**GVEA and the Railbelt:**

**An Overview and Where We Are Today**

**March 7, 2024**

**By Gary Newman, GVEA Director District 4**

**On Cooperatives**

* [Seven Cooperative Principles](https://www.gvea.com/about-us/your-cooperative/cooperative-principles/)
* [Organizational Structure](https://www.gvea.com/about-us/)
* [Bylaws and Article of Incorporation](https://www.gvea.com/about-us/your-cooperative/bylaws-articles-of-incorporation/) as 501(c)12
* [Mission and Vision](https://www.gvea.com/about-us/your-cooperative/who-we-are/)
* [Values](GVEA%20Values.pdf)
* [Policies](https://www.gvea.com/about-us/your-cooperative/policy-manual/)
* [Duties of Directors](https://www.gvea.com/about-us/board-of-directors/) Fiduciary, Strategic Direction, Oversee CEO
* Balance Risk and Reward with due diligence
* Director Education
* [NRECA](NRECA-director-education-catalog.pdf) National Rural Electric Cooperative Association
* [Board Acronym Lis](GVEA%20Board%20Acronym%20list%202022.pdf)t
* [Member Advisory Committee](https://www.gvea.com/about-us/member-advisory-committee-mac/) – the MAC

**GVEA History**

* [History to 2018](GVEA%20History%20to%202018.pdf)
* [Fast Facts 2022](GVEA%20Fast%20Facts%202023%20Annual%20Meeting.pdf)

**Running GVEA**

* Financial – 3 legged stool of Debt, Equity and Capital Credits
* [Financial overview for 2022](GVEA%20Financial%20Report%202023.pdf)
* [2016 Form 7 Example](RUS%20Dec%202016%20Fm7-%20highlighted.pdf)
* [Capital Credits](https://www.gvea.com/member-resources/capital-credits/)
* Setting Rates
* Strategic
* [Strategic Directives](GVEA%20Strategic%20Directives%202021-2022.pdf)
* [Strategic Generation Plan](GVEA%20Strategic%20Generation%20Plan.pdf)
* Operational – Engineering, Power Supply, Transmission, Outside Plant, Dispatch, [Environmental](GVEA%20Environmental%20Acronyms.pdf), Member Services, Financial, Executive.
* [Communication](https://www.gvea.com/community/news/newsroom/) including [social media](https://www.facebook.com/GoldenValleyElectric) and [Youtube](https://www.youtube.com/user/GoldenValleyElectric)
* Governance (see [Policies](https://www.gvea.com/about-us/your-cooperative/policy-manual/))
* Regulatory
  + [GVEA is economically regulated](https://rca.alaska.gov/RCAWeb/Certificate/CertificateDetails.aspx?id=6a907960-cadb-4d83-831d-4ed494e7cf66)
  + Principle of cost causer-cost payer
* [Member Resources](https://www.gvea.com/services/programs-services/) and more. “My Account” access to bills and usage analysis. Outage map.
* Engagement with state and federal entities on Utility Issues
* [Recent white paper to Interior legislators](GVEA%20for%20legislators%2001-2024.pdf)
* [A glossary of players in the Railbelt world](Railbelt%20Electric%20Utility%20related%20organizations%20-10-22.pdf) (from 2022, needing update)

**GVEA’s Future**

* [Strategic Directives](file:///C:\Users\Gary\Documents\Dropbox\GVEA\Phil%20Wight%20class\Gary%20presentation%20class%20030624\Share%20with%20class\GVEA%20Strategic%20Directives%202021-2022.pdf)
* [Strategic Generation Plan](file:///C:\Users\Gary\Documents\Dropbox\GVEA\Phil%20Wight%20class\Gary%20presentation%20class%20030624\Share%20with%20class\GVEA%20Strategic%20Generation%20Plan.pdf)
* [Federal funding](Federal%20Utility%20Support%20Programs%20update%2003-03-24.pdf)
* [Long Duration Thermal Storage](Westinghouse%20PTES%20graphic.JPG) – [Westinghouse](https://www.youtube.com/watch?v=bnVGyZ8HzB4) 4-24 hours +-
* Other technologies - Distributed Energy Resources, Beneficial Electrification, EVs, heat pumps, enhanced efficiencies
* [Nenana Solar Farm](Nenana%20Solar%20Farm.jpg) 16 mw (nameplate) by [Renewable IPP](https://www.renewableipp.com/) proposal

