the Pacific Intertie.
2.	City-Edison Pacific Intertie D-C Transmission Facilities Agreement	LADWP	303	2040 or sooner by mutual agreement of the parties.	<ul style="list-style-type: none"> Edison owns 50% of the D-C transmission facility. (Per CCPIA, this ownership is part of the California Companies entitlements on the Pacific Intertie).
3.	PP&L Agreement	PP&L, PG&E, SDG&E		2008	<ul style="list-style-type: none"> California Companies are entitled to use the entire capacity on the PP&L 500kV transmission line from Malin to Indian Spring for the term of the agreement. Per CCPIA Edison is entitled to 43% of the capacity available on the Pacific Intertie.
4.	WAPA Contract with California Companies for Extra High Voltage Transmission and Exchange Service	WAPA, PG&E, SDG&E	37	January 1, 2005, but service to continue for a period and at charges to be agreed subject to FERC acceptance.	<ul style="list-style-type: none"> WAPA owns a 500 kV transmission line from Malin to Round Mountain. WAPA receives 400 MW of Tracy-Round Mountain transmission service. The capacity on Malin-Round Mountain not used by WAPA is available to CCPIA Parties.
5.	Los Angeles-Edison Exchange Agreement	LADWP	219	May 31, 2025	<ul style="list-style-type: none"> 500 MW of bi-directional firm entitlement on the PDCI transmission line.
6.	Coordinated Operations Agreement	PG&E, SDG&E, and COTP Participants	270.7	January 1, 2043	<ul style="list-style-type: none"> The allocation of Available Scheduling Capability between COTP parties and PACI parties is calculated on a pro rata basis according to the COTP's and PACI's Rated System Transfer Capabilities as specified in the Agreement.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
7.	Pasadena-Edison 230-KV Interconnection and Transmission Agreement	Pasadena	55	2011	<ul style="list-style-type: none"> • Goodrich-Gould and Goodrich-Laguna Bell 230 kV transmission line interconnect Edison's system with Pasadena's system at Pasadena's Goodrich Substation. Lines have been re-configured from arrangement shown in contract. • Edison maintains and operates Goodrich 230 kV Substation.
8.	Edison-MSR Victorville-Lugo/Midway Firm Transmission Service Agreement.	MSR	339	December 31, 1999.	<ul style="list-style-type: none"> • 60 MW of transmission service between Marketplace and Adelanto, and Adelanto-Victorville-Lugo.
9.	Victorville-Lugo Interconnection Agreement	LADWP	51	2019 or sooner by mutual agreement	<ul style="list-style-type: none"> • 1950 MW towards Edison, 900 MW towards LADWP. Transfer capability of the interconnection is established through joint technical studies.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
10.	City-Edison Sylmar Interconnection Agreement	LADWP	307	On 5 years notice by either party any time after the termination of the City-Edison Pacific Intertie DC Transmission Facilities Agreement.	<ul style="list-style-type: none"> Sylmar-Pardee #1&2, Sylmar-Gould and Sylmar-Eagle Rock 230 kV transmission line interconnections at Sylmar including circuit breakers 's and busses. Lines have been re-configured from arrangement described in contract. Edison owns one of the two regulating transformers at Sylmar.
11.	City-Edison Owens Valley Interconnection and interchange Agreement	LADWP	50	On 12 months notice by either party.	<ul style="list-style-type: none"> At the request of either party and by mutual agreement, LADWP's and Edison's respective systems interconnected at LADWP's Haiwee 34.5 kV Substation, may be operated in parallel, which normally operates open at Haiwee.
12.	City-Edison 400,000 kVA Interconnection Agreement (Velasco)	LADWP	215	On 3 year written notice by either party.	<ul style="list-style-type: none"> Edison's portion of the normally open Laguna Bell-Velasco 230 kV transmission line from Laguna Bell to the point where ownership changes.
13.	Edison-Los Angeles Inyo Interconnection Agreement	LADWP	306	On 5 year advance written notice by either party or by mutual agreement.	<ul style="list-style-type: none"> Inyo 230/115 kV Substation, Inyo Phase Shifter, Control-Inyo 115 kV transmission line and 230 kV Tap to LADWP's Owens Gorge-Rinaldi 230 kV transmission line.
