

# *Clean Energy Capacity Building*

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**YK Triple E Work Session**

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Renewable Energy  
Alaska Project

Founded in 2004, REAP is a statewide non-profit coalition of over 80 electric utilities, Alaska Native Corporations, clean energy developers, businesses and other NGOs

***REAP's mission is to increase renewable energy development and promote energy efficiency in Alaska***



# How REAP Sees the Clean Energy Landscape



Energy  
Efficiency First!

- ▶ Technology
- ▶ Workforce, Education & Training
- ▶ Finance
- ▶ Policy



# Alaska's Annual Billion Dollar Bonfire



**Each year, Alaskans collectively spend approximately \$5 billion on electric, heating, and transportation energy. At least 20% of that energy is wasted and goes up in smoke.**

# K-12 STEM Education and Community Engagement

- K-12 Clean Energy Curricula
- Sustainable Southeast Partnership (SSP)
- Alaska Network for Energy Education and Employment (ANEED)



# The Alaska Network for Energy Education and Employment (ANEED)

## MAPPING WHERE ALASKANS *LEARN – TRAIN – EARN*

In Alaska's Energy Sector

### KINDERGARTEN – 12<sup>th</sup> GRADE



### VOCATIONAL



### University of Alaska & APU



### JOBS & CAREERS



# A Legacy of Challenges and Barriers

- Distance
- Logistics
- Access to /Opportunities for Education & Training
- Literacy/Numeracy
- Economies of Scale
- Realistic Expectations
- Accountability
- Cultural Differences



# A Legacy of Overcoming Challenges and Barriers







# TWO WAYS OF TRAINING

# You Go to Them

Go to AVTEC  
Learn a Skill...Get a Great Job



Alaska's Institute of Technology  
[www.avtec.edu](http://www.avtec.edu)

1-800-478-5389

1-907-334-2230

# CIRCUIT & RIDERS



...or They Come To You

# Norm Miller's Classroom





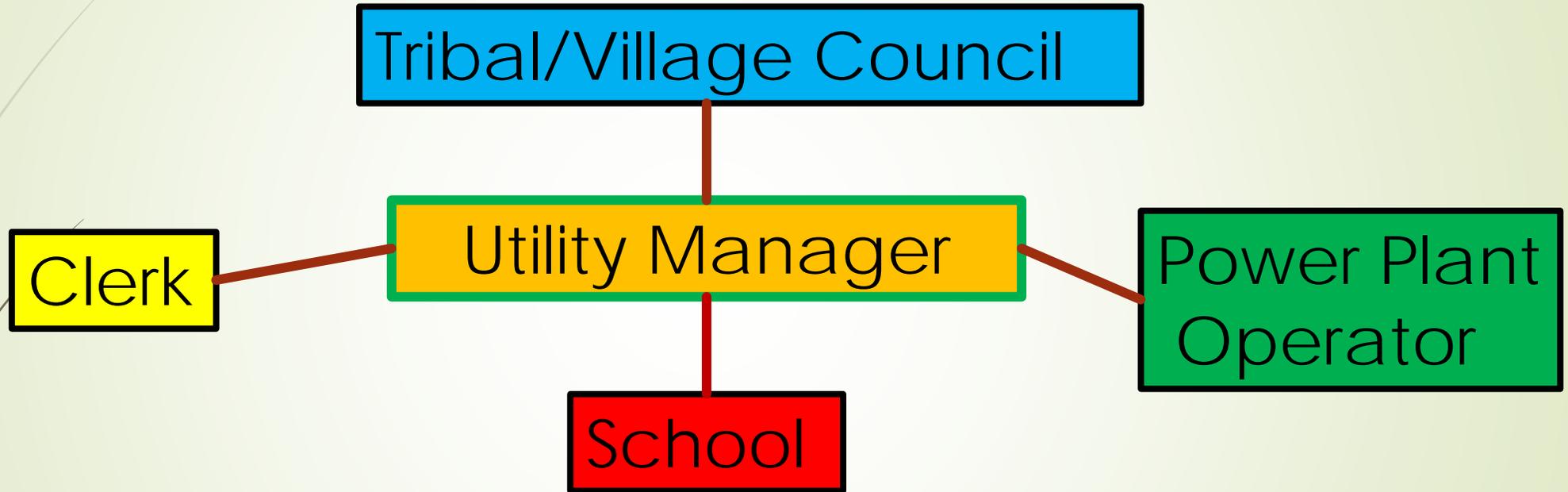
# Training Lessons from Norm Miller

- 1) Improve math and reading.
- 2) On-Call support for problems with mechanical controls, electrical controls and distribution.
- 2) A full understanding of how engine and controls function as a system. This requires that each operator must be trained at their own individual plant.
- 3) Compliance inspection at least every quarter, preferably every month. Assistance or technical support for every compliance issue. (This requires a great number of circuit riders).
- 4) Strong administrative support from the village/tribal council.

# IT ALWAYS STARTS WITH A CHAMPION

- Do you systematically assess training needs of your community?
- Does anyone in your community track available training opportunities?
- Have you collaborated with another organization in the past 3 years to provide training?
- Leveraging / tapping into organizations already in the community is the best starting point - expand from there.
- What is the most important constraint on training?
  - A) Employer resistance?
  - B) Cost?
  - C) Perceived benefits?
  - D) Fear of losing a good worker – Brain Drain?

# Strengthen the In-Community Energy Network



- COORDINATE TRAININGS with other COMMUNITIES
- INCENTIVIZE CLERKS, MANAGERS – Put PCE to work!
- HIRING PROCESS IMPROVES / STATUS IMPROVES
- STUDENT GOVERNMENT



## EXPAND YOUR NETWORK: REACH OUT, SHARE KNOWLEDGE & TALK TO OTHER COMMUNITIES

- PCE TIPS FROM OTHER CLERKS
- FIND LOCAL EXPERTS
- ADVICE ON RENEWABLE PLANNING
- TROUBLESHOOTING - FELLOW AVTEC GRADUATES
- **ERIC MIDDLEBROOK MODEL- Southwestern  
Technical - A One Man Network out of Bethel**

# Takeaways

- More **local capacity can create jobs and keep precious energy dollars in the community** by making sure equipment is running efficiently
- **Math and reading are important!**
- **Every community needs a champion** to track training opportunities and strengthen the community network
- **Reach out and collaborate** with nearby communities



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**Thank You!**

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