

APPENDIX 3A

Interconnection System Impact Study Agreements for 230-kV and 138-kV Systems

INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

THIS AGREEMENT is made and entered into this 28 day of Dec, 2006 by and between NRG West, a limited liability company organized and existing under the laws of the State of Delaware, ("Interconnection Customer,") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("ISO"). The Interconnection Customer and the ISO each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated October 11, 2006; and

WHEREAS, the Interconnection Customer desires to interconnect the Large Generating Facility with the ISO Controlled Grid; and

WHEREAS, the ISO has completed an Interconnection Feasibility Study (the "Feasibility Study") and provided the results of said study to the Interconnection Customer¹; and

WHEREAS, the Interconnection Customer has requested the ISO to conduct or cause to be performed an Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the ISO's FERC-approved Standard Large Generation Interconnection Procedures ("LGIP") or the Master Definitions Supplement, Appendix A to the ISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the ISO shall conduct or cause to be performed an Interconnection System Impact Study consistent with the LGIP in accordance with the ISO Tariff.

¹ This recital to be omitted if the Interconnection Customer has elected to forego the Interconnection Feasibility Study.

- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by the Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. The ISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker short circuit capability limits exceeded on the Participating TO's electric system or the ISO Controlled Grid as a result of the interconnection;
 - identification of any thermal overload or voltage limit violations on the Participating TO's electric system or the ISO Controlled Grid resulting from the interconnection;
 - identification of any instability or inadequately damped response to system disturbances on the Participating TO's electric system or the ISO Controlled Grid resulting from the interconnection;
 - a description and non-binding, good faith estimate of cost and cost responsibility for and time for construction of facilities on the Participating TO's electric system required to interconnect the Large Generating Facility to the ISO Controlled Grid and to address the identified short circuit, instability, and power flow issues on the ISO Controlled Grid; and
 - a Deliverability Assessment on the ISO Controlled Grid pursuant to Section 3.3 of the LGIP; and
 - assessment of the potential magnitude of financial impacts, if any, on Local Furnishing Bonds and a proposed resolution.
- 6.0 The Interconnection Customer shall provide a deposit of \$50,000 for the performance of the Interconnection System Impact Study. The good faith

estimate for the time of completion of the Interconnection System Impact Study is \$50,000.

Following the issuance of the Interconnection System Impact Study, the ISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study, inclusive of any re-studies and amendments to the Interconnection System Impact Study, pursuant to Section 9 of this Agreement.

Any difference between the deposit made toward the Interconnection System Impact Study, amendments and re-studies to the Interconnection System Impact Study, and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate in accordance with Section 13.3 of the LGIP.

- 7.0 Pursuant to Section 3.7 of the LGIP, the ISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The ISO may provide a copy of the Interconnection System Impact Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection, and a revision of the Interconnection System Impact Study or re-study may be required in such event.
- 8.0 Substantial portions of technical data and assumptions used to perform the Interconnection System Impact Study, such as system conditions, existing and planned generation, and unit modeling, may change after the ISO provides the Interconnection System Impact Study results to the Interconnection Customer. Study results will reflect available data at the time the ISO provides the Interconnection System Impact Study to the Interconnection Customer. The ISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 9.0 In the event that a re-study or amendment of the Interconnection System Impact Study is required, the ISO shall provide notification of the need for such re-study or amendment, and the Interconnection Customer shall provide direction as to whether to proceed with the re-study or amendment and any associated deposit payment pursuant to Section 7.6 or Section 12.2.4 of the LGIP, as applicable.
- 10.0 The ISO shall maintain records and accounts of all costs incurred in performing the Interconnection System Impact Study, inclusive of any re-

studies or amendments thereto, in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the Participating TO's offices and at its own expense, to audit the ISO's records as necessary and as appropriate in order to verify costs incurred by the ISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the ISO representative, within one hundred eighty (180) Calendar Days following receipt by the Interconnection Customer of the ISO's notification of the final costs of the Interconnection System Impact Study, inclusive of any re-study or amendment thereto.

11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the ISO. Upon receipt of such notice, this Agreement shall terminate.

12.0 Pursuant to Section 7.2 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6 of this Agreement are received by the ISO. If ISO does not receive the fully executed Agreement and payment pursuant to Section 7.2 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the ISO pursuant to Section 3.8 of the LGIP.

13.0 Miscellaneous.

13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Interconnection System Impact Study Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.

13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.

13.3 Binding Effect. This Interconnection System Impact Study Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

13.4 Conflicts. In the event of a conflict between the body of this Interconnection System Impact Study Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Interconnection System Impact Study Agreement shall prevail and be deemed the final intent of the Parties.

13.5 Rules of Interpretation. This Interconnection System Impact Study Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural

number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Interconnection System Impact Study Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Interconnection System Impact Study Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Interconnection System Impact Study Agreement or such Appendix to this Interconnection System Impact Study Agreement, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Interconnection System Impact Study Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- 13.6 Entire Agreement. This Interconnection System Impact Study Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Interconnection System Impact Study Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Interconnection System Impact Study Agreement.
- 13.7 No Third Party Beneficiaries. This Interconnection System Impact Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

- 13.8 Waiver. The failure of a Party to this Interconnection System Impact Study Agreement to insist, on any occasion, upon strict performance of any provision of this Interconnection System Impact Study Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Interconnection System Impact Study Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Interconnection System Impact Study Agreement. Termination or default of this Interconnection System Impact Study Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or ISO. Any waiver of this Interconnection System Impact Study Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Interconnection System Impact Study Agreement, or with respect to any other matter arising in connection with this Interconnection System Impact Study Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Interconnection System Impact Study Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Interconnection System Impact Study Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 Headings. The descriptive headings of the various Articles and Sections of this Interconnection System Impact Study Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Interconnection System Impact Study Agreement.
- 13.10 Multiple Counterparts. This Interconnection System Impact Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 Amendment. The Parties may by mutual agreement amend this Interconnection System Impact Study Agreement by a written instrument duly executed by both of the Parties.
- 13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Interconnection System Impact Study Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Interconnection

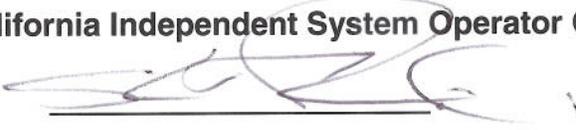
System Impact Study Agreement upon satisfaction of all applicable laws and regulations.

- 13.13 **Reservation of Rights.** The ISO shall have the right to make a unilateral filing with FERC to modify this Interconnection System Impact Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Interconnection System Impact Study Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Interconnection System Impact Study Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.14 **No Partnership.** This Interconnection System Impact Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 13.15 **Assignment.** This Interconnection System Impact Study Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Interconnection System Impact Study Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Interconnection System Impact Study Agreement; and provided further that the Interconnection Customer shall have the right to assign this Interconnection System Impact Study Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Unit, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of

assignment right(s). Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Interconnection System Impact Study Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

California Independent System Operator Corporation

By: 
Title: DARIUSH SHIRMOHAMMADI, DIRECTOR
REGIONAL TRANSMISSION SOUTH
Date: December 28, 2006

NRG West

By: 
Title: President, West Region
Date: 1/22/07

Attachment A

Interconnection System Impact Study Agreement

ASSUMPTIONS USED IN CONDUCTING THE INTERCONNECTION SYSTEM IMPACT STUDY

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied:

- **230 kV bus at the Encina Power Plant**

Designation of alternative Point(s) of Interconnection and configuration:

- **Waived**

Attachment B

**Interconnection System Impact
Study Agreement**

INTERCONNECTION SYSTEM IMPACT STUDY PLAN



**Generator
Interconnection
System Impact Study**

Study Plan

Project Name
Encina Peaking Project

Interconnection Customer
NRG West

December 28, 2006

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Project Summary

The Encina Peaking Project is a 300 MW gas turbine project. The proposed location of the project is in Carlsbad, California. This interconnection request is for a new generating facility.

NRG West proposes the following milestone dates:

1. Proposed In-Service Date: 6/1/08
2. Proposed Trial Operation Date: 7/1/08
3. Proposed Commercial Operation Date: 8/1/08

The preferred Point of Interconnection is the 230 kV bus at the Encina Power Plant. No alternative Point of Interconnection was identified.

System Impact Study Scope Summary

The overall objective of the Interconnection System Impact Study (ISIS) is to perform a detailed technical analysis to determine the impact of the proposed interconnected generator on the transmission system. The technical analysis includes a steady-state thermal and post-transient power flow, reactive power deficiency, transient stability, short circuit, and deliverability analyses. This analysis is based on the applicable planning standards, including the Western Electricity Coordinating Council's (WECC) Reliability Criteria (including Voltage and Stability Criteria), and the North American Electric Reliability Council's (NERC) Planning Standards.

This study will also identify the maximum allowed output without Delivery Network Upgrades, under a variety of potential system conditions.

The ISIS also includes non-binding, good-faith estimates of construction schedule, costs, and facilities (i.e. site layout, plant layout, access roads, etc.) that are required to interconnect and deliver the full output of the proposed project to the SDG&E transmission grid.

Study Fee

A study fee of \$50,000 has been estimated for performing this Interconnection System Impact Study. The final cost to complete this ISIS will be based on the actual cost. CAISO will bill NRG West the remaining balance of the actual cost higher than the \$50,000 study deposit required per Section 7.2 of the Large Generator Interconnection Procedures (LGIP). If the actual cost is less than the study deposit, CAISO will refund the balance to NRG West.

