

COMMENTS OF BLYTHE ENERGY INC. ON THE DRAFT 2016-2017 STUDY PLAN

AND

ECONOMIC PLANNING STUDY REQUEST

March 14, 2016

Submitted By	Company	Date Submitted
Christopher J. Doyle	Blythe Energy Inc.	March 14, 2016

Blythe Energy Inc. (“Blythe”) appreciates the opportunity to provide the following comments concerning the draft 2016-2017 Study Plan and the Stakeholder Meeting held on February 29, 2016. Blythe’s comments focus on the proposed Buck-Colorado River-Julian Hinds 230 kV Loop-In Project (“Loop-In Project”).

I. Background

Blythe submitted the Loop-In Project into the request window for the 2014-2015 Transmission Planning Process (“TPP”). As outlined in that submission, in addition to numerous reliability benefits, the Loop-In Project provides a significant economic benefit.

Reliability studies conducted in the 2014-2015 TPP confirmed the existence of high voltage issues when the Blythe Energy Project (“BEP”) and Metropolitan Water District (“MWD”) pumps were off-line. Though the Loop-In Project would have addressed these high voltage issues, CAISO suggested those same benefits could be obtained through an operating procedure that Southern California Edison (“SCE”) was developing. That operating procedure includes opening the Buck Blvd. breaker to take the BEP gen-tie off-line. As explained in detail in Blythe’s comments on the 2014-2015 draft Transmission Plan, taking the BEP gen-tie off-line

could result in significant financial consequences to BEP under SCE's interpretation of BEP's power purchase tolling agreement.¹

Although the 2014-2015 Transmission Plan suggested that the reliability benefits provided by the Loop-In Project could be achieved through alternate means, the CAISO indicated that it intended "to complete the analysis of the [Loop-In Project] through further study associated with the 2014-2015 planning cycle."² The draft 2015-2016 Transmission Plan reaches a nearly identical conclusion, stating that while the Loop-In Project "has not been found to be needed at this time," "[a]ctivities are continuing, as an extension of the 2014-2015 planning cycle, to explore the issues raised by the project proposal."³

Blythe also submitted an economic planning study request in the 2015-2016 TPP. The CAISO declined that request, as noted in the draft 2015-2016 Transmission Plan, only on the ground that the CAISO has not yet found that the Project was needed for reliability.⁴ The draft Plan provides no analysis or conclusions as to whether the Project does in fact provide economic benefits, which should be the relevant analysis for economic projects, not reliability.

II. Reliability Issues Associated with SCE's Eastern Bulk System

The draft 2015-2016 Transmission Plan suggests that reliability issues associated with high voltages in the vicinity of the Buck Blvd., Julian Hinds, and Eagle Mountain substations can be resolved through an SCE operating procedure and the installation of two shunt reactors at

¹ Blythe disagrees with this interpretation, but to date the dispute over the meaning of the agreement has not been resolved.

² CAISO Response to Blythe Energy Inc.'s Comments on the Draft 2015-2016 Study Plan at 11.

³ Draft 2015-2016 Transmission Plan Section 2.7.4.3 at p. 124.

⁴ Draft 2015-2016 Transmission Plan Section 5.6.2.1 at p. 296.

Eagle Mountain substation. However, the CAISO's September 21-22, 2015 Stakeholder meeting concerning preliminary reliability assessment results revealed existing problems in the area that include thermal overloading, voltage violations under light load conditions, and dynamic issues under both N-1-1 and double contingencies. In particular, the Julian Hinds - Mirage 230 kV line is a major bottleneck that overloads in a variety of contingencies. These contingencies include the loss of the Julian Hinds - Eagle Mountain line, or the Red Bluff - Devers #1 and #2 lines. The 2017 Summer Peak case also shows the Julian Hinds - Mirage line overloads with the loss of the Palo Verde - Col River 500 kV line. At the September 21-22 Stakeholder meeting, the CAISO also identified a potential SPS guideline violation associated with the Devers - Red Bluff N-2 contingency.

The draft 2015-2016 Transmission Plan does not appear to address these issues. Appendix C to the Plan does not even reference the Julian Hinds - Mirage overload. The draft Plan also appears to be missing numerous N-1-1 contingencies in the area, including loss of the Julian Hinds - Eagle Mountain line followed by the loss of Palo Verde - Col River. Nor does the Plan identify reliability issues associated with the Devers-Red Bluff N-2 contingency. Certain bus faults also appear to be missing from Appendix C, including, for example, the loss of the 230 kV tie breaker at Julian Hinds that opens up the connection between SCE and MWD.

Blythe is concerned that these issues were not adequately addressed in the draft 2015-2016 Transmission Plan, and believes that the Loop-In Project could provide a key part of the solution. Blythe urges the CAISO to fully address these issues in the 2016-2017 process, and to complete its evaluation of the Loop-In Project in the process.

III. Economic Benefits Associated with the Loop-In Project

For the past several years, Julian Hinds - Mirage 230 kV circuit has been considered a “congested path” with significant costs associated with that congestion. Congestion data from the CAISO OASIS shows that in 2013 and 2014 the line indicated congestion nearly 100 hours each year, and in 2012 the line indicated congestion for more than 500 hours. The Loop-In Project would address this congestion, and result in significant economic benefits. As part of Blythe’s Request Window submissions in 2014 and 2015, ZGlobal conducted an analysis of the expected economic benefits of the Loop-In Project, using the same Transmission Economic Analysis Methodology (“TEAM”) used by the CAISO to conduct its own economic planning studies in the TPP. That analysis showed that the total 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 Loop-In Project, using the methodology provided in the FERC Cost-of-Service Manual. The annual TRR for the Loop-In Project is expected to be \$18.9 million. The expected net benefit of the Loop-In 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 in 2014, 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.

The draft 2015-2016 Transmission Plan declined to conduct an economic study of the Loop-In Project because the Project “has not been found to be needed at this time” for reliability purposes. However, regardless of the existence (or lack thereof) of reliability benefits, there are clear economic benefits to the Project, which alone merits its approval. Blythe further notes that the draft 2015-2016 Transmission Plan fails to address the congestion costs associated with Julian Hinds - Mirage. Blythe requests that the CAISO address these issues in the 2016-2017 TPP, and conduct a study of the economic benefits of the Loop-In Project, including the benefits associated with relieving congestion on the Julian Hinds - Mirage line.

IV. Conclusion

Blythe’s Loop-In Project would provide significant reliability and economic benefits. 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 requests that the ISO conduct an economic study to confirm the benefits of the Loop-In Project, and conclude its evaluation of the reliability benefits associated with the Project, in connection with a broader review of the existing reliability issues in SCE’s Eastern bulk system, including those issues the CAISO itself identified in its September 21-22, 2015 stakeholder meeting in the 2015-2016 TPP.