

BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

FILED

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CALIFORNIA PUBLIC UTILITIES COMMISSION
CITY OF LOS ANGELES

_____)
Order Instituting Investigation Into)
Implementation of Assembly Bill 970)
Regarding the Identification of)
Electric Transmission and Distribution)
Constraints, Actions to Resolve Those)
Constraints, and Related Matters)
Affecting the Reliability of Electric)
Supply)
_____)

I.00-11-001

**INITIAL BRIEF OF THE
BORDER GENERATION GROUP**

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To: The Honorable Meg Gottstein,
Presiding Administrative Law Judge:

In accordance with Rule 75 of the Commission's Rules of Practice and Procedure, and pursuant to the schedule that was established by the Presiding Judge herein, the Border Generation Group ("BGG")¹ files its initial brief in the above-referenced matter. The BGG requests that the Commission adopt the principles and recommendations set forth in the "Joint

¹ The members of the Border Generation Group are Calpine Corporation, Coral Power, L.L.C., InterGen, PG&E National Energy Group and Sempre Energy Resources.

Recommendation" (Exhibit No. 108) that was presented in this proceeding by BGG, San Diego Gas & Electric Company ("SDG&E"), and the Commission's Office of Ratepayer Advocates ("ORA").

The Joint Recommendation disposes of all of the matters that are properly before the Commission in this phase of the proceeding. The Joint Recommendation, which is supported by the record evidence, provides a reasonable approach to enable SDG&E to proceed with all steps necessary to construct the Miguel-Mission transmission upgrade and the Imperial Valley transformer upgrade.

I.

INTRODUCTION

This phase of the proceeding was initiated through an "Administrative Law Judge's Ruling" that was issued on July 19, 2001.² In her Ruling, the Presiding Judge determined that the purpose of the hearing would be to "evaluate the net economic benefits (benefits minus costs) to ratepayers of relieving two potential in-state transmission constraints in southern California." Ruling at p. 7. The Judge specifically identified "west of Miguel" and "the Imperial Valley substation" as the potential constraint areas to be addressed. The Judge continued:

² I.00-11-001, "Administrative Law Judge's Ruling Regarding Fall Hearings in Phase 2" (dated July 19, 2001).

The utilities and interested parties should present testimony on the potential for generation projects coming on line that would trigger constraints or congestion in these areas, the costs of alternatives to relieve the constraints as well as the allocation of benefits between ratepayers and project developers. The Commission will use the results of this record to determine whether SDG&E should, for example, submit a CPCN to request construction of the Mission-Miguel upgrade based on economic viability, or take other steps needed to move forward with these projects.

Id.

In accordance with the procedural schedule that was established in the July 19 Ruling, prepared direct testimony was served by SDG&E on September 17, and by the BGG on October 11. SDG&E served rebuttal testimony on October 19.

In addition, on October 26, 2001, SDG&E, ORA and the BGG jointly submitted a "Joint Recommendation," which reflects a collaborative effort to supplement the evidentiary record with an agreed upon "roadmap." This "roadmap" is intended to enable the Commission to make findings that will expedite the processing of the Miguel-Mission transmission upgrade and the Imperial Valley transformer upgrade.

The Joint Recommendation provides a proposed course of action with respect to regulatory approvals, and with respect to the matter of "cost allocation" for the transmission upgrades. The Joint Recommendation provides that the Commission should

make the following determinations in this phase of the proceeding:

1. Economic justification exists for construction of the transmission upgrades if a threshold level of new generation (1350 MW) develops in the border area. Ex. 108 at pp. 4-5.
2. Members of the BGG (specifically, Calpine, InterGen and Sempra Energy Resources) have made substantial financial commitments and are proceeding with the construction of approximately 2070 MW of new generation in the border area, all of which currently is scheduled to commence commercial operation no later than the third quarter of 2003. Ex. 108 at p. 5.
3. In view of the potential for net economic benefits, the transmission upgrades will be in the public interest. Ex. 108 at p. 6.
4. SDG&E should proceed expeditiously with all regulatory approvals necessary to construct the transmission upgrades. Ex. 108 at p. 6.
5. The matter of cost allocation for the cost of the transmission upgrades should be addressed by FERC. Ex. 108 at p. 6.
6. Because the Imperial Valley transformer upgrade will be located entirely within the boundaries of the existing Imperial Valley substation, SDG&E should submit an advice letter

with respect to construction of the Imperial Valley transformer upgrade. Ex. 108 at p. 6.

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7. Because the 230 kV circuits will be placed on existing structures within the existing right-of-way, with minor structural changes for the higher voltage, SDG&E should not be required to file an application for a certificate of public convenience and necessity ("CPCN") with respect to the Miguel-Mission upgrade. Ex. 108 at pp. 6-7. SDG&E should be required to file either an application for a "Permit to Construct," or an advice letter, for the relocation of existing 138 kV and 69 kV circuits to a new pole line. Id.

The Joint Recommendation is fully supported by the record evidence in this proceeding. The Commission will assist in expediting the construction of these transmission upgrades if it adopts the proposals set forth in the Joint Recommendation.

II.

STATEMENT OF FACTS

In an earlier phase of this proceeding, the evidence demonstrated that with the development of a substantial amount of new generation in the "border area" (i.e. southern San Diego County and northern Mexico), transmission upgrades will reduce congestion at two points of interconnection between Path 45³ and

³ In the earlier phase, SDG&E witness Linda Brown identified "Path 45" as the transmission line that connects CFE's Tijuana

the SDG&E system: the Miguel substation and the Imperial Valley substation. In that earlier phase, California ISO witness Jeffrey Miller testified that once new generation in the border area reaches the Imperial Valley substation, it will be "stuck." Tr. 2/227-28. SDG&E witness Linda Brown testified further, in the earlier phase, that once new generation is developed in the border area, the Miguel substation will become a "bottleneck," and additional transmission capacity must be added west of Miguel in order to eliminate the bottleneck. Tr. 1/44.

Through a series of "system impact studies" performed by SDG&E in connection with generators' requests for interconnection with the SDG&E system, SDG&E identified the Miguel-Mission transmission upgrade and the Imperial Valley transformer upgrade as the most cost effective means by which to reduce the constraints at Miguel and Imperial Valley. See Ex. 101 (Brown) at pp. 3-4; 10. In this phase of the proceeding, SDG&E performed an economic analysis of the effect of these upgrades on energy costs to SDG&E ratepayers, as well as the effect on ratepayers throughout the ISO control area.

A. The Miguel-Mission Transmission Upgrade

SDG&E witness Linda Brown testified that the Miguel-Mission transmission upgrade will add a new 230 kV circuit on existing substation with SDG&E's Miguel substation, and CFE's Miguel substation with SDG&E's Imperial Valley substation. Tr. 1/40.

towers over the 35 mile expanse between the Miguel substation and the Mission substation. Ex. 101 (Brown, SDG&E) at p. 4. As a part of this transmission upgrade, existing 138 kV and 69 kV transmission circuits will be relocated to a new wood/steel pole line. Id.

