Alaska Energy Security
Task Force Meeting

August 29, 2023

August 29, 2023 Agenda

AESTF Meeting

Welcome to the Alaska Energy Security Task Force (AESTF) Meeting. We're looking forward to collaborating on policies, strategies, and tactics to assist in the State of Alaska's goal of reducing energy costs. 1. Introductions

2. Roll Call

Prior Meeting Minutes
August 8, 2023

4. State Energy Data
Subcommittee Presentation:
Update from Two-Day Technical

Working Group Session

5. Subcommittee Report Outs

6. Round Table Discussion: on preliminary subcommittee action recommendations.

Facilitated Discussion:
Energy Symposium Series
Discussion

8. Adjourn

Organization

Member	Email Address	
Lieutenant Governor Nancy Dahlstrom, Chair	lt.governor@alaska.gov	
Curtis W. Thayer, Alaska Energy Authority, Vice Chair	cthayer@akenergyauthority.org	
Clay Koplin, Cordova Electric Cooperative, Vice Chair	ckoplin@cordovaelectric.com	
Commissioner John Boyle, Department of Natural Resources	john.boyle@alaska.gov	
Commissioner Emma Pokon, Department of Environmental Conservation	emma.pokon@alaska.gov	
Nils Andreassen, Alaska Municipal League	nils@akml.org	
Andrew Guy, Calista Corporation	aguy@calistacorp.com	
Karl Hanneman, International Tower Hill Mines	khanneman@ithmines.com	
Tony Izzo, Matanuska Electric Association	tony.izzo@mea.coop	
Jenn Miller, Renewable Independent Power Producers	jenn.miller@renewableipp.com	
Duff Mitchell, Juneau Hydropower	duff.mitchell@juneauhydro.com	
John Sims, ENSTAR Natural Gas Company	john.sims@enstarnaturalgas.com	
Isaac Vanderburg, Launch Alaska	<u>isaac@launchalaska.com</u>	
Robert Venables, Southeast Conference	robert@seconference.org	
Dan White, University of Alaska Fairbanks	uaf.chancellor@alaska.edu	
Senator Click Bishop (Ex Officio)	senator.click.bishop@akleg.gov	
Garrett Boyle, Denali Commission (Ex Officio)	gboyle@denali.gov	
Commissioner Keith Kurber, Regulatory Commission of Alaska (Ex Officio)	<u>keith.kurber@alaska.gov</u>	
Representative George Rauscher (Ex Officio)	representative.george.rauscher@akleg.gov	
Erin Whitney, United States Department of Energy, Arctic Energy Office (Ex Officio)	erin.whitney@hq.doe.gov	
*Andrew Jensen, Policy Advisor, Office of Governor Mike Dunleavy	andrew.jensen@alaska.gov	

Proposed Work Schedule

JUNE 27		AUGUST 8		SEPTEMBE	R 10	OCTOBER 17	NO	OVEMBER 10	
	JULY 18		AUGUST 29		OCTOBER 3		OCTOBER 31	NOVEMBER	R 17
Subcommittee Work				Release S/R** report for 28-Day Public Comment					

