Avenal Power Center, LLC
500 Dallas Street, Level 31
Houston, TX 77002

April 17, 2009

Mr. Joseph Douglas
Project Manager
c/o Dockets Unit, 4th Floor
California Energy Commission
1516 Ninth Street
Sacramento, CA 95814-5512

Re: Determining Re-Rate Potential For Lines Impacted By Avenal Energy (08-AFC-01)

Dear Mr. Douglas,

Avenal Power Center, LLC ("Avenal") requested that Navigant Consulting, Inc. ("NCI") prepare the attached information on the re-rating potential for transmission lines potentially impacted by Avenal Energy in response to questions raised by CEC staff writing the Transmission System Engineering section of the Final Staff Assessment.

NCI reviewed PG&E's recent transmission system expansion plans and spoke with PG&E staff to prepare the attached document.

Avenal believes this additional information provides the additional information CEC staff had requested regarding the potential to re-rate certain impacted lines. Should the Staff have any further questions, please feel free to contact me at 713-275-6147 or jim.rexroad@macquarie.com.

Sincerely,

J.P. Rexroad
Vice President
Avenal Power Center, LLC

AVENAL PROJECT SIS
DETERMINING RE-RATE POTENTIAL FOR IMPACTED LINES

Background

The Avenal SIS indicated that new Project-related overloads could occur on the lines listed in Table 1 and investigated the possibility of re-rating these impacted lines as a way of mitigating the pertinent overloads. In the past PG&E has increased the ratings of several lines in northern California to reflect a wind speed of 3 or 4 feet-per-second (fps) rather than the standard assumption of 2 fps. As part of the "re-rating" assessment for the Avenal Project Navigant Consulting, Inc. (NCI) reviewed PG&E's recent transmission system expansion plans, and in particular, the "Rerate Table" in PG&E's 2006 Expansion Plan which summarized all of the PG&E facility re-rates that had been accomplished or were proposed as of the end of 2006. Comparing the information in the "Rerate Table" (refer to Appendix 1) to that in Table 1 verifies that none of the impacted lines listed in Table 1 had been re-rated as the end of 2006.

Table 1: New Facility Overloads Due to Avenal Project

Facility	Limiting Conductor	Normal Rating (Amps)	Emergency Rating (Amps)
Impacted 230-kV lines			
Melones–Cottle A 230-kV [1]	795 ACSR	742	850
Panoche-Dos Amigos 230-kV [1]	795 ACSR	742	850
Gates - Panoche #1 230-kV [2]	795 ACSR	742	850
Los Banos - Dos Amigos 230-kV [2]	795 ACSR	742	850
Panoche - Los Banos #2 230-kV [2]	795 ACSR	742	850
Panoche - Los Banos #1 230-kV [2]	1113 AL	825	975
Impacted 115-kV line			
Oro Loma - El Nido 115-kV [2]	397.5 AAL	440	512
Impacted 70-kV lines			
Mendota-Tomatak 70-kV [1]	266.8 AAL	338	396
Coppermine - River Rock 70-kV [2]	266.8 AAL	379	437

NCI also reviewed the PG&E and CaISO Annual Transmission Expansion Plans (for the 2001-2009 period) and one-line diagrams of the PG&E system[3] to verify the limiting conductor of the impacted lines. If specific data was not available for a particular line, the conductor for the line was assumed to be that of known lines with the same normal

[1] Overloaded for Category B conditions
[2] Overloaded for Category C conditions
[3] The conductor size of only one line listed in Table 1 (the Coppermine-River Rock 70-kV line) could not be verified by review of the one-line diagrams.

and emergency ratings as the pertinent line. This method was facilitated by comparing the 2 fps normal and emergency rating listed in the Rerate Table with lines of known conductor configuration.

In addition those lines listed in the Rerate Table whose "original ratings" are the same as the ratings of the lines listed in Table 1 were used to determine the potential increase in normal and emergency ratings for the lines in Table 1 when a 4 fps wind-speed was applied. Table 2 summarizes those facilities found to have the same conductor sizes as the impacted lines and their resulting 4 fps re-rate. As shown in Table 2 the normal ratings for some lines were not increased; however, for those that were changed the normal ratings increased by 11-21%. The emergency ratings of all of the lines listed in Table 2 were increased and these increases ranged from 11% to 20%.

