

AEA Overview

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SFIN DCCED Budget Subcommittee
February 27, 2019



ALASKA ENERGY AUTHORITY



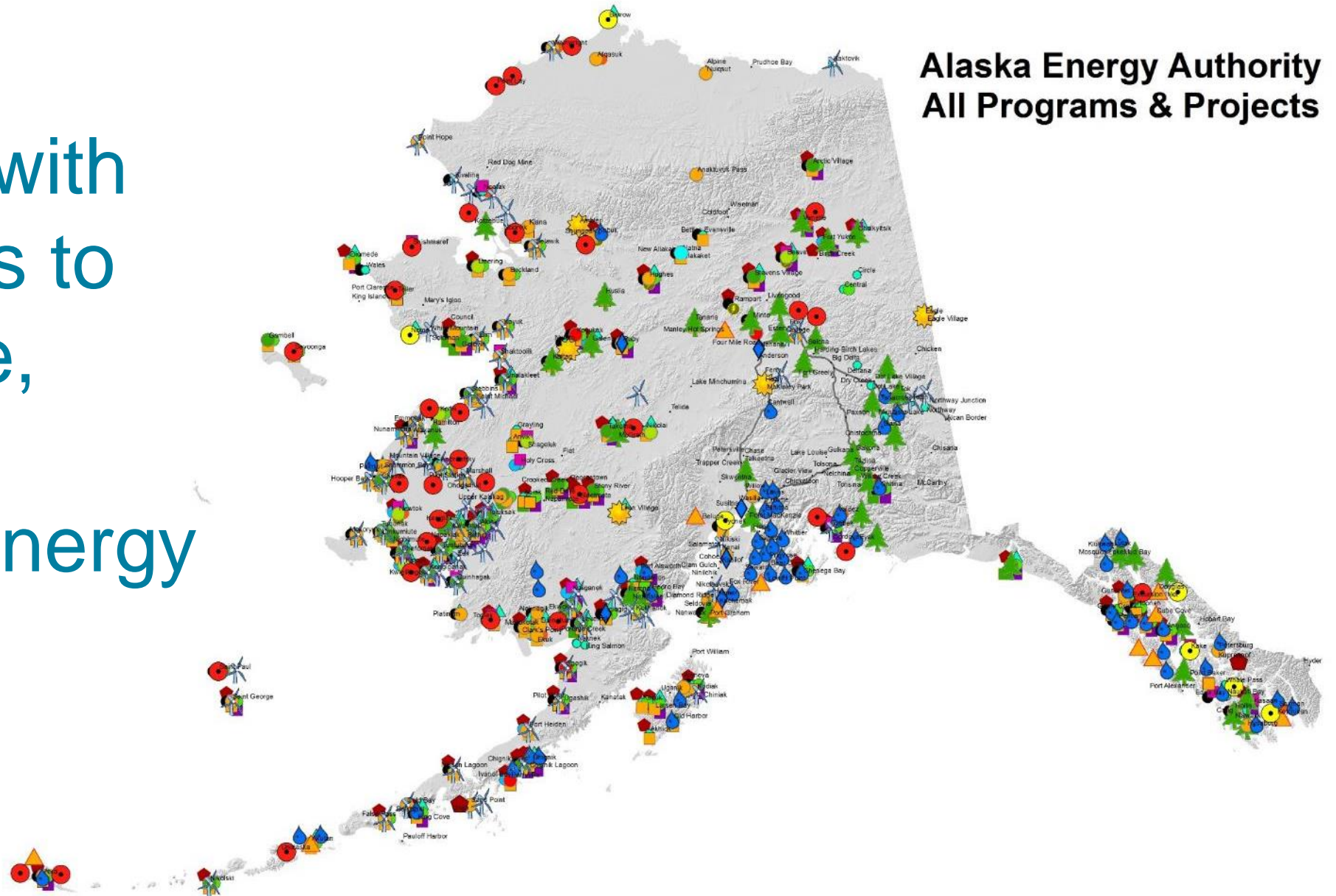
REDUCING THE COST OF ENERGY IN ALASKA



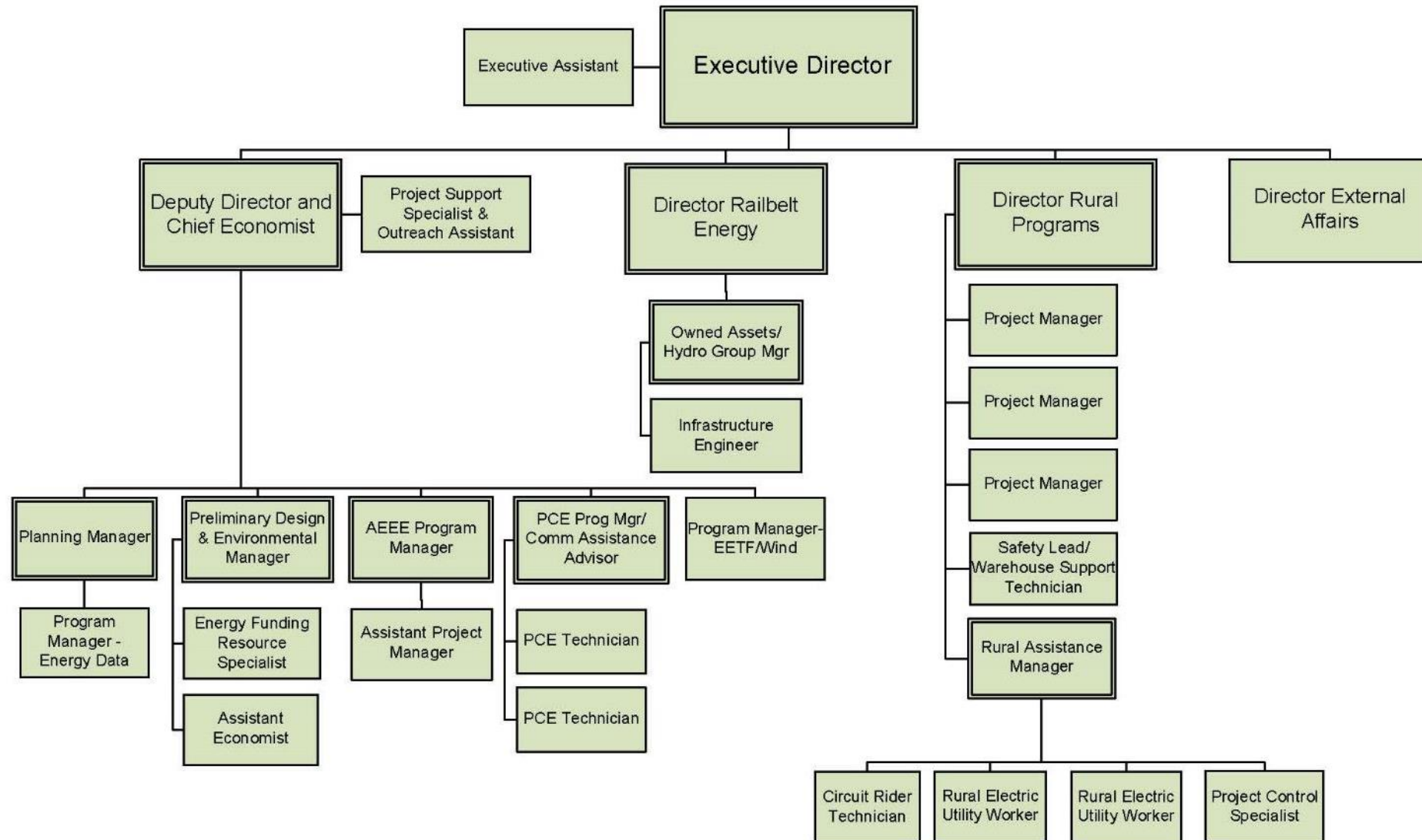
AEA's mission is to reduce the cost of energy in Alaska



Alaska Energy Authority All Programs & Projects



Alaska Energy Authority



ALASKA ENERGY AUTHORITY
FY2020 OPERATING BUDGET OVERVIEW (in thousands)
All Component Summary