The Miguel-Mission transmission upgrade is expected to add 560 MW of new transmission capacity on the SDG&E system west of Miguel. Id. at p. 5; Tr. 4/362 (Brown). This added capacity will relieve congestion at Miguel, allowing more power to move north into the SDG&E load center as new generation is developed south and east of Miguel. Ex. 101 at p. 3; Tr. 4/361 (Brown).

SDG&E witness Brown testified that all of the construction for the Miguel-Mission upgrade will be accomplished within the existing right-of-way. Ex. 101 at p. 4; Tr. 4/363. Ms. Brown provided a "preliminary estimated project cost" of \$26 million for the Miguel-Mission upgrade. Ex. 101 at p. 4. She also provided a tentative in-service date of June 2004, "subject to any [Commission] licensing requirements." Id.

B. The Imperial Valley Transformer Upgrade

Ms. Brown testified that the system impact studies performed by SDG&E showed that "the single existing 500/230 kV bank at Imperial Valley will overload with all lines in service with high export from CFE and with generation interconnection at Imperial Valley." Id. Ms. Brown testified that "[w]ithout a

transmission system upgrade to the IV bank, congestion management would be used to curtail generation and maintain reliability." Id.

Ms. Brown testified that the Imperial Valley transformer upgrade will involve installation of a new 500/230 kV, 1120 MVA transformer bank at Imperial Valley, and replacement of the existing transformer at Imperial Valley with a 500/230 kV, 1120 MVA transformer." Ex. 101 at p. 10. Ms. Brown testified that the transformer upgrade will more than double the existing capability to move energy through the Imperial Valley substation. Tr. 4/369.

Ms. Brown also testified that all of the construction in connection with the new transformers will take place within the existing footprint (boundaries) of the Imperial Valley substation. Tr. 4/377-78. Ms. Brown testified that the estimated total project cost for the Imperial Valley transformer upgrade is \$29.4 million. Ex. 101 at p. 10. She further testified that the "earliest feasible in-service date" for the upgrade is June 1, 2003. Id.

C. New Generation in the Border Area

Ms. Brown identified new generation projects that are being developed in the border area, which will provide new power in an

amount approximately equal to 3800 MW. Ex. 101 at p. 6.⁴ The individual members of BGG are the sponsors of four of these generation projects in the Otay Mesa area (east and south of Miguel) and in Mexicali, in Baja California, Mexico. Once constructed, these four generation projects will represent more than 2000 MW of generation that will move through the Miguel substation into the SDG&E load center, and potentially beyond. See Tr. 5/480 (Kritikson, BGG); Tr. 4/421 (Brown).

All of the generation projects sponsored by members of the BGG have commenced construction, and all are scheduled to commence operation by the third quarter of 2003. See Ex. 108 at p. 5; Ex. 109 (Kritikson) at pp. 19-20. The current schedule for these generation projects places the generation in-service almost a year before the Miguel-Mission upgrade will be in-service.

The BGG presented undisputed evidence demonstrating the substantial commitments that have been made by the generators with respect to the generation projects located in Otay Mesa and Mexicali. The evidence, which reflected the progress of the

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⁴ The generation projects are reflected in SDG&E's inter-connection "queue." Ex. 101 at p. 6.

projects at the time the testimony was served,⁵ included the following:

1. InterGen

The testimony of James Kritikson, BGG's witness, included a declaration from Stephen Kaufman of InterGen concerning the status of the 750 MW La Rosita Power Plant ("LRPP") and the 310 MW La Rosita Expansion Plant ("LREP"). With respect to LRPP, the declaration showed that construction commenced on March 1, 2001, and that as of September 22, 2001, construction was 17.3 percent complete. See Ex. 112. Total project expenditures already are at \$250 million (U.S.), purchase orders have been placed for all major equipment, all necessary environmental and construction permits have been secured, and engineering, procurement and construction ("EPC") agreements have been signed for power plant construction and associated transmission line construction. Ex. 109, Declaration of Stephen Kaufman at p. 3.

In addition, a 25-year power purchase agreement has been entered into with CFE, natural gas transportation agreements have been executed with North Baja Pipeline and the Baja Norte Pipeline, and fuel supply agreements have been signed. Id. The LRPP generation project is on schedule to be in operation by March 1, 2003. Ex. 109 (Kritikson) at p. 3.

⁵ Additional progress has been made on all of these generation projects since the time the testimony was served.

With respect to LREP, the declaration showed that construction commenced on June 1, 2001, and that total project expenditures are already approximately \$65 million. See Ex. 109, Kaufman Declaration at p. 4. An EPC agreement has been signed for transmission line construction (Id.), and substantial progress has been achieved in constructing the transmission lines from LREP to both the La Rosita substation and the Imperial Valley substation. Ex. 112.

Mr. Kaufman's declaration also showed that InterGen affiliates and SDG&E have substantially completed an expedited interconnection facilities agreement as well as an interconnection agreement. In this regard, InterGen already has advanced \$3 million to SDG&E. Ex. 109, Kaufman Declaration at p. 4. Natural gas transportation agreements have been signed with North Baja Pipeline and the Baja Norte Pipeline, and fuel supply agreements have been signed as well. InterGen has secured all necessary environmental and construction permits for LREP. Id. The LREP project is scheduled to begin providing energy from a 160 MW combustion turbine in simple cycle mode by August 1, 2002, and in combined cycle, delivering 310 MW, by the summer of 2003. Ex. 109 at p. 4.

2. Calpine

Mr. Kritikson's testimony included a declaration from Mitchell Weinberg of Calpine stating that the Otay Mesa

Generating Company, LLC ("OMGC"), which is owned by Calpine, is developing the Otay Mesa Energy Center, a 510 MW generation facility that will connect with SDG&E's 230 kV transmission system 9 miles south of the Miguel substation. Ex. 109, Declaration of Mitchell Weinberg at p. 2. The project commenced construction in September 2001, and is scheduled for commercial operation in the third quarter of 2003. Id. The declaration stated that OMGC and Calpine have purchased the major equipment for the generation project, including combustion turbines, steam turbine, heat recovery steam generators and air cooled condenser. OMGC already has obtained its construction permit from the California Energy Commission. See Tr. 5/480 (Kritikson).

In addition, OMGC has executed an interconnection agreement and an interconnection facilities agreement with SDG&E. Ex. 109, Weinberg Declaration at p. 2. SDG&E has commenced work on both the electric interconnection facilities and the natural gas interconnection facilities for the Otay Mesa project. Id. at p. 3. In order to provide natural gas to serve the Otay Mesa plant, a subsidiary of PG&E National Energy Group has executed firm, long-term gas transportation agreements with the North Baja Pipeline and the Baja Norte Pipeline. Ex. 109 (Kritikson) at p. 21; Ex. 111. OMGC has a 10-year tolling agreement in

place with another PG&E National Energy Group subsidiary for up to 250 MW of the plant's output. Ex. 109 at pp. 4-5.