Study Schedule

Timeframe	Activity
December 28, 2006	<ul style="list-style-type: none">• CAISO tenders a signed ISISA to IC
30 CD	<ul style="list-style-type: none">• CAISO received executed ISISA from IC, \$50,000 study deposit, and Part 1 Attachment A Technical Data
120 CD	<ul style="list-style-type: none">• CAISO issues ISIS Final Report to IC• CAISO provides Pro Forma IFASA to IC
10 BD	<ul style="list-style-type: none">• ISIS Results Meeting

CAISO = California Independent System Operator

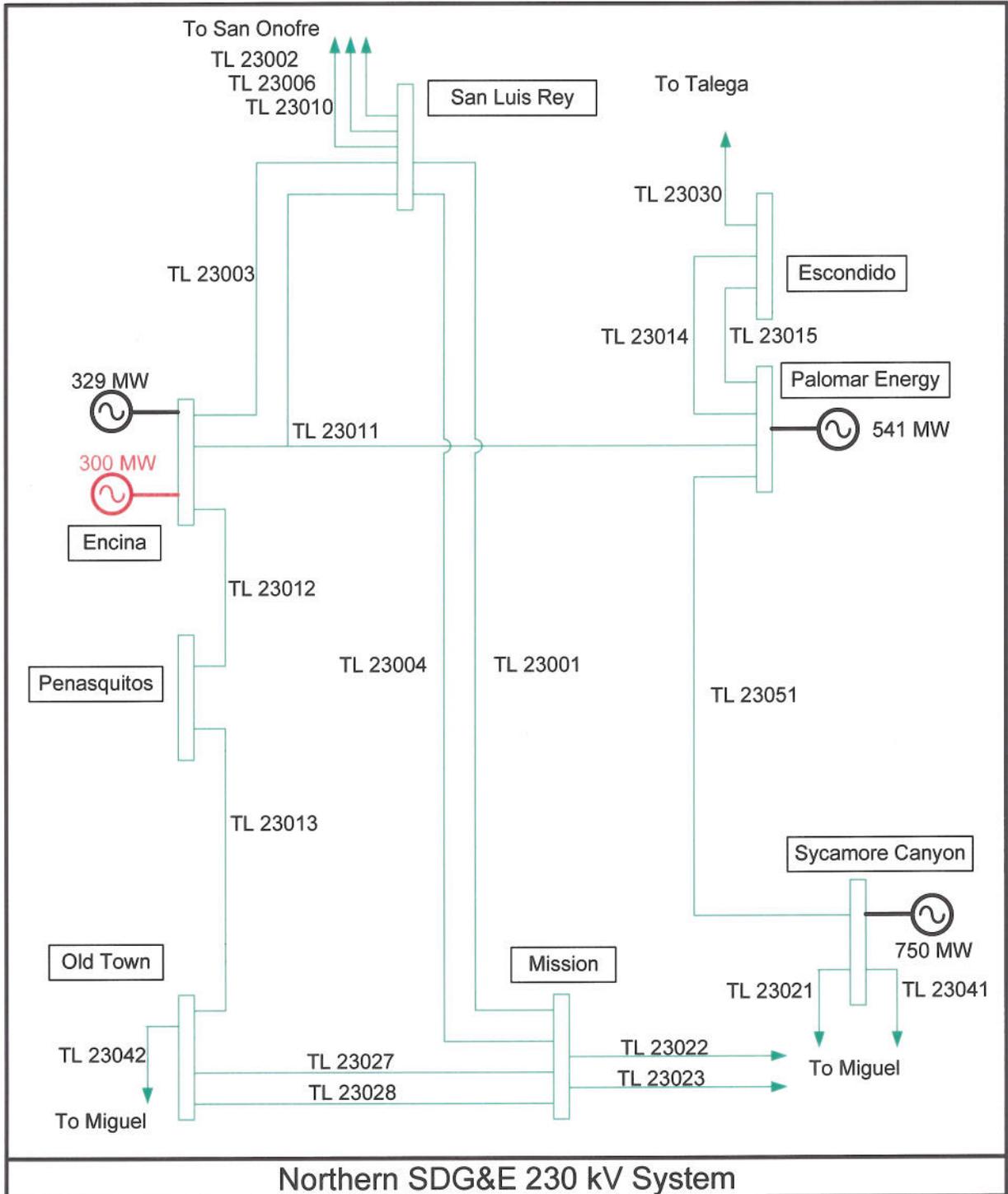
ISISA = Interconnection System Impact Study Agreement

IC = Interconnection Customer

IFASA = Interconnection Facilities Study Agreement



Conceptual One-Line Diagram



Summary of the Results of the Feasibility Study

Per mutual agreement among the CAISO, the Participating Transmission Owner (PTO), and the Interconnection Customer, the requirement for an Interconnection Feasibility Study was waived for this project.

System Impact Study Assumptions

The Study results, recommendations, and cost estimates may vary if these assumptions are changed. The following general assumptions will be used during the course of this study:

1. This interconnection request is for a new 300 MW generation facility in Carlsbad, California. The preferred interconnection point is the 230 kV bus at the Encina Power Plant.
2. The proposed In-Service date is June 1, 2008.
3. The proposed Commercial Operation Date is August 30, 2008.
4. Encina Peaking Project occupies Queue Position #137 in the CAISO generation queue. The Future Year (FY) study, or 'queue' study, will account for all higher-queued generation projects within the SDG&E network. The FY study will evaluate the 2011 heavy summer study period. The Commercial Operation Date (COD) study examines operating conditions modeling higher-queued generation projects within the SDG&E network which will be in-service when the Encina Peaking Project is in-service. The COD study will evaluate the 2008 heavy summer study period. The following table identifies projects modeled in each of the two types of analysis:

Queue Position	Point of Interconnection	FY	COD	
		2011 Heavy Summer	2008 Heavy Summer	2008-09 Light Winter
1A	Miguel Substation/Otay Mesa Generation Project	Yes	No	No
8	Sycamore Canyon Substation	Yes	No	No
13	Escondido	Yes	Yes	Yes
25	Crestwood	Yes	Yes	Yes
26	Crestwood	Yes	Yes	Yes
27	South Bay	Yes	No	No
32	Boulevard-Crestwood 69 kV transmission line	Yes	Yes	Yes
72	Proposed Lee Lake Substation	Yes	No	Yes
78	Imperial Valley Substation	Yes	No	No
90	Existing radial 69 kV gen-tie to TL6929	Yes	Yes	Yes
103	Border Substation 69 kV	Yes	No	Yes
106A	500 kV Imperial Valley-Miguel trans line	Yes	Yes	Yes
112	500 kV Imperial Valley-Miguel trans line	Yes	No	Yes
121	SDG&E Miramar GT Substation	Yes	Yes	Yes
122	SDG&E Pala Substation	Yes	Yes	Yes
123	SDG&E Margarita Substation	Yes	Yes	Yes
124	Imperial Valley Substation	Yes	No	No
137	Encina Plant 230 kV Bus	Yes	Yes	Yes

These generation projects will be modeled in the study cases, but may not necessarily be dispatched under all study conditions.

5. All presently operating Special Protection Systems (SPS) are modeled in the power flow cases.

6. The following SDG&E transmission projects are modeled in the cases identified:

Project	FY	COD	
	2011 Heavy Summer	2008 Heavy Summer	2008-09 Light Winter
230 kV Otay Metro Powerloop	Yes	Yes	Yes
Otay Mesa Generating Project	Yes	No	No
Imperial Valley 500/230 kV Bank 82	Yes	Yes	Yes
Silvergate Substation	Yes	No	Yes
Proposed Lee Lake Substation, related transmission and 500/230 kV phase shifters	Yes	No	Yes
Sunrise Powerlink 500 kV and associated plan of service	Yes	No	No

Power Flow Base Cases

Future-Year Study:

2011 Heavy Summer

Commercial Operation Date Study:

2008 Heavy Summer
2008-2009 Light Winter

Detailed ISIS Study Scope

Future-Year Study:

Steady-State Thermal

Steady state thermal analysis will be performed to identify thermal overloads as a result of the project. The following case, assumptions, contingencies, and criteria will be used in this analysis:

1. 2011 Heavy Summer
2. All higher-queued generation in SDG&E's service territory up to and including Encina Peaking Project's Queue Position #137, unless otherwise noted.
3. Class A, Class B, and credible Category C contingencies
4. WECC and CAISO planning criteria

Transient Stability Analysis

Analysis to determine the impact of the project on transient stability will be performed. The following case and criteria will be used in this analysis:

1. 2011 Heavy Summer
2. WECC planning criteria

Transient stability outages to be studied include, but are not limited to the following:

1. Three-phase fault on Encina 230 kV bus cleared after 6 cycles (no system elements removed post clearing).
2. Three-phase fault on Encina 230 kV bus cleared by opening Encina-San Luis Rey 230 kV transmission line.
3. Three-phase fault on Encina 230 kV bus cleared by opening Encina-San Luis Rey-Palomar Energy 230 kV transmission line.
4. Three-phase fault on Encina 230 kV bus cleared by opening Encina-Penasquitos 230 kV transmission line.

Post-Transient Stability Analysis

Analysis will be performed to identify voltage deviation and stability violations as a result of the project. The following case, contingencies, and criteria will be used in the analysis:

1. 2011 Heavy Summer
2. Select Category B and Category C contingencies
3. WECC voltage stability criteria

Reactive Power Deficiency Analysis

Analysis will be performed to identify the need for any reactive support as a result of the proposed project. The analysis will use the following case and conditions:

1. 2011 Heavy Summer
2. Case convergence for 105% load for Category B contingencies
3. Case convergence for 102.5% load for Category C contingencies

Fault Duty Analysis - 2011 Heavy Summer

Analysis will be performed to identify and overduty circuit breakers as a result of the project.

