

**COMMENTS OF BLYTHE ENERGY INC. ON THE DRAFT 2014-2015
TRANSMISSION PLAN**

March 3, 2015

| Submitted By | Company | Date Submitted |
|--|---------------------------|-----------------------|
| Seth D. Hilton, Esq. Stoel Rives LLP (415) 617-8943 | Blythe Energy Inc. | March 3, 2015 |

Blythe Energy Inc. (“Blythe”) appreciates the opportunity to provide the following comments concerning the draft 2014-2015 Transmission Plan and the Stakeholder Meeting held on February 17, 2015. Blythe’s comments focus on the proposed Buck-Colorado River-Julian Hinds 230 kV Loop-In Project (“Loop-In Project”). The Loop-In Project provides significant reliability and economic benefits, and should be approved in the Final 2014-2015 Transmission Plan.¹

I. Background

Blythe Energy Inc. owns the Blythe Energy Project (“BEP”), a 520 megawatt natural gas-fired electric-generating facility located in the City of Blythe, Riverside County. BEP commenced commercial operation in December 2003. In order to improve delivery to the ISO system, Blythe financed, constructed and placed in service a 67-mile 230 kV generation tie line from Buck Blvd. substation located adjacent to BEP, to the Southern California Edison/Metropolitan Water District Julian Hinds substation.

Though the gen-tie line enhanced BEP’s ability to deliver its full capacity to the ISO system, reliability issues involving voltage control and overload issues at the Mirage and Julian

¹ .The Loop-In Project has also received substantial public support, as indicated by the support letters attached as Appendix A.

Hinds substations exist under certain operating conditions and contingencies. These reliability issues are currently being addressed through remedial action schemes (“RAS”), reactive compensation and operating procedures.

Southern California Edison’s (“SCE”) 2014 Annual Transmission Reliability Assessment identified that exceedingly high voltages could result in circumstances where Metropolitan Water District (“MWD”) pumps and BEP are both off-line. To address this contingency, SCE developed GCC Operating Procedure No. 128. Under the current version of the Procedure, the Buck Blvd. breaker would be opened at Julian Hinds to take the BEP gen-tie off-line to address the high voltage issue.

SCE’s implementation of the Operating Procedure has significant operational and financial impacts on BEP. SCE has taken the position that BEP is not available when it opens the Buck Blvd. breaker at Julian Hinds. While not conceding the point, if BEP is deemed unavailable when the breaker is opened, it would result in significant financial consequences to BEP under its power purchase tolling agreement with SCE.

To address the high voltage and other issues, Blythe timely submitted a request into the Request Window for the 2014-2015 Transmission Planning Process (“TPP”) for the ISO to evaluate the Loop-In Project. The Loop-In Project would take advantage of Blythe’s existing gen-tie line to create network facilities that would create a “loop” between the Colorado River Switching Station 500 kV system and the 230 kV system to the Devers substation. Blythe’s existing gen-tie would be segmented, and each new segment would be connected to the Colorado River Switching Station. Due to the proximity of the Colorado River Switching Station, the new segments would be only about .4 miles in length, requiring minimal new construction. The

Project would result in a 230 kV loop between Julian Hinds and Colorado River Switching Station, and a new BEP gen-tie from Buck to Colorado River Switching Station.

Blythe intends to become the project sponsor for the Loop-In Project, and to become a Participating Transmission Owner with the ISO. Blythe has already submitted a Right-of-Way Plan of Development to the Bureau of Land Management (“BLM”) for the Loop-In Project.² Because the line would involve minimal new construction, the proposed in-service date is December 2016.³

The draft Transmission Plan identifies the high voltage issue when both the MWD pumps and BEP are off-line, but recommends that Operating Procedure No. 128 be used to mitigate that concern. (Draft Transmission Plan at 2.7.4.4, p. 117.) The draft Plan concludes that because the Operating Procedure will address the high voltage issue, the Loop-In Project does not address any reliability need. (Draft Transmission Plan at 2.7.4.3, p. 117.) The draft Transmission Plan does state, however, that the ISO “will revisit the concept in future reliability assessment, generation interconnection or other transmission planning processes.” (Draft Transmission Plan at 2.7.4.4, p. 117.)