14.	Edison-Los Angeles Sepulveda Canyon Power Plant Transmission Service Agreement	LADWP	280	Termination of Sepulveda Canyon Power Plant Interconnection Agreement or sooner by either party giving a one year notice.	<ul style="list-style-type: none"> 9 MW of transmission service from the high voltage leads of Sepulveda Canyon Power Plant to the 230 kV bus at Sylmar.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
15.	Edison-Los Angeles Owens Valley Transmission Service Agreement	LADWP	281	Upon the termination of Inyo Interconnection Agreement, or five years after notice by LA, or 60 days after notice by Edison.	<ul style="list-style-type: none"> Up to 50 MW of bi-directional transmission service between Inyo Tie and Sylmar.
16.	Amended and Restated IID-Edison Mirage 230 kV Interconnection Agreement	IID	314	On one year notice but not prior to the termination date of the IID-Edison Transmission Service Agreement.	<ul style="list-style-type: none"> Edison's interconnection with IID at Mirage and the point of interconnection on the Devers - Coachella Valley line.
17.	IID Edison Transmission Service Agreement for Alternative Resources	IID	268	Earlier of Dec 31, 2015, or the termination date of the last Plant Connection Agreement.	<ul style="list-style-type: none"> Transmission Service on IID's 230 kV system to transmit the output of QFs resources to Edison's system, via Mirage Substation.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
18.	Four Corners Principles of Interconnected Operation	APS, SRP, EPE, PSNM, TGE	47.0	None	<ul style="list-style-type: none"> • Generation principles for emergency service. • Edison's facility at Four Corners includes its portion of the Eldorado -Moenkopi from Eldorado to CA/NV boarder of the Eldorado-Moenkopi -Four Corners 500 kV transmission line. • Edison can separate its wholly-owned facilities from parallel operation with others under abnormal operating conditions without prior notice. • Edison can separate its wholly-owned facilities from parallel operation with others for maintenance on reasonable advance notice (see Co-tenancy Agreement for facilities). • Edison has the right to schedule emergency service from each party.
19.	Four Corners Project Co-Tenancy Agreement and Operating Agreement	APS, SRP, EPE, PSNM, TGE	47.2	2016	<ul style="list-style-type: none"> • Edison has co-tenancy ownership of 32% in the Four Corners 500 kV switchyard, 12% in the 345 kV switchyard and 48% in the 345/500 kV bus-tie transformer bank. • Edison has rights to sufficient capacity in the switchyards and bus-tie transformer bank to permit its entitlement to Four-Corners Project power and energy to be delivered to the point where the Eldorado-Moenkopi-Four Corners transmission line connects to the Four Corners 500 kV Switchyard. • Edison may use any unused capacity in the switchyard for any purpose, provided that any over subscription shall be subject to proration of the remaining capacity based on switchyard ownership of the requesting co-owners.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
20.	Navajo Interconnection Principles	USA, APS, SRP, NPC, LADWP, TGE	76	None	<ul style="list-style-type: none"> • Generation principles for emergency service.
21	Edison - Navajo Transmission Agreement	USA, APS, SRP, NPC, LADWP, TGE	264	5/21/23	<ul style="list-style-type: none"> • In the event of a contingency in the Navajo-McCullough or Moenkopi-Eldorado transmission lines, Edison and the Navajo participants provide each other emergency transmission service without a charge. The amount of service provided is proportional to each parties' entitlement to the total capability of the transmission system described above.
22.	ANPP High Voltage Switchyard Agreement	APS, SRP, PSNM, EPE, SCPPA, LADWP	320	2031	<ul style="list-style-type: none"> • Edison has 21.77% undivided ownership interest as a tenant-in-common in the ANPP High Voltage Switchyard. • Edison has rights to transmit through the ANPP High Voltage Switchyard up to its 15.8% share of generation from ANPP, or a substitute equal amount, plus any other generation up to the extent of its transmission rights in the Palo Verde-Devers 500 kV Transmission Line • Edison has additional rights to use any unused capacity in the ANPP High Voltage Switchyard, provided that any over subscription shall be subject to proration of the remaining capacity based on switchyard ownership.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