Industrial Development Bond (IDB) Analysis - 2011 Heavy Summer

Additional Facilities

1. Interconnection Facilities – dedicated exclusively to providing an interconnection to Encina Peaking Project. The IC will be responsible for all Interconnection Facility Upgrades identified.
2. Reliability Network Upgrades – facility upgrades required for the SDG&E transmission system to provide reliable service, which are not directly dedicated to the Encina Peaking Project interconnection. The IC will be responsible for all Reliability Network Upgrades identified.
3. Delivery Network Upgrades – facility upgrades to allow full output of the proposed Encina Peaking Project, under a variety of potential system conditions. The IC will be

responsible for any Delivery Network Upgrades it selects. Any Delivery Network Upgrades not selected and subsequently not built, could result in operating constraints for the IC's generators.

Commercial Operation Date Study:

Steady-State Thermal

Steady state thermal analysis will be performed to identify thermal overloads as a result of the project. The following cases, assumptions, contingencies, and criteria will be used in this analysis:

1. 2008 Heavy Summer
2. 2008-2009 Light Winter
3. All higher-queued generation in SDG&E's service territory which will be in-service when Encina Peaking Project is in-service, unless otherwise noted.
4. Category A, Category B, and credible Category C contingencies
5. WECC and CAISO planning criteria

Transient Stability Analysis

Analysis to determine the impact of the project on transient stability will be performed. The following case and criteria will be used in this analysis:

1. 2008 Heavy Summer
2. WECC planning criteria

Transient stability outages to be studied include, but are not limited to the following:

5. Three-phase fault on Encina 230 kV bus cleared after 6 cycles (no system elements removed post clearing).
6. Three-phase fault on Encina 230 kV bus cleared by opening Encina-San Luis Rey 230 kV transmission line.
7. Three-phase fault on Encina 230 kV bus cleared by opening Encina-San Luis Rey-Palomar Energy 230 kV transmission line.
8. Three-phase fault on Encina 230 kV bus cleared by opening Encina-Penasquitos 230 kV transmission line.

Post-Transient Stability Analysis

Analysis will be performed to identify voltage deviation and stability violations as a result of the project. The following case, contingencies, and criteria will be used in the analysis:

1. 2008 Heavy Summer
2. Select Category B and Category C contingencies
3. WECC voltage stability criteria

Reactive Power Deficiency Analysis

Analysis will be performed to identify the need for any reactive support as a result of the proposed project. The analysis will use the following case and conditions:

1. 2008 Heavy Summer
2. Case convergence for 105% load for Category B contingencies

3. Case convergence for 102.5% load for Category C contingencies

Fault Duty Analysis - 2008 Heavy Summer

Analysis will be performed to identify and overduty circuit breakers as a result of the project.

Deliverability Assessment

A Deliverability Assessment (DA) will be performed by the CAISO to determine the IC's Large Generating Facility's ability to deliver its energy to the CAISO Controlled Grid under peak load conditions. The DA will provide IC with information as to the level of deliverability without Network Upgrades, and the DA will provide the IC with information as to the required Network Upgrades to enable the IC's Large Generating Facility to deliver the full output of the proposed Large Generating Facility to the CAISO Controlled Grid based on specified study assumptions. Thus, the DA results will provide the IC two (2) data points on the scale of deliverability: 1) a deliverability level with no Network Upgrades, and 2) the required Network Upgrades to support 100% deliverability. Deliverability of a new Large Generating Facility will be assessed on the same basis as all other existing resources interconnected to the CAISO Controlled Grid.

The DA will identify the facilities that are required to enable the IC to meet the requirements for deliverability and as a general matter, that such Large Generating Facility's interconnection is also studied with the CAISO Controlled Grid at peak load, under a variety of severely stressed conditions, to determine whether, with the Large Generating Facility at full output, the aggregate of generation in the local area can be delivered to the aggregate of load on the CAISO Controlled Grid, consistent with the CAISO's reliability criteria and procedures. This approach assumes that some portion of existing resources that is designated as deliverable is displaced by the output of the IC's Large Generating Facility. This DA in and of itself does not convey any right to deliver electricity to any specific customer or point of delivery. The CAISO Controlled Grid may also be studied under non-peak load conditions. However, upon request by the IC, the DA must explain in writing to the IC why the study of non-peak load conditions is required for reliability purposes.

Deliverability Assessment Work Scope & Costs of Delivery Network Upgrades to support 100% deliverability:

To be provided by CAISO

Expected ISIS Study Results Per The LGIP

Category A Normal Conditions

Due to the waiving of the feasibility study, no claims will be made regarding performance of the Encina Peaking Project under normal conditions.

Category B and C Contingency Conditions

Due to the waiving of the feasibility study, no claims will be made regarding performance of the Encina Peaking Project under contingency conditions.

NERC/WECC/CAISO/PTO Planning Standards/Reliability Criteria

Thermal Steady-State Criteria:

Performance Level	Disturbance	Thermal Criteria
A	None	All branches less than 100% of normal rating.
B	One Generator One Circuit One Transformer	All branches less than 100% of emergency rating. No loss of load for single contingencies. All branches less than 100% of normal rating with system reconfiguration as necessary.
C	Two Generators Two Circuits Bipole DC	All branches less than 100% of emergency rating. Loss of load permitted for double contingency.

Post-Transient Voltage Criteria:

Performance Level	Disturbance	Post Transient Voltage Deviation
B	One Generator One Circuit One Transformer Single Pole DC	Not to exceed 5% at any bus. *
C	Two Generators Two Circuits Bipole DC	Not to exceed 10% at any bus.
* SCE allows deviation up to 7% on certain buses for N-1		

Reactive power deficiency criteria:

Performance Level	Disturbance	Criteria
B	One Generator One Circuit One Transformer Single Pole DC	Power flow to reach convergence at 105% of SDG&E load level
C	Two Generators Two Circuits Bipole DC	Power flow to reach convergence at 102.5% of SDG&E load level

Transient Stability Criteria:

Performance Level	Disturbance	Transient Voltage Dip Criteria	Minimum Transient Frequency
B	One Generator One Circuit One Transformer Single Pole DC	Max V Dip – 25% Max Duration of V Dip Exceeding 20% - 20 cycles Not to exceed 30% at non-load buses.	59.6 Hz for 6 cycles or more at a load bus.
C	Two Generators Two Circuits Bipole DC	Max V Dip – 30% at any bus. Max Duration of V Dip Exceeding 20% - 40 cycles at load busses.	59.0 Hz for 6 cycles or more at a load bus.

Local Area Criteria/Considerations

Existing five steam generators at the Encina Substation site:

1. Four Units connected to the 138 kV bus (approximately 617 MW total)
2. One Unit connected to the 230 kV bus (approximately 329 MW)

System Protection – Preliminary Evaluation

SDG&E's System Protection group will evaluate the proposed interconnection for potential impacts on the transmission system. The evaluation includes, but is not limited to, the following:

1. Coordination with existing system protection philosophy and systems.
2. Development of new System Protection Schemes (SPS), if applicable.
3. Modification to existing SPS, if applicable.
4. Communications requirements.

Substation Evaluation

SDG&E's Substation Engineering group will evaluate the proposed interconnection for potential impacts on SDG&E-owned substation facilities. The evaluation includes, but is not limited to, the following:

1. How best to connect the proposed generator in a safe, reliable, and cost-effective manner, while keeping in mind future system requirements and operational convenience.
2. The scope of any modifications necessary to accommodate the proposed interconnection.
3. Good faith, non-binding estimates for costs and construction times.

Transmission Line Evaluation

SDG&E's Transmission Engineering group will evaluate the proposed interconnection for potential impacts on SDG&E-owned transmission facilities. The evaluation includes, but is not limited to, the following:

1. How best to connect the proposed generator in a safe, reliable, and cost-effective manner, while bearing in mind future system requirements and operational convenience.
2. The scope of any modifications necessary to accommodate the proposed interconnection.
3. Good faith, non-binding estimates for costs and construction times.

Land Evaluation

SDG&E will evaluate the scope of the proposed modifications or extensions to SDG&E-owned transmission and substation facilities to determine if any additional land should be acquired. SDG&E will develop good faith, non-binding estimates for the cost and time required to acquire and permit any necessary real estate.

Environmental Evaluation & Permitting

SDG&E will evaluate the scope of the proposed modifications or extensions to SDG&E-owned transmission and substation facilities to determine the scope of required environmental evaluations and permitting. If the permitting process is determined to be a significant time and cost factor in the project, SDG&E will develop good faith, non-binding estimates for the time and cost to perform any necessary environmental evaluations and obtain any required permits.

Local Furnishing Bonds/Industrial Development Bonds

SDG&E has financed substantial portions of its transmission and distribution systems with proceeds from \$687,000,000 of outstanding Local Furnishing Bonds, LFBs, (also known as Industrial Development Bonds, IDBs) issued by the City of San Diego and the City of Chula Vista. Interest on these bonds is tax-exempt. Pursuant to applicable IRS private letter rulings, if the proposed project would cause impairment of the tax-exempt interest on these bonds, the IC would pay any resulting costs to SDG&E in mitigating the impairment to the continued tax-exempt status of interest on the LFBs (an "Impairment"). The ISIS will evaluate any potential impact on LFBs. The Encina Peaking Project will be reviewed with Bond Counsel representing the Cities of San Diego and Chula Vista on behalf of bondholders.

As a part of the analysis, technical studies will be performed to determine the following:

1. If the additional generation at the Encina Peaking Project will result in SDG&E becoming a net exporting utility.
2. If the additional generation at the Encina Peaking Project affects line flows to change on LFB-funded transmission facilities, and if so, affects the ability of those facilities to serve native load customers.
3. If facilities are constructed sooner, larger, more costly, or of a different design than SDG&E would undertake solely to service its local furnishing customers.

The analysis will examine the 2011 heavy summer study period. The analysis will examine scenarios where the Encina Peaking Project generation will displace generation internal to the SDG&E service area.