3. Sempra Energy Resources

Mr. Kritikson's testimony included a declaration from Octavio Simoes stating that a substantial commitment also has been made by Sempra Energy Resources' affiliate Termoelectricia De Mexicali ("TDM") with respect to its 500 MW (600 MW peak capacity) power plant near Mexicali. The TDM project commenced construction on September 1, 2001, and is scheduled to commence commercial operations in June 2003. See Ex. 109, Declaration of Octavio Simoes at p. 2; see also Ex. 112. TDM has executed firm gas transportation contracts with the North Baja Pipeline and the Baja Norte Pipeline projects. Id. TDM has executed an EPC contract with ICA Fluor Daniel to design and construct the generating plant. Ex. 112. TDM also has executed a contract for the design and construction of the radial generation tie-line that will interconnect the power plant to the Imperial Valley substation. Ex. 109, Simoes Declaration at p. 3.

In addition, TDM has executed agreements to purchase combustion turbine sets and a steam turbine generator for the first phase of the project. Id. TDM currently is negotiating an interconnection facilities agreement and an interconnection agreement with SDG&E. In this regard, TDM already has paid substantial sums to SDG&E to enable SDG&E to purchase equipment

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Pipeline Permit
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to enable TDM to interconnect at the Imperial Valley substation.

Id. at pp. 3-4.

4. Summary

The combined capacity of the new InterGen, Calpine and Sempra Energy Resources generating facilities will be 2070 MW when all of these facilities are placed in commercial operation by the third quarter of 2003. To date, the generators have made substantial commitments and have made substantial progress toward placing these generation facilities into commercial service on a timely basis. See Ex. 109 (Kritikson) at p. 21.

D. Economic Analysis of the Benefits of the Transmission Upgrades

The focus of SDG&E's prepared testimony in this proceeding was an economic analysis, prepared by Henwood Energy Services,⁵ that assessed whether, and to what extent, the costs of the Miguel-Mission transmission upgrade and the Imperial Valley transformer upgrade will be economically justified. The economic analysis calculated the reduced annual energy prices that will arise from the combination of these transmission upgrades and new generation that is planned in the border area. Ex. 101 at pp. 3, 8. The reduced annual energy prices, in turn,

⁵ Ms. Brown testified that SDG&E selected Henwood Energy Services because Henwood is "known to be a leader in the business." Tr. 4/381. Ms. Brown stated that Henwood is "well known in the industry for the type of work they do." Id.

were compared against the annual cost of the transmission upgrades for the year 2004. Ex. 101 at pp. 8-9.

SDG&E's economic witness, Richard Lauckhart of Henwood Energy Services, explained how he modeled the economic effects of the transmission upgrades. He stated that "[a]n analysis of the economic benefits will look at operations of the power grid (generation dispatch and line loading) for all hours of a year . . . both with the proposed facility and without the proposed facility." He continued: "The economic benefit is the lower market prices for commodity that are likely to result." Ex. 100 (Lauckhart, SDG&E) at p. JRL-2.

Mr. Lauckhart's analysis modeled the entire Western Systems Coordinating Council ("WSCC") region, and divided the WSCC region into 23 different market areas. Ex. 110 at p. 3-3. In performing his analysis, Mr. Lauckhart received input from SDG&E with respect to projections of load, base case generation, and scenarios for new generation. See Tr. 4/383-84 (Brown); Ex. 100 at p. 6 (Brown). Mr. Lauckhart employed Henwood's proprietary Electric Market Simulation System and its PROSYM production cost model to simulate the operation of the WSCC. Ex. 110 at p. 4-1 (Lauckhart).⁷ Mr. Lauckhart used this model to simulate the

⁷ Mr. Lauckhart testified that Henwood licenses these software models to over one hundred players in the electric industry. Tr. 4/448. He testified that PROSYM currently is used by more than 120 companies on five continents. Tr. 4/452-53. Within

operation of the WSCC region on an hourly basis for the year 2004, and thereafter for the years 2005 through 2010. See Ex. 105; Tr. 4/447.⁸

Mr. Lauckhart explained that the Henwood model looked at all resources and all loads in the WSCC, with the goal of meeting the total load with the lowest cost resources. Tr. 4/441. Mr. Lauckhart testified that if transmission is not adequate to allow the most economic resources to serve the load, there must be a "redispatch" of resources. Id.⁹ He explained that when the transmission constraints are removed, generating resources with lower variable costs replace generating resources with higher variable costs during certain hours. Tr. 4/441-42.

The economic analysis sponsored by SDG&E demonstrated that the transmission upgrades are economically justified if just a portion of the anticipated new generation is brought on-line. The economic analysis showed, for example, that with approximately 1350 MW of new generation in the border area, energy prices for SDG&E ratepayers in the year 2004 will be \$6

the WSCC, Henwood has over 40 clients that rely upon Henwood's consulting, including the PROSYM model. Tr. 4/453.

⁸ Mr. Lauckhart testified that based upon his study results, he expected that the same magnitude of benefit would continue over a period extending beyond 2010. Tr. 4/447-48.

⁹ In the absence of the identified transmission upgrades, congestion at Miguel and congestion at Imperial Valley would impede the flow of the most economic energy to market. Tr. 4/443 (Lauckhart, SDG&E).

million lower with the Miguel-Mission upgrade than without the upgrade. See Ex. 101 at p. 7. Because the combined annual cost of the Miguel-Mission upgrade and the Imperial Valley upgrade will be approximately \$6.8 million, the economic study showed that these upgrades are economically justified at or near the 1350 MW level. See Ex. 101 at p. 9.

At higher levels of generation, the economic study showed that the benefits to ratepayers will be even greater. With 2350 MW of new generation, for example, the study showed that the net economic benefit to SDG&E ratepayers will be \$7.24 million and the net economic benefit to all ISO ratepayers will be \$43.24 million in 2004. See Ex. 101 (Brown) at p. 9 (Case 4).¹⁰

In view of this evidence, the Commission should find that the transmission upgrades are economically justified, and that SDG&E should proceed with all due diligence in order to place these upgrades into service at the earliest possible time. The EGG urges the Commission to adopt the Joint Recommendation in order to enable SDG&E to proceed expeditiously with these transmission projects.

1350
2350

3700

¹⁰ SDG&E's response to an Energy Division data request indicated that at a level of new generation equal to approximately 3800 MW, the benefit to SDG&E ratepayers would be \$328 million, and the benefit to all ISO ratepayers would be \$1.7 billion, over the seven-year period 2004-2010. See Ex. 105.

III.

ARGUMENT

- A. The Economic Analysis Presented by SDG&E Demonstrated that the Economic Benefits of the Transmission Upgrades Will Exceed the Cost of the Upgrades if New Generation is Developed

The economic analysis showed that in the absence of the Miguel-Mission and Imperial Valley upgrades, thousands of hours of congestion will prevent delivery of the most economic energy to SDG&E ratepayers, as well as ratepayers throughout the ISO control area. Tr. 4/443 (Lauckhart); Ex. 109 (Kritikson) at p. 7. The hours of congestion translate into relatively higher energy costs for SDG&E ratepayers and ISO ratepayers. Construction of the transmission upgrades will reduce congestion and thereby reduce energy costs for all ratepayers in the ISO control area, including SDG&E ratepayers.

