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 system 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, 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), 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.

- (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 concensus as to any new interim operating limit.

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:

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.

TRANSMISSION CONTROL AGREEMENT APPENDIX A

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, AM
1.	California Companies Pacific Intertie Agreement (CCPIA)	PG&E, SDG&E	40	July 31, 2007	•	43% of the California Companies
2.	City-Edison Pacific Intertie D-C Transmission Facilities Agreement	LADWP	303	2040 or sooner by mutual agreement of the parties.	•	Edison owns 50% of the D-C tra ownership is part of the Californi Pacific Intertie).
3.	PP&L Agreement	PP&L, PG&E, SDG&E		2008	•	California Companies are entitled PP&L 500kV transmission line fr term of the agreement. Per CCPI capacity available on the Pacific 1
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	•	WAPA owns a 500 kV transmiss: Mountain. WAPA receives 400 h transmission service. The capacitused by WAPA is available to CC
5.	Los Angeles-Edison Exchange Agreement	LADWP	219	May 31, 2025	•	500 MW of bi-directional firm en line.
6.	Coordinated Operations Agreement	PG&E, SDG&E, and COTP Participants	270.7	January 1, 2043	•	The allocation of Available Scher parties and PACI parties is calcul to the COTP's and PACI's Rated specified in the Agreement.

		OTHER	FERC	CONTRACT	
	CONTRACT NAME	PARTIES	NO.	TERMINATION	FACILITY/PATH, AM
7.	Pasadena-Edison 230-KV Interconnection and Transmission Agreement	Pasadena	55	2011	Goodrich-Gould and Goodrich-Laline interconnect Edison's system Pasadena's Goodrich Substation. from arrangement shown in control Edison maintains and operates Goodrich Substation.
8.	Edison-MSR Victorville- Lugo/Midway Firm Transmission Service Agreement.	MSR	339	December 31, 1999.	60 MW of transmission service b and Adelanto-Victorville-Lugo.
9.	Victorville-Lugo Interconnection Agreement	LADWP	51	2019 or sooner by mutual agreement	1950 MW towards Edison, 900 N capability of the interconnection it technical studies.

		OTHER	FERC	CONTRACT	
	CONTRACT NAME	PARTIES	NO.	TERMINATION	FACILITY/PATH, AM
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.	 Sylmar-Pardee #1&2, Sylmar-Go transmission line interconnection breakers 's and busses. Lines hav arrangement described in contrac Edison owns one of the two regul
11.	City-Edison Owens Valley Interconnection and interchange Agreement	LADWP	50	On 12 months notice by either party.	At the request of either party and and Edison's respective systems i Haiwee 34.5 kV Substation, may normally operates open at Haiwee
12.	City-Edison 400,000 kVA Interconnection Agreement (Velasco)	LADWP	215	On 3 year written notice by either party.	Edison's portion of the normally transmission line from Laguna Be changes.
13.	Edison-Los Angeles Inyo Interconnection Agreement	LADWP	306	On 5 year advance written notice by either party or by mutual agreement.	Inyo 230/115 kV Substation, Inyo kV transmission line and 230 kV 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.	9 MW of transmission service fro Sepulveda Canyon Power Plant to

		OTHER	FERC			
	CONTRACT NAME	PARTIES	NO.	TERMINATION		FACILITY/PATH, AM
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.	•	Up to 50 MW of bi-directional tra 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.	•	Edison's interconnection with III interconnection on the Devers - C
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.	•	Transmission Service on IID's 23 of QFs resources to Edison's syst

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AM
18.	Four Corners Principles of Interconnected Operation	APS, SRP, EPE, PSNM, TGE	47.0	None	 Generation principles for emerge Edison's facility at Four Corners Moenkopi from Eldorado to CA Moenkopi -Four Corners 500 kV Edison can separate its wholly-ov operation with others under abnorprior notice. Edison can separate its wholly-ov operation with others for mainten (see Co-tenancy Agreement for fate its edison has the right to schedule ε
19.	Four Corners Project Co- Tenancy Agreement and Operating Agreement	APS, SRP, EPE, PSNM, TGE	47.2	2016	 Edison has co-tenancy ownership kV switchyard, 12% in the 345 k 345/500 kV bus-tie transformer b Edison has rights to sufficient cat transformer bank to permit its ent power and energy to be delivered Moenkopi-Four Corners transmis Corners 500 kV Switchyard. Edison may use any unused capar purpose, provided that any over s proration of the remaining capaci of the requesting co-owners.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION		FACILITY/PATH, AM
20.	Navajo Interconnection Principles	USA, APS, SRP, NPC, LADWP, TGE	76	None	•	Generation principles for emerge
21	Edison - Navajo Transmission Agreement	USA, APS, SRP, NPC, LADWP, TGE	264	5/21/23	•	In the event of a contingency in the Moenkopi-Eldorado transmission participants provide each other end without a charge. The amount of each parties' entitlement to the transpart described above.
22.	ANPP High Voltage Switchyard Agreement	APS, SRP, PSNM, EPE, SCPPA, LADWP	320	2031	•	Edison has 21.77% undivided ow common in the ANPP High Volta Edison has rights to transmit thro Switchyard up to its 15.8% share substitute equal amount, plus any its transmission rights in the Palo Transmission Line Edison has additional rights to us High Voltage Switchyard, provid be subject to proration of the rem switchyard ownership.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AM
23.	Mohave Project Co- Tenancy Agreement and Operating Agreement	SRP, NPC, LADWP	319	July 1, 2006	 Edison has co-tenancy ownership Edison has a capacity entitlement equivalent to its entitlement to M Edison may use any unused capacany purpose provided that any ov proration of the remaining capaci 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.	In the event of a contingency in the North Gila-Imperial Valley transithe available capacity based on present out in a separate operating bul
25.	Midway Interconnection	PG&E	309	July, 1, 2007	 Edison's share of 500 kV Midway Midway-Vincent #1 Midway-Vincent #2 Midway-Vincent #3 from Vincent 1
26.	Eldorado System Co- Tenancy	NPC, SRP, LADWP	267	July 1, 2006	Edison's share of Eldorado Syste Mohave 500 kV line minus 700 N 230 kV lines minus 282 MW.