Table 2: Re-rated Facilities per PG&E 2006 Expansion Plan Appendix 1

Facility Name	Re-Rate Date	2 feet-per-second		4 feet-per-second			
		Original Normal Capacity (Amps)	Original Emergency Capacity (Amps)	Re-rated Normal Capacity (Amps)	Normal Re-rate Percentage of Original	Re-rated Emergency Capacity (Amps)	Emergency Re-rate Percentage of Original
795 ACSR Re-rated 230-kV Lines							
Contra Costa-Las Positas	Prior 2002	742	850	886	119%	1,000	118%
Tassajara-Newark	Prior 2002	742	850	886	119%	1,005	118%
U.S. Windpower-Cayetano section of Contra Costa-Cayetano	Prior 2002	742	850	742	100%	1,004	118%
Rio Oso–Brighton	May-09	742	850	886	119%	1,005	118%
1113 AAL Re-rated 230-kV Lines							
Rio Oso-Atlantic	Sep-02	825	975	825	100%	1,078	111%
Rio Oso-Gold Hill	Sep-02	825	975	825	100%	1,078	111%
Pittsburg-Eastshore	May-02	825	975	998	121%	1,161	119%
Pittsburg-San Mateo	May-02	825	975	998	121%	1,161	119%
397.5 AAL Re-rated 115-kV Lines							
Panoche-Oro Loma	Mar-02	440	514	489	111%	610	119%
266.8 AAL Re-rated 70-kV Lines							
Henrietta-Jacobs Corner	Dec-06	346	395	411	119%	474	120%
Sanger-Reedley (Sanger Cogen Jct.-Parlier)	May-04	343	399	343	100%	474	119%

In addition to the above NCI also contacted PG&E via e-mail on April 1, 2009 and April 10, 2009 regarding the rerating matter. NCI's April 1, 2009 e-mail noted that the Avenal SIS had indicated that the addition of the Project could result in Category B overloads on the following lines:

- Melones-Cottle A 230-kV line - maximum overload of 1.4% based on an emergency rating of 850 amps

- Panoche-Dos Amigos 230-kV line - maximum overload of 3.4% based on an emergency rating of 850 amps
- Mendota-Tomatak 70-kV line - maximum overload of 2.7% based on an emergency rating of 396 amps

NCI's April 1, 2009 e-mail also noted that, based on the research discussed above, NCI was of the opinion that:

- Both of the above 230-kV lines utilize 795 ACSR conductor
- The 70-kV line utilizes 266.8 AAL conductor
- All of the ratings listed above are based on a 2 fps wind speed
- PG&E has re-rated at least four 230-kV lines using the 795 MCM ACSR conductor (by applying a 4 fps wind speed) and has increased the emergency ratings of these lines to at least 1,000 amps
- PG&E has re-rated at least two 70-kV lines using the 288.8 AAL conductor (by applying a 4 fps wind speed) and has increased the emergency ratings of these lines to at least 470 amps

NCI's April 10, 2009 e-mail to PG&E requested input as to:

- Whether the three lines mentioned in the April 1, 2009 e-mail are rated at 2 feet/sec.
- Whether or not there are other lines in the study area that are rated at 4 ft/sec.
- How much the ratings of the critical lines could increase if the "new" ratings were based on 4 ft/sec wind speeds

On April 10, 2009 PG&E responded to NCI's April 10, 2009 e-mail and stated that:

- The three lines mentioned in the April 1, 2009 e-mail are rated at 2 feet/sec.
- There are other lines in the study area that are rated at 4 ft/sec.
- Typically, the ratings of the lines based on 4 fps wind speed will increase up to 20% more than the standard 2 fps wind speed rating (PG&E also noted that the ratings of the lines based on 3 fps wind speed will increase up to 10% more than the standard 2 fps wind speed rating).

Conclusions

Based on the above it appears that the lines impacted by the addition of the Avenal Project could be rerated to mitigate such impacts. However, it is understood that PG&E will have to undertake a rerate study for the pertinent lines before any potential rerates could become effective.