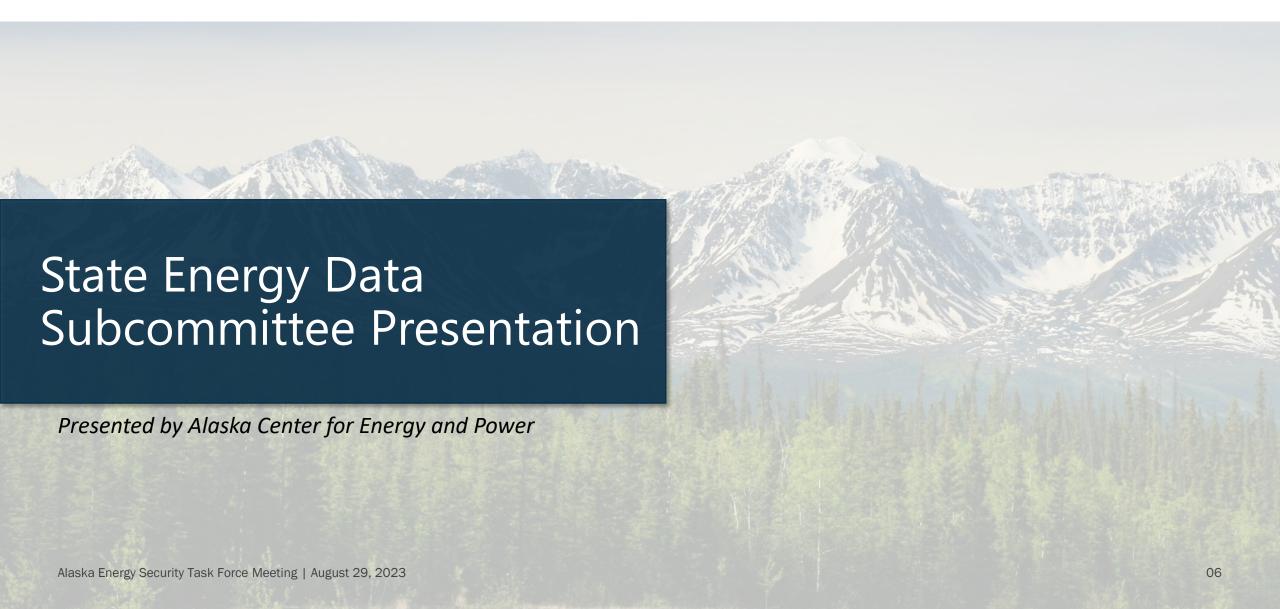
Key Milestones	Completed By
Regional Sub Status Reports	Tuesday, July 18, 2023
Regional Sub Initial Reports	Tuesday, August 8, 2023
Regional Sub Final Reports and I/S/S/R* Data Sub Initial Reports	Tuesday, August 29, 2023
I/S S/R* Data Sub Final Reports; Release S/R** report for 28-Day Public Comment	Tuesday, September 19, 2023
Receive Initial Report, Release for 28-day Public Comment; Take Public Comment on S/R** Report	Tuesday, October 3, 2023
Discuss S/R** Final Report; Vote on Recommendations; Take Public Comment on Initial Report	Tuesday, October 17, 2023
Discuss Final Report; Vote on Recommendations; Receive Final S/R** Report; send to GOA	Tuesday, October 31, 2023
Task Force Receives Final Report	Friday, November 10, 2023
Vote to Approve Final Report	Friday, November 17, 2023

