

**UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION**

Southern California Edison Company) Docket No. ER07-1034-002

**INITIAL BRIEF OF SOUTHERN CALIFORNIA EDISON COMPANY
(February 26, 2009)**

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February 26, 2009

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**To: The Honorable David H. Coffman
 Presiding Administrative Law Judge**

Pursuant to the briefing schedule set by the Presiding Administrative Law Judge in the Order Establishing Procedural Schedule, issued September 12, 2008 in this docket, Southern California Edison Company (“SCE”) submits the following Initial Brief.

INTRODUCTION

The Green Borders Generating Project (“Green Borders”) applied to the California Independent System Operator (“CAISO”) to interconnect its 62 MW Generating Facility to the CAISO Controlled Grid through the non SCE-owned Dixie Valley-Oxbow Transmission Line into the SCE-owned Control Substation. As described in the Joint Stipulation of Facts, the parties entered into settlement for all but one remaining issue regarding the interconnection of Green Borders to the CAISO Controlled Grid. The parties were unable to resolve whether the telecommunications facilities identified in the Technical Assessment II (JST-6) and revised Facilities Study (JST-7) should be classified as Interconnection Facilities or Network Upgrades.

SCE believes that the telecommunications facilities at issue in this case are properly classified as Interconnection Facilities, and thus, the cost responsibility is properly allocated to the Green Borders Generating Project (“Green Borders”). Commission Staff Testimony, CAISO Testimony, and Commission precedent all support treatment of these facilities as Interconnection

Facilities, properly chargeable to Green Borders.

PROCEDURAL HISTORY

SCE adopts the Joint Stipulation of Documents and Facts, which contains the procedural history of this matter.

ARGUMENT

I. Should telecommunication facilities identified in the revised interconnection studies (JST-6 and JST-7) as necessary to interconnect the Green Borders Geothermal project to the CAISO Controlled Grid, consisting of a fiber optic cable and microwave equipment, be classified as Interconnection Facilities or Network Upgrades?

The telecommunications facilities at issue in this case should be classified as Interconnection Facilities because they fall squarely within the Commission approved definition of Interconnection Facilities as “facilities needed to physically and electrically interconnect the generating facility to the Participating Transmission Owner’s Transmission System.”¹

There are a number of different factors to take into consideration when determining whether the telecommunications facilities should be considered network upgrades or Interconnection Facilities. In most cases, the Commission uses its well-settled “at or beyond the point of interconnection” test to determine whether a facility is a network upgrade, as opposed to an interconnection facility. Under this test, the determination of whether the cost of a facility is directly assignable is simply a function of determining where the point of interconnection is. Per this standard, facilities constructed on the generator’s side of the point of interconnection are considered to be an “Interconnection Facilities,” for which the costs are directly assignable to the

¹ *The CAISO’s FERC approved Large Generating Interconnection Agreement defines Interconnection Facilities as: The Participating TO’s Interconnection Facilities and the Interconnection Customer’s Interconnection Facilities. Collectively, the Interconnection Facilities include all facilities and equipment between the Generating Facility and the Point of Interconnection, including any modification, additions or upgrades that are necessary to physically and electrically interconnect the Generating Facility to the Participating TO’s Transmission System. Interconnection Facilities are sole use facilities and shall not include Distribution Upgrades, Stand Alone Network Upgrades or Network Upgrades. Updated California ISO 4th Replacement (MRTU) Tariff, Appendix V, Original Sheet 1691.*

generator. Anything constructed on the network side is considered to be a “Network Upgrade,” for which the generator is responsible for paying the upfront cost, which is then reimbursed as transmission credits.² There is no dispute, and all parties agree, that the telecommunications facilities at issue are on the Green Borders side of the interconnection, and therefore “before the point of interconnection.” (JST ¶ 14)

There are additional ways to analyze the characterization of facilities – all of which invariably lead to a determination that the facilities should be classified as interconnection. In the Whitewater decision, the Commission held that where an interconnection is unusual, it would apply the Mansfield test.³ The Mansfield Test states that the proper analysis of whether transmission facilities should be considered Network or Interconnection Facilities is:

- (1) Whether the facilities are radial, or whether they loop back into the transmission system;
- (2) Whether energy flows only in one direction, from the transmission system to the customer over the facilities, or in both directions, from the transmission system to the customer, and from the customer to the transmission system;
- (3) Whether the transmission provider is able to provide transmission service to itself or other transmission customers . . . over the facilities in question;
- (4) Whether the facilities provide benefits to the transmission grid in terms of capability or reliability, and whether the facilities can be relied on for coordinated operation of the grid; and
- (5) Whether an outage on the facilities would affect the transmission system.⁴

As explained in Commission Staff testimony in this proceeding, when the Mansfield Test is applied, the determination is clear that the facilities should be considered Interconnection Facilities (S-1 at 14-16). First, the Dixie Valley-Oxbow 230 kV Transmission line is a radial generation tie-line, originally built to interconnect the Oxbow QF facility to SCE’s Transmission system through