Appendix 1

Appendix 1

Table 1: Summary of Transmission Line Rerates

Facility Name	In-Service Date	Original Normal Capacity (Amps)	Original Emergency Capacity (Amps)	Rerated Normal Capacity (Amps)	Rerated Emergency Capacity (Amps)
1. Implemented Line Rerates					
Glenn No. 1 60kV	07/12/06	281	326	336	386
Weber No. 1 60kV	06/28/06	397	463	476	550
Tulucay-Vaca 230kV	06/14/06	831	954	920	1129
Rio Oso-East Nicolaus 115kV	05/26/06	325	377	325	416
Vaca-Suisun 115kV	12/22/05	416	484	499	575
Vaca-Suisun-Jameson 115kV	12/22/05	416	484	499	575
Templeton-Atascadero 70kV	08/03/05	297	345	356	409
Moss Landing-Green Valley No. 1 115kV	07/27/05	920	1055	920	1200
Moss Landing-Green Valley No. 2 115kV	07/27/05	920	1055	920	1200
Ravenswood-Cooley Landing No. 1 115kV	06/30/05	703	802	780	885
Ravenswood-Cooley Landing No. 2 115kV	06/30/05	703	802	780	885
San Mateo-Martin No. 4 115kV	06/27/05	1144	1144	1144	1311
Menlo Tap 60kV	06/10/05	440	499	525	591
Hollister Tap No. 1 115kV	06/10/05	325	377	389	447
Hollister Tap No. 2 115kV	06/10/05	281	326	336	386
Moss Landing-Salinas-Soledad No. 1 115kV (Lagunitas Sw-Sargent SS)	06/10/05	310	350	370	415
Moss Landing-Salinas-Soledad No. 2 115kV (Lagunitas Sw-Sargent SS)	06/10/05	310	350	370	415
Vaca-Vacaville-Jameson-North Tower 115kV	06/10/05	631	742	759	881
Newark-Ames No. 1 115kV	05/31/05	461	522	461	618
Newark-Ames No. 2 115kV	05/31/05	461	522	461	618
Newark-Ames No. 3 115kV	05/31/05	415	470	415	557
Newark-Ames Dist. 115kV	05/31/05	415	470	415	557
Lockeford-Lodi No. 2 60kV	05/31/05	631	742	759	881
Brighton-Davis 115 kV	05/24/05	449	512	449	600
West Sacramento-Brighton 115kV	05/24/05	449	512	449	605
Atascadero-San Luis Obispo 70kV	05/19/05	297	345	330	381
San Mateo-Hillsdale Junction 60kV	04/26/05	488	554	582	656
Tesla-Newark No. 2 230kV (coastal section)	03/23/05	1840	1950	2212	2506
Smartville-Marysville 60kV	03/10/05	243	282	243	311
Cortina-Mendocino 115kV	01/24/05	493	563	588	666
Maricopa-Old River 70kV	01/24/05	257	298	308	354

Appendix 1

Facility Name	In-Service Date	Original Normal Capacity (Amps)	Original Emergency Capacity (Amps)	Rerated Normal Capacity (Amps)	Rerated Emergency Capacity (Amps)
Kern-Old River 70kV	01/21/05	243	282	291	334
Cooley Landing-Palo Alto 115kV	10/17/04	703	802	780	885
Corona-Lakeville 115kV	12/08/04	1126	1126	1289	1289
Eagle Rock-Cortina 115kV	12/08/04	440	514	528	600
Sonoma-Pueblo 115 kV	12/08/04	440	514	528	600
Moss Landing-Salinas-Soledad No. 1 115kV (Moss Landing-Lagunitas Sw)	11/29/04	488	554	582	656
Moss Landing-Salinas-Soledad No. 2 115kV (Moss Landing-Lagunitas Sw)	11/29/04	488	554	582	656
Tesla-AEC Tap Jct. section of Tesla-Manteca 115kV	10/12/04	631	742	631	881
Atlantic-Pleasant Grove No. 2 60kV	09/15/04	631	742	759	881
Smartville-Lincoln-Pleasant Grove 60kV	08/26/04	281	326	325	377
West Sacramento-Davis 115kV	08/26/04	281	326	336	386
Kasson-Louise 60kV	08/17/04	281	326	336	386
Monta Vista-Jefferson No. 1 230kV	06/27/04	920	1055	1106	1253
Monta Vista-Jefferson No. 2 230kV	06/27/04	920	1055	1106	1253
Contra Costa-Brentwood 230kV	06/14/04	825	954	996	825
Contra Costa-Delta Switching Yard 230kV	06/09/04	825	954	825	1129
Delta Switching Yard-Tesla 230kV	06/09/04	825	954	996	1129
Ravenswood-Palo Alto No. 1 115kV	05/28/04	703	802	839	949
Ravenswood-Palo Alto No. 2 115kV	05/28/04	703	802	839	949
Sanger-Reedley 70kV (Sanger Cogen Jct.-Parlier)	05/23/04	343	399	343	474
Atlantic-Del Mar 60kV	05/18/04	631	742	759	881
Kings River-Sanger-Reedley 115kV (Kings River-Sanger section)	04/08/04	437	512	528	610
Kings River-Sanger-Reedley 115kV (Piedra Sw-Reedley section)	04/08/04	437	512	528	600
Rio Oso-Woodland No. 1 115kV	04/05/04	631	742	631	820
Rio Oso-Woodland No.2 115kV	04/05/04	631	742	631	820
El Dorado-Missouri Flat 115kV	05/14/04	325	377	389	447
Placer-Gold Hill No. 2 115kV	04/21/04	325	377	325	416