As explained below, in addition to addressing the high voltage concern referenced in the draft Transmission Plan, the Loop-In Project would have additional reliability benefits, as well as significant economic benefits. It would also support the public policy goals referenced in the 2014-2015 Study Plan. Neither the economic benefits nor the public policy implications appear to have been considered by the ISO in its initial consideration of the Loop-In Project. Blythe

² Blythe submitted the Plan of Development to the BLM on January 21, 2015.

³ The Draft Transmission Plan incorrectly states the proposed in-service date is December 31, 2020. (Draft Transmission Plan at 2.7.4.3., page 117.)

therefore urges the ISO to continue to study the Loop-In Project in this TPP,⁴ or, at a minimum, make the Project a priority in the 2015-2016 TPP.

II. The Project Would Provide Significant Reliability Benefits

The Loop-In Project would provide a number of reliability benefits, in addition to the high voltage issues identified above, as analyzed in detail in Blythe's Request Window submission.

Under normal conditions, the Loop-In Project would reduce high flow on several critical and aged facilities, including: (1) the two Mirage-Devers 230 kV lines (reduced by 106 MW); (2) the Julian Hinds-Mirage 230 kV line (reduced by 121 MW); (3) the Julian Hinds-Julian Hinds MWD 230 kV line (reduced by 87 MW), and (4) the Eagle Mt.-Iron Mtn. 230 kV line (reduced by 33 MW). The Loop-In Project would also result in higher transmission utilization on the Colorado River 500/230 kV and 500 kV lines between Colorado River and Devers.

The Loop-In Project would also eliminate overloads and high voltage issues under N-1 conditions without requiring the need to initiate the Julian Hinds RAS or the SCE Operating Procedure No. 128. The loss of either Julian Hinds-Eagle Mt. 230 kV or a bus fault at Julian Hinds 230 kV will overload the Julian Hinds-Mirage 230 line to 151%. The Loop-In Project will eliminate the overload, reducing loading on the line to 63%. The current Julian Hinds RAS requires dropping MWD pump load to address these contingencies. The Loop-In Project would therefore reduce the need to drop MWD pump load.

The Loop-In Project would also eliminate high voltage issues that arise under certain outage conditions, and mitigate voltage deviations in excess of NERC reliability requirements.

⁴ Pursuant to section 4.11.3 of the Business Practice Manual ("BPM") for Transmission Planning, projects that require additional studies may be considered after adoption of the Final Transmission Plan.

The Loop-In Project would also improve system stability under N-2 conditions, including eliminating overloads caused by two contingencies studied in the CAISO's 2014-2015 Reliability Assessment: (1) J.Hinds-Mirage & Eagle Mtn-Iron Mtn, and (2) J.Hinds-Mirage & Iron Mtn-Camino-Mead-Gen230. The Draft Transmission Plan proposes a mitigation solution for those contingencies that would involve the use of SCE GCC Operating Procedure No. 128 and ISO Operating Procedure 7720F. (Draft Transmission Plan Appendix B). By eliminating these overloads, the Loop-In Project would eliminate the need to utilize these operating procedures.

In sum, the Loop-In Project would provide the following benefits by improving reliability in SCE's 230 kV system east of Devers:

- Eliminate high voltage issues at Julian Hinds, thereby eliminating the need for an SCE operating procedure that would potentially reduce the availability of BEP;
- Support MWD pumping operations by eliminating the need for the Julian Hinds RAS, which in certain circumstances would drop MWD pump load;
- Increase deliverability from and through SCE's 230 kV system east of Devers, including deliverability from renewable generation; and
- Improve the stability of SCE's 230 kV system east of Devers by mitigating overloads and voltage issues occurring during N-1 and N-2 conditions.

III. The Project Would Provide Significant Economic Benefits

As mentioned above, the Project would also provide substantial economic benefits. As part of Blythe's Request Window submission, ZGlobal conducted an analysis of the expected economic benefits for the Loop-In Project, using the same Transmission Economic Analysis Methodology ("TEAM") used by the CAISO to conduct its economic planning

studies in the transmission planning process. That analysis showed that the total reliability and economic benefits would be approximately \$33.7 million, with production cost benefits of over \$15 million.