23.	Mohave Project Co-Tenancy Agreement and Operating Agreement	SRP, NPC, LADWP	319	July 1, 2006	<ul style="list-style-type: none"> • Edison has co-tenancy ownership of 56% of the Mohave switchyard. • Edison has a capacity entitlement in the Mohave switchyard equivalent to its entitlement to Mohave Project Power and energy. • Edison may use any unused capacity in the Mohave switchyard for any purpose provided that any over subscription shall be subject to proration of the remaining capacity based on switchyard ownership of the requesting co-owners.
24.	Mutual Assistance Transmission Agreement	IID, APS, SDG&E	174	On 2034 or sooner by mutual agreement of the parties.	<ul style="list-style-type: none"> • In the event of a contingency in the Palo Verde-Devers, Palo Verde-North Gila-Imperial Valley transmission lines, participants to share the available capacity based on predetermined operating procedures set out in a separate operating bulletin.
25.	Midway Interconnection	PG&E	309	July, 1, 2007	<ul style="list-style-type: none"> • Edison's share of 500 kV Midway-Vincent transmission system: <ul style="list-style-type: none"> - Midway-Vincent #1 - Midway-Vincent #2 - Midway-Vincent #3 from Vincent Substation to mile 53, Tower 1
26.	Eldorado System Co-Tenancy	NPC, SRP, LADWP	267	July 1, 2006	<ul style="list-style-type: none"> • Edison's share of Eldorado System: Eldorado Substation, Eldorado-Mohave 500 kV line minus 700 MW and Eldorado-Mead No. 1&2 230 kV lines minus 282 MW.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
27.	Sierra Pacific -Edison Silver Peak 55 kV Interconnection Agreement	Sierra Pacific	310	2016 or sooner on 90 days advance notice but not prior to the termination of Edison's Power Purchase Agree. from Chevron.	<ul style="list-style-type: none"> Control-Silver Peak A&C 55 kV transmission lines. Edison's share of the Control-Silver Peak lines is from Control Substation to the CA/NV border.
28.	WAPA-Edison 161 kV Blythe Substation Interconnection Agreement	WAPA	221	September 30, 2007 or sooner by 3 year advanced notice by either party.	<ul style="list-style-type: none"> WAPA's Blythe 161 kV Substation, and Edison's Eagle Mountain-Blythe 161 kV transmission line. Edison may transmit up to 72 MW through WAPA's Blythe Substation, via the Eagle Mountain-Blythe 161 kV transmission line .
29.	SONGS Ownership and Operating Agreements	SDG&E, Anaheim, Riverside	321	None.	<ul style="list-style-type: none"> Edison's share of SONGS switchyard with termination of its 230 kV transmission lines: <ul style="list-style-type: none"> SONGS - Santiago 1 and 2, SONGS - Serrano, and SONGS - Chino 230 kV
30.	District-Edison 1987 Service and Interchange Agreement	MWD	203	September 30, 2017 or on five years notice by either party.	<ul style="list-style-type: none"> Transmission is owned by District, but is in ISO control area. If not in use by District, or the United States under existing contracts, District's Transmission Line is available to transmit any electric energy to which Edison may be entitled. Up to 320 MW is required to supply District's Colorado River Aqueduct pump load. District's Transmission Line is operated by the District as directed by Edison.
31.	Edison-Arizona Transmission Agreement	APS	282	On 2016 or later upon negotiation.	<ul style="list-style-type: none"> Edison has ownership-like rights to the 500 kV Transmission line from the Four Corners Project to the Arizona-Nevada border. Edison also owns the 500 kV line from Arizona-Nevada border to Edison's Eldorado substation.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
32.	Mead Interconnection Agreement	WAPA	308	May 31, 2017	<ul style="list-style-type: none"> • Edison has rights to transmit its Hoover power • Edison's facilities include Eldorado-Mead 230 kV #1 and 2 transmission lines. • Edison may request additional firm transmission service rights through Mead Substation subject to availability as determined by WAPA.
33.	Power Purchase Contract Between SCE and Midway-Sunset Cogeneration Company.	Midway-Sunset Cogeneration Company.		5/8/09	<ul style="list-style-type: none"> • 200 MW of capacity through Midway Substation.