As noted above, the economic analysis found that in a scenario in which approximately 1350 MW of new generation is constructed in the border area ("Case 3"), in the absence of the Miguel-Mission transmission upgrade, congestion will occur during 4077 out of 8760 hours in the year. See Ex. 110 at p. 2-1. In this same Case 3, however, if the Miguel-Mission upgrade is assumed to have been placed in service, the hours of congestion will be reduced to 371. Id. This reduction in the hours of congestion will reduce energy costs to SDG&E ratepayers

by \$6 million, and will reduce energy costs to all ISO ratepayers (including SDG&E ratepayers) by \$13 million. Id.; Tr. 4/443-44 (Lauckhart).

Mr. Lauckhart noted, in this connection, that the transmission upgrades will improve prices not only in the San Diego service area, but in the entire ISO control area, as well. Tr. 4/445. The economic analysis did not assume that all of the new generation in the border area necessarily will serve load in the SDG&E service territory. See Tr. 5/497 (Kloberdanz, SDG&E); Tr. 4/445 (Lauckhart). Rather, the economic analysis assumed that the new generation will help levelize costs across the WSCC as the physical system allows. Tr. 4/452 (Lauckhart). To the extent that the transmission upgrades allow power from new generation to move more freely, the economic benefits accrue not only to SDG&E ratepayers but to ratepayers throughout the ISO control area. Id.¹¹

As is discussed in more detail below, BGG witness James Kritikson testified that if ISO Tariff Amendment No. 27 is approved by the FERC, the cost of the transmission upgrades could be spread to all transmission owners in the ISO grid area.

¹¹ BGG witness James Kritikson also testified that it is possible that the power from the new generation could be sold anywhere in the WSCC. Tr. 5/480. Mr. Kritikson noted, however, that because supplies in California are "tight," the prices for power will be at such a level that the power is likely to be sold in California. Id.; see also Tr. 4/423 (Brown).

Ex. 109 at p. 18; Tr. 5/484-85 (Kritikson). Whether the costs of the transmission upgrades are borne by all ISO ratepayers or exclusively by SDG&E ratepayers, however, the economic benefits of the upgrades will equal or exceed the cost, at approximately 1350 MW of generation. This demonstration of net economic benefits provides solid justification for SDG&E to proceed with these projects.

B. The Benefits of the Transmission Upgrades Extend Beyond the Benefits Identified in the Economic Analysis

Mr. Kritikson testified that the transmission upgrades, combined with new generation in the border area, present the likelihood that there will be a reduction in reliability must run ("RMR") contracts, and a reduction in associated RMR costs, in the SDG&E service area. Ex. 109 at p. 13. To the extent additional power can enter the SDG&E service territory when the transmission upgrades are complete, the potential exists for reduced RMR costs. Id.¹²

Mr. Kritikson testified that according to the ISO, the fixed and variable cost of RMR contracts in the SDG&E area will be approximately \$32 million in 2002. Ex. 109 at p. 13; Ex.

¹² Mr. Lauckhart acknowledged that any reduction in RMR costs would be in addition to the economic benefits that he identified in his study. Tr. 4/446. Mr. Lauckhart noted, however, that he did not attempt to calculate the economic benefits associated with reduced RMR costs. Id.

111. SDG&E witness Brown acknowledged that "it is feasible that new, more efficient generation within the San Diego service territory could increase competition among bidders and thus reduce the associated costs of RMR contracts." Ex. 102 at p. 2; Tr. 4/406-07.¹³ A reduction in RMR costs would add to the economic benefits associated with the transmission upgrades.

Mr. Kritikson also testified that the Miguel-Mission upgrade and the Imperial Valley upgrade will produce a "qualitative reliability benefit" for the SDG&E system. Ex. 109 at p. 15. Because new generation will lead to reduced reliance upon RMR generation, Mr. Kritikson testified that "the system will have more margin to deal with forced generation outages or other contingencies that may occur when the RMR generation is being maintained or otherwise out of service." Id. Ms. Brown acknowledged, in this regard, that it is possible that a transmission upgrade will improve system reliability without having been found, in SDG&E's annual "grid assessment study," to be required for reliability. Tr. 4/359.

By allowing additional generation to compete for sales in the SDG&E market area, the transmission upgrades also are likely to reduce market power. Mr. Lauckhart acknowledged that he did

¹³ The evidence indicates that based upon a review currently being undertaken by the ISO, the level of RMR costs in the SDG&E service territory may be reduced over the next few years. Tr. 5/511 (Logan, ORA).

not attempt to calculate, in his study, the economic benefits that may be associated with a reduction of "market power" in the San Diego area. Tr. 4/446. Nevertheless, Mr. Lauckhart agreed that if there was market power that could be eliminated with the construction of the transmission upgrades, the benefits would be in addition to the economic benefits that are reflected in the Henwood study. Id.

The Commission should recognize, based upon the record evidence in this case, that the benefits associated with the Miguel-Mission upgrade and the Imperial Valley upgrade will not be limited to the economic benefits exhibited in SDG&E's economic analysis. The benefits also may include improvements in reliability, reduced RMR costs, and reduced market power by generators in the San Diego area. See Ex. 109 (Kritikson) at pp. 13-15. These benefits should not be overlooked in determining that these upgrades are in the public interest.

C. Substantial Progress Already Has Been Made in the Development of More than 1350 MW of New Generation in the Border Area

SDG&E witness Brown testified that the Miguel-Mission upgrade and the Imperial Valley upgrade will provide economic benefits to ratepayers only if new generation in the border area actually develops. Ex. 101 at p. 11. The evidence presented by the BGG, including declarations by representatives of Calpine, InterGen and Sempra Energy Resources, shows that these

generators already have made substantial financial commitments, and substantial progress, with respect to these generation projects. See Ex. 109 (Kritikson) at pp. 19-20. The dollar investments made by InterGen alone (\$250 million on LRPP; \$65 million on LREP) (see Ex. 112) far exceed the total cost of the transmission upgrades.

All of the members of the BGG have commenced construction of their projects, and all have entered into binding contracts for power plant design and construction. All of these generators also have entered into firm gas transportation contracts that support a new gas pipeline project between the U.S. and Mexico. See Ex. 109 (Kritikson) at pp. 20-21. And, all of the generators have received all regulatory and permit approvals required to proceed with their projects. The completion of these significant steps provides substantial proof that the generation projects will be completed within the projected timeframes. See Tr. 5/472 (Kritikson).¹⁴

It should be noted, in addition, that the generation sponsored by members of the BGG is not the exclusive source of new power that will be delivered into the SDG&E system via the Imperial Valley substation and/or the Miguel substation.

¹⁴ Ms. Brown testified that new generation in the amount of 1350 MW, and even in the amount of 2350 MW, is "very plausible." Tr. 4/411-12.

SDG&E's analysis identified new generation projects sponsored by AEP (two 250 MW plants), AES (500 MW) and a second Sempra Energy Resources project (600 MW), all of which are listed on SDG&E's current interconnection "queue." Ex. 101 at pp. 6-7; Tr. 5/490 (Brown).

