

Introduction

Wavesight's advanced wireless transmission technology facilitated secure, reliable data and video transmission between Kudankulam Nuclear Power Plant and the NPCIL Township located 10 kilometers away. This critical infrastructure deployment ensures continuous, encrypted communication links essential for nuclear facility operations, adhering to stringent security protocols required for nuclear power installations in India.

The Challenge

- Establishing secure, interference-resistant wireless communication links for critical nuclear facility operations across 10km distance.
- Meeting stringent cybersecurity and electromagnetic compatibility requirements mandated for nuclear power plant communications.
- Ensuring reliable, continuous data and video transmission while maintaining nuclear facility security protocols and regulatory compliance.

The Solution

- Progility Technologies deployed Wavesight's industrial-grade point-to-point wireless radios engineered for critical infrastructure applications requiring high security and reliability.
- The wireless transmission system established encrypted, low-latency communication links between the nuclear power plant and administrative township.
- Network architecture incorporated advanced security protocols and interference mitigation technologies essential for nuclear facility communications.





Results & Benefits

- Reliable, secure wireless data and video transmission enhanced operational coordination between nuclear facility and administrative operations.
- Advanced wireless technology reduced dependency on physical infrastructure while maintaining nuclear-grade security standards.
- Scalable, resilient network supports future facility expansion and critical communication requirements.

Conclusion

Wavesight's secure wireless transmission solutions enabled NPCIL to establish reliable communication infrastructure for the Kudankulam Nuclear Power Plant complex, demonstrating the effectiveness of advanced wireless technology in meeting the stringent security and reliability requirements of critical nuclear infrastructure.