Supplement to Edison Appendix A

Notices Pursuant to Section 4.1.5

Pursuant to the Transmission Control Agreement Section 4.1.5 (iii), Southern California Edison Company (Edison) is providing notice its transmission system¹ being placed under the California Independent System Operator's (ISO) Operational Control will meet the Applicable Reliability Criteria in 1998,² except as noted in its bulk power program and described herein. Edison's transmission system has been developed in accordance with NERC and WSCC's reliability criteria. WSCC's most recent Log of System Performance Recommendations, dated April 15, 1997, does not show any instances where Edison's transmission system does not meet NERC and WSCC reliability criteria, absent approved exemptions.

Pursuant to Section 4.1.5 (i), Edison does not believe that transfer of Operational Control is inconsistent with any of its franchise or right of way agreements to the extent that ISO Operational Control is implemented as part of Edison's utility service pursuant to AB 1890. However, Edison can't warrant that these right of way or franchise agreements will provide necessary authority for ISO entry or physical use of such rights apart from Edison's rights pursuant to its physical ownership and operation of transmission facilities.

¹ Including upgrades and operational plans for the transmission lines and associated facilities.

² Edison's most recent assessment is based on Edison's substation and system load forecasts for study year 1998 and criteria in effect as of September 1, 1997. Edison meets WSCC's reliability criteria except for WSCC's Disturbance Performance level 'D' (e.g. outage of three or more circuits on a right-of-way, an entire substation or an entire generating plant including switchyard), where the risk of such an outage occurring is considered very small and the costs of upgrades very high. Assessments of Edison's transmission system using NERC Planning Standards and Guides, released September 16, 1997 will be performed in accordance with the ISO's coordinated transmission planning process as provided for in the ISO Tariff, Section 3.2.2. and under schedules adopted in that process.

Modification of Appendix A1

Diagrams of Transmission Lines and Associated Facilities Placed Under the Control of the ISO

**(submitted by the ISO on behalf of San Diego Gas and Electric Company
Transmission Owner)**

The diagrams of transmission lines and associated facilities placed under the control of the ISO submitted hereby the ISO on behalf of SDG&E are amended as follows.

Item 1: Imperial Valley Switchyard 230kV Breakers Nos. 4132 and 5132 shown in the diagram as non-SDGE facilities should be shown as SDG&E owned. Furthermore, these breakers are being placed under the operational control of the ISO.