ZGlobal also calculated the transmission revenue requirement (“TRR”) for the Project, using the methodology provided in the FERC Cost-of-Service Manual. The annual TRR for the Project is expected to be \$18.9 million. The expected net benefit of the Project is therefore more than \$14.3 million in the first year alone, with a cost-benefit ratio of 1.8. By comparison, the cost-benefit ratio for the Delaney-Colorado River Project, approved by the ISO Board last year after the adoption of the Final Transmission Plan, had a maximum cost-benefit ratio of 1.17. The fact that the vast majority of the Loop-In Project is already constructed also provides significant benefits, and cost certainty, to customers, as well as minimizing the environmental impacts and permitting timelines associated with constructing new transmission lines.

Overall, the expected present value of the net benefits from the Loop-In Project would be approximately **\$278 million**.

IV. The Project Supports State Policy Goals

The Loop-In Project also supports achievement of both public policy goals identified in the 2014-2015 Final Study Plan: (1) achieving the 33% RPS on an annual basis, and (2) supporting RA deliverability status for needed renewable resources outside the ISO balancing authority area.

Currently, the Eastern Riverside County 500 kV transmission corridor from Devers to Palo Verde is constrained due to overload on the North Gila-Imperial Valley-ECO 500 kV corridor. Any additional renewable generation located in Eastern Riverside County may require

major and expensive transmission upgrades. Yet the RPS portfolios developed by and submitted to the CAISO by the California Public Utilities Commission for the 2014-2015 TPP identify between 1,400 to 3,800 MWs of renewable generation to be developed in Eastern Riverside. (Draft Transmission Plan at 202-204). The Loop-In Project would increase deliverability from and through SCE's Eastern Bulk system, thereby allowing additional deliverability from renewable projects in both Eastern Riverside and western Nevada.

Governor Brown also recently announced a 50% renewable energy goal. On February 26, 2015, the California Public Utilities Commission also opened a new RPS proceeding that will, among other things, evaluate whether the CPUC should increase the current 33% RPS, pursuant to the authority granted it in AB 327 (R.15-02-020.). Given the high likelihood that California will increase its RPS in the near future, the CAISO has also included a special study in its 2015-2016 draft Study Plan that would evaluate potential transmission needs to meet a 50% renewable energy goal.

The 2015-2016 draft Study Plan states that it would be premature to approve any projects associated with a higher RPS in the 2015-2016 TPP in part because the 50% goal has a target date of 2030, outside of the planning horizon for the next TPP. It is worth noting, however, that a 50% goal would require significant increases in RPS generation well before the target date of 2030, including increases well within the study horizon of this TPP. A linear increase of the RPS from 33% in 2020 to 50% in 2030 would require an RPS of over 40% by 2025.

Given the likely growth in RPS generation in California, it becomes that much more important that the CAISO give serious consideration to projects like the Loop-In Project, which will support California's efforts to achieve the 33% RPS in 2020.

V. Conclusion

Blythe's Loop-In Project would provide significant reliability and economic benefits, and supports the State policy goals that the ISO identified in the 2014-2015 Study Plan. The Project will eliminate voltage issues and overloads in SCE's 230 kV system east of Devers, and will provide net economic benefits of \$14.3 million in the first year alone. The net economic benefits over the 40 year life of the Project are likely to be over \$755 million. In light of these benefits, Blythe urges the CAISO to further consider the Loop-In Project in this TPP, or, at a minimum, make the Project a priority in the 2015-2016 TPP.

APPENDIX A
Letters in Support of Project

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California Legislature

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EDUARDO GARCIA
CHAIR OF ASSEMBLY COMMITTEE ON
JOBS, ECONOMIC DEVELOPMENT, AND THE ECONOMY
ASSEMBLYMEMBER, FIFTY-SIXTH DISTRICT

March 3, 2015

Mr. Keith Casey
Vice President of Market and Infrastructure Development
California Independent System Operator (CAISO)
250 Outcropping Way
Folsom, CA 95630

Dear Mr. Casey:

I am writing to state my support for the Blythe Energy Loop-In Project. The project proposes to modify its existing 67-mile gen-tie transmission line into a transmission network line by segmenting the line and looping it. This change improves system reliability in the Blythe region and downstream from the loop. The Loop-In Project provides significant economic benefits and allows renewable energy projects to connect into the site.

As a strong supporter of renewable energy, I support this multi-benefit project that provides both assisting renewable energy and adding upgrades to the existing transmission in eastern Riverside County. The transmission support is vital to the thousands of megawatts of renewable energy projects in the region. Without the upgrade, some projects will face substantial costs to connect to the transmission grid.

