

STATE OF CALIFORNIA

Energy Resources Conservation
And Development Commission

In the Matter of:) Docket No. 02-AFC-1
)
Application for Certification)
for the BLYTHE ENERGY PROJECT, PHASE II)
)
_____)

**ENERGY COMMISSION STAFF’S MOTION TO COMPEL APPLICANT
TO SUBMIT CERTAIN INFORMATION ON PROPOSED TRANSMISSION
INTERCONNECTION CONFIGURATION**

INTRODUCTION

The transmission system situation in the vicinity of BEP II is complex and constrained. Currently, BEP I is only able deliver approximately 100 megawatts (MW) (out of 520 MW the plant is capable of generating) on a “consistent and economically predictable basis” to southern California under long-term transmission arrangements.¹ Moreover, the existing system can only accommodate approximately 70 MWs of BEP II’s 520 MW power output²; thus, unless critical changes are made to the system, the majority of BEP II’s power will be stranded. No other application reviewed by the Commission has involved transmission constraints to this extent. Several transmission lines are currently being proposed in the area, including one proposed by BEP I to resolve its transmission problems. It is possible that one of these lines could also relieve BEP II’s constraints. However, staff believes this is questionable and without the necessary information it would be impossible to confirm this.

Applicant has not provided adequate information concerning the project’s transmission interconnection configuration to enable BEP II to proceed to evidentiary hearings at this time.

¹ See Blythe Energy’s Petition for Post-Certification Amendment, October 2004.

² Blythe Area Regional Transmission Power Flow Analysis Study, March 7, 2003.

Without further information on the proposed transmission interconnection, staff and the California Independent System Operator (CA ISO) will not be able to provide the analysis necessary for the Commission to make the requisite findings regarding the project's conformance with federal, state and local laws, ordinances, regulations and standards (LORS) or a determination of potential impacts under the California Environmental Quality Act (CEQA) resulting from interconnection of the project.³

Staff has made every effort to determine the project's proposed interconnection configuration. Since issuance of the Preliminary Staff Assessment (PSA), staff has repeatedly attempted to obtain this information from applicant and, failing that, from the CA ISO and various transmission owners involved, including the Western Area Power Administration (Western), and Southern California Edison (SCE). Applicant has refused to provide staff with this information and, due to confidentiality concerns, the transmission owners and CA ISO cannot divulge such information without applicant's permission, which has not been given.

On several occasions staff has requested information from applicant, both orally and in writing, concerning how the proposed project will interconnect with the transmission grid to distribute its electricity. Staff requested such information in written data requests, in the June 27, 2003 and July 31, 2004 status reports, through numerous phone calls in the intervening months, and, most recently, at the January 26, 2005 PSA workshop. Staff finally received a copy of an Application for Interconnection of BEP II to the Western System; however, this document is dated 2003 and it is unclear whether this is the most recent application. Additionally, staff was recently informed by Western that applicant at long last entered into an interconnection study agreement with Western who has now begun a System Impact Study (SIS) for interconnection of the BEP II with the Buck Boulevard Substation and with the Desert Southwest Transmission Project (DSWTP) transmission option.⁴ This is the first step in securing adequate information for the

³ The CA ISO generally files testimony with the Commission on all generator interconnects to the CA ISO grid when the FSA is published. They have been unable to do so here due to the absence of adequate information.

⁴ Email from Nick Saber (Western) regarding BEP II system integration, April 6, 2005.

project; however, the applicant has not been forthcoming with any information about this study and staff still has no information on BEP II's Request to Terminate with the CA ISO-controlled SCE grid.

Pursuant to Public Resources Code section 25519(b) and California Code of Regulations, title 20, section 1716(g), staff respectfully requests, for the reasons described below, the Committee to compel applicant to provide the information identified in Attachment A and related to interconnection of BEP II to the transmission system. This information is essential for the Commission to make the necessary findings.

A. Certain Minimum Information on a Proposed Interconnection Configuration is Required in Order to Ensure an Adequate Transmission System Engineering Analysis.

One of the main purposes for the certification process is to ensure that a proposed project will provide a reliable supply of electrical energy. (Cal. Code Regs., tit. 20, §1741(a).) In furtherance of this goal, staff's transmission system engineering analysis involves a determination of whether a proposed facility will comply with electrical engineering and system reliability standards and be able to reliably and safely interconnect to the electricity grid and deliver electricity to the load. (see Cal. Code Regs., tit. 20, §§1741, 1743.) For the project to be considered reliable and in compliance with LORS, applicant must show that the interconnection complies with the California Public Utilities Commission's general orders, Western's interconnection standards, SCE's Interconnection standards, and the reliability and planning standards of the CA ISO, Western Electricity Coordinating Council (WECC), North American Electric Reliability Council (NERC), and Western. Additionally, the power plant switchyard, the outlet line(s), and termination facilities must also comply with additional safety, engineering, and reliability LORS.