The study will detail either the degree of Impairment caused by the project, with associated mitigation costs, or certify that the project does not pose an Impairment.

This analysis may be deferred to the Interconnection Facility Study (IFAS) if required by time constraints.

Cost Estimates

Determine costs for the following:

1. Interconnection Facilities
2. Reliability Network Upgrades
3. Delivery Network Upgrades

The cost estimates will be developed by SDG&E Transmission and Substation Engineering, and will be of a conceptual nature.

Estimated Time to Construct (Construction Schedule)

Determine construction time estimates for the following:

1. Interconnection Facilities
2. Reliability Network Upgrades
3. Delivery Network Upgrades

The time estimates will be developed by SDG&E Transmission and Substation Engineering, and will be of a conceptual nature. SDG&E and the Interconnection Customer shall negotiate in good faith concerning a schedule for the construction of SDG&E's Interconnection Facilities and the Network Upgrades.

Reasons a Re-Study May be Needed

Potential for re-study of the ISIS exists and may be required due to a higher-queued project dropping out of the queue or a modification of a higher-queued project, or any other effective change in information which necessitates a re-study. If this possibility materializes SDG&E shall so notify the IC and the CAISO in writing. Upon receipt of such notice, the IC shall provide SDG&E, within ten (10) business days, a written request that the Participating TO either (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the IC requests SDG&E to continue the study, the IC shall pay an additional \$10,000 deposit for the re-study along with providing written notice for the study to continue. Such re-study shall take no longer than sixty (60) calendar days from the date written notice is received to continue the study and payment of the additional \$10,000 deposit. Study results will be shared for review. Comments will be incorporated and a final study report will be issued within eighty (80) calendar days following receipt of the IC's written notice to continue the study and payment of the additional \$10,000 deposit. If SDG&E and/or the CAISO is unable to complete the ISIS within that additional eighty (80) calendar days time period, SDG&E shall notify the IC and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of a re-study shall be borne by the IC.

Vendor NAME: **CALIFORNIA ISO**

CHECK DATE: **January 24, 2007**

CHECK NO: **13155**

VENDOR KEY: **116412**

VOUCHER NO.	INVOICE DATE	INVOICE NO.	INVOICE REMARK	GROSS AMOUNT	NET AMOUNT
411838	12/29/06	07-ENCSTUDY-1/1		50,000.00	50,000.00
TOTALS				\$50,000.00	\$50,000.00

Please Detach Before Presenting for Payment



NRG Energy, Inc
211 Carnegie Center
Princeton NJ 08540-6213

Bank of America, N.A.
Atlanta, Dekalb County, Georgia

64-1278
611 GA

13155

January 24, 2007

VOID AFTER 90 DAYS

AMOUNT
*****\$50,000.00

PAY Fifty thousand and 00/100 Dollars

To
The
Order
Of

CALIFORNIA ISO
PO BOX 639014
FOLSOM, CA 95763-4704

⑈00013155⑈ ⑆061112788⑆ 3299044273⑈

1819 Aston Avenue, Suite 105.
Carlsbad, CA 92008

Direct: (760) 710-2150
Fax: (760) 918-6950

NRG West

June 1, 2007

Ms. Pamela Perkins
Technical Assistant
California ISO
151 Blue Ravine Road
Folsom, CA 95630

RE: Interconnection System Impact Study Agreement for Encina Repower 138kV

Dear Ms. Perkins:

Attached are three signed originals of the Interconnection System Impact Study Agreement for the Encina Repower 138kV between NRG West Coast LLC and the California Independent System Operator Corporation. Also included is the requested deposit check for \$50,000.00.

The DUNS number for the company is 790966365. If you have any questions or would like to discuss the project, please give me call.

Sincerely,



Christopher J. Doyle
Regional Development Engineering Manager

INTERCONNECTION SYSTEM IMPACT STUDY AGREEMENT

THIS AGREEMENT is made and entered into this 31st day of May, 2007 by and between NRG West Coast LLC, a limited liability company organized and existing under the laws of the State of Delaware, ("Interconnection Customer,") and the California Independent System Operator Corporation, a California nonprofit public benefit corporation existing under the laws of the State of California, ("ISO"). The Interconnection Customer and the ISO each may be referred to as a "Party," or collectively as the "Parties."

RECITALS

WHEREAS, the Interconnection Customer is proposing to develop a Large Generating Facility or generating capacity addition to an existing Generating Facility consistent with the Interconnection Request submitted by the Interconnection Customer dated March 29, 2007, revised; and

WHEREAS, the Interconnection Customer desires to interconnect the Large Generating Facility with the ISO Controlled Grid; and

WHEREAS, the ISO has completed an Interconnection Feasibility Study (the "Feasibility Study") and provided the results of said study to the Interconnection Customer¹; and

WHEREAS, the Interconnection Customer has requested the ISO to conduct or cause to be performed an Interconnection System Impact Study to assess the impact of interconnecting the Large Generating Facility;

NOW, THEREFORE, in consideration of and subject to the mutual covenants contained herein the Parties agree as follows:

- 1.0 When used in this Agreement, with initial capitalization, the terms specified shall have the meanings indicated in the ISO's FERC-approved Standard Large Generation Interconnection Procedures ("LGIP") or the Master Definitions Supplement, Appendix A to the ISO Tariff, as applicable.
- 2.0 The Interconnection Customer elects and the ISO shall conduct or cause to be performed an Interconnection System Impact Study consistent with the LGIP in accordance with the ISO Tariff.

¹ This recital to be omitted if the Interconnection Customer has elected to forego the Interconnection Feasibility Study.

- 3.0 The scope of the Interconnection System Impact Study shall be subject to the assumptions set forth in Attachment A to this Agreement.
- 4.0 The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study and the technical information provided by the Interconnection Customer in the Interconnection Request, subject to any modifications in accordance with Section 4.4 of the LGIP. The ISO reserves the right to request additional technical information from the Interconnection Customer as may reasonably become necessary consistent with Good Utility Practice during the course of the Interconnection System Impact Study. If the Interconnection Customer modifies its designated Point of Interconnection, Interconnection Request, or the technical information provided therein is modified, the time to complete the Interconnection System Impact Study may be extended.
- 5.0 The Interconnection System Impact Study report shall provide the following information:
- identification of any circuit breaker short circuit capability limits exceeded on the Participating TO's electric system or the ISO Controlled Grid as a result of the interconnection;
 - identification of any thermal overload or voltage limit violations on the Participating TO's electric system or the ISO Controlled Grid resulting from the interconnection;
 - identification of any instability or inadequately damped response to system disturbances on the Participating TO's electric system or the ISO Controlled Grid resulting from the interconnection;
 - a description and non-binding, good faith estimate of cost and cost responsibility for and time for construction of facilities on the Participating TO's electric system required to interconnect the Large Generating Facility to the ISO Controlled Grid and to address the identified short circuit, instability, and power flow issues on the ISO Controlled Grid; and
 - a Deliverability Assessment on the ISO Controlled Grid pursuant to Section 3.3 of the LGIP; and
 - assessment of the potential magnitude of financial impacts, if any, on Local Furnishing Bonds and a proposed resolution.
- 6.0 The Interconnection Customer shall provide a deposit of \$50,000 for the performance of the Interconnection System Impact Study. The good faith

estimate for the time of completion of the Interconnection System Impact Study is October 26, 2007.

Following the issuance of the Interconnection System Impact Study, the ISO shall charge and the Interconnection Customer shall pay the actual costs of the Interconnection System Impact Study, inclusive of any re-studies and amendments to the Interconnection System Impact Study, pursuant to Section 9 of this Agreement.

Any difference between the deposit made toward the Interconnection System Impact Study, amendments and re-studies to the Interconnection System Impact Study, and the actual cost of the study shall be paid by or refunded to the Interconnection Customer, as appropriate in accordance with Section 13.3 of the LGIP.

- 7.0 Pursuant to Section 3.7 of the LGIP, the ISO will coordinate the conduct of any studies required to determine the impact of the Interconnection Request on Affected Systems. The ISO may provide a copy of the Interconnection System Impact Study results to an Affected System Operator and the Western Electricity Coordinating Council. Requests for review and input from Affected System Operators or the Western Electricity Coordinating Council may arrive at any time prior to interconnection, and a revision of the Interconnection System Impact Study or re-study may be required in such event.
- 8.0 Substantial portions of technical data and assumptions used to perform the Interconnection System Impact Study, such as system conditions, existing and planned generation, and unit modeling, may change after the ISO provides the Interconnection System Impact Study results to the Interconnection Customer. Study results will reflect available data at the time the ISO provides the Interconnection System Impact Study to the Interconnection Customer. The ISO shall not be responsible for any additional costs, including, without limitation, costs of new or additional facilities, system upgrades, or schedule changes, that may be incurred by the Interconnection Customer as a result of changes in such data and assumptions.
- 9.0 In the event that a re-study or amendment of the Interconnection System Impact Study is required, the ISO shall provide notification of the need for such re-study or amendment, and the Interconnection Customer shall provide direction as to whether to proceed with the re-study or amendment and any associated deposit payment pursuant to Section 7.6 or Section 12.2.4 of the LGIP, as applicable.
- 10.0 The ISO shall maintain records and accounts of all costs incurred in performing the Interconnection System Impact Study, inclusive of any re-

studies or amendments thereto, in sufficient detail to allow verification of all costs incurred, including associated overheads. The Interconnection Customer shall have the right, upon reasonable notice, within a reasonable time at the ISO's offices and at its own expense, to audit the ISO's records as necessary and as appropriate in order to verify costs incurred by the ISO. Any audit requested by the Interconnection Customer shall be completed, and written notice of any audit dispute provided to the ISO representative, within one hundred eighty (180) Calendar Days following receipt by the Interconnection Customer of the ISO's notification of the final costs of the Interconnection System Impact Study, inclusive of any re-study or amendment thereto.