The Loop-In Project also provides economic benefits to the region. The project will create more than a dozen jobs in the region and may spur hundreds of other jobs if the project jumpstarts some stalled renewable projects dealing with interconnection issues. Economic studies show that the project will provide \$165 million in income tax and more than \$25 million in property tax revenue. Most importantly, the project reduces the cost of energy and provides consumer benefits in excess of \$14 million in the first year alone.

Not only does the project assist renewable energy and create significant economic benefits, it will have a minimal impact to the environment. It is for these reasons, that I encourage CAISO to approve this needed project. If you have any questions or concerns, please contact my office at (916) 319-2056

Sincerely

A handwritten signature in black ink, appearing to read "Eduardo Garcia".

Eduardo Garcia
Assemblymember, District 56

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California State Senate

SENATOR
JEFF STONE, PHARM.D.
TWENTY-EIGHTH SENATE DISTRICT

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RELATIONS
VICE CHAIR
NATURAL RESOURCES &
WATER

MEMBER
BUDGET & FISCAL REVIEW
PUBLIC SAFETY

February 24, 2015

Mr. Keith Casey
Vice President of Market and Infrastructure Development
California Independent System Operator (CAISO)
250 Outcropping Way
Folsom, CA 95630

Dear Mr. Casey:

The people of the 28th Senate District stand to benefit significantly from the proposed Blythe Energy Loop-In Project now before the California Independent System Operator (CAISO). I strongly urge its approval and timely implementation.

This well-designed, environmentally responsible project would substantially improve the region's power transmission system, while delivering ratepayer savings, vital local and state tax revenues, new jobs and progress toward the state's renewable energy goals.

The project proposes to realign and reroute the existing system, adding only about a half-mile of new power lines. This increases reliability by mitigating high voltage issues, reducing overloads on transmission lines and improving a congested part of the transmission system in Blythe and downstream in eastern Riverside County. It also improves transmission to vital Metropolitan Water District pumping stations to safeguard our water supplies.

For energy ratepayers in the area, the use of existing infrastructure and reduced cost and time needed to fix transmission issues means energy cost savings of \$14.3 million in the first year alone. Over its lifespan, the project also would generate \$165 million in income tax and \$25.7 in property tax to fund important state and local programs and projects.

The project also brings new jobs – a dozen or so to build the new facilities and the prospect of hundreds more to build pending wind, solar and other renewable energy projects that would be able to tie into the redesigned transmission grid without incurring major additional costs. This added benefit of the project helps California move toward its Renewable Portfolio Standard requiring utilities to provide 33 percent of their energy from these sources.

Mr. Keith Casey
February 24, 2015
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The multiple benefits of this project are too great to pass up. It merits approval by the CAISO. If you have questions or comments, please call my office at (916) 651-4028.

Sincerely,

A handwritten signature in black ink that reads "Jeff Stone". The signature is written in a cursive style with a large initial "J" and a distinct "S".

Jeff Stone
State Senator, 28th District

County of Riverside

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SUPERVISOR JOHN J. BENOIT FOURTH DISTRICT

March 3, 2015

Mr. Keith Casey, Vice President of Market and Infrastructure Development
c/o California Independent System Operator
250 Outcropping Way
Folsom, CA 95630

Dear Mr. Casey,

The Blythe Energy Loop-In Project will provide improvements to the vital power transmission system serving Eastern Riverside County. I generally support projects that improve transmission and reliability and ask that the California Independent System Operator (CAISO) favorably consider this project.

The project proposes to offer a range of benefits: increased overall energy deliverability, reduced overloads on other transmission lines and improved electric service reliability for Metropolitan Water District pumping stations to ensure a steady supply of water to the region.

The project may also help the state meet renewable energy standards by enabling additional energy generation from renewable sources to interconnect without significant and costly transmission grid upgrades.

By using existing infrastructure, the project attempts to eliminate the need for other expensive system upgrades in the region, reduce the cost and time needed to fix transmission line problems and minimize environmental impacts.

I ask that CAISO review the project and favorably consider the proposal. Please let me know if you have any questions. Call my office at (760) 863-8211.

Sincerely,

A handwritten signature in blue ink that reads "John J. Benoit". The signature is stylized and cursive.

JOHN J. BENOIT
Supervisor, Fourth District

JJB:jpp