Since 1999, all 38 applications for certification filed with the Commission have included at least a partial SIS in accordance with WECC, NERC, and Western standards (when applicable), or

else a full study was provided shortly after the filing of the AFC.⁵ The SIS contains power flow, short circuit, post-transient power flow, and transient stability studies that forecast violations of system reliability and breaker overstress. At a minimum, the SIS identifies whether any direct assignment facilities⁶ or reliability upgrades are needed as well as whether any delivery upgrades are necessary to deliver the new generating facility's full output over the CA ISO-controlled grid. For interconnection of a generating plant or a new transmission line to the CA ISO grid, the transmission owner's SIS must be coordinated with the CA ISO.

Applicants occasionally may precede the SIS with a Feasibility Study. A Feasibility Study is often used as a screening study to analyze and compare alternatives for transmission interconnection. It is also used to provide basic information, such as preliminary reliability criteria violations, so that the applicant can develop an interconnection plan for the project in order to proceed further with the more detailed SIS. Since the Feasibility Study only provides preliminary study results, it cannot be used as a substitute for the SIS. The Feasibility Study does not identify all reliability impacts, or the degree of these impacts, and, therefore, all necessary mitigation measures cannot be identified.

Following the SIS, a study entitled the Facility Study (FS) is required by the CA ISO and Western. The FS provides the detailed scope of the proposed additions, alterations, or upgrades to the transmission grid and their estimated cost. The CA ISO uses the FS to determine whether the proposed changes are adequate to mitigate impacts to the system and for the delivery of the proposed generation to the CA ISO-controlled grid. Staff is only able to finalize its analysis of transmission system engineering, and identify the necessary conditions of certification, when staff has received the SIS, the FS, and CA ISO's preliminary or final approval of the interconnection of the project, where applicable, as in this case.

The studies identified above define the scope of the proposed project and identify whether downstream facilities will be required. If the interconnection of a project with the electricity grid

⁵ A partial study includes only power flow analyses while a full study includes power flow, stability, and fault current analysis.

⁶ Direct Assignment Facilities are those facilities that would not be built but for the interconnection request. Examples include the power plant switchyard, outlet line, and termination equipment at the terminus of the line.

would require new downstream construction or modification of transmission lines or substations, these additional facilities must be included in the Commission’s analysis of the project. (Public Utilities Comm. V. Energy Resources Conservation and Development Comm., 150 Cal.App.3d 437, 451 (1984) [“if certification of a new...thermal powerplant will require construction of transmission lines that will not fall within the commission’s certification jurisdiction, the additional lines must be considered part of the ‘project’ for purposes of the California Environmental Quality Act”].) Without the studies to identify necessary mitigation measures, the whole of the project that must be analyzed is left undefined and the requisite findings regarding impacts under CEQA and LORS conformance cannot be made.

The Commission has never certified a project without at least a basic understanding of its proposed interconnection configuration, its potential for transmission system impacts, and any necessary mitigation measures. As described below, BEP II has fallen far short of meeting these minimum information requirements.

B. Applicant Has Not Provided Adequate Information Regarding the Proposed Transmission Interconnection Configuration.

The interconnection configuration proposed by applicant has been a moving target since the AFC was filed. Applicant has changed BEP II’s proposed interconnection configuration several times, requiring staff and other interested agencies, including CA ISO, Western, and the Imperial Irrigation District, to analyze at least five different interconnection configurations. Shortly before publication of the PSA, applicant had conveyed to staff that it was committed to a particular interconnection design scenario to Western’s system that would rely on a new 500 kV line from Western’s Buck Boulevard Substation to SCE’s Devers Substation to get its power to the loads. Staff later learned, however, that applicant had expressed interest in applying for transmission interconnection under several alternative design configurations with CA ISO and SCE.

