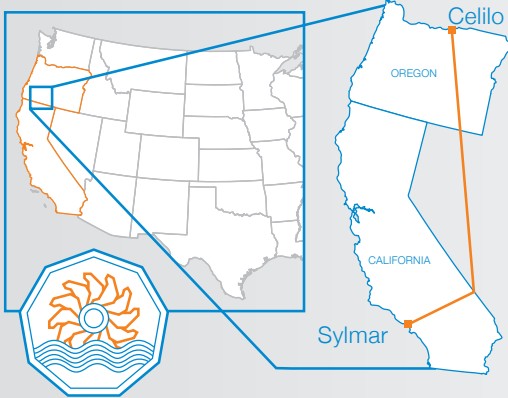


Pacific Intertie – A partnership nearing half a century

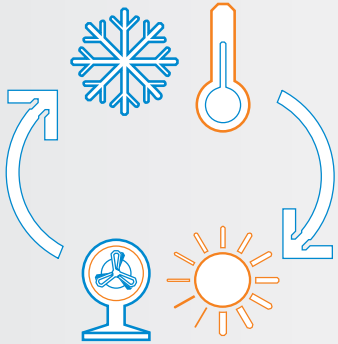
Sylmar station upgrade – Enhanced efficiency and reliability of power supply

The 846 miles (1,362 km)

long **Pacific HVDC Intertie** allows power to flow between the Northwest and Southern California, helping to balance supply with demand.



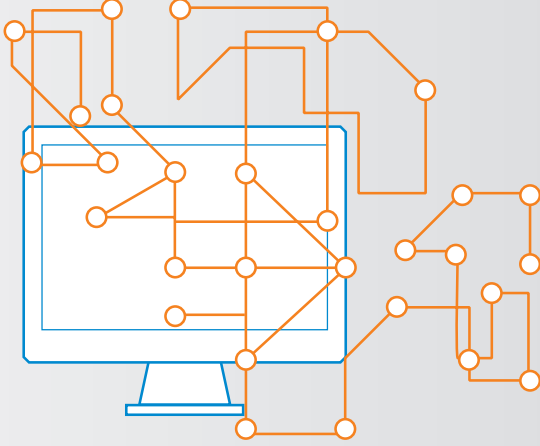
Oregon consumes more power for **heating** during winter while in summer California consumes more power for **cooling.**



Lifetime commitment

- Now** Upgrade of Sylmar station to enhance and improve efficiency and reliability of power supply.
- 2016** Refurbishment and upgrade of Celilo converter station.
3,800 megawatts, ±560 kilovolts
- 2004** Modernization and life extension of Sylmar converter station.
- 1989** ABB commissions the Pacific Intertie Expansion.
3,100 megawatts, ±500 kilovolts
- 1985** Upgrade.
2,000 megawatts, ±500 kilovolts
- 1975** Transmission rating raised.
1,600 megawatts, ±400 kilovolts
- 1970** ABB commissions Pacific Intertie HVDC link.
1,440 megawatts, ±400 kilovolts

An HVDC link in an AC grid



MACH, the market leading **control and protection** system for HVDC.

Optimized for the unique requirements of the Pacific Intertie.

