EXHIBIT I - ANTICIPATED NOISE AND INTERFERENCE WITH COMMUNICATION SIGNALS

As stated in the Arizona Corporation Commission Rules of Practice and Procedure R14-3-219:

"Describe the anticipated noise emission levels and any interference with communication signals which will emanate from the proposed facilities."

The Preliminary EMF and Corona Effects Study for the SunZia Southwest Transmission Project was conducted by Power Engineers, Inc., and is included in this Exhibit I (also contained in Exhibit B-1, the Final Environmental Impact Statement - Appendix K). Electric and magnetic fields (EMF) and corona noise levels were analyzed for a variety of conductor configurations and two structure types for the first alternating current (AC) transmission line. In addition, the effects of increased line voltage and adding a second line in parallel were analyzed.

The analysis was based on preliminary structure designs for the SunZia project (see Exhibit G-1). The results of the study were reported for a base case, horizontal guyed-V structure with a three-conductor bundle, and included an analysis of the effects of modifying the bundle or structure type, increases in voltage along the line, and the addition of a second AC or direct current (DC) line in parallel. Adding a second AC or DC line would produce similar results, measured at the outside of the right-of-way (ROW), as compared to a single line.

EMF effects were analyzed at a minimum conductor height. The results of the study conducted for the SunZia transmission line indicate that EMF levels would be below the International Commission on Non-Ionizing Radiation Protection (ICNIRP) reference exposure limits, as measured outside of the transmission line ROW. Arizona does not have any statewide requirements for EMF effects.

Audible noise, radio interference (RI), and television interference (TVI) were analyzed at average conductor height. Values calculated are typically below common limits and guidelines for each effect. Based on the results of this study, audible noise levels would be below Environmental Protection Agency (EPA) recommended values for outdoor areas. Radio frequency interference from the proposed 500 kV transmission lines is expected to be relatively low within a few miles of the line for frequencies near 1 MHz, and near negligible as the frequency increases.

RI and TVI depend on the signal strength to categorize the effects of the interference on reception quality. Values for AM radio interference are approximately at or below typical guidelines, and television interference has no published guidelines for digital television signals, although the interference produced by the transmission lines is likely to be negligible, and thus generally acceptable.

Proposed Willow-500 kV Substation and 500 kV DC Converter Station (Option)

EMF and TVI levels from substations and converter stations are highly controlled through a number of design features. Generally, EMF levels measured at the outside of either a substation or converter station are lower than the EMF levels measured at the outside boundary of a high-voltage transmission line right-of-way, and are thus anticipated to be within acceptable levels. EMF levels would be acceptable at all locations external to the property boundaries of the proposed Willow-500 kV substation, as well as at the DC Converter Station site. There are no sensitive receptors located in proximity to the proposed Willow-500 kV Substation site, such as occupied dwellings or other structures, that could be subject to exposure to EMF or audible noise.

Within substation or converter station sites, magnetic fields are managed by proper physical barriers (fencing) to provide protection to operations and maintenance personnel in accordance with relevant Occupational Safety and Health Association and International Electrotechnical Commission (IEC) standards.

Noise sources associated with high-voltage DC converter stations are typically the same or are very similar to those in AC substations. Voltage transformers are the primary sources of audible noise from operating substations and converter stations. DC converter stations include other equipment, such as dry-cooling tower systems and harmonic filters, which produce noise during operations. All of these noise sources can be managed and mitigated through the use of attenuating surfaces, equipment design, and in some cases, specific noise buffers that are custom-designed for the specific station. Local and national standards typically require continuous sources of noise to be at 55 dBA (broadband steady state) or lower levels at the station property boundaries. Passive measures, including the provision of noise buffer areas at the property boundaries, are very effective in reducing overall noise emissions from the station to meet these standards.