11.0 In accordance with Section 3.8 of the LGIP, the Interconnection Customer may withdraw its Interconnection Request at any time by written notice to the ISO. Upon receipt of such notice, this Agreement shall terminate.

12.0 Pursuant to Section 7.2 of the LGIP, this Agreement shall become effective upon the date the fully executed Agreement and deposit specified in Section 6 of this Agreement are received by the ISO. If ISO does not receive the fully executed Agreement and payment pursuant to Section 7.2 of the LGIP, then the Interconnection Request will be deemed withdrawn upon the Interconnection Customer's receipt of written notice by the ISO pursuant to Section 3.8 of the LGIP.

13.0 Miscellaneous.

13.1 Dispute Resolution. Any dispute, or assertion of a claim, arising out of or in connection with this Interconnection System Impact Study Agreement, shall be resolved in accordance with Section 13.5 of the LGIP.

13.2 Confidentiality. Confidential Information shall be treated in accordance with Section 13.1 of the LGIP.

13.3 Binding Effect. This Interconnection System Impact Study Agreement and the rights and obligations hereof, shall be binding upon and shall inure to the benefit of the successors and assigns of the Parties hereto.

13.4 Conflicts. In the event of a conflict between the body of this Interconnection System Impact Study Agreement and any attachment, appendices or exhibits hereto, the terms and provisions of the body of this Interconnection System Impact Study Agreement shall prevail and be deemed the final intent of the Parties.

13.5 Rules of Interpretation. This Interconnection System Impact Study Agreement, unless a clear contrary intention appears, shall be construed and interpreted as follows: (1) the singular number includes the plural

number and vice versa; (2) reference to any person includes such person's successors and assigns but, in the case of a Party, only if such successors and assigns are permitted by this Interconnection System Impact Study Agreement, and reference to a person in a particular capacity excludes such person in any other capacity or individually; (3) reference to any agreement (including this Interconnection System Impact Study Agreement), document, instrument or tariff means such agreement, document, instrument, or tariff as amended or modified and in effect from time to time in accordance with the terms thereof and, if applicable, the terms hereof; (4) reference to any applicable laws and regulations means such applicable laws and regulations as amended, modified, codified, or reenacted, in whole or in part, and in effect from time to time, including, if applicable, rules and regulations promulgated thereunder; (5) unless expressly stated otherwise, reference to any Article, Section or Appendix means such Article or Section of this Interconnection System Impact Study Agreement or such Appendix to this Interconnection System Impact Study Agreement, or such Section to the LGIP or such Appendix to the LGIP, as the case may be; (6) "hereunder", "hereof", "herein", "hereto" and words of similar import shall be deemed references to this Interconnection System Impact Study Agreement as a whole and not to any particular Article, Section, or other provision hereof or thereof; (7) "including" (and with correlative meaning "include") means including without limiting the generality of any description preceding such term; and (8) relative to the determination of any period of time, "from" means "from and including", "to" means "to but excluding" and "through" means "through and including".

- 13.6 Entire Agreement. This Interconnection System Impact Study Agreement, including all Appendices and Schedules attached hereto, constitutes the entire agreement between the Parties with reference to the subject matter hereof, and supersedes all prior and contemporaneous understandings or agreements, oral or written, between the Parties with respect to the subject matter of this Interconnection System Impact Study Agreement. There are no other agreements, representations, warranties, or covenants which constitute any part of the consideration for, or any condition to, any Party's compliance with its obligations under this Interconnection System Impact Study Agreement.
- 13.7 No Third Party Beneficiaries. This Interconnection System Impact Study Agreement is not intended to and does not create rights, remedies, or benefits of any character whatsoever in favor of any persons, corporations, associations, or entities other than the Parties, and the obligations herein assumed are solely for the use and benefit of the Parties, their successors in interest and, where permitted, their assigns.

- 13.8 Waiver. The failure of a Party to this Interconnection System Impact Study Agreement to insist, on any occasion, upon strict performance of any provision of this Interconnection System Impact Study Agreement will not be considered a waiver of any obligation, right, or duty of, or imposed upon, such Party.

Any waiver at any time by either Party of its rights with respect to this Interconnection System Impact Study Agreement shall not be deemed a continuing waiver or a waiver with respect to any other failure to comply with any other obligation, right, duty of this Interconnection System Impact Study Agreement. Termination or default of this Interconnection System Impact Study Agreement for any reason by the Interconnection Customer shall not constitute a waiver of the Interconnection Customer's legal rights to obtain an interconnection from the Participating TO or ISO. Any waiver of this Interconnection System Impact Study Agreement shall, if requested, be provided in writing.

Any waivers at any time by any Party of its rights with respect to any default under this Interconnection System Impact Study Agreement, or with respect to any other matter arising in connection with this Interconnection System Impact Study Agreement, shall not constitute or be deemed a waiver with respect to any subsequent default or other matter arising in connection with this Interconnection System Impact Study Agreement. Any delay, short of the statutory period of limitations, in asserting or enforcing any right under this Interconnection System Impact Study Agreement shall not constitute or be deemed a waiver of such right.

- 13.9 Headings. The descriptive headings of the various Articles and Sections of this Interconnection System Impact Study Agreement have been inserted for convenience of reference only and are of no significance in the interpretation or construction of this Interconnection System Impact Study Agreement.
- 13.10 Multiple Counterparts. This Interconnection System Impact Study Agreement may be executed in two or more counterparts, each of which is deemed an original but all constitute one and the same instrument.
- 13.11 Amendment. The Parties may by mutual agreement amend this Interconnection System Impact Study Agreement by a written instrument duly executed by both of the Parties.
- 13.12 Modification by the Parties. The Parties may by mutual agreement amend the Appendices to this Interconnection System Impact Study Agreement by a written instrument duly executed by both of the Parties. Such amendment shall become effective and a part of this Interconnection

System Impact Study Agreement upon satisfaction of all applicable laws and regulations.

- 13.13 **Reservation of Rights.** The ISO shall have the right to make a unilateral filing with FERC to modify this Interconnection System Impact Study Agreement with respect to any rates, terms and conditions, charges, classifications of service, rule or regulation under section 205 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder, and Interconnection Customer shall have the right to make a unilateral filing with FERC to modify this Interconnection System Impact Study Agreement pursuant to section 206 or any other applicable provision of the Federal Power Act and FERC's rules and regulations thereunder; provided that each Party shall have the right to protest any such filing by another Party and to participate fully in any proceeding before FERC in which such modifications may be considered. Nothing in this Interconnection System Impact Study Agreement shall limit the rights of the Parties or of FERC under sections 205 or 206 of the Federal Power Act and FERC's rules and regulations thereunder, except to the extent that the Parties otherwise mutually agree as provided herein.
- 13.14 **No Partnership.** This Interconnection System Impact Study Agreement shall not be interpreted or construed to create an association, joint venture, agency relationship, or partnership between the Parties or to impose any partnership obligation or partnership liability upon any Party. No Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, another Party.
- 13.15 **Assignment.** This Interconnection System Impact Study Agreement may be assigned by a Party only with the written consent of the other Party; provided that a Party may assign this Interconnection System Impact Study Agreement without the consent of the other Party to any Affiliate of the assigning Party with an equal or greater credit rating and with the legal authority and operational ability to satisfy the obligations of the assigning Party under this Interconnection System Impact Study Agreement; and provided further that the Interconnection Customer shall have the right to assign this Interconnection System Impact Study Agreement, without the consent of the other Party, for collateral security purposes to aid in providing financing for the Large Generating Unit, provided that the Interconnection Customer will require any secured party, trustee or mortgagee to notify the other Party of any such assignment. Any financing arrangement entered into by the Interconnection Customer pursuant to this Article will provide that prior to or upon the exercise of the secured party's, trustee's or mortgagee's assignment rights pursuant to said arrangement, the secured creditor, the trustee or mortgagee will notify the other Party of the date and particulars of any such exercise of

assignment right(s). Any attempted assignment that violates this Article is void and ineffective. Any assignment under this Interconnection System Impact Study Agreement shall not relieve a Party of its obligations, nor shall a Party's obligations be enlarged, in whole or in part, by reason thereof. Where required, consent to assignment will not be unreasonably withheld, conditioned or delayed.

IN WITNESS THEREOF, the Parties have caused this Agreement to be duly executed by their duly authorized officers or agents on the day and year first above written.

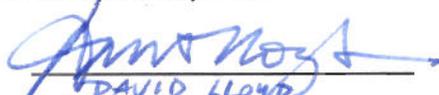
California Independent System Operator Corporation

By: 

Title: GARY D. DESHAZO, DIRECTOR
REGIONAL TRANSMISSION NORTH

Date: May 30th, 2007

NRG West Coast, LLC

By: 

Title: SECRETARY

Date: June 1, 2007

Attachment A

**Interconnection System Impact
Study Agreement**

**ASSUMPTIONS USED IN CONDUCTING THE
INTERCONNECTION SYSTEM IMPACT STUDY**

The Interconnection System Impact Study will be based upon the results of the Interconnection Feasibility Study, subject to any modifications in accordance with Section 4.4 of the LGIP, and the following assumptions:

Designation of Point of Interconnection and configuration to be studied:

- **Encina 138kV substation (unit 1 and unit 3)**

Designation of alternative Point(s) of Interconnection and configuration:

- **waived**

Attachment B

**Interconnection System Impact
Study Agreement**

INTERCONNECTION SYSTEM IMPACT STUDY PLAN

Interconnection System Impact Study Plan

Generation Interconnection

NRG West

Encina Repower – 138kV



California ISO
Your Link to Power

May 30, 2007

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1. Introduction

NRG West, the Interconnection Customer (IC), has submitted a completed Interconnection Request (IR) to the California Independent System Operator Corporation (CAISO) for their proposed Encina Repower – 138kV Project (Project). The Project is a 280MW (net output) combined cycle project to be located in San Diego County, California west of Interstate 5 and north of Cannon Road. This interconnection request is for a replacement of an existing Generating Facility with the facility 20 MW smaller.