^{*}Incentives and Subsidies and Statutes and Regulations Reform

^{**}Statutes and Regulations Reform

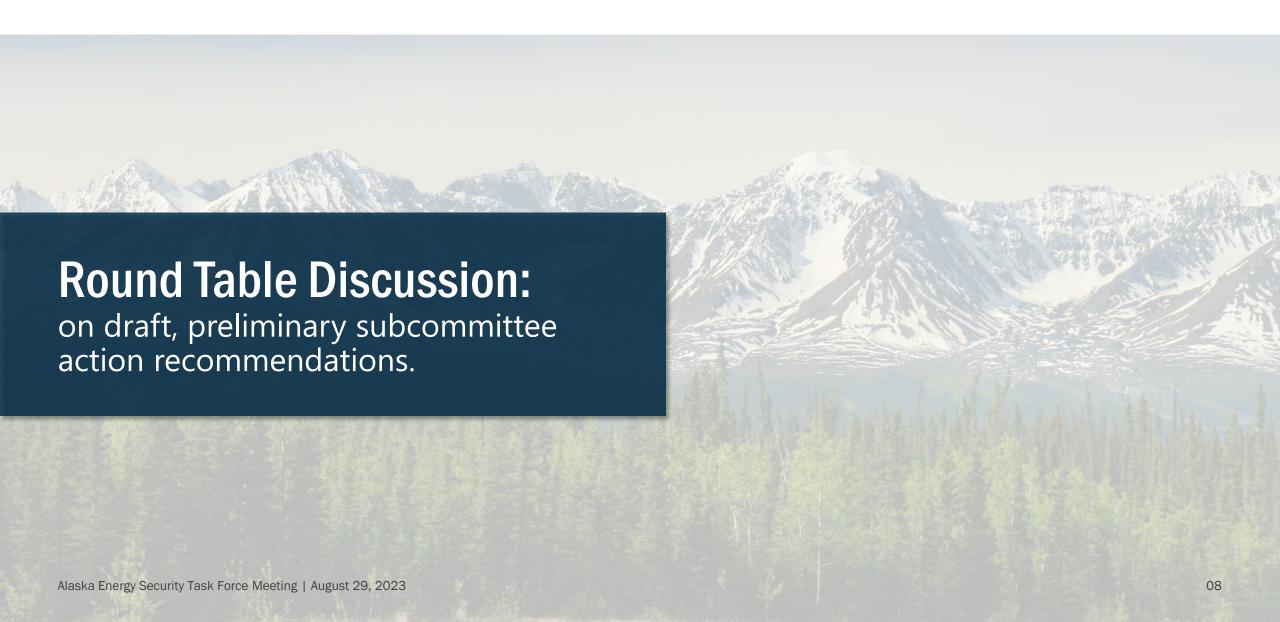
Revised Proposed Work Schedule for Consideration

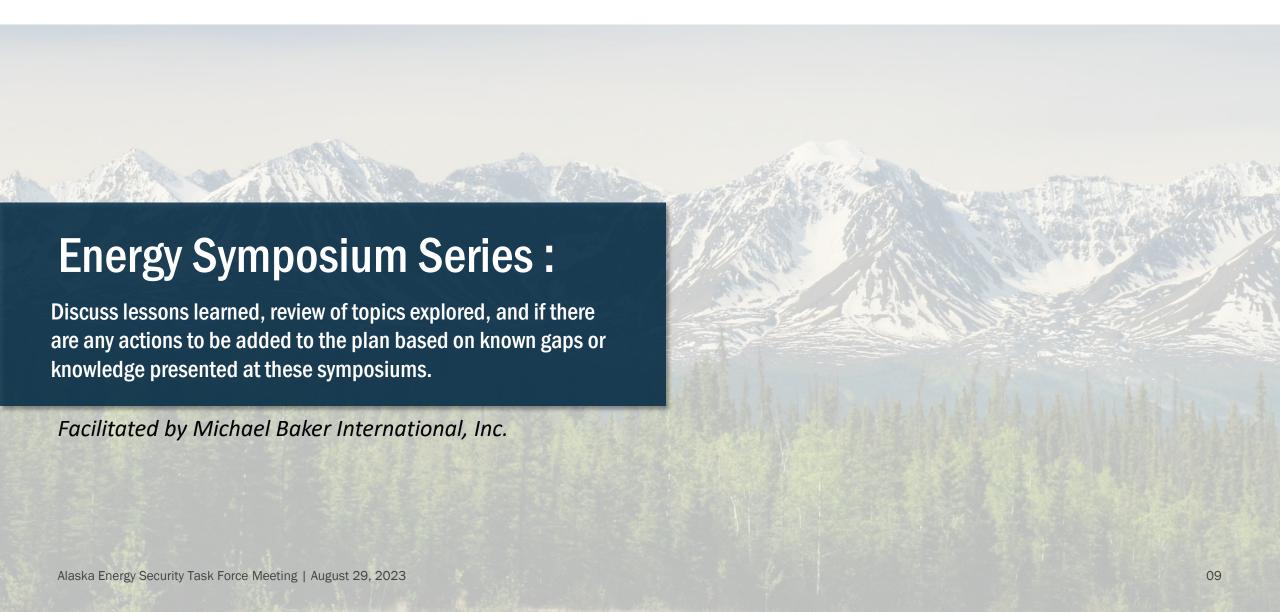
Key Milestones	Completed By
Regional Sub Status Reports	Tuesday, July 18, 2023
Regional Sub Initial Reports	Tuesday, August 8, 2023
Regional Sub Final Reports and Data Sub Initial Reports	Tuesday, August 29, 2023
Data Sub Final Reports	Tuesday, September 19, 2023
Receive Initial Report & Presentation, Public Comment Meeting	Tuesday, October 3, 2023
Task Force Meeting; Release Draft Report for Public Comment (Meeting Added)	Tuesday, October 10, 2023
(Meeting rescheduled to October 10, 2023)	Tuesday, October 17, 2023
Discuss Final Report; Vote on Recommendations; send to GOA; Public Comment on Final Report	Tuesday, October 31, 2023
Public Comment Incorporated in Draft Final Report (No Task Force Meeting)	Tuesday, October 24, 2023
Task Force Receives Final Report	Friday, November 10, 2023
Vote to Approve Final Report	Friday, November 17, 2023