Ms. Brown also testified that on September 18, 2001, SDG&E filed an application with the FERC (Docket No. ER01-47-000) in which SDG&E requested authority to impose a supplemental transmission surcharge in connection with an upgrade to its Path 45 capacity from 408 MW to 800 MW. See Ex. 102 (Brown) at p. 1; Ex. 104; Tr. 4/370 (Brown). The increase in Path 45 capacity will enable SDG&E to import up to 800 MW from Mexico into San Diego at the Imperial Valley substation or the Miguel substation. Tr. 4/373 (Brown).¹⁵ In this connection, Ms. Brown provided inputs to the economic study that assumed that 800 MW can flow over Path 45. Tr. 4/383 (Brown).¹⁶ Increased deliveries from Comision Federal de Electricidad ("CFE") will

¹⁵ In an earlier phase of this proceeding, Mr. Kritikson testified that CFE has indicated, in transmission planning sessions attended by the California ISO and SDG&E, that CFE intends to export 800 MW of power to California. Ex. 15 (Kritikson) at p. 4.

¹⁶ Ms. Brown noted that for purposes of the economic study, SDG&E increased the rating of Path 45 from 800 to 1300 MW for "Case 5." Ex. 101 at p. 7; Tr. 4/387-88 (Brown).

add to the congestion at Miguel and Imperial Valley in the absence of the transmission upgrades.

At this time, the generators are much further along with their projects than SDG&E is with the transmission upgrades. SDG&E witness Brown testified that the earliest in-service date for the Miguel-Mission upgrade is June 2004. Ex. 101 at p. 4. This date is nearly one year later than the projected commercial operation dates for all of the BGG members' generation projects. See Ex. 108 at p. 5.

Ms. Brown acknowledged, during cross-examination, that as long as the new generation is in place and the transmission upgrades are delayed, SDG&E ratepayers and other ISO ratepayers will forego the benefits associated with reduced congestion on the SDG&E system. Tr. 4/365-66. The Commission should do all that it can to assist SDG&E in expediting the construction of these transmission upgrades.

D. The Commission Should Defer the Matter of Cost Allocation to the FERC

In D.01-10-070 (October 25, 2001), the Commission stated, in connection with the issue of prospective major transmission projects to the southwest: "[W]e believe that the public interest is best served by evaluating the economic need for new transmission projects, and the appropriate allocation of costs

among beneficiaries, in this proceeding -- where we can ensure that a public record is fully developed." Decision at p. 30.

The BGG acknowledges the Commission's role in evaluating the economic need for new transmission projects in California. The BGG also recognizes the Commission's mandate, pursuant to A.B. 970, to "identify and undertake those actions necessary to reduce or remove constraints on the state's existing electrical transmission and distribution system." P.U. Code Section 399.15(a)(1).

These obligations do not extend to deciding the cost allocation methodology for the cost of new transmission facilities, however. Cost allocation for transmission facilities is a matter within the exclusive jurisdiction of the FERC.¹⁷

In D.95-12-063 (December 20, 1995), as modified in D.96-01-009 (January 10, 1996), the Commission ordered the disaggregation of the utilities' transmission facilities and the transfer of those transmission facilities to control by the California ISO. The Commission noted, in its Decision, that "the FERC must approve rates, terms and conditions of

¹⁷ See generally, Promoting Wholesale Competition Through Open Access Nondiscriminatory Transmission Services by Public Utilities and Transmitting Utilities, FERC Order No. 888, 75 F.E.R.C. ¶ 61,080, slip op. at pp. 427-440 and Appendix G (April 24, 1996); see also Tr. 5/507 (Logan, ORA).

transmission services provided by the ISO." D.95-12-063 at p. 31. In D.97-08-056 (August 1, 1997), the Commission reiterated the fact that the FERC now has responsibility for the rates for transmission owned by the California electric utilities. The Commission stated:

One of the consequences of electric industry restructuring is the transfer of transmission ratemaking from the Commission to FERC. Although FERC always retained authority over regulation of transmission, it deferred to the states to set a total revenue requirement for the transmitting utility, a revenue requirement which included the reasonable cost of transmission. Henceforth, FERC will have sole responsibility to set transmission revenue requirements.

Decision at p. 15.

Notwithstanding the fact that the FERC has exclusive authority over the level and allocation of transmission costs, this Commission may participate -- indeed this Commission must participate -- in proceedings before the FERC that address transmission provided by the ISO. See P.U. Code Section 365 a . To the extent that the Commission seeks input from the parties in this proceeding as to the position the Commission should take in a future cost allocation proceeding before FERC, the BGG urges the Commission to support a "rolled-in" cost allocation approach for the transmission upgrades. Specifically, the BGG urges the Commission to support a roll-in of the cost of the

transmission upgrades in the revenue requirement of SDG&E. Ex. 109 (Kritikson) at p. 15.

1. The Ratepayer Benefits of the Transmission Upgrades Exceed the Cost of the Upgrades

SDG&E, ORA and the BGG all agree that the costs of the Miguel-Mission upgrade and the Imperial Valley upgrade should be rolled-in to SDG&E's revenue requirement because the benefits of these upgrades to SDG&E's ratepayers will exceed the cost. See Tr. 5/506-07 (Logan); Tr. 5/495-97 (Kloberdanz); Tr. 5/509 (Kritikson). The economic study sponsored by SDG&E showed that at all levels of new generation above 1350 MW, the transmission upgrades will produce benefits to SDG&E ratepayers that will equal or exceed the annual cost of both of these transmission upgrades. See Ex. 101 at Ex. 2. In view of the substantial likelihood that as much as 2000 MW of new generation will be constructed in the border area by the third quarter of 2003, the benefits of the transmission upgrades will surpass the annual transmission upgrade costs, and this net benefit will continue in every year from 2004 through at least 2010, and likely beyond. See Ex. 105; Tr. 447-48 (Lauckhart).

Moreover, the benefits of the transmission upgrades will extend beyond the economic benefits identified by SDG&E's study. The benefits include reduced RMR costs, reduced market power, and increased reliability. Ex. 109 (Kritikson) at pp. 13-15.

Although these additional benefits have not been quantified, these benefits also will accrue to ratepayers in SDG&E's service area. All of these benefits make it clear that it is proper to roll the cost of the upgrades into the SDG&E revenue requirement.

2. It Would be Impossible to Allocate the Cost of the Transmission Upgrades Fairly Among Generators and Marketers

A rolled-in cost allocation approach is also appropriate because it would be impossible to allocate the cost of transmission upgrades fairly among all of the generators and marketers that will benefit from the transmission upgrades. SDG&E's economic study attempted to show that the transmission upgrades are likely to benefit generators and marketers as well as ratepayers. See Ex. 101 at p. 7 (Brown). Mr. Kritikson testified, however, that the transmission upgrades will benefit all generators and marketers whose power flows through the Imperial Valley substation and/or west of the Miguel substation, not just the sponsors of new generation in the border area. Ex. 109 at p. 16; Tr. 5/475-76 (Kritikson).

The beneficiaries of the transmission upgrades include current and potential future suppliers of power in Arizona (the Southwest Power Link), the Imperial Irrigation District, and

Mexico. See Tr. 4/362-63 (Brown).¹⁸ It would be impossible for FERC to assign an appropriate portion of the cost of the transmission upgrades to all of the generators and marketers that potentially could benefit from these projects. Ex. 109 at p. 16.