				Variance
	FY2019	FY2020	FY2020	Governor vs.
AEA FY2020 Operating Budget - All Components	Authorized	Governor	Governor Amended	Governor Amended
Expenditure Categories:				
Travel	162.0	162.0	134.8	(27.2)
Services (includes personal services paid to AIDEA)	9,698.2	9,698.2	9,698.2	-
Commodities	56.0	56.0	56.0	-
Capital Outlay/Equipment	15.0	15.0	15.0	-
Grants	32,100.0	32,100.0	32,100.0	-
Totals	42,031.2	42,031.2	42,004.0	(27.2)
Funding Sources:				
Unrestricted GF (undesignated)	874.5	874.5	33,584.1	32,709.6
Power Project Fund (designated)	995.5	995.5	995.5	-
Renewable Energy (designated)	2,000.0	2,000.0	2,000.0	-
PCE Endowment (designated)	32,736.8	32,736.8	-	(32,736.8)
GF Program Receipts (designated)	100.0	100.0	100.0	-
Subtotal (Designated & Undesignated GF)	36,706.8	36,706.8	36,679.6	(27.2)
CIP Receipts	2,567.8	2,567.8	2,567.8	-
Federal Receipts	1,502.0	1,502.0	1,502.0	-
AEA Receipts	980.7	980.7	980.7	-
I/A Receipts	123.9	123.9	123.9	-
Statutory Designated Program Receipts	150.0	150.0	150.0	-
Totals	42,031.2	42,031.2	42,004.0	(27.2)

Unaudited Financial Highlights (in thousands)

BALANCE SHEETS

Assets:

	June 30, 2018	June 30, 2017
Restricted Investment securities and cash	1,212,214	1,157,603
Loans, net	17,968	11,283
Capital assets, net	369,188	374,937
Receivables and other assets	5,766	7,244
<i>Total Assets</i>	1,605,136	1,551,067

Liabilities and net position:

Liabilities

Bonds payable	85,179	53,495
Other bond liabilities	1,256	1,533
Payables and other liabilities	29,774	34,829
<i>Total liabilities</i>	116,209	89,857
<i>Net position</i>	1,488,927	1,461,210
<i>Total liabilities and net position</i>	1,605,136	1,551,067

Unaudited Financial Highlights (in thousands)

REVENUES, EXPENSES AND CHANGES IN NET POSITION

Operating revenues:

Federal grants	3,505	5,992
Revenue from operating plants	21,482	18,698
State operating and capital revenues	16,063	25,419
Interest on loans	296	292
Other operating revenues	144	22
<i>Total operating revenues</i>	<u>41,490</u>	<u>50,423</u>

Operating Expenses:

Grants and projects	30,496	36,776
Power cost equalization grants	26,196	25,853
Interest expense	2,371	2,652
Plant operating	6,772	4,330
General and administrative	4,454	4,703
Provision for loan losses	(51)	154
Loss on disposal of asset	15	-
Depreciation	15,594	10,809
Other project expenses	-	-
<i>Total operating expenses</i>	<u>85,847</u>	<u>85,277</u>

Operating loss

(44,357)	(34,854)
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Investment Income, net

79,345	114,443
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State of Alaska reappropriations and transfers

(10,067)	(13,556)
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Capital contributions

2,796	-
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Increase (decrease) in net position

<u>27,717</u>	<u>66,033</u>
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PCE Endowment Fund History (in thousands)