Subcommittee Report Outs

- Railbelt Transmission, Generation, and Storage: (Co-Chairs: Tony Izzo & Jenn Miller)
- Rural Generation, Distribution, and Storage: (Co-Chairs: Clay Koplin & Andrew Guy)
- Coastal Generation, Distribution, and Storage: (Co-Chairs: Duff Mitchell, & Robert Venables)
- Statutes and Regulations Reform: (Co-Chairs: Robert Venables & Karl Hanneman)
- Incentives and Subsidies: (Co-Chairs: Nils Andreassen & Isaac Vanderburg)
- State Energy Data: (Erin Whitney for Chair: Dan White)





Energy Symposium Series

Energy Symposium events that have occurred:

- **7/13 -** Cook Inlet Natural Gas Supply & Development
- **7/20 -** Alaska Rural Energy: Challenges and Opportunities for Reducing the Cost of Energy
- 7/27 Global Trends and Grid of the Future
- **8/03** Railbelt Hydropower Development & Financing: Lessons Learned for the Past, Opportunities for the Future.
- **8/17** Alaska Energy Statistics and Economics
- 8/24 Transmission and Storage: Building a More Resilient Grid

Future Upcoming Event Dates:

- 8/31- Emerging Technologies and Opportunities for Alaska: Small Scale Nuclear
- **9/07** RPS and Clean Energy Standards: National Policy Comparisons

For more information on the symposiums visit uaf.edu/acep/news/energy-symposium.php





Logistics:

Weekly on Thursdays from 11a.m.-1 p.m.

Format:

 Zoom webinars: recordings will be made available.

July 13th Energy Symposium:

Cook Inlet Natural Gas Supply and Development

Presentations included:

■ 2022 Cook Inlet Gas Forecast

Prepared by: Division of Oil & Gas, Alaska Department of Natural Resources

Cook Inlet Gas Supply Project Phase I

Prepared by: Regulatory Commission of Alaska

■ Alaska Liquified Natural Gas (LNG) Project

Prepared by: Alaska Gasline Development Corp





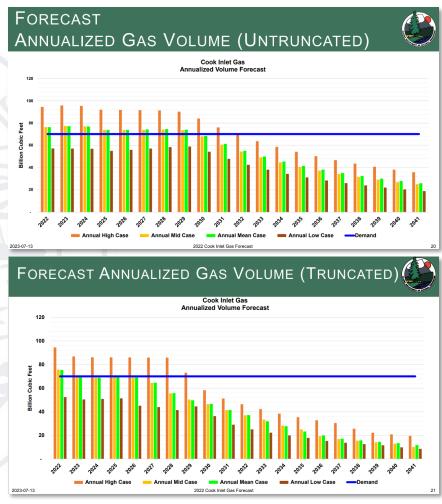
Watch the complete July 13th Energy Symposium recording **here.**