NRG West proposes the following milestone dates:

- | | |
|--|---------------|
| 1) Proposed In-Service Date: | March 1, 2010 |
| 2) Proposed Trial Operation Date: | April 1, 2010 |
| 3) Proposed Commercial Operation Date: | May 1, 2010 |

The preferred Point of Interconnection is SDG&E's existing 138kV Encina substation. No alternative Point of Interconnection was identified.

In accordance with FERC's Large Generation Interconnection Procedures (LGIP), the IC has elected to proceed with an Interconnection System Impact Study (ISIS). The ISIS will:

- 1) Identify transmission system impacts caused solely by the addition of the Project
- 2) Identify the system reinforcements, if any, necessary to mitigate the adverse impact of the Project under various system conditions
- 3) Identify the maximum allowed output of the Project without Delivery Network Upgrades, under a variety of potential system conditions
- 4) Identify the level of deliverability of the Project by means of a Deliverability Assessment, conducted by CAISO per section 3.3.3 of the LGIP

This ISIS Study Plan will form the basis for the ISIS Agreement (ISISA) by defining the scope, content, assumptions, and terms of reference of the ISIS.

2. Study Fee

CAISO has estimated a study fee of **\$60,000** for performing the ISIS. The final cost to complete the ISIS will be based on actual cost. According to the LGIP, a \$50,000 deposit will be needed when the IC returns the signed ISISA to CAISO.

CAISO will bill the IC the remaining balance if the actual cost is higher than the collected deposit. If the actual cost is less than the collected deposit, CAISO will refund the balance to the IC.

3. Schedule

Table 3-1 shows the tentative milestones/schedules associated with the ISIS.

Table 3-1: Study Schedule

Task	Milestone Description	Target Date
1	CAISO tenders an ISISA to the IC	May 29, 2007
2	The IC returns the signed ISISA, the study deposit of \$50,000, and Part 1 Attachment A Technical Data to CAISO	+30 Calendar Days
3	CAISO issues final ISIS report to IC	+120 Calendar Days
4	ISIS Results Meeting	+10 Business Days

Per the LGIP, the IC must execute and return the attached ISISA with the deposit of \$50,000 within 30 calendar days from the tendering of ISISA and this study plan. If the IC fails to return an executed ISISA and the deposit within 30 calendar days, the IR will be deemed withdrawn and will be processed pursuant to Section 3.8 of the LGIP.

4. Cost and Construction Time Estimates

The ISIS will include non-binding, good-faith estimates of construction schedule, costs, and facilities that are required to interconnect and deliver the full output of the proposed project to the SDG&E transmission grid. The study will determine costs and construction time estimates for the following:

- 1) Interconnection Facilities
- 2) Reliability Network Upgrades
- 3) Delivery Network Upgrades

The cost and construction time estimates will be developed by SDG&E Transmission and Substation Engineering, and will be of a preliminary nature.

5. Project and Interconnection Information

Table 5-1 provides general information about the Project.

Table 5-1: Encina Repower – 138kV General Information

Project Location	West of Interstate 5, North of Cannon Road
Number and Type of Generators	Rapid response combined cycle plant 1 - Siemens SCC6-5000F Steam Turbine 1 - Siemens SGT6-5000F Gas Turbine
Maximum Generator Net Output to CAISO Controlled Grid	280MW
Description Of Interconnection Configuration	Encina 138kV Substation
Connection Voltage	138kV

Figure 5-1 provides the map for the Project and the transmission facilities in the vicinity. Figure 5-2 shows the single line diagram of the Project.

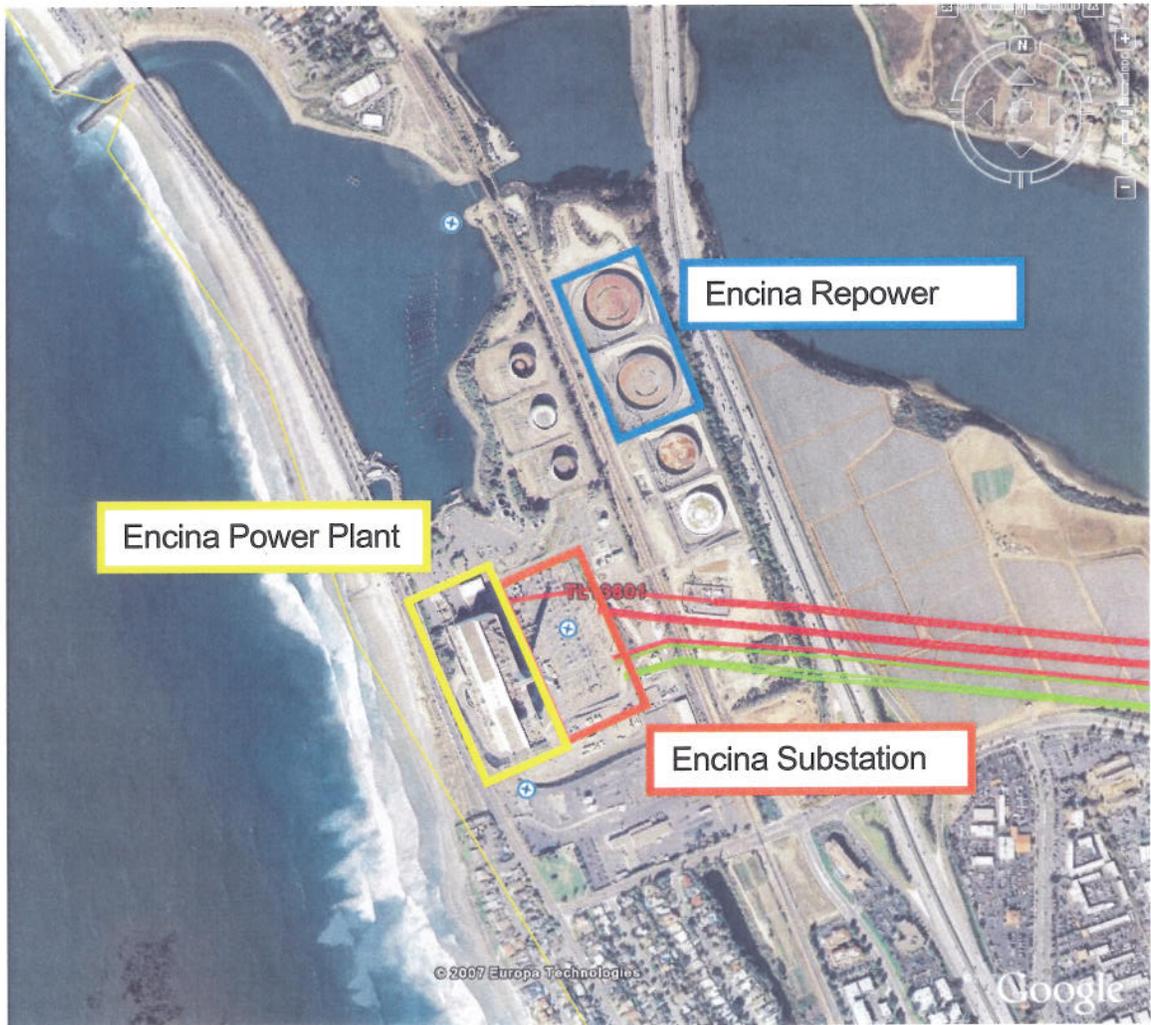


Figure 5-1: Location Map

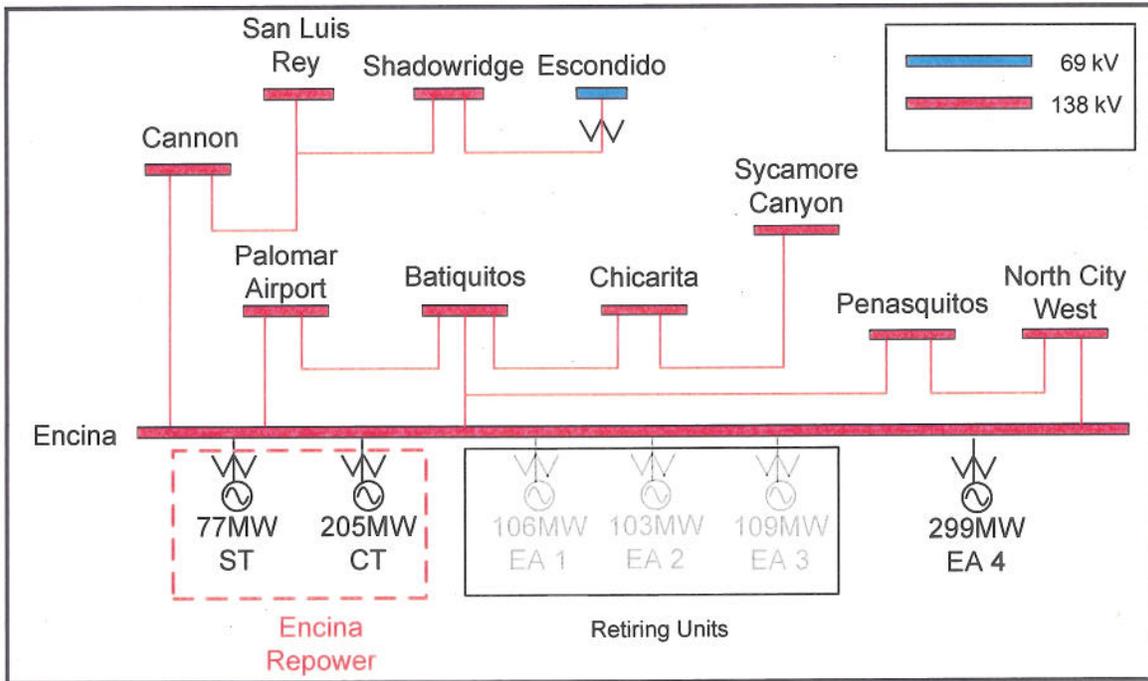


Figure 5-2: Single Line Diagram of SDG&E's Northern 138kV System

6. Interconnection Feasibility Study Results

The Participating Transmission Owner (PTO) for this Project will be San Diego Gas & Electric (SDG&E). Per mutual agreement among the CAISO, the PTO, and the Interconnection Customer, the requirement for an Interconnection Feasibility Study was waived for this project.