unaudited

	FY2010	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	FY2018
Beginning investment fund balance	\$ 303,354	320,714	364,529	751,780	840,215	977,867	969,389	946,939	1,023,566
Inflows:									
Annual investment earnings	38,387	67,651	10,948	111,488	171,112	33,192	8,912	112,331	76,602
Capital fund transfers in	—	—	400,000	—	—	—	—	—	—
Total inflows	38,387	67,651	410,948	111,488	171,112	33,192	8,912	112,331	76,602
Outflows:									
Transfers to AEA for PCE payments (1)	(20,725)	(23,458)	(23,154)	(22,527)	(32,773)	(41,002)	(30,622)	(34,956)	(25,595)
Program administration - AEA	(160)	(174)	(211)	(198)	(241)	(248)	(255)	(243)	(624)
Administrative fee - Regulatory Commission	—	(78)	(129)	(90)	(110)	(107)	(100)	(112)	(113)
Management fee - Department of Revenue	(142)	(126)	(203)	(238)	(336)	(313)	(385)	(393)	(458)
Total outflows	(21,027)	(23,836)	(23,697)	(23,053)	(33,460)	(41,670)	(31,362)	(35,704)	(26,790)
Ending investment fund balance	\$ <u>320,714</u>	<u>364,529</u>	<u>751,780</u>	<u>840,215</u>	<u>977,867</u>	<u>969,389</u>	<u>946,939</u>	<u>1,023,566</u>	<u>1,073,378</u>

(1) Final PCE program expenditures reported may vary depending on outstanding PCE payables at June 30, not included in this presentation.

PCE Endowment FY2019 Appropriations

SLA2018

Calculation of Excess Power Cost Equalization Earnings Available for Appropriation

FY2017 Earnings (AS 42.45.050(c)(2))		<u>\$112,330,514</u>
FY2019 Planned Appropriations – Based on Prior Year		
AEA – Rural Energy Assistance	\$381,800	
AEA – Power Cost Equalization	\$32,355,000	
Revenue – Treasury	\$359,000	
Less: Total FY2019 Appropriations		<u>\$33,095,800</u>
Unobligated FY2017 Earnings		\$79,234,714
70% of Unobligated FY2017 Earnings per AS 42.45.085(d) (max \$55 million per AS 42.45.085(d)(2))		\$55,000,000
FY2019 Additional Appropriations per AS 42.45.085 (d)(2)		
Community Assistance Program (AS 42.45.085(d)(2)(A))	\$30,000,000	
Renewable Energy Grant Fund (AS 42.45.085(d)(2)(B))	\$14,000,000	
Rural Power Systems Upgrades (AS 42.45.085(d)(2)(B))	\$11,000,000	
Less: FY2019 Additional Appropriations		<u>\$55,000,000</u>
Remaining Balance		\$0

AEA PROGRAMS & PROJECTS

- Bradley Lake Hydro
- Alaska Intertie
- Power Cost Equalization
- Rural Utility Assistance
- Bulk Fuel Upgrades
- Rural Power System Upgrades
- Renewable Energy Fund grants
- Power Project Fund Loans
- Alternative Energy & Energy Efficiency
- Project Development & Finance



Battle Creek lower access road (foreground), Bradley Lake Dam (background); picture taken summer 2018

Bradley Lake Hydroelectric Project

- Produces ~ 10% of Railbelt electricity, 4.5 cents/kWh
- Benefits members of
 - Golden Valley Electric
 - Matanuska Electric
 - Municipal Light & Power
 - Chugach Electric
 - Homer Electric
 - City of Seward
- Battle Creek Diversion Project: \$47M, will add ~10% energy



Alaska Intertie

- 170 miles from Willow to Healy
- Allows Golden Valley Electric Assoc. (GVEA) to connect to and benefit from lower cost power
- Improves reliability within Railbelt system
- Operated by AEA and Railbelt utilities
- \$27.4M savings for GVEA in FY2018



Power Cost Equalization (PCE) Program

- 195 communities served
- Disbursed \$27M in FY2018
- Regular communication with rural utilities helps identify problems early
- Dovetails with AEA rural utility assistance
- Online portal will increase efficiency and accuracy of reporting



Akiachak

Power Cost Equalization Endowment Fund

- \$32M to PCE program authorized FY2019
- \$30M in excess earnings to Community Assistance Program FY2019
- \$25M to Renewable Energy Fund (REF) and Rural Power System Upgrade (RPSU) projects in FY2019
- Fund is managed by Department of Revenue



Quinhagak

Rural Utility Assistance



CR Assistance

103

Communities received **circuit rider**
and **rural utility worker** assistance
in FY2018