July 13th Energy Symposium:

Cook Inlet Natural Gas Supply and Development

Key Topics Explored:

- Cook Inlet gas won't meet forecasted demand beyond 2026 (current reserves) or early/mid 2030s (assuming incremental supply development)
- Viable options for Cook Inlet Gas supply must be reduced to single sanction decision by Dec 2023
- Alaska LNG project update



2022 Cook Inlet Gas Forecast Truncated vs Untruncated

July 13th Energy Symposium:

Cook Inlet Natural Gas Supply and Development



Discussion Topic

Any transformative actions for the TF to consider related to Natural Gas Supply and Development?

July 20th Energy Symposium:

Alaska Rural Energy: Challenges & Opportunities for Reducing the Cost of Energy

Presentations included and linked below:

Providing Electricity in Rural Alaska

Prepared by: Alaska Village Electric Cooperative

How is AVEC Doing?

Prepared by: Alaska Village Electric Cooperative

■ Standalone Rural Electric Utilities

Prepared by: Matanuska Telephone Association

Public Private Partnerships & The Case for Community – IPPs

Prepared by: Northwest Arctic Borough & NANA Regional

■ From the Frontier to the Future

Prepared by: Intelligent Energy Systems, LLC



Watch the complete July 20th Energy Symposium recording <u>here.</u>

For more information on the symposiums visit <u>uaf.edu/acep/news/energy-symposium.php</u>

July 20th Energy Symposium:

Alaska Rural Energy: Challenges & Opportunities for Reducing the Cost of Energy

Key Topics Explored:

Why electricity is expensive in rural Alaska?

• Small populations, small loads, isolated systems, remote, expensive fuel, O&M, limited personnel, etc.

Strategies discussed to reduce power cost:

 Improve generation efficiency, minimize distribution loss, interconnect villages, add renewables and renewables-based microgrids, capture and sell recovered heat, excess wind energy, promote energy education, and incentivize reduction of diesel use.



Case Studies and examples from standalone utilities and cooperatives:

 Alaska Village Electric Cooperative; Chaninik Wind Group; NWAB Independent Power Producers (IPPs)/Community Solar; and Nikolski

Public Private Partnerships – IPPs

• Vision of Northwest Arctic Borough to be 50% reliant on regionally available energy sources (renewable and non-renewable) by 2050.

July 20th Energy Symposium:

Alaska Rural Energy: Challenges and Opportunities for Reducing the Cost of Energy



Discussion Topic

What actions are necessary to advance alternative energy sources for rural communities (e.g. micro-nuclear, renewables, etc)?

July 20th Energy Symposium:

Alaska Rural Energy: Challenges and Opportunities for Reducing the Cost of Energy





What are TF members initial thoughts on the current PCE program?

July 27th Energy Symposium:

Global Trends and Grid of the Future

Presentations included:

■ Energy Transformation –

It can Happen Faster than you Think!

South Australia as a Case Study,

Prepared by: Sandia National Laboratories

Opportunities for Electric Load
 Growth in Alaska

Prepared by: Sandia National Laboratories

Insights into the Icelandic
Energy Market

Prepared by: Alaska Center for Energy and Power





Watch the complete July 27th Energy Symposium recording **here.**

For more information on the symposiums visit <u>uaf.edu/acep/news/energy-symposium.php</u>

July 27th Energy Symposium:

Global Trends and Grid of the Future

Key Topics Explored:

- Heating space and water is the biggest energy user in Alaska
- Cold-climate air source heat pumps (ccASHP): problems and solutions with widespread heat pump adoption and solutions
 - Potential Solutions include: dual fuel heat pumps, better building envelope, geothermal heat pumps

Case Studies:

- Proliferation of diverse energy in South Australia are there lessons to be learned?
- Overview of Iceland's energy market and how it compares to Alaska

July 27th Energy Symposium:

Global Trends and Grid of the Future



Discussion Topic

Any topics from this symposium the TF members would like to discuss?