As a direct result of applicant’s failure to commit to an interconnection configuration, BEP II has fallen behind several other projects in the generation and transmission queue including SCE’s proposed Devers-Palo Verde 2 (DPV2) 500 kV line and Blythe Energy, LLC’s proposed Blythe

Energy Project Transmission Line (BEPTL). The BEPTL is being evaluated as an amendment to BEP I in a separate Energy Commission compliance proceeding (Docket 99-AFC-8C). Given these additional projects in the Blythe region, which completely alter the transmission line situation in the area, none of the preliminary studies previously provided by applicant accurately reflect the proposed project and its potential impacts. Any proposal to interconnect to the transmission system must include in its evaluation all projects that are ahead of it in the queue.⁷ The Blythe Area Regional Transmission Power Flow Analysis (BART) study, upon which applicant relies, does not include the proposed BEPTL and DPV2 as part of its baseline and is, therefore, not accurate. Moreover, the BART study was based on 2006 system conditions; since it now appears that BEP II cannot be approved and constructed before at least mid to late 2008, a new study is needed that will accurately reflect system conditions using a more realistic on-line date.

1. Applicant Has Not Described in Adequate Detail How the Project Will Interconnect.

The BEPTL petitioner has proposed extensive modifications to the Buck Boulevard Substation and a new 67.4 mile 230 kV line from Buck Boulevard to the Julian Hinds Substation or a 6.7 mile 230 kV line to a new Midpoint Substation, or both. Because BEP II is now behind BEPTL and DPV2 in its study queue, BEP II must take the modifications proposed by these two projects as its baseline; BEP II is now responsible for mitigating any impacts caused by the interconnection of BEP II to a transmission system that already contains BEPTL and DPV2. Applicant has not provided an electrical description or layout plan that shows how BEP II will connect to Buck Boulevard with the BEPTL and DPV2 modifications already proposed.

This lack of information contributes to an incomplete description of the project and its impacts. It also leaves no basis for determining conformance with LORS applicable to the Buck Boulevard Substation and BEP II's integration switchyard and outlet line.

⁷ CA ISO Conformed Tariff, February 14, 2005.

2. Applicant Has Not Shown in Adequate Detail That the Transmission System Can Accommodate BEP II's Electricity

As discussed in the introduction, and further in staff's Final Staff Assessment (FSA), the transmission system in the vicinity of BEP II is seriously constrained. BEP I can only deliver 100 MW out of its 520 MW capacity to southern California on a consistent and economically predictable basis. Without the necessary studies confirming that the transmission system can accommodate BEP II's electricity, there is no basis on which the Commission can conclude that BEP II will be able to reliably provide electricity to the grid.

3. Applicant Has Not Identified What Physical Changes to the System Will Be Necessary to Accommodate BEP II as Required by CEQA.

The interconnection of a large electricity generator, such as BEP II, usually requires at least some modification to the transmission system. Sometimes the necessary modifications rise only to the level of operational changes such as remedial action schemes which are located within substations or power plants and decrease or drop generation as needed. Other times, however, physical facilities must be modified or constructed. If the latter occurs because of BEP II, then the changes to the environment must be analyzed by the Commission under CEQA before the project can be certified. Without the requested information, there is no indication of the extent of the changes necessary to accommodate BEP II, and, thus, the necessary findings regarding impacts under CEQA cannot be made.

4. Applicant Has Not Shown That the Transmission Owners Agree to the Physical Transmission System Changes Necessitated by BEP II.

In order for changes to the transmission system to be deemed feasible, they must be agreed to by the owner of the transmission system and the CA ISO. Without their acquiescence, such changes cannot take place. Without the information requested by staff, there is no indication that the transmission owners or CA ISO would agree to the changes necessary to accommodate BEP II. If the Commission were to move forward without this information, it would be certifying a project absent critical input from affected transmission owners and the CA ISO, and without determining whether the transmission system can feasibly be modified to accommodate BEP II.

5. Applicant Has Not Shown That This Will Be the Final Interconnection Configuration.

Within the last few months, three years after applying for certification with the Energy Commission, applicant has formally applied for interconnection to Western and to the CA ISO grid, and has funded such applications, finally giving it a place in the generation and transmission queue.⁸ However, until the SISs and FSs have been completed, there is no certainty that the interconnection configuration identified in those applications will be what is ultimately built. These studies could conclude that the proposed interconnection is infeasible or that the necessary modifications to the transmission system would be too extensive, thus prompting applicant to once again revise the configuration.

Additionally, there are many unanswered questions regarding the various transmission lines applicant has proposed to use. SCE has raised serious reliability concerns about the DSWTP due to the line's close proximity to SCE's alignment for DPV1 and 2.⁹ Additionally, Desert Southwest Power, LLC has expressed concern about having sufficient room for the DSWTP if the BEPTL is in the same right-of-way, as is currently proposed.¹⁰ The DSWTP FEIS/FEIR that was promised in early 2004 and then again in February of this year has not yet been filed, further calling into question whether the transmission line will proceed at a pace necessary to accommodate BEP II. Staff has also learned that applicant recently discussed an alternative for interconnection to the existing DPV1 transmission line with CA ISO¹¹. This proposal has never been described in these or any other proceedings and no studies have been provided describing the potential impacts of such a proposal or any mitigation measures identified.