AVTEC training

38

Communities received
Training in FY2018



Hughes electrical emergency assistance

6

Communities assisted with
electrical emergencies in
FY2018

Bulk Fuel Tank Farm Upgrades (BFU)

- Builds code compliant fuel storage facilities
- Preventing spills and contamination
- Decreasing the per unit cost of fuel by allowing the community to purchase bulk quantities
- 118 projects completed since 2000



Kipnuk Bulk Fuel Tanks being loaded onto the barge in WA

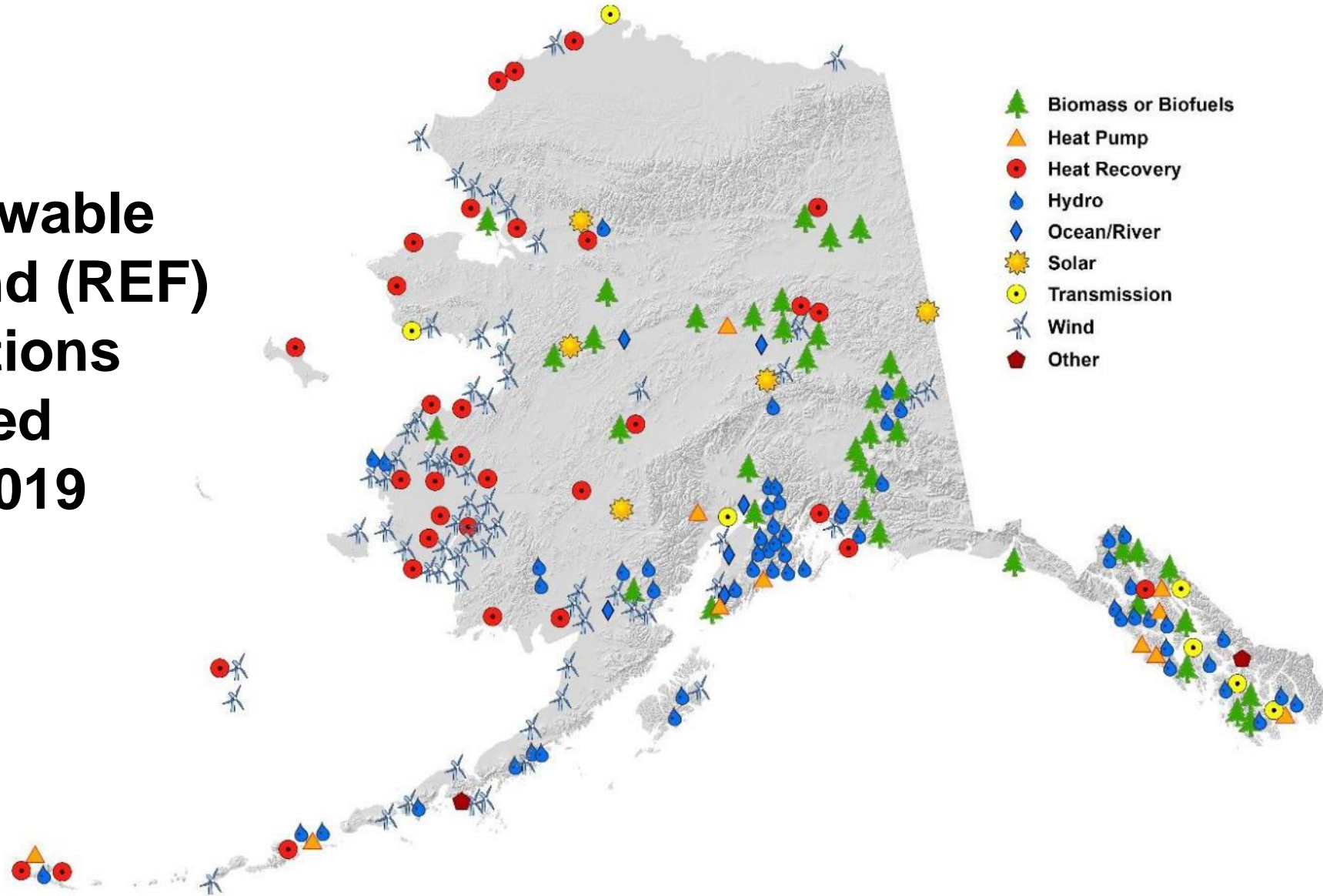
Rural Power System Upgrades (RPSU)