APPENDIX A.2: SDG&E'S CONTRACT ENTITLEMENTS

CONTRACT NUMBER	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AMOUNT OF SERVICE
66-020	California Companies Pacific Intertie Agreement	Edison, PG&E	20	Subject to FERC's approval and any litigation concerning term, no earlier than July 31, 2007.	7% of the California Companies entitlements on the Pacific Intertie, including delivery rights through SCE's system from Sylmar to SONGS (100 MW); and from SONGS to Sylmar (105 MW); from Midway to SONGS (161 MW); and from SONGS to Midway (109MW).
67-012	Pacific Power & Light Agreement	PP&L, PG&E, Edison		Subject to FERC's acceptance and any litigation concerning term, no earlier than 2008.	California Companies entitled to use the entire capacity on the PP&L 500 kV transmission line from Malin to Indian Spring for the term of the agreement. SDG&E is entitled to 7% of the capacity available on the Pacific Intertie.
67-100	WAPA contract with California Companies for Extra High Voltage Transmission and Exchange Service	WAPA, PG&E Edison	37	Subject to FERC's acceptance and any litigation concerning term, no earlier than January 1, 2005. May be extended at negotiated rates.	WAPA owns a 500 kV transmission line from Malin to Round Mountain. WAPA receives 400 MW of Tracy-Round Mountain transmission service. The capacity on Malin-Round Mountain not used by WAPA is available to California Companies Pacific Intertie parties.
92-000	Coordinated Operations Agreement	PG&E, Edison, and COTP participants	270.7	January 1, 2043.	The allocation of Available Scheduling Capability between COTP parties and the Companies Pacific Intertie parties calculated on a pro rata basis according to the COTP's and PACI's Rated System Transfer Capabilities as specified in the Agreement.
81-034	Mutual Assistance Transmission Agreement	IID, APS, Edison	62	4/12/2034 or sooner by mutual agreement of the parties.	Should a contingency occur in the Palo Verde-Devers, Palo Verde-North Gila-Imperial Valley transmission lines, participants to share the available capacity based on predetermined operating procedures set out in a separate operating bulletin.
79-016	SONGS Participation Agreement	Edison, Anaheim, Riverside	321	None.	SDG&E's share of SONGS switchyard with termination of its 230 kV transmission lines: - San Luis Rey Tap - Mission - Talega (2 lines) - Encina

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
 FERC ELECTRIC TARIFF NO. 7
 FIRST REPLACEMENT TRANSMISSION CONTROL AGREEMENT

Original Sheet No. 84

79-017	IID-SDG&E Interconnection and Exchange Agreement	IID	065	June 24, 2051 (schedule pertaining to emergency capacity/energy services is expected to be terminated upon execution by IID of the ISO's Control Area Agreement).	Should a contingency occur due to loss or interruption of generating or transmission capabilities on either party's electric system, IID and SDG&E to provide each other emergency capacity and energy.
78-007	CFE-SDG&E Interconnection and Exchange Agreement	CFE		12 month notice (schedule pertaining to emergency capacity/energy services is expected to be terminated upon execution by CFE of the ISO's Control Area Agreement).	Should a contingency occur due to loss or interruption of generating or transmission capabilities on either party's electric system, CFE and SDG&E to provide each other emergency capacity and energy.
81-005	Palo Verde-North Gila Line ANPP High Voltage Switchyard Interconnection Agreement	APS, IID, PNM, SRP, El Paso, SCE, SCPPA	063	July 31, 2031.	The parties are obligated to provide mutual switchyard assistance during emergencies to the extent possible. However, in the event that the capacity of the ANPP Switchyard is insufficient to accommodate all requests, the rights of the ANPP Switchyard Participants shall take precedence in all allocations.
81-050	IID-SDG&E California Transmission System Participation Agreement	IID		June 24, 2051.	SDG&E and IID schedule power and energy over the California Transmission System for their respective accounts at the Yuma (North Gila) 500 kV Switchyard for delivery to the 500 kV breaker yard of the Imperial Valley in the following percentages of operating capacity: SDG&E -- 85.64%; and IID -- 14.36%.
78-003	APS-SDG&E Arizona Transmission System Participation Agreement	APS		July 31, 2031.	SDG&E, APS, and IID schedule power and energy over the Arizona Transmission System for their respective accounts at the Palo Verde Switchyard for delivery at the Yuma (North Gila) 500 kV Switchyard in the following percentages of operating capacity: APS -- 11%; SDG&E - 69%; IID - 20%.

Issued by: Roger Smith, Senior Regulatory Counsel
 Issued on: March 23, 2001

Effective: January 1, 2001

Supplement To SDG&E's Appendix A

Notices Pursuant to Section 4.1.5

Pursuant to the Transmission Control Agreement Section 4.1.5 (iii), the transmission system¹ of San Diego Gas & Electric Company (SDG&E) is placing under the California Independent System Operator's Operational Control meets the Applicable Reliability Criteria,² with the following exceptions: (1) SDG&E has not yet re-assessed its system performance for any reliability criteria added or modified by the new North American Electric Reliability Council (NERC) Planning Standards and Guides, released in September, 1997;³ (2) SDG&E has also not yet re-assessed its system performance for the revised simultaneous generator outage criteria which was approved by the WSCC Board of Trustees on October 27, 1997.⁴

Pursuant to Section 4.1.5(i), SDG&E does not believe that transfer of Operational Control is inconsistent with any of its franchise or right of way agreements to the extent that ISO Operational Control is implemented as part of SDG&E utility service pursuant to AB 1890. However, SDG&E cannot warrant that these right-of-way or franchise agreements will provide necessary authority for ISO entry or physical use of such rights apart from SDG&E's rights, pursuant to its physical ownership and operation of transmission facilities.