7. Study Assumptions

The Study results, recommendations, and cost estimates may vary if these assumptions are changed. Under the direction of CAISO, SDG&E will conduct the ISIS under the following assumptions:

- 1) This interconnection request is for a change in generating capacity and material modification at the existing Encina Power Plant located in San Diego County, California. Existing Units 1, 2, and 3, which currently generate 318MW, will be removed from service and replaced by a Large Generating Facility producing a total of 280MW. The Point of Interconnection is SDG&E's 138 kV Encina Substation.
- 2) The proposed In-Service Date is March 1, 2010.
- 3) The proposed Commercial Operation Date is May 1, 2010.

- 4) This study will take into account the planned generating facilities in SDG&E's service territory whose schedules are concurrent with or precede the Project's schedule, as well as the new transmission projects approved by the CAISO. Encina Repower project occupies Queue Position #189 in the CAISO generation queue. The Future Year (FY) study, or 'queue' study, will account for all higher-queued generation projects within the SDG&E network. The FY study will evaluate the 2012 heavy summer and 2011-2012 light winter study period. The Commercial Operation Date (COD) study examines operating conditions modeling higher-queued generation projects within the SDG&E network which will be in-service when the Encina Repower project is in-service. The COD study will evaluate the 2010 heavy summer study periods. The major generation projects included are shown in [Attachment 1](#).
- 5) The generation projects will be modeled in the study cases, but may not necessarily be dispatched under all study conditions. Generation will be dispatched to represent a "worst case analysis" by stressing the transmission system in a reasonable manner.
- 6) All presently operating Special Protection Systems (SPS) are modeled in the power flow cases.
- 7) SDG&E transmission projects that are modeled in the cases are shown in [Attachment 1](#).

8. Power Flow Study Base Cases

Three power flow base cases will be used to evaluate the feasibility of the proposed interconnection and the transmission system impacts of the Project. While it is impractical to study all combinations of system load and generation levels during all seasons and at all times of the day, these three base cases represent extreme loading and generation conditions for the study area.

CAISO cannot guarantee that the Project can operate at maximum rated output 24 hours a day, year round, without system impacts, nor can CAISO guarantee that the Project will not have system impacts during the times and seasons not studied in the ISIS.

All power flow cases and the ensuing system analysis for the proposed generation project will be performed using the latest available data for the Western Electricity Coordinating Council (WECC) interconnected system. A WECC full-loop representation will be used; this includes the Western United States, Western Canada and the system of Comisión Federal de Electricidad (CFE) of Baja California, Mexico. The Future Year and Commercial Operation Date studies serve to identify all needed network upgrades and to facilitate assignment of project cost responsibility.

Future-Year Study:

- 2012 Heavy Summer
- 2011-2012 Light Winter

Commercial Operation Date Study:

- 2010 Heavy Summer

9. Detailed ISIS Scope

This ISIS will determine the impact of the Project on the CAISO Controlled Grid. The study will follow the NERC/WECC/CAISO/PTO Planning Standards/Reliability Criteria, shown in [Attachment 2](#). The specific studies conducted are outlined below:

9.1 Steady State Power Flow Analysis

Power Flow analysis will be performed using the three base cases described in [Section 8](#). The three base cases will be used to simulate the impact of the Project during normal (CAISO Categories “A”) operating conditions, as well as, single (CAISO Categories “B”) and selected multiple (CAISO Categories “C”) contingencies. The study will cover the transmission facilities within SDG&E’s planning area.

9.1.1 Future-Year Study

The Future-Year Study steady-state thermal analysis is described by the following:

- 1) 2012 Heavy Summer Base Case
- 2) 2011-2012 Light Winter Base Case
- 3) All higher-queued generation in SDG&E’s service territory up to and including the Encina Repower project’s Queue Position #189, unless otherwise noted.
- 4) Category A, Category B, and credible Category C contingencies
- 5) NERC, WECC, and CAISO planning criteria

9.1.2 Commercial Operation Date Study

The Commercial Operation Date Study steady-state thermal analysis is described by the following:

- 1) 2010 Heavy Summer
- 2) All higher-queued generation in SDG&E’s service territory which will be in-service when the Encina Repower facility is in-service, unless otherwise noted.
- 3) Category A, Category B, and credible Category C contingencies
- 4) NERC, WECC, and CAISO planning criteria

9.1.3 Additional Facilities

Both the Future-Year Study and the Commercial Operation Date Study will address the following additional facilities:

- 1) Interconnection Facilities – dedicated exclusively to providing an interconnection to the Encina Repower facility.
- 2) Reliability Network Upgrades – facility upgrades required for the SDG&E transmission system to provide reliable service, which are not directly dedicated to the Encina Repower interconnection.
- 3) Delivery Network Upgrades – facility upgrades to allow full output of the proposed Encina Repower facility, under a variety of potential system conditions.

9.2 Short Circuit Analysis

Short circuit studies will be performed to determine the maximum fault currents on various buses in the vicinity of the Project. This ISIS will assess the impact of increased fault duty resulting from the added generation. Equipment that may become overstressed as a result of the added generation will be identified.

Fault Duty Analyses will be performed for both the Future-Year Study (using 2012 Heavy Summer Base Case) and the Commercial Operation Date Study (using 2010 Heavy Summer Base Case).

9.3 Transient Stability Analysis

The Transient Stability analysis will be performed in the Commercial Operation Date study.

- 1) 2010 Heavy Summer
- 2) WECC planning criteria

Transient stability outages to be studied include, but are not limited to the following:

- 1) Three-phase fault on Encina 138kV bus cleared after 6 cycles (no system elements removed post clearing).
- 2) Three-phase fault on Encina 138kV bus cleared by opening Encina-Cannon 138kV transmission line.
- 3) Three-phase fault on Encina 138kV bus cleared by opening Encina-Penasquitos-Batiquitos 138kV transmission line.
- 4) Three-phase fault on Encina 138kV bus cleared by opening Encina-Palomar Airport 138kV transmission line.

- 5) Three-phase fault on Encina 138kV bus cleared by opening Encina-North City West 138kV transmission line.
- 6) Three-phase fault on Imperial Valley 500 kV bus cleared by opening Imperial Valley-Miguel 500 kV transmission line.

9.4 Post-Transient Voltage Analysis

Analysis will be performed to identify voltage deviation and stability violations as a result of the project. The following case, contingencies, and criteria will be used in the analysis:

- 1) 2010 Heavy Summer
- 2) Select Category B and Category C contingencies
- 3) WECC voltage stability criteria

9.5 Reactive Power Deficiency Analysis

Analysis will be performed to identify the need for any reactive support as a result of the proposed project. The analysis will use the following case and conditions:

- 1) 2010 Heavy Summer
- 2) Case convergence for 105% load for Category B contingencies
- 3) Case convergence for 102.5% load for Category C contingencies

9.6 Deliverability Assessment

A Deliverability Assessment will be performed by the CAISO. This assessment will determine the Project's ability to deliver its energy to the CAISO Controlled Grid under peak load conditions. The Deliverability Assessment will provide the IC with information as to the level of deliverability without Network Upgrades, and the required Network Upgrades required to deliver the full output of the Project. The Deliverability Assessment will provide:

- 1) Deliverability Level with no Network Upgrades
- 2) Required Network Upgrades to support 100% Deliverability

CAISO will conduct the Deliverability Assessment in accordance with Sections 3.3.2 and 3.3.3 of the LGIP. For more information about deliverability assessment, please refer to <http://www.caiso.com/181c/181c902120c80.html>.

9.7 Expected ISIS Results Per the LGIP

Category A Normal Conditions

No Category A violations are expected due to the interconnection of the Encina Repower project.

Category B and C Contingency Conditions

Neither Category B nor Category C violations are expected due to the interconnection of the Encina Repower project.

9.8 Local Area Criteria/Considerations

The site chosen for this project is currently zoned accordingly and should not present any extenuating circumstances.

9.9 System Protection Requirements

SDG&E's System Protection group will evaluate the proposed interconnection for potential impacts on the transmission system. The evaluation includes, but is not limited to, the following:

- 1) Coordination with existing system protection philosophy and systems.
- 2) Development of new System Protection Systems (SPS), if applicable.
- 3) Modification to existing SPS, if applicable.
- 4) Communications requirements.

9.10 Substation Evaluation

SDG&E's Substation Engineering group will evaluate the proposed interconnection for potential impacts on SDG&E-owned substation facilities. The evaluation includes, but is not limited to, the following:

- 1) How best to connect the proposed generator in a safe, reliable, and cost-effective manner, while keeping in mind future system requirements and operational convenience.
- 2) The scope of any modifications necessary to accommodate the proposed interconnection.
- 3) Good faith, non-binding estimates for costs and construction times.

