

Railbelt Reliability  
for the  
Energy Policy Task Force

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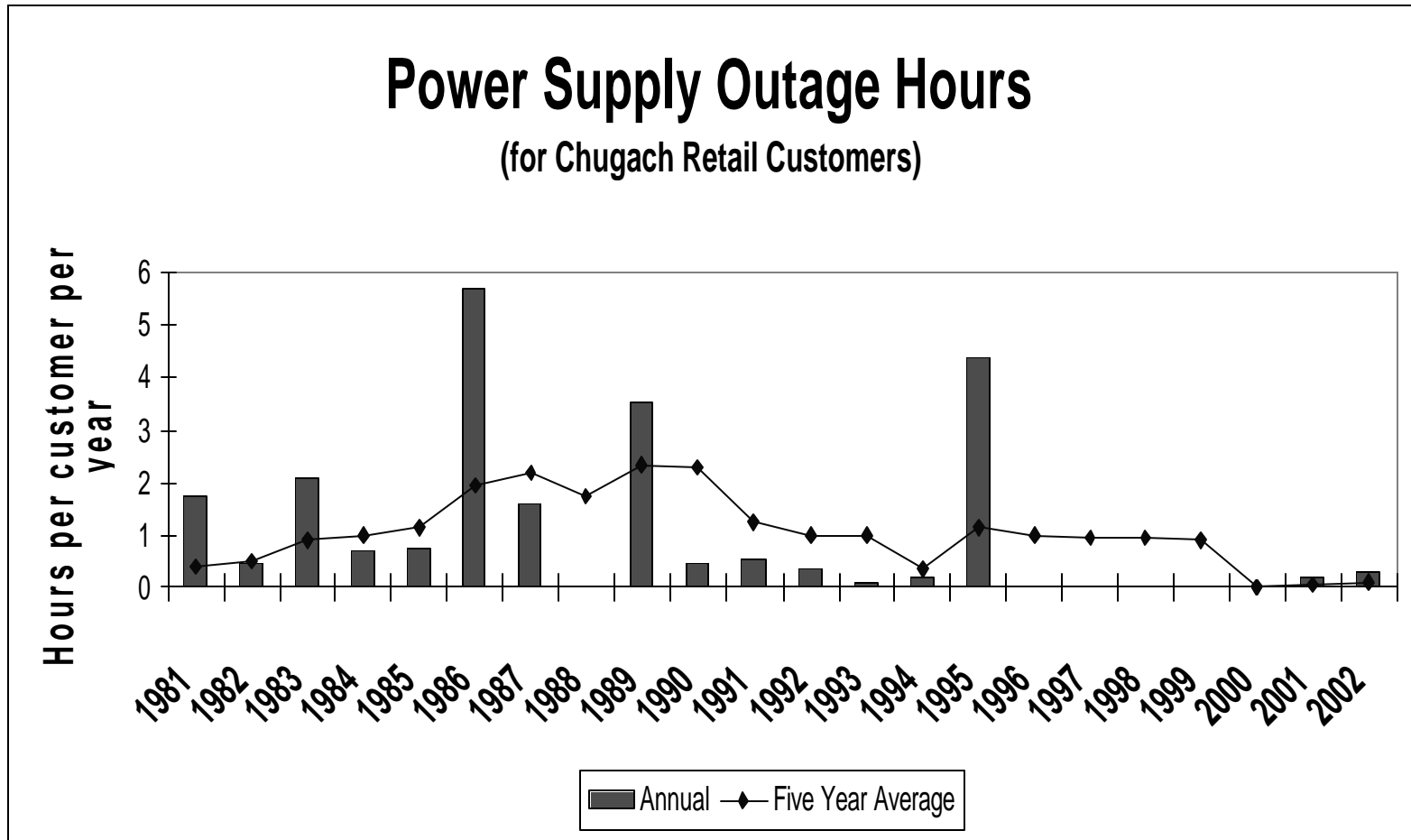
Chugach Electric Association

November 4, 2003



# Voluntary utility cooperation

Has been mostly successful



# Voluntary utility cooperation

but not without controversy

- ◆ Energization of a substation without operating protocols
- ◆ Dual utility control of breakers without clearly defined accountability / responsibility
- ◆ Automation of SILOS
- ◆ Operation of the Eklutna line
- ◆ Spinning reserve accounting procedures

# Significant Events

## ◆ 1986/1987

- First year of Anchorage-Fairbanks intertie
- Labor strike

## ◆ 1989

- Failure of gas supply to Beluga

## ◆ 1995

- Next to last major blackout

# Alaska Intertie Agreement (1985)

- ◆ Among Railbelt generating entities
  - Alaska Electric Generation & Transmission
    - ◆ Homer and Matanuska
  - Alaska Power Authority (now AEA/AIDEA)
  - Anchorage Municipal Light & Power
  - Chugach Electric Association
  - Fairbanks Municipal Utility Systems
  - Golden Valley Electric Association

# Alaska Intertie Agreement (1985)-continued


- ◆ Established Intertie Operating Committee
  - Administer operation of State owned transmission between Anchorage and Fairbanks
  - Interconnection agreement between utilities
    - ◆ Interconnected operating rules
    - ◆ Contractual agreement on rules
  - Operating Reserve Sharing

# Alaska Systems Coordinating Council

- ◆ An association promoting improved reliability through system coordination
- ◆ Voluntary organization
- ◆ Affiliated with North American Electric Reliability Council (NERC)
- ◆ Developed reliability planning standards

# Future reliability concerns

- ◆ Installation of generation by a non-generating utility or a non-utility generator, which fails to follow the current Railbelt reliability practices leading to:
- ◆ Degraded levels of reliability for everyone



Will the current  
voluntary system  
remain adequate?

# Reliability Solution

- ◆ A Railbelt Grid Reliability Organization
  - Created by the Legislature
  - Membership required of all generating entities and load serving entities connected to the Railbelt grid.
  - Mandated to establish reliability planning and operating standards
  - Ability to enforce standards among members

# Reliability Solution-continued

- Weighted voting based on installed capacity for generators and peak demand for distributors
- Applies to all generation  $> 10$  MW and all transmission  $> 69$  kV

# Questions?

