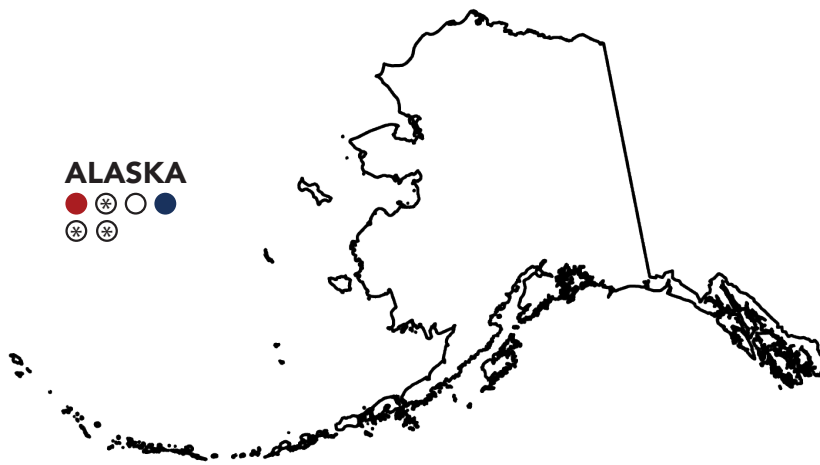


FACT SHEET

2023 NATIONAL TRANSMISSION NEEDS STUDY

ALASKA

The U.S. Department of Energy’s Grid Deployment Office (GDO) released the National Transmission Needs Study (“Needs Study”) in October 2023. The Needs Study is the Department’s **triennial state of the grid** report. The Needs Study identifies transmission needs and provides information about current and anticipated future capacity constraints and congestion on the Nation’s electric transmission grid. In this fact sheet, we highlight the transmission needs of Alaska. The Needs Study provides further detail on the benefits of transmission that could be realized throughout in the country.



Current or Anticipated Need	Improve reliability & resilience	●
	Alleviate congestion & unscheduled flows	*
	Alleviate transfer capacity limits between neighbors	■
	Deliver cost-effective generation to meet demand	●
Anticipated Need	Meet future generation & demand with within-region transmission	*
	Meet future generation & demand with interregional transfer capacity	*

**Wholesale market price data is limited for non-RTO/ISO regions and capacity expansion modeling data is limited for Alaska. Absence of data does not necessarily indicate that there is no need for new transmission.*

FINDINGS OF TRANSMISSION NEED IN ALASKA

- › **Improve reliability and resilience.** Anticipated generation retirements in Alaska’s northern Railbelt region are expected to require capacity replacement from power purchase agreements with southcentral Railbelt utilities and new renewable resources installations. Transmission upgrades to deliver needed capacity to the northern Railbelt region would reduce existing capacity constraints negatively impacting the Alaska Intertie. Similarly, planned generation capacity increases on the Kenai Peninsula in the southern Railbelt region are anticipated to require transmission upgrades to reduce constraints and increase capacity exports on the Kenai Intertie. Further, deployment of additional transmission paths parallel to constrained single transmission lines—particularly near the interties and certain areas of the southcentral Railbelt region—would help reduce the need for load shedding following contingency events.
- › **Deliver cost-effective generation to meet demand.** Outside of the Railbelt service region, rural Alaskan communities are served largely by standalone microgrids. Additional transmission between isolated Alaskan communities served by rural utilities, as well as increased rural utility interconnection with the Railbelt transmission system where feasible, would help accommodate higher levels of renewable capacity and help supply cost-effective generation in areas that rely on higher-cost, imported diesel fuel.

HELPFUL LINKS

- › Read the full study at www.energy.gov/gdo/national-transmission-needs-study
- › Contact GDO with additional questions: transmission@hq.doe.gov