¹ Including upgrades and operational plans for the transmission lines and associated facilities.

² Based upon studies with SDG&E's forecast peak 1998 system loads and the Applicable Reliability Criteria, including the WSCC Reliability Criteria for Transmission Planning and WSCC Minimum Operating Reliability Criteria dated March 1997, and the SDG&E Local Reliability Criteria as submitted to the California ISO by letter dated December 15, 1997.

³ Assessments of SDG&E's transmission system using NERC Planning Standards and Guides, released September 16, 1997 will be performed in accordance with the ISO's coordinated transmission planning process as provided for in the ISO Tariff, Section 3.2.2 and under schedules adopted in that process.

⁴ The revised criteria will be cooperatively assessed by SDG&E and the ISO as soon as possible but not later than May 1, 1998. SDG&E also may not meet the WSCC's Disturbance Performance level 'D' (e.g. outage of three or more circuits on a right-of-way, an entire substation or an entire generating plant including switchyard), where the risk of such an outage occurring is considered very small and the costs of upgrades very high.

APPENDIX A.2: CITY OF VERNON

TRANSMISSION ENTITLEMENTS

POINT OF RECEIPT-DELIVERY	PARTIES	DIRECTION	CONTRACT-TITLE	FERC	CONTRACT TERMINATION	CONTRACT AMOUNT
1. Mead-Adelanto Project (MAP)	SCPPA, MSR, Vernon (Operating Agent-LA) (7)	Bi-Directional	<ul style="list-style-type: none"> - MAP Joint Ownership Agreement. - Adelanto Switching Station Interconnection Agreement. - Marketplace-McCullough 500 kV Interconnection Agreement. 		As agreed to by the owners and approved by the Project Coordinating Committee.	75 MW
2. Mead-Phoenix Project (MPP)	SCPPA, MSR, Vernon, SRP, APS (Operating Agent-Westwing) (7)		<ul style="list-style-type: none"> - MPP Joint Ownership Agreement - Westwing Substation Interconnection Agreement - Mead Interconnection Agreement - Marketplace-McCullough 500 kV Interconnection Agreement. 		As agreed to by the owners and approved by the Project Management Committee.	
a) Westwing-Mead		Bi-Directional				28 MW
b) Mead Substation		Bi-Directional				47 MW
c) Mead-Marketplace		Bi-Directional				75 MW
3. North to South on COTP South to North on COTP	Vernon, PG&E, TANC, WAPA, City of Shasta Lake, Carmichael Water District, San Juan Suburban Water District, CDWR		COTP Interim Participation Agreement.		Upon execution of a superseding long-term participation agreement or upon a unanimous decision by the executing parties to terminate this Agreement.	121 MW N-S 92 MW S-N

VERNON APP. A-1

CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
 FERC ELECTRIC TARIFF NO. 7
 FIRST REPLACEMENT TRANSMISSION CONTROL AGREEMENT
APPENDIX A.2: CITY OF VERNON'S CONTRACT ENTITLEMENTS