Furthermore, BEP II has intervened in the BEPTL proceeding stating that the interconnection of BEP II to DSWTP is only an "option" and strongly recommending that the Commission consider a single 500 kV line to SCE that would accommodate both projects. While staff does not object

⁸ Personal Communication between Al McCuen and David Lee (CA ISO), April 6, 2005.

⁹ Letter from Michael R. Montoya (SCE) to Mr. John Kalish (Bureau of Land Management), August 18, 2003.

¹⁰ Letter from Bob Mooney, Desert Southwest Transmission Project, to Jack W. Caswell, Energy Commission Project Manager for the Blythe Energy Project Transmission Line Amendment, March 17, 2005.

¹¹ Personal Communication between Al McCuen and David Lee (CA ISO), April 6, 2005.

to such an approach, it does call into question applicant's commitment to pursuing the most recent interconnection it has proposed in this proceeding, as does its request for termination to the DPV1 transmission line. For all of these reasons, it is imperative that the Commission have the final studies in hand confirming that BEP II has committed to a proposed interconnection configuration before certifying the project.

C. The Commission Cannot Rely on a Condition of Certification in Lieu of Obtaining the Identified Information.

1. Absent the Requested Information, the Commission Cannot Make the Necessary Findings.

The Commission is required to make findings regarding the project's conformance with applicable LORS. (Pub. Resources Code §25523(d)(1).) The Commission is also required to make findings regarding whether the project will result in any unmitigated significant adverse impacts under CEQA and must identify specific provisions relating to the manner in which the project is to be designed in order to protect environmental quality. (Pub. Resources Code §21000 et seq.; §25523(a).) Additionally, if the Commission were to override a particular instance of LORS nonconformance, it must consider the project's impacts to electric system reliability in determining whether the project is necessary for public convenience and necessity. (Pub. Resources Code §25525.) These findings cannot be made without the information contained in the documents requested by staff.

Applicant has suggested that instead of requiring the information that has been required in all previous AFC proceedings, the Commission should certify the project with a simple condition of certification.¹² The suggested condition would merely delay construction of BEP II until DSWTP (or some unnamed upgrade) has received its permits and would limit the combined electrical output of BEP I and BEP II from exceeding an unidentified number of megawatts until DSWTP (or some unnamed upgrade) is built. Even in the proposed condition, BEP II cannot commit to using DSWTP. Furthermore, the condition does not require the interconnection to be

¹² Caithness Blythe II, LLC's Response to California Energy Commission Preliminary Staff Assessment For Blythe Energy Project Phase II, April 2004.

in compliance with LORS, it does not ensure that any physical modifications to the transmission lines are analyzed and mitigated under CEQA, and it does not ensure that once the DSWTP (or some unnamed upgrade) is built, BEP II will be able to reliably send all of its electricity to the grid. Nor can the Commission fulfill its obligations to make these findings by relying on a condition of certification.

Because the system cannot currently accommodate BEP I, it is critical that information be provided to ensure the system will be able to accommodate BEP II; this is not a situation where the Commission can assume that these unresolved issues will work out in due time. Otherwise, the Commission runs the risk of certifying a project that is merely stranded generation. Certifying stranded generation would be in direct contravention of, inter alia, the purpose of the Commission's application proceedings, which is to ensure that any projects certified provide a reliable supply of electrical energy. (Cal. Code Regs., tit. 20, §1741.)

The Commission must have the SISs and FSs produced by Western and SCE, including the feasible mitigation measures identified as acceptable to them, before it can make the required findings on the proposed project. These studies will identify any potential downstream impacts resulting from project interconnection, will determine conformance with LORS, and will indicate the mitigation measures the transmission owners and CA ISO have identified as necessary. Any physical changes to accommodate the project must be analyzed pursuant to CEQA as part of the proposed project or as foreseeable consequences of the project during the Commission's review proceedings and cannot be deferred to some point in time after the project has already been certified. Without this critical information, the project cannot be adequately evaluated for the Commission's final decision to be legally sufficient.

