

Appendix A
Transmission Network Upgrade

Hydrogen Energy International LLC (HEI or Applicant) submitted an Interconnection Request (IR) to the California Independent System Operator (ISO) as required per Federal Energy Regulatory Committee (FERC) Order No. 2003 for Large Generating Facility interconnections to the California Independent System Operator (CAISO) Controlled Grid. The IR was received January 29, 2008, along with a \$10,000 initial deposit and \$10,000 deposit in lieu of evidence of site control (deposits were received on February 4, 2008). Following the Scoping Meeting, HEI executed an Interconnection Feasibility Study Agreement (FSA) on March 28, 2008. The purpose of the Feasibility Study was to determine network upgrades and estimated cost and time to construct the Project facilities required to connect to the ISO Controlled Grid. However, due to the genesis of the Generator Interconnection Process Reform (GIPR) proposal, the Project was not presented with the FSA on the proposed date.

Because the official FSA was not available at the time of the Project's initial permit submittal, the Project resorted to using a previous engineering study in lieu of the report issued by the CAISO. The technical analysis, performed by Navigant Consulting Inc., was similar to the analysis that would have been performed in the Feasibility Study portion of the Large Generator Interconnection Procedure (LGIP). Although the analysis identified in detail the Network Upgrades required to connect to the grid, the conditions used to model the Project are no longer technically valid due to the significant number of Interconnection Customers (ICs) that have withdrawn from the Generation Queue as a result of the GIPR. Therefore, the results of this study will not be included in this Application for Certification submittal.

The GIPR resulted in the CAISO temporarily ceasing technical analysis for projects that were not far enough along in the LGIP to have a System Impact Study (SIS) completed by May 1, 2008. Had the CAISO continued to study all of the projects in the Interconnection Queue in a serial fashion, the Project would receive the SIS after May 1, 2008. The Project was one of many other ICs who would not have an SIS completed by the aforementioned date. When the technical analysis for the above ICs resumed, the Project was to be studied along with other projects in groups known as "clusters." The first set of projects to be studied in this fashion was deemed the "Transition Cluster," and was required to comply with Section 3.1 of Appendix 2 to the LGIP Relating to the Transition Cluster. As Section 3.1 of Appendix 2 applied to the Project, it required:

- An increase in the Project's deposit to the new \$250,000 threshold (an additional \$230,000 was required, since HEI had previously posted \$20,000 with the CAISO).
- An increase in the Project's Site Exclusivity Deposit to \$250,000 (an additional \$240,000 was required, as HEI had previously posted \$10,000 with the CAISO)

Both these financial requirements (a sum total of \$470,000) and updated Project technical information were submitted to the CAISO in November 2008 to continue the technical analysis required to determine Network and Deliverability Upgrades required to connect to the ISO Controlled Grid. HECA is expected to receive the results of this analysis (now characterized as "Phase I Interconnection Study") no later than July 2009. In an e-mail from Rod Jones, CEC Project Manager, to Gregory Skannal, HECA Health Safety Security Environmental Manager, dated March 17, 2009, the CEC staff intends to use the Phase I Interconnection Study when it is made available to the Project to complete the transmission analysis and write the preliminary

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staff assessment for the project. Additionally, HEI will be expected to complete a California Environmental Quality Act analysis and prepare a small environmental document if it is determined that there are downstream (indirect) impacts resulting from the Project.

The formal connection offer (Large Generator Interconnection Agreement) is not expected until late 2010, given the study timeline proposed by the CAISO in the LGIP relating to the Transition Cluster.