Original Sheet No. 87

POINT OF RECEIPT-DELIVERY	PARTIES	DIRECTION	CONTRACT-TITLE	FERC	CONTRACT TERMINATION	CONTRACT AMOUNT
4. Sylmar-Midway (After 12/31/2007).	Vernon, Edison	Bi-Directional	Edison-Vernon PDCI/COTP FTS	272	(1) See Notes	93 MW
5. Sylmar-Laguna Bell - Through midnight December 31, 2002. - After midnight December 31, 2002.	Vernon, Edison	Bi-Directional	Edison-Vernon PDCI/COTP FTS	272	(1) See Notes	93 MW 60 MW
6. Midway-Laguna Bell (After 12/31/2007).	Vernon, Edison	Bi-Directional	Edison-Vernon PDCI/COTP FTS	272	(1) See Notes	60 MW
7. Mead-Laguna Bell	Vernon, Edison	Bi-Directional	Edison-Vernon Mead FTS	207	(2) See Notes	26 MW
8. Victorville-Lugo Midpoint-Laguna Bell Note: Service is reduced to 11 MW on 1/1/2003, unless Vernon elects by 10/1/2002 to extend up to an additional 64 MW of service.	Vernon, Edison	Bi-Directional	Edison-Vernon Victorville-Lugo Midpoint FTS	154	(3) See Notes	75 MW
9. Adelanto-Victorville/Lugo Midpoint (4a)	Vernon, Los Angeles	Bi-Directional	Los Angeles-Vernon Adelanto-Victorville/Lugo FTS		(4b) See Notes	75 MW
10. NOB-Sylmar-Midway Midway-Sylmar-NOB (6)	Vernon, PG&E	Bi-Directional	Transmission Service Exchange Agreement Between PG&E and the City of Vernon	148	(5) See Notes	93 MW N-S 82 MW S-N

Summary - Details are in each Agreement.

VERNON APP. A-2

Issued by: Roger Smith, Senior Regulatory Counsel
 Issued on: March 23, 2001

Effective: January 1, 2001

APPENDIX A.2: CITY OF VERNON'S CONTRACT ENTITLEMENTS

Notes:

- (1) Contract Termination: Upon termination of Vernon's ownership of a portion of the COTP entitlement.
- (2) Contract Termination: Upon termination of Vernon's Hoover Power Sales contract with WAPA; or 12/31/2007 based on proper notice from Vernon to Edison.
- (3) Contract Termination: Upon permanent removal from operation of the Mead-Adelanto 500 kV Transmission Project; or 12/31/2007 based on proper notice from Vernon to Edison.
- (4a) DWP No. 10396.
- (4b) Contract Termination: Upon permanent removal from operation of the Mead-Adelanto 500 kV Transmission Project; or four years prior written notice by either party.
- (5) Contract Termination:
 - 1. This Agreement may be terminated on July 31, 2007:
 - A. By PG&E with one year notice to Vernon, if PG&E has not retained for the remaining term of this Agreement at least a 659 MW transmission entitlement in DC Line at NOB.
 - B. By Vernon, if PG&E's entitlement in the DC Line after July 2007 results in an arrangement for the operation of DC Line as to reduce transmission capability.
 - C. If the DC Line or COTP facilities are retired.
 - 2. In the event City elects to participate in an alternative project that provides City with transmission capability between the Southern Terminus of COTP and Edison's system, City may terminate this Agreement by written notice to PG&E at least five (5) years in advance of such termination.
 - 3. Otherwise, the Agreement remains in effect until September 2042.

VERNON APP. A-3

APPENDIX A.2: CITY OF VERNON'S CONTRACT ENTITLEMENTS

Notes: (continued)

- (6) Transfer capability at Sylmar: In accordance with Section 7.2 of the PG&E-Vernon Transmission Service Exchange Agreement and Section 6.1 of the Edison-Vernon Firm Transmission Service Agreement, Vernon receives the following transmission services:
- a) 93 MW from NOB to Sylmar.
 - b) 82 MW from Sylmar to NOB.
 - c) 93 MW from Sylmar to Laguna Bell (60 MW after midnight December 31, 2002).
 - d) 93 MW from Laguna Bell to Sylmar (60 MW after midnight December 31, 2002).
 - e) 60 MW to Sylmar through the regulating transformers.
 - f) 53 MW from Sylmar through the regulating transformers.
 - g) 93 MW from Sylmar to Midway, after 12/31/2007.
 - h) 93 MW from Midway to Sylmar, after 12/31/2007.
- (7) For information only.

VERNON APP. A-4