August 3rd Energy Symposium:

Railbelt Hydropower Development & Financing: Lessons Learned from the Past, Opportunities for the Future

Presentations included and linked below:

Small Hydropower in Southcentral Alaska

Prepared by: Polarconsult Alaksa, Inc.

Bradley Lake Operations and Governance

Prepared by: Bradley Lake Project Management Committee

■ Railbelt Hydropower – Current & Upcoming Projects

Prepared by: Alaska Energy Authority

■ Susitna-Watana Hydro

Prepared by: Susitna-Watana Hydro



Watch the complete August 3rd Energy Symposium recording <u>here.</u>

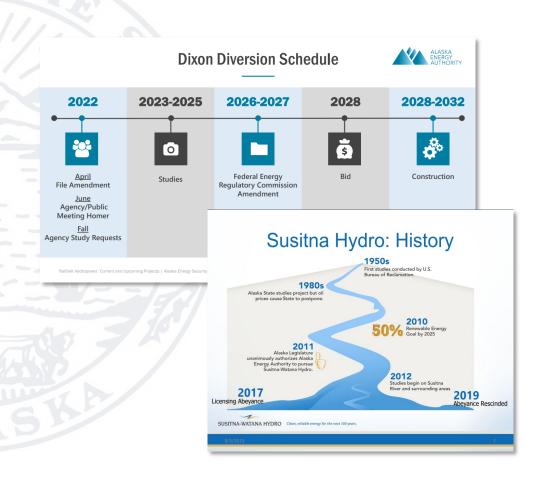
For more information on the symposiums visit <u>uaf.edu/acep/news/energy-symposium.php</u>

August 3rd Energy Symposium:

Railbelt Hydropower Development & Financing: Lessons Learned from the Past, Opportunities for the Future

Key Topics Explored:

- Dixon Diversion would be largest renewable energy project since Bradley Lake
- Susitna-Watana Hydro: ~50% of Railbelt's energy demand
- Southcentral small hydro: 100MW capacity is achievable
- Bradley Lake Operations and Governance



August 3rd Energy Symposium:

Railbelt Hydropower Development & Financing: Lessons Learned from the Past, Opportunities for the Future



Discussion Topic

Any TF recommendations to move Railbelt Hydropower projects forward?

August 17th Energy Symposium:

Alaska Energy Statistics & Economics

Presentations included and linked below:

Alaska Energy Data: The Good, the Bad, the Missing

Prepared by: Alaska Center for Energy and Power

Alaska Comprehensive Economic Development Strategy (CEDS) Overview

Prepared by: UA Center for Economic Development, Alaska DCCED

■ CEDS Energy – Specific Goals & Objectives

Prepared by: Department of Commerce, Community, and Economic Development



Watch the complete August 17th Energy Symposium recording **here.**

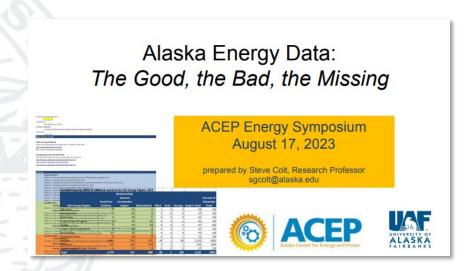
For more information on the symposiums visit <u>uaf.edu/acep/news/energy-symposium.php</u>

August 17th Energy Symposium:

Alaska Energy Statistics & Economics

Key Topics Explored:

- Need for central energy data repository with regular maintenance and updates
- Unreliable/uncleaned data is worse than no data
- There is almost zero measured fuel oil consumption data
- Impact of EVs and Heat Pumps



Slide from the CEDS presentation.

