

Kodiak Electric Association, Inc.

Opportunities and Challenges

Thank you for the infrastructure that you will be bringing to Kodiak.

Kodiak Electric Association, Inc. (KEA)

- Nearly 100% of power generated through renewable resources
- Maximum renewable capacity of 30 MW
- Stable rates to the membership
- Totally isolated system with no regional grid connection
- Little excess capacity to accommodate new large loads

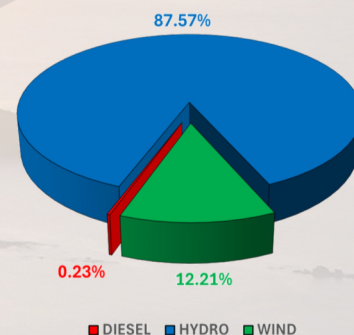
KEA's recent expansion of the watershed into the Terror Lake reservoir was projected to provide excess renewable power through at least 2032. With the new large loads that the government is planning to bring to the island, this pushes KEA into burning diesel for generation. The membership should not have to bear the cost of burning diesel and purchasing more diesel generators due to the U.S. government's large power demands.



It is important to recognize that assumptions appropriate for large Lower-48 grids do not translate cleanly to rural Alaska. In an isolated micro-grid, a single customer can materially alter system economics, reliability margins, and long-term planning. There is no external safety net during system stress, outages, or fuel disruptions. Therefore, adding large governmental loads to isolated rural grids should include consumer protections such as cost-responsibility requirements, long-term service agreements, and federal infrastructure investment. These safeguards will enhance mission assurance and resilience as well as enhance military families quality of life.

Potential New Large Loads

- Arctic Security Cutters – 7.7 MW
- Data Center on Navy Base – 2MW
- Electric Boiler on USCG Base – 2 MW
- Alaska Aerospace Pacific Spaceport Complex – 2 MW
- Child Development Center (all electric) – unknown load
- Heat Pumps for new USCG Housing – unknown load



With these loads in mind, KEA will need to increase our generating capacity. These are the immediate projects that must be completed in order to meet the needs of the government facilities.

- New caterpillar diesel generators at Airport Substation – **\$30 million**
- Installation of additional wind turbines and the supporting infrastructure – **\$25 million**



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System Generation