In addition, as Mr. Kritikson explained in his testimony, congestion at the Miguel substation and at the Imperial Valley substation is "intra-zonal" congestion. See Ex. 109 at pp. 10-12. There are no firm transmission rights within an ISO zone. Id. at p. 17. If the FERC were to allocate a portion of the cost of the transmission upgrades to individual generators, the generators would not receive any firm transmission rights. Id. This means that generators would receive nothing in return for the payment that they would be required to make for the upgrades, except a competitive disadvantage vis-à-vis other generators and marketers.

Based upon the foregoing, the BGG submits that the Commission should take the position, in a proceeding at FERC, that the costs of the transmission upgrades should be rolled-in to SDG&E's transmission revenue requirement. This position is

¹⁸ Ms. Brown acknowledged that to the extent there is increased generation in the Imperial Valley area and IID enhances the transmission capacity from the El Centro area to the Imperial Valley substation, this could add to the level of congestion at the Imperial Valley substation. Tr. 4/400-01.

consistent with FERC precedent that provides, generally, that the cost of network upgrades should be rolled-in to the transmission operator's revenue requirement.¹⁹

3. The Cost of the Transmission Upgrades Could in the Future be Allocated to all ISO Ratepayers

SDG&E, ORA and the BGG agree that in the current regulatory environment, based upon the demonstrated benefits for SDG&E ratepayers, the costs of the transmission upgrades should be rolled-in to SDG&E's revenue requirement. See Tr. 5/495-97 (Kloberdanz); Tr. 506-08 (Logan); Tr. 5/509 (Kritikson). It is possible, however, that a future change in cost allocation among participating transmission owners in the ISO control area (including SDG&E) could lead to an allocation of the cost of transmission upgrades to all ratepayers in the ISO. Tr. 5/509 (Kritikson); Ex. 109 at p. 18.

ISO Tariff Amendment No. 27, which was filed with the FERC on March 31, 2000, proposed the establishment of a uniform high voltage transmission Access Charge across the entire ISO-controlled grid. Under this approach, the charge paid by all ratepayers within the ISO service area for high voltage (i.e.

¹⁹ See FERC Docket No. EL01-47-005, 96 F.E.R.C. ¶ 61,155, "Order on Requests for Clarification and Rehearing," (dated July 27, 2001), slip op. at pp. 15-16.

above 200 kV) transmission would become a uniform, "postage stamp" charge over a 10-year transition period.²⁰

In addition, Tariff Amendment No. 27 proposed that capital investments by any participating transmission owner in new high voltage transmission facilities, and additions to existing high voltage transmission facilities (including supporting facilities such as transformers) should immediately be included in the grid-wide component of the high voltage Access Charge.²¹ Thus, under Tariff Amendment No. 27, the costs of the Miguel-Mission transmission upgrade and the Imperial Valley transformer upgrade could qualify for immediate inclusion in the grid-wide component of the ISO's high voltage Access Charge. See Tr. 5/485 (Kritikson).

In an Order issued on May 31, 2000, the FERC accepted the ISO Tariff Amendment for filing, suspended the Tariff Amendment, and established a settlement process for consideration of

²⁰ See FERC Docket No. ER00-2019-000, Transmittal Letter from ISO to the Honorable David P. Boergers, Secretary (dated March 31, 2000). Under the ISO proposal, the 10-year transition period would begin when a new participating transmission owner (other than SDG&E, Edison and PG&E) joins the ISO. See Letter at p. 12.

²¹ See FERC Docket No. ER00-2019-000, March 31, 2000 Transmittal Letter at p. 12. The amount of the new capital costs to be allocated to other transmission owners could potentially be affected by a proposed annual "cap" on the level of cost shifts. See Letter at pp. 13-14.

disputed issues.²² In its May 2000 Order, the FERC directed the parties to address contested issues through a settlement process, but the FERC generally acknowledged the benefit of a single, systemwide postage stamp rate for high voltage transmission. The FERC stated: "This evolution in rate design away from the utility-specific zone rates to a high voltage grid-wide methodology ensures a uniform grid-wide rate." 91 F.E.R.C., slip op. at p. 5.

It is uncertain, at this time, how and when the FERC finally will address ISO Tariff Amendment No. 27. Nevertheless, the tariff amendment presents the potential for a roll-in of the cost of the SDG&E transmission upgrades across the entire ISO. See Ex. 109 (Kritikson) at p. 18.

In view of the ISO's proposal in connection with Tariff Amendment No. 27, it is appropriate for this Commission to consider the benefits that the transmission upgrades will provide to all ISO ratepayers, not just to SDG&E ratepayers. According to the economic analysis, when new generation reaches a level of approximately 1350 MW, the benefits of the transmission upgrades to all ISO ratepayers will exceed the costs by more than \$6 million. See Ex. 101 at Ex. 2; Ex. 109

²² California Independent System Operator Corporation, 91 F.E.R.C. ¶ 61,205 (May 31, 2000). The FERC ruled that if the settlement process fails, a hearing will be held on the justness and reasonableness of the proposed tariffs.

(Kritikson) at p. 16. The point at which the economic benefits of the transmission upgrades will exceed their cost thus may be at a level of generation substantially below 1350 MW. The potential for spreading the costs across the ISO control area provides an even stronger justification for a roll-in of the cost of the transmission upgrades.

E. The Commission Should Facilitate the Licensing Process for the Transmission Upgrades

Time is of the essence with respect to approval of construction of the transmission upgrades. As is described above, SDG&E witness Brown testified that the earliest in-service date for the Miguel-Mission upgrade is June 2004 (Ex. 101 at p. 4), which is between 9 months and a year after the projected commercial operation date for the generation facilities sponsored by members of the BGG. See Ex. 108 at p. 5.

SDG&E witness Brown testified that the June 2004 in-service date is dependent on a number of factors, the "biggest" of which is SDG&E's licensing process. Tr. 4/364. Ms. Brown acknowledged that the longer the transmission upgrades are delayed, the greater the economic benefits that are foregone by SDG&E ratepayers as well as ISO ratepayers. Tr. 4/366; see also Tr. 4/427 (Brown). It is in the public interest, therefore, to

expedite the regulatory approvals necessary to proceed with the transmission upgrades.

Ms. Brown testified that SDG&E will have to begin work on the access roads in the first quarter of 2002 in order to meet an in-service date of June 2004 for the Miguel-Mission upgrades. Tr. 4/408. Ms. Brown also testified that SDG&E will need to order materials and start detailed design by January 2002 (less than three months from now) in order for the Imperial Valley transformer upgrades to be in service by December 2003. Id.

Commission General Order No. 131-D governs the process that must be followed in order for SDG&E to obtain regulatory approval for the transmission upgrades. Under General Order No. 131-D, regulatory approvals for the Miguel-Mission transmission upgrade and the Imperial Valley transformer should be considered separately. The BGG agrees with the analysis of General Order No. 131-D that was provided by SDG&E in the brief submitted in this proceeding on November 13, 2001.²³

1. Miguel-Mission Transmission Upgrade

General Order No. 131-D (Section III.A.) provides generally that a certificate of public convenience and necessity ("CPCN") is required for major new electric transmission facilities that

²³ I.00-11-001, "San Diego Gas & Electric Company's Brief Addressing the Applicability of G.O. 131-D to Certain Proposed Projects" (dated November 13, 2001).

are designed for operation at 200 kV or more. However, the Miguel-Mission transmission upgrade will make extensive use of existing structures, and all of the work will be undertaken in the existing right-of-way. See Tr. 4/363 (Brown); Tr. 5/502 (Kloberdanz).