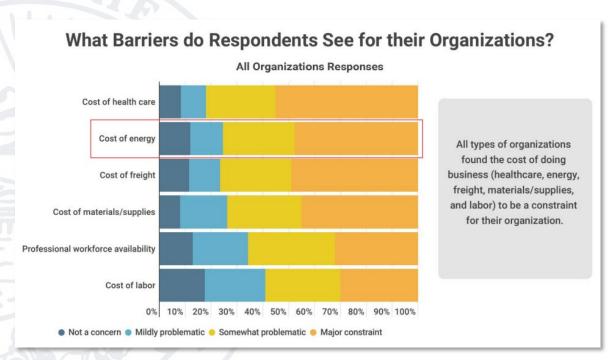
August 17th Energy Symposium:

Alaska Energy Statistics & Economics

Key Topics Explored:

Alaska Comprehensive Economic Development Strategy (CEDS) includes actions and objectives related to the following:

- Sustainable Energy
- Affordable Energy
- Alternative Energy Workforce
- Resilience Capacity
- Resilient Infrastructure
- Oil & Gas
- Alternative Energy
- Timber



Slide from the CEDS presentation.

August 17th Energy Symposium:

Alaska Energy Statistics & Economics



Discussion Topic

TF comments on the relationship of the Energy Security Masterplan with CEDS Economic Development Strategy?

August 24th Energy Symposium:

Transmission & Storage: Building a More Resilient Grid

Presentations included and linked below:

Energy Storage Options and Selection Considerations

Prepared by: Sandia National Laboratories

Beneficial and Equitable Electrification

Prepared by: Alaska Center for Energy and Power

Tidal Power in Alaska

Prepared by: Alaska Center for Energy and Power





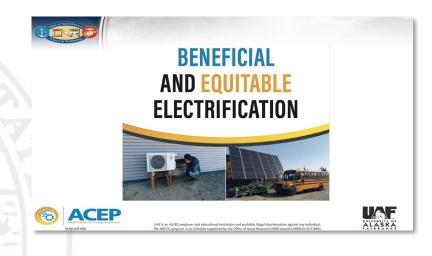
For more information on the symposiums visit <u>uaf.edu/acep/news/energy-symposium.php</u>

August 24th Energy Symposium:

Transmission & Storage: Building a More Resilient Grid

Key Topics Explored:

- Energy storage system (ESS) selection is scenario specific, key scenario considerations include:
 - Power purchase agreement;
 - Grid demand;
 - Available energy for charging;
 - System Round Trip Efficiency; % demand met requirement; and
 - Levelized Cost of Energy Storage requirement/ROI requirement
- Beneficial and Equitable Electrification
 - Harnessing local, sustainable, and cost-effective energy resources to electrify energy loads such as transportation and heating.
- Tidal Power in Alaska
 - Policy & Permitting Recommendations:
 - Identify and Fill Regulatory Data Gaps
 - Support Adaptive Management Approaches
 - R&D Investment





August 24th Energy Symposium:

Transmission & Storage: Building a More Resilient Grid



Discussion Topic

TF recommendations for leveraging existing and future transmission and storage technology?

Next Steps

- Confirm/Schedule next meeting with your subcommittee(s):
 - Railbelt Transmission, Generation, and Storage: August 30th, 1:00 pm
 - Rural Generation, Distribution, and Storage: September 7th, 1:00 pm
 - Coastal Generation, Distribution, and Storage: September 8th, 11:00 am
 - Statutes and Regulations Reform: September 5th, 10:30 am
 - Incentives and Subsidies: September 11th, 8:00 am
 - State Energy Data: *TBD*
- Next Energy Symposium Presentation
 - Thursday, August 31st, 2023
- Next AESTF Meeting Date: Tuesday, September 19th, 2023

Email and Website



Email

AEA-hosted info email account created to capture correspondence related to the Task Force.

info@akenergysecuritytaskforce.com



Website

AEA-hosted external webpage houses the Task Force's schedule, public notices, recordings, minutes, documents, and resources as they are created.

http://akenergysecuritytaskforce.com