Appendix 1

Facility Name	In-Service Date	Original Normal Capacity (Amps)	Original Emergency Capacity (Amps)	Rerated Normal Capacity (Amps)	Rerated Emergency Capacity (Amps)
Tesla-Ravenswood 230kV	3/2/2004	1840	2110	1840	2500
Brentwood-Kelso 230kV	12/18/2003	825	954	996	1129
Kelso-Tesla 230kV	12/18/2003	825	954	996	1129
Kasson-Kasson Jct. 115kV	12/16/2003	631	743	631	881
Tesla-Salado 115kV	10/31/2003	297	345	297	409
Tesla-Salado-Manteca 115kV	4/29/2003	281	326	281	386
El Capitan-Wilson 115kV	4/24/2003	631	743	759	881
Kifer-San Jose "B" 115kV	4/18/2003	703	802	839	949
Newark-Milpitas 115kV	4/18/2003	920	1055	1106	1200
Tesla-Newark No.2 230kV	4/18/2003	1650	1714	1650	1954
Swift-Metcalf 115kV	4/18/2003	1144	1144	1200	1200
Ravenswood-San Mateo 115kV	3/25/2003	461	522	461	618
Newark-Ravenswood No. 1 230kV	11/26/2002	1840	2110	1840	2500
Mountain View-Monta Vista 115kV	10/21/2002	703	802	839	949
Whisman-Monta Vista 115kV	10/21/2002	703	802	839	949
Ignacio-San Rafael No. 1 115kV	10/14/2002	488	554	582	656
Ignacio-San Rafael No. 3 115kV	10/14/2002	488	554	582	656
Llagas-Gilroy Foods 115kV	9/22/2002	1262	1484	1518	1762
Rio Oso-Atlantic 230kV	9/4/2002	825	975	825	1078
Rio Oso-Gold Hill 230kV	9/4/2002	825	975	825	1078
Palermo-Pease 115kV (Palermo-Honcut)	8/1/2002	449	512	497	564
Carbona No. 2 60kV Tap	7/26/2002	440	514	528	610
Cortina No. 3 Line Section 60kV	7/18/2002	281	326	336	386
Schulte-Kasson 115kV	7/1/2002	631	742	631	881
Tesla-Schulte 115kV	7/1/2002	631	742	631	881
Vierra-Tracy-Kasson 115kV	7/1/2002	631	742	631	881
Fulton-Santa Rosa No. 1 115kV	6/24/2002	631	742	759	881
Fulton-Santa Rosa No. 2 115kV	6/24/2002	631	742	759	881
Placer-Gold Hill No. 1 115kV	6/17/2002	325	377	325	416
Salado-Newman No. 1 60kV (Salado-Newman Jct)	6/13/2002	344	400	412	475
Eastshore-San Mateo 230kV	5/23/2002	831	954	990	1119
Pittsburg-Eastshore 230kV	5/23/2002	825	975	998	1161
Pittsburg-San Mateo 230kV	5/23/2002	825	975	998	1161
Colgate-Smartville No. 2 60kV	5/22/2002	375	436	417	482
Stagg-Country Club No. 1	5/22/2002	631	742	759	881