Specifically, the new 230 kV circuits will be placed on existing structures. Only the 138 kV and 69 kV transmission circuits will be relocated to a new wood/steel pole line. See Ex. 102 (Brown) at p. 3; Ex. 109 (Kritikson) at p. 22; Tr. 4/363 (Brown). Under these circumstances, SDG&E should only be required to file a "permit to construct," under Section III.B. of General Order No. 131-D, with respect to the relocation of the lower voltage transmission lines. Tr. 5/502-03 (Kloberdanz); Tr. 5/505 (Kritikson).

2. Imperial Valley Transformer Upgrade

As Ms. Brown discussed in her prepared testimony, the Imperial Valley transformer upgrade includes the installation of a new 500/230 kV, 1120 MVA transformer bank, and the replacement of the existing transformer with a second 500/230 kV, 1120 MVA transformer. Ex. 101 at p. 10. All of this work is to be undertaken within the existing footprint -- boundaries -- of the Imperial Valley substation. Tr. 4/377-78 (Brown.)

The Imperial Valley transformer upgrade does not require a CPCN or a permit to construct because the upgrade is properly

characterized as a "substation modification project" within the meaning of General Order 131-D, Section III. B. The transformer upgrade "increase[s] the voltage of [the] substation to the voltage for which the substation has been previously rated" In these circumstances, the most that is required for the Imperial Valley upgrade is an advice letter, in accordance with General Order 131-D, Section III.B.

IV.

MILESTONES FOR MONITORING THE PROGRESS OF CONSTRUCTION

As directed by the Presiding Judge, the BGG is proposing a set of "milestones" that should be used by SDG&E and generators to coordinate and monitor the progress of construction on new border area generation projects, on the one hand, and SDG&E's transmission upgrades, on the other hand. The proposed milestones are attached hereto in Appendix A.

The milestones are predicated on the undisputed record evidence, reflected in the Joint Recommendation, which shows that economic justification exists for construction of the transmission upgrades if a threshold level of new generation (approximately 1350 MW) develops in the border area. See Ex. 108 at pp. 4-5. The milestones are proposed in order to enable SDG&E and the developers of this new generation to verify the progress of construction of their respective projects.

The BGG and SDG&E have not been able to reach agreement on specific milestones. To the extent that differences exist between SDG&E's proposed milestones and the BGG's proposed milestones, these differences will be addressed in the BGG's reply brief. It is possible, however, that the BGG and SDG&E will be able to resolve any differences in the intervening period between the submission of initial briefs and the submission of reply briefs on December 3, 2001. If an agreement is reached, this agreement will be presented to the Presiding Judge.

The BGG's proposed milestones are based upon a series of "general principles" that interact with the enumerated milestone dates and events. The general principles are intended to establish a framework within which the specific milestones will be applied.

The BGG will not recite, herein, all of the general principles and specific milestones that are reflected in Appendix A. Instead, the BGG will highlight certain key elements of the proposed milestones, as follows:

1. The milestone process, and the specific milestones, are not intended to establish a precedent for the parties or for the Commission in future circumstances or proceedings. The milestones are intended exclusively as guideposts for SDG&E's

construction of the Miguel-Mission transmission upgrade and the Imperial Valley transformer upgrade.

2. The milestones are not intended to impose rigid deadlines on the generators or on SDG&E. Rather, the milestones are intended to provide target dates for substantial compliance with indicated objectives. To this end, the milestone proposal contemplates that a "Verification Committee," comprised of representatives from SDG&E and the individual generators, will meet periodically to monitor the progress of construction and to ascertain whether milestones are being met. The Verification Committee will consider, on a case-by-case basis, whether adjustments to the milestones should be made in order to accommodate unforeseen delays or other exigencies.

3. The milestones are not directed at any individual generators, either members of the BGG or otherwise. Consistent with the Joint Recommendation, the milestones reflect target dates for a "threshold" level of generation development in the border area, which ultimately will be at least 1350 MW.

4. The milestones reflect the fact (as shown in the evidence) that generation projects totaling far more than 1350 MW are currently in an advanced stage of development. See Ex. 109 (Kritikson) at pp. 19-20 and declarations referenced therein. Accordingly, the specific milestones anticipate that substantially more progress will have been achieved by a

threshold level of generation projects than by SDG&E as of each target date, including the initial target date of January 2002.

5. The specific milestones also reflect the reality that individual generation projects are proceeding under independent construction schedules. This means that at certain times early in the milestone process, as equipment is ordered and delivered, the level of generation that will satisfy identified construction targets may be less than 1350 MW. However, the milestone proposal also anticipates that by September 2002 and thereafter, all indicated construction targets will be met by at least 1350 MW of generation, which reflects the threshold level of new generation set forth in the Joint Recommendation. By contrast, the proposed milestones anticipate that SDG&E will have just commenced construction of the Imperial Valley upgrade and the Miguel-Mission upgrade as of September 2002.

6. The milestones reflect the fact that once a generation project achieves the point in construction when all major equipment has been mounted on the foundation at the project site, no further milestones are necessary for construction of the generation project. At this point, the investment in the project is so substantial that the generator has reached a "point of no return." Accordingly, the milestones do not reflect further generation construction target dates once the

"point of no return" has been achieved for at least 1350 MW of new generation.

7. The milestones show that the "point of no return" for 1350 MW of new generation will be achieved by December 2002. SDG&E, however, will only be completing the engineering and design for the Miguel-Mission upgrade by December 2002. The Miguel-Mission upgrade is not expected to be in-service until 18 months later, in June 2004. The proposed milestones demonstrate that SDG&E's progress will lag substantially behind the progress of the generators at every stage of the process.

The proposed milestones that are set forth in Appendix A reflect a realistic schedule for the progress of construction on new generation and on SDG&E's transmission upgrades. The members of the BGG look forward to working with SDG&E on the Verification Committee in order to coordinate and monitor the progress of these projects. The BGG's objective in this process is to facilitate and expedite SDG&E's construction of the transmission upgrades in order to achieve the stated in-service dates of December 2003 (Imperial Valley upgrade) and June 2004 (Miguel-Mission upgrade).

V.

CONCLUSION

Based upon the evidence presented in this phase of the proceeding, the Commission should conclude the following:

1. The potential economic benefits associated with the transmission upgrades, combined with the likelihood of new generation in the border area, provide strong justification for proceeding with the transmission upgrades on an expeditious basis.

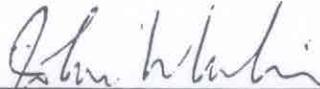
2. The matter of cost allocation should be deferred to the FERC, but the Commission should support a rolled-in cost allocation approach in any FERC proceeding in which this issue arises.

3. SDG&E should be required to submit an advice letter, at most, with respect to the Imperial Valley transformer upgrade.