9.11 Transmission Line Evaluation

SDG&E's Transmission Engineering group will evaluate the proposed interconnection for potential impacts on SDG&E-owned transmission facilities. The evaluation includes, but is not limited to, the following:

- 1) How best to connect the proposed generator in a safe, reliable, and cost-effective manner, while bearing in mind future system requirements and operational convenience.

- 2) The scope of any modifications necessary to accommodate the proposed interconnection.
- 3) Good faith, non-binding estimates for costs and construction times.

9.12 Land Evaluation

SDG&E will evaluate the scope of the proposed modifications or extensions to SDG&E-owned transmission and substation facilities to determine if any additional land should be acquired. SDG&E will develop good faith, non-binding estimates for the cost and time required to acquire and permit any necessary real estate.

9.13 Environmental Evaluation and Permitting

SDG&E will evaluate the scope of the proposed modifications or extensions to SDG&E-owned transmission and substation facilities to determine the scope of required environmental evaluations and permitting. If the permitting process is determined to be a significant time and cost factor in the project, SDG&E will develop good faith, non-binding estimates for the time and cost to perform any necessary environmental evaluations and obtain any required permits.

9.14 Local Furnishing Bonds/Industrial Development Bonds

SDG&E has financed substantial portions of its transmission and distribution systems with proceeds from \$687,000,000 of outstanding Local Furnishing Bonds, LFBs, (also known as Industrial Development Bonds, IDBs) issued by the City of San Diego and the City of Chula Vista. Interest on these bonds is tax-exempt. Pursuant to applicable IRS private letter rulings, if the proposed project would cause impairment of the tax-exempt interest on these bonds, the IC would pay any resulting costs to SDG&E in mitigating the impairment to the continued tax-exempt status of interest on the LFBs (an "Impairment"). The ISIS will evaluate any potential impact on LFBs. This project will be reviewed with Bond Counsel representing the Cities of San Diego and Chula Vista on behalf of bondholders.

As a part of the analysis, technical studies will be performed to determine the following:

- 1) If the generation at the Encina Repower facility will result in SDG&E becoming a net exporting utility.
- 2) If the generation at the Encina Repower facility causes line flows to change on LFB-funded transmission facilities, and if so, whether it affects the ability of those facilities to serve native load customers.
- 3) If facilities are constructed sooner, larger, more costly, or of a different design than SDG&E would undertake solely to service its local furnishing customers.

The analysis will examine the 2012 heavy summer study period. The analysis will examine scenarios where Encina Repower generation will displace generation internal to the SDG&E service area.

The study will detail either the degree of Impairment caused by the project, with associated mitigation costs, or certify that the project does not pose an impairment.

This analysis may be deferred to the Interconnection Facility Study (IFAS) if required by time constraints.

10. Re-study

The ISIS will be performed according to the assumptions shown in the [Section 7](#). Potential for re-study of the ISIS exists and may be required due to a higher-queued project dropping out of the queue or a modification of a higher-queued project, or any other effective change in information which necessitates a re-study. If this possibility materializes SDG&E shall so notify the IC and the CAISO in writing. Upon receipt of such notice, the IC shall provide SDG&E, within ten (10) business days, a written request that the Participating TO either (i) terminate the study and withdraw the Interconnection Request; or (ii) continue the study. If the IC requests SDG&E to continue the study, the IC shall pay an additional \$10,000 deposit for the re-study along with providing written notice for the study to continue. Such re-study shall take no longer than sixty (60) calendar days from the date written notice is received to continue the study and payment of the additional \$10,000 deposit. Study results will be shared for review. Comments will be incorporated and a final study report will be issued within eighty (80) calendar days following receipt of the IC's written notice to continue the study and payment of the additional \$10,000 deposit. If SDG&E and/or the CAISO is unable to complete the ISIS within that additional eighty (80) calendar days time period, SDG&E shall notify the IC and provide an estimated completion date with an explanation of the reasons why additional time is required. Any and all costs of a re-study shall be borne by the IC.

ATTACHMENT 1 – GENERATION AND TRANSMISSION PROJECTS

Table 1. SDG&E Generation Projects – ISO Generation Interconnection Queue				
Queue Position	Point of Interconnection	FY		COD
		2012 Heavy Summer	2011-2012 Light Winter	2010 Heavy Summer
1A	Miguel Substation/Otay Mesa Generation Project	Yes	Yes	Yes
8	Sycamore Canyon Substation	Yes	Yes	No
13	Escondido	Yes	Yes	Yes
14	Miguel-Tijuana	Yes	Yes	Yes
25	Crestwood	Yes	Yes	Yes
26	Crestwood	Yes	Yes	Yes
27	South Bay	Yes	Yes	Yes
32	Boulevard-Crestwood 69 kV transmission line	Yes	Yes	Yes
72	Proposed Lee Lake Substation	Yes	Yes	Yes
78	Imperial Valley Substation	Yes	Yes	Yes
90	Existing radial 69 kV gen-tie to TL6929	Yes	Yes	Yes
103	Border Substation 69 kV	Yes	Yes	Yes

Table 1. SDG&E Generation Projects – ISO Generation Interconnection Queue				
Queue Position	Point of Interconnection	FY		COD
		2012 Heavy Summer	2011-2012 Light Winter	2010 Heavy Summer
106A	500 kV Imperial Valley-Miguel trans line	Yes	Yes	Yes
112	500 kV Imperial Valley-Miguel trans line	Yes	Yes	Yes
121	SDG&E Miramar GT Substation	Yes	Yes	Yes
124	Imperial Valley Substation	Yes	Yes	No
137	Encina Plant 230 kV Bus	Yes	Yes	Yes
150	Border Substation	Yes	Yes	Yes
159A	500 kV Imperial Valley-Miguel trans line	Yes	Yes	Yes
164	Imperial Valley 230 kV switchyard	Yes	Yes	No
168	Imperial Valley 500 kV bus	Yes	Yes	No
169	Imperial Valley 500 kV bus	Yes	Yes	No
173	Pala 69kV Bus	Yes	Yes	Yes
176	Margarita 138kV Substation	Yes	Yes	Yes
178A	Miguel 230kV Bus	Yes	Yes	Yes
178B	Imperial Valley 230kV Bus	Yes	Yes	Yes

Table 1. SDG&E Generation Projects – ISO Generation Interconnection Queue				
Queue Position	Point of Interconnection	FY		COD
		2012 Heavy Summer	2011-2012 Light Winter	2010 Heavy Summer
183	500kV Imperial Valley-Miguel trans line	Yes	Yes	Yes

Table 2. SDG&E Transmission Projects			
PROJECT	FY		COD
	2012 Heavy Summer	2011-2012 Light Winter	2010 Heavy Summer
230 kV Otay Metro Powerloop	Yes	Yes	Yes
Silvergate Substation	Yes	Yes	Yes
Sunrise Powerlink 500 kV and associated plan of service	Yes	Yes	Yes
San Luis Rey Rearrangement ¹	Yes	Yes	Yes

¹ This project is not yet approved by the CAISO pending additional information from SDG&E. It will be modeled in the studies only if this information is received by the CAISO by the time the studies are started. Otherwise, the project will be modeled as a sensitivity, and the studies be performed both with and without this project.

ATTACHMENT 2 – NERC/WECC/CAISO/PTO Planning Standards/Reliability Criteria

Thermal Steady-State Criteria		
Performance Level	Disturbance	Thermal Criteria
A	None	All branches less than 100% of normal rating.
B	Generator One Circuit One Transformer	All branches less than 100% of emergency rating. No loss of load for single contingencies. All branches less than 100% of normal rating with system reconfiguration as necessary.
C	Two Generators Two Circuits IPPDC	All branches less than 100% of emergency rating. Loss of load permitted for double contingency.

SDG&E Fault Duty/Short Circuit Breaker Duty Criteria		
Equipment	Disturbance	Criteria
Existing Generator Breakers	LG and 3LG faults	No fault exceeds 100% of the nameplate interrupting rating.
Existing Non-Generator Breakers ≤ 230 kV	LG and 3LG faults	No fault exceeds 115% of the nameplate interrupting rating.
Existing Non-Generator Breakers > 230 kV	LG and 3LG faults	No fault exceeds 100% of the nameplate interrupting rating.

Transient Stability Criteria			
Performance Level	Disturbance	Transient Voltage Dip Criteria	Minimum Transient Frequency
B	Generator One Circuit One Transformer PDCI	Max V Dip – 25% Max Duration of V Dip Exceeding 20% - 20 cycles Not to exceed 30% at non-load buses.	59.6 Hz for 6 cycles or more at a load bus.
C	Two Generators Two Circuits IPPDC	Max V Dip – 30% at any bus. Max Duration of V Dip Exceeding 20% - 40 cycles at load busses.	59.0 Hz for 6 cycles or more at a load bus.

Post-Transient Voltage Criteria		
Performance Level	Disturbance	Post Transient Voltage Deviation
B	Generator One Circuit One Transformer PDCI	Not to exceed 5% at any bus. *
C	Two Generators Two Circuits IPPDC	Not to exceed 10% at any bus.
* SCE allows deviation up to 7% on certain buses for N-1		

Reactive Power Deficiency Criteria		
Performance Level	Disturbance	Criteria
B	Generator One Circuit One Transformer PDCI	Power flow to reach convergence at 105% of SDG&E load level
C	Two Generators Two Circuits IPPDC	Power flow to reach convergence at 102.5% of SDG&E load level

Vendor NAME: **CALIFORNIA ISO**

CHECK DATE: **May 15, 2007**

CHECK NO: **17589**

VENDOR KEY: **116412**

VOUCHER NO.	INVOICE DATE	INVOICE NO.	INVOICE REMARK	GROSS AMOUNT	NET AMOUNT
459750	5/9/07	07-ISO-5/9	Encina repowering impact study	50,000.00	50,000.00
TOTALS				\$50,000.00	\$50,000.00

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