Appendix 1

Facility Name	In-Service Date	Original Normal Capacity (Amps)	Original Emergency Capacity (Amps)	Rerated Normal Capacity (Amps)	Rerated Emergency Capacity (Amps)
60kV					
Stagg-Country Club No. 2 60kV	5/22/2002	631	742	759	881
Palermo-Bogue 115kV	5/21/2002	325	377	361	416
Palermo-Nicolaus 115kV	3/26/2002	325	377	361	416
Panoche-Oro Loma 115kV	3/26/2002	440	514	489	610
Metcalf-Moss Landing No. 1 230kV	3/22/2002	813	910	899	1073
Metcalf-Moss Landing No. 2 230kV	3/22/2002	813	910	899	1073
Bair-Belmont 115kV	Prior 2002	415	470	495	557
Bair-Cooley Landing No. 1 60kV	Prior 2002	415	470	495	557
Bair-Cooley Landing No. 2	Prior 2002	415	470	495	557
Clayton-Meadow Lane 115kV	Prior 2002	631	742	759	881
Clear Lake-Eagle Rock 60kV	Prior 2002	440	514	528	610
Contra Costa-Las Positas 230kV	Prior 2002	742	850	886	1000
Contra Costa-U.S. Windpower section of Contra Costa-Cayetano 230kV	Prior 2002	742	850	886	1000
Dumbarton-Newark 115kV	Prior 2002	718	816	838	948
East Grand-San Mateo 115kV	Prior 2002	1143	1143	1160	1160
Eastshore-Dumbarton 115 kV	Prior 2002	718	816	839	949
Eastshore-Mt. Eden No. 1 115kV	Prior 2002	703	802	839	949
Eastshore-Mt. Eden No. 2 115kV	Prior 2002	703	802	839	949
Grant-Eastshore No. 1 115kV	Prior 2002	359	406	428	481
Grant-Eastshore No. 2 115kV	Prior 2002	359	406	428	481
Green Valley-Llagas 115kV	Prior 2002	631	742	759	881
Hammer-Country Club 60kV	Prior 2002	631	742	759	881
Hicks-Metcalf 230kV	Prior 2002	920	1055	1106	1253
Lakeville-Tulucay 230kV	Prior 2002	825	975	998	1161
Lakewood-Clayton-Meadow Lane 115kV (Lakewood Jct.-Meadow Lane section)	Prior 2002	631	742	759	881
Livermore-Las Positas 60kV	Prior 2002	631	742	759	881
Lockeford-Industrial 60kV	Prior 2002	631	742	759	881
Lockeford-Lodi No. 3 60kV	Prior 2002	440	514	528	600
Metcalf-El Patio No. 1 115kV	Prior 2002	703	802	838	949
Metcalf-El Patio No. 2 115kV	Prior 2002	703	802	838	949
Metcalf-Evergreen No. 1	Prior 2002	703	802	838	949

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Facility Name	In-Service Date	Original Normal Capacity (Amps)	Original Emergency Capacity (Amps)	Rerated Normal Capacity (Amps)	Rerated Emergency Capacity (Amps)
115kV					
Metcalf-Evergreen No. 2 115kV	Prior 2002	703	802	838	949
Metcalf-Morgan Hill 115kV	Prior 2002	703	802	838	949
Millbrae-San Mateo 115kV	Prior 2002	1144	1144	1311	1311
Missouri Flat-Gold Hill No. 1 115kV	Prior 2002	631	742	759	881
Missouri Flat-Gold Hill No. 2 115kV	Prior 2002	631	742	759	881
Monta Vista-Hicks 230kV	Prior 2002	920	1055	1106	1253
Moraga-San Leandro No. 1 115kV	Prior 2002	415	470	495	557
Moraga-San Leandro No. 2 115kV	Prior 2002	415	470	495	557
Moraga-San Leandro No. 3 115kV	Prior 2002	538	602	640	711
Moraga-Oakland "J" 115kV	Prior 2002	538	602	640	711
Newark-Fremont No. 1 115kV	Prior 2002	310	350	370	417
Newark-Fremont No. 2 115kV	Prior 2002	310	350	370	417
Newark-Kifer 115kV	Prior 2002	703	802	839	949
Newark-NRS No. 1 115kV	Prior 2002	703	802	839	949
Newark-NRS No. 2 115kV	Prior 2002	703	802	839	949
Newark-Trimble 115kV	Prior 2002	703	802	839	949
NRS-Scott No. 1 115kV	Prior 2002	703	802	839	949
NRS-Scott No. 2 115kV	Prior 2002	703	802	839	949
Oakland J-Grant 115kV	Prior 2002	703	802	838	948
Parkway-Moraga 230kV	Prior 2002	911	1021	1024	1140
Pittsburg-Clayton No. 1 115kV	Prior 2002	1262	1484	1518	1600
Pittsburg-Clayton No. 3 115kV	Prior 2002	1262	1484	1518	1762
Pittsburg-San Ramon 230kV	Prior 2002	825	975	998	1161
Pittsburg-Tesla No. 1 230kV	Prior 2002	825	975	998	1161
Pittsburg-Tesla No. 2 230kV	Prior 2002	825	975	998	1161
Ravenswood-Bair 115kV	Prior 2002	461	522	550	707
San Leandro-Oakland J No. 1 115kV	Prior 2002	703	802	839	949
San Mateo-Bair 60kV	Prior 2002	415	470	495	557
San Mateo-Bay Meadows No. 1 115kV	Prior 2002	415	470	488	554
San Mateo-Bay Meadows No. 2 115kV	Prior 2002	415	470	488	554
San Mateo-Belmont 115kV	Prior 2002	415	470	495	633
San Mateo-Martin No. 3 115kV	Prior 2002	1144	1144	1160	1160
San Mateo-Martin No. 6 115kV	Prior 2002	1144	1144	1160	1160

