



The Independent Safety Evaluation
Excerpts from the ISE regarding loss of power scenarios at IPEC

IPEC Switchyard: (ISE report, page 40)

Nuclear power plant safety systems depend on electrical power for motor driven pumps, motor operated valves, and control systems to direct and deliver cooling water to cool the reactor core. Plants are designed with redundant on-site emergency power sources, diesel generators, to provide their own necessary electric power if normal sources are lost. However, off-site power sources from the electric grid surrounding the plant are the primary sources of electric power used for normal and emergency plant equipment when the plant is not in service and producing its own electric supplies. This designed defense in depth helps to ensure reactor safety.

The Indian Point units connect to the New York power grid through a large Consolidated Edison Company switchyard that is located directly adjacent to the power plant site. This switchyard serves as an important transmission node for supplying power to the city of New York. Due to the switchyard's importance to grid reliability in the area and its important support function to IPEC, Consolidated Edison maintains personnel at the switchyard around the clock (24/7).

There are multiple supply cables between the switchyard and the three units on the IPEC site. This supply redundancy, plus on-site power cross-tie capability, provides a reliable source of off-site power to the station. As an example of this reliability, IPEC was one of the first facilities in the region to receive electric power after the 2003 Northeast blackout. Power was restored in approximately 1.5 hours."

Conclusion: (ISE report, page 62)

The ISE Nuclear Safety Team concludes that the plant is physically sound and is being operated safely. From a nuclear safety standpoint, Indian Point is generally comparable to that of high performing U.S. nuclear power plants. As with all nuclear plants, there are areas where improvements can be made, as noted in this report. And while this review was not focused on regulatory compliance, the team found no instance of non-compliance with regulations.