**Railbelt Transmission**

* Studies (including generation)
  + Alaska Railbelt Regional Integrated Resource Plan Study [RIRP 2010](Combined%20Railbelt%20IRP-RIRP%202010.pdf)
  + So many more over the decades
* [Generation and transmission infrastructure 2021](Railbelt%20Transmission%20and%20Generation%202021.pdf)
* Railbelt Transmission Grid – [North](2023_Railbelt_Transmission_Update_North-11x17.pdf) and [South](2023_Railbelt_Transmission_Update_South-11x17.pdf) with improvements needed.
* Federal funding AEA GRIP – [206.5 mm](https://alaskabeacon.com/2023/11/10/huge-new-federal-grant-promises-easier-access-for-cheaper-cleaner-power-in-alaskas-railbelt/) with equal match for HVDC Nikiski to Beluga
* [Bradley Lake Project Management](https://www.akenergyauthority.org/What-We-Do/Railbelt-Energy/Bradley-Lake-Hydroelectric-Project/Bradley-Lake-Project-Management-Committee) Committee – history, funding, projects
* Integrated Railbelt Transmission - [AESTF](2023.11.30%20AESTF%20Report%20Volume%20I.pdf) top recommendation, [SB 257](https://www.akleg.gov/basis/Bill/Detail/33?Root=sb%20257) and others
* Long term - [Roadbelt](https://www.denali.gov/roadbelt-intertie-information/)

**Railbelt Generation**

* Southcentral Alaska natural gas constraints - [Report](https://s3.documentcloud.org/documents/23866685/cigsp-phase-i-report-brg-28june2023.pdf) June 2023
* Railbelt utilities direction is for fewer operational responsibilities and more Power Purchase Agreements
* Big projects too big for any single utility. Need state, federal, and independent power producers.
* [Brian Hickey Presentation to House Energy Feb. 2023](Modernizing%20the%20Railbelt%20Grid-House%20Energy%20Committee-Hickey&BPMC-MAC.pdf)
* [Dixon Diversion](https://www.akenergyauthority.org/What-We-Do/Railbelt-Energy/Bradley-Lake-Hydroelectric-Project/Dixon-Diversion-Project) for Bradley Lake increased storage – TBD, perhaps by 2030.
* [Renewable Portfolio Standard](https://www.akleg.gov/basis/Bill/detail/32?Root=HB301#tab6_4), [Clean Energy Standard](https://www.akleg.gov/PDF/33/Bills/HB0368A.PDF) proposed legislation in Alaska Legislature.
* [Susitna-Watana Dam](https://www.susitna-watanahydro.org/index.html) - $8-9 billion (my guess, 2014 was $5.9 billion) 600 mw. Needs another $100-150 mm to finish studies in order submit application to FERC.
* [Gas line from Prudhoe Bay](https://alaska-lng.com/) $10+ billion for just in-state. [The latest saga](https://alaskapublic.org/2024/01/24/political-pressure-builds-as-state-led-alaska-lng-project-goes-another-year-without-a-deal/) estimated with export $43 billion. Hold your breath.
* Other potentials
* Too far out for current consideration/not commercially available.
* Nuclear (micro is a misnomer), tidal, geothermal, carbon capture, hydrogen, add your own.
* Others too whack to consider any more - [Rampart Dam](https://en.wikipedia.org/wiki/Rampart_Dam) (1954-1980), add your own