Facility Name	In-Service Date	Original Normal Capacity (Amps)	Original Emergency Capacity (Amps)	Rerated Normal Capacity (Amps)	Rerated Emergency Capacity (Amps)
San Ramon-Moraga 230kV	Prior 2002	831	954	996	1129
San Ramon-Radum 60kV	Prior 2002	631	742	759	881
Saratoga-Vasona 230kV	Prior 2002	920	1055	1106	1253
SF Airport-San Mateo 115kV	Prior 2002	1144	1144	1311	1311
SF Airport-San Mateo 115kV	Prior 2002	1144	1144	1311	1311
Stockton A-Lockeford-Bellota No. 1 115kV	Prior 2002	325	377	389	447
Stockton A-Lockeford-Bellota No. 2 115kV	Prior 2002	325	377	389	447
Stockton A-Weber No. 3 60kV	Prior 2002	631	742	759	881
Tassajara-Newark 230kV	Prior 2002	742	850	886	1005
Tulucay-Vaca 230kV	Prior 2002	831	954	920	1051
U.S. Windpower-Cayetano section of Contra Costa-Cayetano 230kV	Prior 2002	742	850	742	1004
Vaca-Bahia 230kV	Prior 2002	752	888	906	1054
Vaca-Lakeville 230kV	Prior 2002	831	954	920	1051
Vaca-Parkway 230kV	Prior 2002	752	888	906	1053
Valley Springs No. 1 60kV	Prior 2002	325	377	389	447
Vasona-Metcalf 230kV	Prior 2002	920	1055	1106	1253
Wilson-Merced No. 1 115kV	Prior 2002	343	399	411	474
Wilson-Merced No. 2 115kV	Prior 2002	343	399	411	474
2. Line Rerates Under Construction or Planned					
Henrietta-Jacobs Corner 70kV	Dec-06	346	395	411	474
Palermo-Pease 115 kV (Honcut-Pease section)	Dec-06	440	512	489	564
Evergreen-Los Gatos 60kV	May-07	440	499	525	591
Gold Hill-Clarksville 115kV	May-07	661	742	759	881
Monta Vista-Los Gatos 60kV	May-07	440	499	525	591
Borden-Madera No. 2 70kV	May-07	661	742	759	881
Drum-Bell 115 kV	May-07	325	377	325	447
Table Mountain-Tres Vias 60kV	May-07	661	742	703	820
Humboldt Bay-Eureka 60kV	May-07	310	350	370	415
Lakeville-Petaluma "C" 60kV	Dec-07	440	514	528	610
Lockford-Lodi No. 1 60kV	May-08	281	326	336	386
Lodi-Industrial 60kV	May-08	631	742	759	881
Contra Costa-Rossmoor Tap No. 1	May-09	825	954	825	1129
Contra Costa-Rossmoor Tap No. 2	May-09	825	954	825	1129
Rio Oso – Brighton 230 kV	May-09	742	850	886	1005