² *Southern California Edison Company*, 117 F.E.R.C. ¶61,103 (F.E.R.C. 2006) (Whitewater)

³ *Id.*

⁴ *Mansfield Municipal Electric Department and North Attleborough Electric Department v. New England Power Company*, 97 F.E.R.C. ¶61,134 (2001).

breaker #8 at SCE's Control Substation (S-1 at 14). Second, as explained by CAISO, power flows are solely in the direction from the Oxbow QF to Control Substation (S-1 at 14). Third, the Dixie Valley-Oxbow generation tie-line is not part of the CAISO Controlled Grid, and therefore the CAISO has no control and no scheduling capability on the line (S-1 at 15). Fourth, the Dixie Valley-Oxbow generation tie-line does not provide benefits to the transmission grid in terms of capability or reliability (S-1 at 16). Finally, an outage of the Dixie Valley-Oxbow generation tie-line would not materially effect the CAISO Controlled Grid (S-1 at 16). Thus, the determination that the Dixie Valley-Oxbow generation tie-line is not integrated with the CAISO Controlled Grid then allows for an analysis of the nature of the telecommunications facilities at issue, distinct from other telecommunications facilities that are part of the Remedial Action Schemes for the CAISO Controlled Grid.

Further, it is clear that these facilities do not benefit the CAISO Controlled Grid. The sole function of these telecommunications facilities is to protect the existing rights on a radial line of a third-party Qualifying Facility, under certain defined circumstances. (S-1 at 11-12). This protection is needed because of Green Borders' election to interconnect to the CAISO Controlled Grid via the existing Dixie Valley-Oxbow line, and the resulting need to allow for the tripping of the Green Borders project without impacting service to the existing Oxbow QF (ISO-2 at 2-3).

II. Whether the telecommunication facilities at issue provide a benefit to the CAISO Controlled Grid?

As noted above, the telecommunications facilities at issue benefit only Green Borders and do not benefit the CAISO Controlled Grid as a whole. The addition of the Green Border project increases the risk exposure of arming and operating the Bishop Remedial Action Scheme (RAS). A RAS is an automated, protective system that safeguards the operation of the transmission system from overloading due to abnormal operating situations that may occur due to faults, equipment

failure, or *force majeure*.⁵ This increase in arming and operating the Bishop RAS has a detrimental impact on the existing generating units, in particular it greatly increases the exposure of operating the Control 115 kV Position #8 circuit breaker, which results in a disconnection of the Dixie Valley-Oxbow gen-tie line that connects the existing QF. In order to mitigate these impacts, SCE requires either: (1) concurrence from the existing QF that connects to SCE's system via the Dixie Valley-Oxbow gen-tie line at Position #8 to allow for the continued operation of the existing Bishop RAS as currently designed (resulting in increased tripping of the existing QF and therefore degrading service to the QF) or (2) mitigate the impact of the increased tripping by installing additional telecommunications facilities to eliminate the need to operate the RAS under the increased conditions as described in SCE's testimony (SCE-1 at 7). SCE is informed that there is no concurrence from the existing QF and therefore SCE needs the additional telecommunication facilities in lieu of the ability to operate the circuit breaker at the Control 115 kV Position #8.

In contrast to the telecommunication facilities at issue, the Green Borders interconnection studies (JST 2-7) have shown that there are telecommunications upgrades required from SCE's Lugo Substation to the Bishop area that are triggered by the Green Borders project in order to conform to the current Western Electricity Coordinating Council RAS Task Force requirements(SCE-1 at 6). These telecommunications upgrades would serve multiple circuit breakers that control other generation tie-lines and support the monitoring of CAISO Controlled Facilities (SCE-1 at 6). These telecommunications upgrades would be network upgrades because they provide benefits to the entire transmission system, unlike the Green Borders facilities that are the subject of this proceeding (SCE-1 at 6).

There are telecommunications upgrades needed to upgrade the RAS in order to interconnect

⁵ *Southern California Edison Co.*, 97 FERC ¶61, 148 (2001) (Wildflower).

the Green Borders project, but these upgrades are facilities that are beyond the point of interconnection. The telecommunication facilities at issue benefit only the Green Borders project, in that they allow the generator to interconnect without having to build its own generation tie-line and interconnect at a separate circuit breaker which could be tripped at the point of interconnection rather than at the Aurora Substation (Green Borders' proposed new substation that interconnects Green Borders with the Dixie Valley-Oxbow line).

III. Is the location of the telecommunications facilities on the Green Borders side of the interconnection relevant in determining their appropriate classification?