- Improving power system efficiency, safety and reliability
- Promote local hire and training
- 30% - 40% increase in fuel savings is common after RPSU
- Builds code compliant facilities providing stable and reliable power
- ~10% to 20% efficiency improvement in diesel generation
- 86 projects completed since 2000



Kipnuk powerhouse

295 Renewable Energy Fund (REF) Applications Funded 2008-2019



Renewable Energy Fund (REF)

- \$280M invested in REF by the State
- Boosted renewable energy market in Alaska
- Leveraged hundreds of millions of federal and private dollars
- 73 operational projects, 56 in the pipeline
- Displacing ~30 million diesel equivalent gallons annually
- ~\$74M in fuel savings in 2018



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Power Project Fund Loan Program

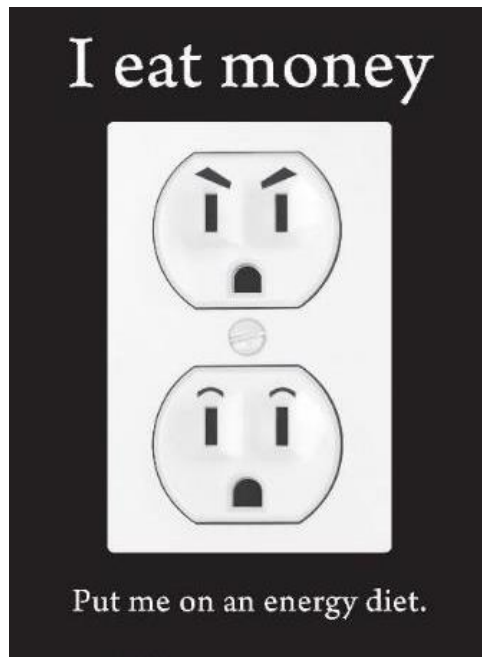
- \$100M+ disbursed since 1980
- 17 active loans in FY2018
- Flexible loan program
- Covers all aspects of supply side system
- Technical, economic and finance viability
- Critical resource in shift from grant funded to debt financed energy projects
- Participation continues to increase



Waterfall Creek, King Cove

Alternative Energy & Energy Efficiency

Energy
Efficiency



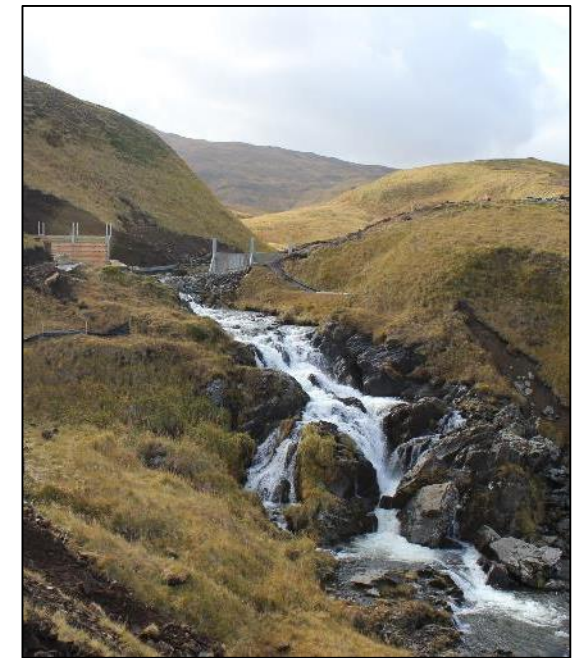
Wind



Biomass



Hydro



Project Development & Financing

- Planning and evaluation
- Project development technical assistance
- Resource assessment
- Technical & economic analysis
- Data collection & reporting
- Utility business assistance
- Financing (e.g. Power Project Fund loans)

AEA provides energy solutions to meet the unique needs and opportunities of Alaska's rural and urban communities.



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