Table 2: Summary of Transmission Transformer Rerates

Transformer Name	Actual Rating Change Date	Nameplate Normal Rating (MVA)	Existing Emergency 4-HR Rating (MVA)	Existing Emergency 1-HR Rating (MVA)	Rerate Normal Rating (MVA)	Rerate Emergency 4-HR Rating (MVA)	Rerate Emergency 1-HR Rating (MVA)
1. Increased Rating							
Atlantic #1 230/60 kV	6/13/2001	134.4	161.0	187.0	139.5	161.0	187.0
Brighton #9 230/115 kV	3/2/2001	120.0	144.0	168.0	133.5	145.2	159.3
Cooley Landing #1 115/60 kV	5/27/2004	84	100	100	84	100	108
Cooley Landing #2 115/60 kV	5/27/2004	90	103	103	96	107	110
Eastshore #1 230/115 kV	10/5/2001	120.0	144.0	168.0	134.4	160.8	174.7
Eastshore #2 230/115 kV	10/5/2001	120.0	144.0	168.0	138.0	161.1	162.0
Green Valley #1 115/60 kV	6/3/2002	37.0	37.0	37.0	43.5	45.0	52.5
Los Banos #1 500/230 kV	8/20/2001	840.0	840.0	840.0	891.0	1005.0	1050.0
McCall #1 230/115 kV	7/11/2004	120.0	133.0	144.0	126.7*	150.0	168.0
McCall #2 230/115 kV	7/11/2004	403.2	403.2	403.2	403.2	465.0	465.0
Mesa 230/115 kV Bank#1	8/18/2006	134.4	161.3	188.2	134.4	181.3	208
Mesa 230/115 kV Bank#2	8/18/2006	134.4	161.3	188.2	134.4	181.3	208
Moss Landing #1 230/115 kV	11/6/2002	131.0	157.0	183.8	160.0	181.0	193.0
Moss Landing #2 230/115 kV	6/3/2002	131.0	157.0	183.8	160.0	181.0	193.0
Moss Landing #9 500/230 kV	10/16/2001	1122.0	1335.0	1571.0	1236.0	1455.0	1584.0
Newark #7 230/115 kV	9/7/2000	403.2	463.7	505.0	429.0	495.0	530.1
Newark #9 230/115 kV	9/7/2000	403.2	463.7	505.0	489.6	579.0	633.9
Newark #11 230/115 kV	9/7/2000	403.2	463.7	505.0	403.2	496.2	539.4
Ravenswood #1 230/115 kV	8/31/2000	403.2	463.7	504.0	440.1	490.0	514.5
Salado #1 115/60 kV	9/25/2002	48.0	58.6	67.2	64.0	77.0	84.0

Appendix 1

Transformer Name	Actual Rating Change Date	Nameplate Normal Rating (MVA)	Existing Emergency 4-HR Rating (MVA)	Existing Emergency 1-HR Rating (MVA)	Rerate Normal Rating (MVA)	Rerate Emergency 4-HR Rating (MVA)	Rerate Emergency 1-HR Rating (MVA)
Table Mountain #2 230/115/60 kV		168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	201.6 (230 kV) 101 (60 kV)	235.2 (230 kV) 117.6 (60 kV)
Tesla #2 500/230 kV		1122.0	1335.0	1571.0	1312.0	1480.0	1626.0
Tesla #4 500/230 kV		940.0	1073.0	1159.0	981.0	1092.0	1200.0
Vaca Dixon #2 230/115 kV	8/16/2002	134.4	134.4	134.4	140.0	152.0	160.0
2. No Change in Rating							
Borden #1 230/70 kV	N.A.	107.4	107.4	107.4	107.4	107.4	107.4
Colgate P.H. #3 230/60 kV	N.A.	75.0	90.0	105.0	75.0	90.0	105.0
Contra Costa #3 230/115 kV	N.A.	120.0	144.0	168.0	120.0	144.0	168.0
Corcoran #2 115/70 kV	N.A.	28.1	34.2	39.4	28.1	34.2	39.4
Cortina #1 230/115/60 kV	N.A.	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)
Del Monte #4 115/60 kV	N.A.	80.0	96.0	112.0	80.0	96.0	112.0
Herdlyn #2 70/60 kV	N.A.	50.0	60.0	70.0	50.0	60.0	70.0
Ignacio #1 115/60 kV	N.A.	80.0	80.0		80.0	80.0	
Palermo #1 230/115/60 kV		168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)
3. Decrease in Rating							
Henrietta #2 230/70 kV	10/22/2001	107	129	145	100	107	107
Ignacio #3 230/115/60 kV	10/8/2001	168 (230 kV) 84 (60 kV)	202 (230 kV) 101 (60 kV)	235 (230 kV) 118 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)	168 (230 kV) 84 (60 kV)
Kern PP #3 230/115 kV	11/6/2002	115.0	137.0	168.0	115.0	115.0	
Kern PP #3A 230/115 kV	10/25/2002	120.0	120.0	168.0	120.0	120.0	
Kern PP #4 230/115 kV	11/6/2002	120.0	144.0	168.0	120.0	120.0	
Kern PP #5 230/115 kV	11/6/2002	120.0	144.0	168.0	134.4	134.4	
Monta Vista #4 230/115	6/3/2002	120.0	144.0	168.0	120.0	120.0	