Order 2003 states “The Commission has developed a simple test for distinguishing Interconnection Facilities from Network Upgrades: Network Upgrades include only facilities at or beyond the point where the Interconnection Customer’s Generating Facility interconnects to the Transmission Provider’s Transmission System.”⁶ In most cases, the Commission uses its well-settled “at or beyond the point of interconnection” test to determine whether a facility is a network upgrade, as opposed to an interconnection facility. As discussed above, under this test, the determination of whether a facility is directly assignable is simply a function of determining the point of interconnection. That is, anything constructed on the generator’s side of the point of interconnection is considered to be an “Interconnection Facility,” which is directly assignable to the generator, and anything constructed on the network side is considered to be a “Network Upgrade,” which the generator pays for upfront and then is reimbursed through transmission credits.⁷ This is an important part of the analysis of whether these facilities should be considered Interconnection

⁶ *Standardization of Generator Interconnection Agreements, and Procedures, Order No. 2003, FERC Stats. & Regs. 31,146 (2003), order on reh’g, Order No. 2003-A, FERC Stats. & Regs. 31,160 (2004), order on reh’g, Order No. 2003-B, FERC Stats. & Regs. 31,171 (2004), order on reh’g, Order No. 2003-C, 111 FERC 61,401 (2005) (“Order 2003”).*

⁷ *Southern California Edison Company, 117 F.E.R.C. ¶61,103 (F.E.R.C. 2006) (Whitewater)*

Facilities or Network Upgrades.

IV. Does the fact that Southern California Edison will own and operate the telecommunications facilities support treating them as network upgrades?

Both the FERC Pro Forma Large Generator Interconnection Agreement (“LGIA”) and the CAISO approved LGIA recognize a category of Interconnection Facilities that are owned by the transmission provider.⁸ The telecommunication facilities at issue herein will be operated for the sole benefit of the Green Borders project, as there are no other uses for these facilities (ISO-2 at 7). As such, the fact that SCE will own and operate the telecommunications facilities is not relevant to the determination of whether they are Interconnection Facilities or Network Upgrades.

V. Is the Commission’s decision in *Southern California Edison Co.*, 97 FERC ¶ 61,148 (2001) (“Wildflower”) relevant in determining the nature of the classification of the telecommunications facilities at issue in the current proceeding, and if so, how?

The Wildflower decision is relevant because it deemed that the cost of the RAS equipment should be treated a network upgrade. In Wildflower, the addition of a 136 MW generator necessitated the installation of telecommunications facilities in order to implement a RAS.⁹ The Commission found that these facilities necessary for the RAS should be classified as Network because they provided benefits to the entire CAISO Controlled Grid.¹⁰ The Commission found that the RAS upgrades, which were beyond the point of interconnection, should be classified as Network (ISO-2 at 6). The Wildflower generating facility interconnected directly to the CAISO Controlled Grid, and therefore had no need for the telecommunications of the sort required for Green Borders (ISO-2 at 6).

⁸ *Updated California ISO 4th Replacement (MRTU) Tariff, Appendix V, Original Sheet 1691 and 1693. Order 2003, Appendix C, Standard Large Generator Interconnection Agreement, page 8.*

⁹ *Southern California Edison Co.*, 97 FERC ¶ 61,148 at pg. 1 (2001) (“Wildflower”)

¹⁰ *Id.* at pg. 10

SCE properly included the cost of the RAS equipment that benefits the CAISO grid in its LGIA with Green Borders, consistent with the decision in Wildflower. The distinction between how the facilities in Wildflower were treated with the treatment of the facilities at issue in this case is clear, in that Green Borders is interconnecting to the electric system (through the non-SCE owned Dixie Valley-Oxbow line) and delivering its output through a single non-CAISO controlled 115-kV circuit breaker at the SCE Control Substation. The additional telecommunications facilities at issue are only required to mitigate increased tripping exposure that would otherwise be burdened onto a third party generator (ISO-2 at 6).

VI. Is it appropriate to compare the telecommunications facilities at issue in Green Borders to a radial transmission line for purposes of determining the appropriate facilities classification?

It is appropriate to compare the Green Borders' telecommunications facilities to a radial transmission line for the purposes of classifying the facilities. The additional telecommunications facilities are needed in order to mitigate the detrimental impact to the Oxbow QF that connects to SCE's system through the Dixie Valley–Oxbow radial transmission line. If Green Borders were to connect via its own radial transmission line to SCE's Control Substation, those facilities would be considered Interconnection Facilities, and the telecommunications facilities at issue would not be needed but rather the circuit breaker installed at the Control Substation to support the new radial transmission line would be tripped as part of the RAS (SCE-1 at 7-8).

Both the telecommunications facilities at issue and a generation tie-line are dedicated to safely and reliably interconnecting a single interconnection customer to the grid. The only purpose of these telecommunications facilities is to trip the Green Borders project separately and independently, without also tripping the Oxbow QF. Because these facilities are located on the

Green Borders' side of the interconnection, it is appropriate to analogize the addition of these facilities to the addition of a generation tie-line to the grid (ISO-1 at 10-11; ISO-2 at 8-9).

CONCLUSION

For the reasons set forth above, SCE respectfully requests that the Commission find that the telecommunications facilities at issue are properly classified as Interconnection Facilities and allocate the costs of such facilities directly to Green Borders.

Respectfully submitted,

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Dated: February 26, 2009

CERTIFICATE OF SERVICE

I hereby certify that I have this day served the foregoing **INITIAL BRIEF OF SOUTHERN CALIFORNIA EDISON COMPANY** upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated at Rosemead, California, this **26th day of February, 2009**.

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