4. SDG&E should be required to file an application for a Permit to Construct, or an advice letter, with respect to the Miguel-Mission transmission upgrade.

All of these conclusions are presented in the Joint Recommendation. The BGG urges the Commission to embrace the Joint Recommendation as the roadmap for further action by SDG&E with respect to these transmission upgrades.

Respectfully submitted,



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Attorneys for the Border Generation
Group

Date: November 21, 2001

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BEFORE THE
PUBLIC UTILITIES COMMISSION
OF THE
STATE OF CALIFORNIA

Order Instituting Investigation Into)	
Implementation of Assembly Bill 970)	
Regarding the Identification of)	I.00-11-001
Electric Transmission and Distribution)	
Constraints, Actions to Resolve Those)	
Constraints, and Related Matters)	
Affecting the Reliability of Electric)	
Supply)	

APPENDIX A

**THE BORDER GENERATION GROUP'S
PROPOSED MILESTONES RESPECTING
CONSTRUCTION OF THE MIGUEL-MISSION
AND IMPERIAL VALLEY UPGRADES**

The Border Generation Group ("BGG") presents its proposed "milestones" with respect to SDG&E's construction of the Miguel-Mission transmission upgrade and the Imperial Valley transformer upgrade. The milestones are intended to coordinate the construction of SDG&E's transmission upgrades with the construction of a threshold level of new generation in the border area. The milestones provide target dates for

construction progress, and present a collaborative process for monitoring the achievement of these target dates.

A.

GENERAL PRINCIPLES

The general principles that govern the milestones are as follows:

1. Paragraph 8 of the Joint Recommendation states:

Based on the economic study presented in this proceeding, it appears that justification exists for construction of the transmission upgrades if a threshold level of new generation develops in the Border area. Once new generation in the Border area exceeds approximately 1350 MW, the annual energy cost savings to SDG&E ratepayers could exceed the annual cost of both the Miguel-Mission Upgrade and the IV Upgrade.

The milestones are intended to ensure that at least 1350 MW of new generation develops as SDG&E proceeds with construction of the transmission upgrades.

2. The milestones are not intended to be specific to individual generators. The objective, over the course of the construction period, is to achieve milestones with any combination of generation that is equal to at least 1350 MW.

3. The milestones set forth herein are not intended to establish a precedent for the parties or for the Commission.

4. In order to ascertain whether substantial compliance has been achieved with respect to the milestones, a

"Verification Committee," comprised of selected representatives from SDG&E and members of the BGG, will meet periodically. In order to verify substantial compliance with the milestones, the Verification Committee will accept sworn affidavits by responsible representatives, and will employ site visits. Parties will inform the Verification Committee immediately upon determining that a milestone will not be met.

5. The Verification Committee will determine, on a case-by-case basis, whether a missed milestone is significant enough to justify a delay of other milestones. The Verification Committee will consider whether reasonable adjustments to the milestones should be made in order to accommodate specific circumstances.

6. The specific milestones set forth below anticipate that SDG&E will not spend more than a total of \$2 million on the upgrades until it receives a final order from FERC that addresses how SDG&E should treat the costs of the upgrades. In the absence of a FERC order by April 15, 2002, the Verification Committee will address whether certain milestones should be delayed.

7. The specific milestones set forth below anticipate that SDG&E will not begin constructing the Miguel-Mission upgrade until it receives an order from the CPUC that authorizes it to do so. If SDG&E does not receive an order from the CPUC

in time to commence construction under the milestone schedule, the Verification Committee will address whether certain milestones should be delayed.

8. Once a generation project achieves the point in construction at which all of the Major Equipment (defined below) is mounted on the foundation on the project site, progress is deemed to be sufficient not to require additional milestones for the generation project.

B.

SPECIFIC MILESTONES

The specific milestones are as follows:

By The End Of January 2002

Generators (at least 1350 MW)

1. Engineering Procurement & Construction Contract (EPC) signed, or equivalent.
2. Major Equipment (combustion turbine, steam turbine, heat recovery steam generator (HRSG)) ordered.
3. Interconnect agreement signed or in advanced stage of negotiation.
4. All major US/Mexico licenses/approvals required for commencement of power plant site construction.
5. Gas pipeline transportation agreement executed.
6. Plant construction commenced, including substantial progress on grading.

7. Generation tie-line construction in progress, if applicable.

SDG&E

1. Finish joint interconnection/system upgrade study.
2. File petition for Declaratory Order for rolled-in rate recovery with FERC (target date 1/1/02 or sooner).
3. Order circuit breakers for IV Sub banks.
4. File advice letter for IV transformer upgrade, if applicable.

By The End Of March 2002

Generators (at least 1000 MW)

1. Combustion turbines delivered.
2. Foundations for Major Equipment complete.
3. Power plant switchyard construction commenced, if applicable.

SDG&E

1. ML-MS#2 environmental data collection complete.
2. File the relevant G.O. 131-D pleading for ML-MS #2.

By The End Of June 2002

Generators (at least 1000 MW)

1. Major Equipment delivered.
2. Condensers, Distributed Control System (DCS) equipment ordered (1350 MW).

3. Substantial progress on power plant switchyard construction, if applicable.

SDG&E

1. Complete design of IV bank upgrade.
2. Long lead-time materials ordered for ML-MS#2.
3. Order transformers for IV upgrade.

By The End Of September 2002

Generators (at least 1350 MW)

1. Major Equipment on site.

SDG&E

1. Start construction for IV bank upgrades.
2. Start construction for ML-MS#2 (contingent on receipt of an order from the CPUC that authorizes construction).

By The End Of December 2002

Generators (at least 1350 MW)

1. Major Equipment mounted on foundation.
2. Condenser, DCS equipment on site.
3. Power plant switchyard complete, if applicable.

SDG&E

1. Complete engineering for ML-MS#2.
2. Receive IV transformer banks.
3. Complete design of ML-MS#2 project.

By The End of January 2003

Generators (at least 1350 MW)

1. Tie-line construction complete, if applicable.

By The End Of June 2003

Generators

No further milestones.

SDG&E

1. Install and test first new transformer (May 2003).
2. Place first new transformer in service.

By The End Of Sept. 2003

Generators

No further milestones.

SDG&E

1. Remove old transformer and install second new transformer (August 2003).
2. Relocate 69 kV and 138 kV lines.

By The End Of December 2003

Generators

No further milestones.

SDG&E

1. Place second new transformer in service.

By The End Of June 2004

Generators

No further milestones.

SDG&E

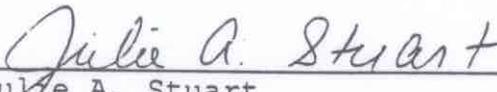
1. Install new 230 kV line.
2. Place ML-MS#2 in-service.

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CERTIFICATE OF SERVICE

I hereby certify that I have served, this day, a copy of the foregoing **INITIAL BRIEF OF THE BORDER GENERATION GROUP** on the service list for **I.00-11-001** by electronic mail, as well as mailing a properly addressed copy, by first-class mail with postage prepaid, to each party.

Executed on November 21, 2001, at San Diego, California.



Julie A. Stuart