Appendix 1

Transformer Name	Actual Rating Change Date	Nameplate Normal Rating (MVA)	Existing Emergency 4-HR Rating (MVA)	Existing Emergency 1-HR Rating (MVA)	Rerate Normal Rating (MVA)	Rerate Emergency 4-HR Rating (MVA)	Rerate Emergency 1-HR Rating (MVA)
kV							
Monta Vista #4A 230/115 kV	6/3/2002	134.4	161.4	188.0	134.4	134.4	
Rio Oso #1 230/115 kV	5/30/2001	120.0	144.0	188.0	120.0	120.0	
Taft #2 115/70/12 kV	7/22/2002	62.0	74.0	87.0	58.0	68.0	
Vaca Dixon #2A 230/115 kV	8/16/2002	120.0	144.0	168.0	118.0	128.0	136.0
4. To Be Processed							
Kasson 115/60 kV	76.2	76.2	91.4	106.6	TBD	TBD	TBD
Kern PP #1 115/70 kV	80.0	80.0	96.0	112.0	TBD	TBD	TBD
Manteca #3 115/60 kV	31.3	31.3	37.5	43.7	TBD	TBD	TBD
Metcalf #13 500/230 kV	May-07	1122	1122	1122	TBD	TBD	TBD
Soledad #4	May-07	37.5	45	52.5	TBD	TBD	TBD
Soledad #5	May-07	37.5	45	52.5	TBD	TBD	TBD
Tesla #6 500/230 kV	May-07	1122	1122	1122	TBD	TBD	TBD

BEFORE THE ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION
OF THE STATE OF CALIFORNIA
1516 NINTH STREET, SACRAMENTO, CA 95814
1-800-822-6228 – WWW.ENERGY.CA.GOV

APPLICATION FOR CERTIFICATION
For the AVENAL ENERGY PROJECT

Docket No. 08-AFC-1
PROOF OF SERVICE
(Revised 2/3/2009)

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Declaration of Service

I, Joshua Taylor, Declare that on April 21, 2009, I served and filed copies of the attached Evaluation of Re-rating Potential for Affected Transmission Lines for Avenal Energy (08-AFC-1) dated April 17, 2009. The original document, filed with the Docket Unit, is accompanied by a copy of the most recent Proof of Service list, located on the web page for this project at:

http://www.energy.ca.gov/sitingcases/avenal/index.html

The document has been sent to both the other parties in this proceeding (as shown on the Proof of Service list) and to the Commission's Docket Unit, in the following manner:

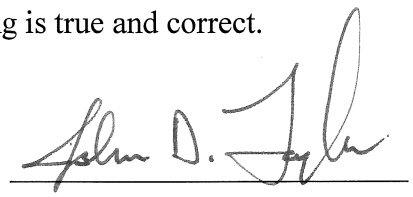
Via electronic mail to those individuals listed on the Proof of Service list above.

AND

Sending one original, 1 hard copy, and two electronic copies (compact disc), via Federal Express located in Irvine, California, to the address below:

Mr. Joseph Douglas
California Energy Commission
C/O Docket Unit (08-AFC-1)
1516 Ninth Street, MS-4
Sacramento, CA 95814-5512

I declare under penalty of perjury that the foregoing is true and correct.



Joshua D. Taylor