2. The Commission Must Have CA ISO's Input Prior to Certification

Commission regulations require the Commission to request CA ISO to perform an analysis and offer comments and recommendations regarding system reliability implications and identification of interconnection facilities required for connection to the CA ISO controlled grid. (Tit. 20, Cal. Code Regs., §1714; see also Tit. 20, Cal. Code Regs., §1748(b) ["The hearings

shall...assess the need for and feasibility of modifications in the design, construction or operation of the facility or any other condition necessary to assure safe and reliable operation of the facilities.”].) According to applicant’s most recent interconnection proposal, delivery of power from BEP II will be dependent upon the proposed DSWTP 500 kV line from the Buck Boulevard to Devers Substation. Therefore, the CA ISO, with its responsibility for reliability impacts in the CA ISO grid, will need to evaluate applicant’s proposed interconnection of the DSWTP to Devers. The Commission must, therefore, secure CA ISO’s findings and conclusions on the reliability impacts for termination of the DSWTP line at Devers Substation. The CA ISO has indicated that they cannot provide any conclusions or recommendations on the interconnections until SISs are provided.¹³

CONCLUSION

Applicant has the “burden of presenting sufficient substantial evidence to support the findings and conclusions required for certification of the site and related facility.” (Cal. Code Regs., tit. 20, § 1748(e).) Thus, applicant has the burden of describing the project and providing the requisite information to analyze the transmission system engineering aspects and environmental impacts of the proposed project in order to ensure the Commission can make the appropriate findings regarding reliability, LORS conformance, and impacts under CEQA. Applicant has not yet met this burden. Applicant must demonstrate that there is a feasible interconnection configuration that will ensure the distribution of BEP II’s electricity to the grid and that such configuration complies with applicable LORS and does not result in any unmitigable significant adverse environmental impacts. Only the necessary interconnection requests, subsequent study agreements, study plans, schedules, and System Impact and Facility Studies, as identified in Attachment A, can provide the information needed to firmly define the transmission interconnection configuration, foreseeable impacts, and reasonable mitigation.

At the January 2004 Status Conference, the Committee indicated that it might be willing to proceed to evidentiary hearings without the information previously requested by staff. However, there have been substantial changes since the Committee expressed this inclination. BEP II has

¹³ Email from David Lee (CA ISO) to Al McCuen, February 3, 2005.

delayed securing its place in the queue so long that it has fallen behind BEPTL and DPV2; the interconnection of BEP II must now assume that BEPTL and DPV2 are in place. BEP II has intervened in BEPTL, further raising doubts as to its commitment to the DSWTP transmission option. Additionally, staff has not received applicant's request to terminate with SCE, either on the DPV1 line or for the termination of the DSWTP to the Devers Substation, despite applicant's assurance at the January 2004 Status Conference that it would be provided.

There is no benefit in speeding this project prematurely to evidentiary hearings absent critical information. Applicant's lengthy delay in signing an interconnection study agreement (approximately three years after it filed the AFC) should also serve as evidence of applicant's inability to describe its project in sufficient detail. Now that Interconnection Study Agreements have apparently finally been signed by applicant, it should take no more than approximately six months for the SISs and FSs to be performed and for applicant to provide the requested information. Applicant has indicated that it would not even consider beginning construction until a viable transmission line project (DSWTP, DPV2, BEPTL, or other) has received all of the necessary permits. There is no threat that any of the transmission line projects currently under consideration in the vicinity of BEP II will receive all of the necessary permits within the next six months, or even the next year. Thus, waiting for the necessary documents to ensure an adequate analysis of the project would not affect the project's schedule to any significant degree.

Dated: May 4, 2005

Respectfully submitted,

LISA M. DECARLO
Staff Counsel

ATTACHMENT A
Information Requested in the Motion to Compel

1. All active Requests to Interconnect with the Western Area Power Administration (Western) at the Buck Boulevard Substation or any other part of the Western grid as well as all Interconnection Study Agreements and Study Plans.
2. All Requests to Terminate with Southern California Edison (SCE) at Devers-Palo Verde 1 (DPV1) or Devers-Palo Verde 2 (DPV2) or any other active request for termination on the California Independent System Operator (CA ISO) or SCE grid as well as all Interconnection Study Agreements and Study Plans.
3. All System Impact Studies and Facility Studies performed by SCE and Western analyzing all interconnection alternatives and transmission alternatives, where applicable. This shall include the identification of the final project configuration and plan for interconnection of BEP II with the transmission system and all measures required to mitigate the identified transmission system impacts.
4. An analysis of any potential impacts and mitigation measures (environmental, public health and safety, transmission system) resulting from the final transmission interconnection configuration, including any impacts from any downstream facilities needed to mitigate system impacts caused by interconnection of BEP II.