	CONTRACT NAME	OTHER PARTIES	FERC NO.	CONTRACT TERMINATION	FACILITY/PATH, AM
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.	 Control-Silver Peak A&C 55 kV Edison's share of the Control-Silver 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.	WAPA's Blythe 161 kV Substation Blythe 161 kV transmission line. Edison may transmit up to 72 MV Substation, via the Eagle Mounta
29.	SONGS Ownership and Operating Agreements	SDG&E, Anaheim, Riverside	321	None.	Edison's share of SONGS switch transmission lines: 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.	 Transmission is owned by Distric in use by District, or the United S District's Transmission Line is at energy to which Edison may be e Up to 320 MW is required to sup Aqueduct pump load. District's Transmission Line is of by Edison.
31.	Edison-Arizona Transmission Agreement	APS	282	On 2016 or later upon negotiation.	Edison has ownership-like rights from the Four Corners Project to Edison also owns the 500 kV line Edison's Eldorado substation.

		OTHER	FERC	CONTRACT	
	CONTRACT NAME	PARTIES	NO.	TERMINATION	FACILITY/PATH, AM
32.	Mead Interconnection Agreement	WAPA	308	May 31, 2017	 Edison has rights to transmit its I Edison's facilities include Eldora transmission lines. Edison may request additional fir through Mead Substation subject WAPA.
33.	Power Purchase Contract Between SCE and Midway-Sunset Cogeneration Company.	Midway-Sunset Cogeneration Company.		5/8/09	200 MW of capacity through Mic

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 system 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
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 Com Intertie, including deliver: Sylmar to SONGS (100 M (105 MW); from Midway t SONGS to Midway (109M
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 enti PP&L 500 kV transmissio for the term of the agreem capacity available on the F
67-100	WAPA contract with California Companies for Extra High Voltage Transmission and Exchange Service	WAPA, PG&E Edison	17	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 trai Mountain. WAPA receives Mountain transmission sei Mountain not used by WA Companies Pacific Intertie
92-000	Coordinated Operations Agreement	PG&E, Edison, and COTP participants	270.7	January 1, 2043.	The allocation of Available COTP parties and the Cor calculated on a pro rata be PACI's Rated System Trai 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 occu Verde-North Gila-Imperia participants to share the a predetermined operating poperating bulletin.
79-016	SONGS Participation Agreement	Edison, Anaheim, Riverside	321	None.	SDG&E's share of SONG(230 kV transmission lines - San Luis Rey Tap - Mission - Talega (2 lines) - Encina

79-017	IID-SDG&E Interconnection and	IID	065	June 24, 2051 (schedule	Should a contingency occu
	Exchange Agreement			pertaining to emergency	generating or transmission
				capacity/energy services is	electric system, IID and Sl
				expected to be terminated	emergency capacity and er
				upon execution by IID of	
				the ISO's Control Area	
				Agreement).	
78-007	CFE-SDG&E Interconnection and	CFE		12 month notice (schedule	Should a contingency occu
	Exchange Agreement			pertaining to emergency	generating or transmission
				capacity/energy services is	electric system, CFE and §
				expected to be terminated	emergency capacity and er
				upon execution by CFE of	
				the ISO's Control Area	
				Agreement).	
81-005	Palo Verde-North Gila Line ANPP	APS, IID, PNM,	063	July 31, 2031.	The parties are obligated t
	High Voltage Switchyard	SRP, El Paso, SCE,			assistance during emergen
	Interconnection Agreement	SCPPA			in the event that the capac
					insufficient to accommoda
					ANPP Switchyard Particia
					allocations.
81-050	IID-SDG&E California	IID		June 24, 2051.	SDG&E and IID schedule
	Transmission System Participation				California Transmission S
	Agreement				at the Yuma (North Gila)
					the 500 kV breaker yard o
					following percentages of o
					85.64%; and IID 14.36%
78-003	APS-SDG&E Arizona	APS		July 31, 2031.	SDG&E, APS, and IID sch
	Transmission System Participation				Arizona Transmission Sys
	Agreement				the Palo Verde Switchyard
					Gila) 500 kV Switchyard i
					operating capacity: APS -

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 system of San Diego Gas & Electric Company (SDG&E) is placing under the California Independent System Operator's Operational Control meets the Applicable Reliability Criteria, 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; (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.

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.