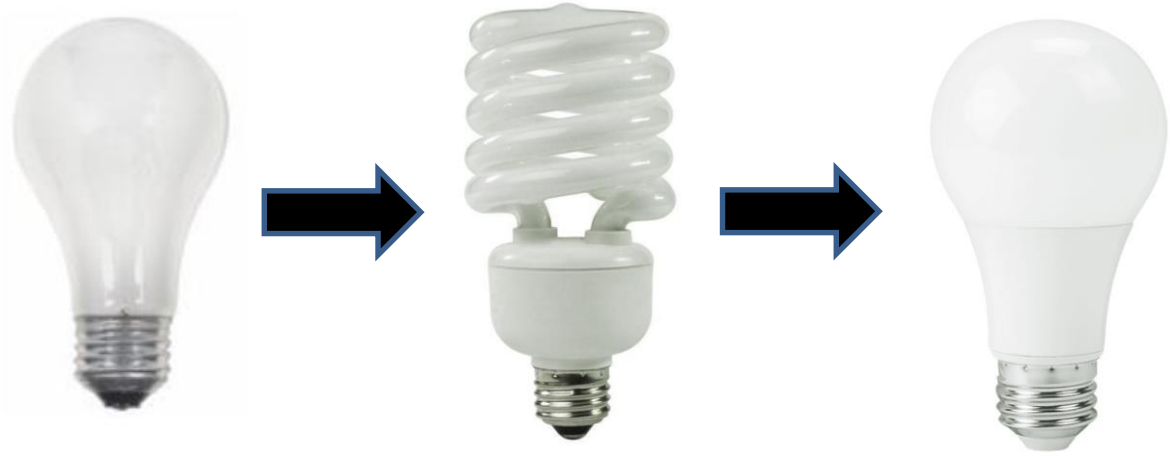
“Ductless Heat Pump Mini-Splits: Big Issues, Big Breakthroughs on the Horizon”

Sept 12, 2019

Challenge YOUR Thinking! - COMFORT

Technology Improvements



60 Watts **14 Watts** **8 Watts**

Technology Improvements

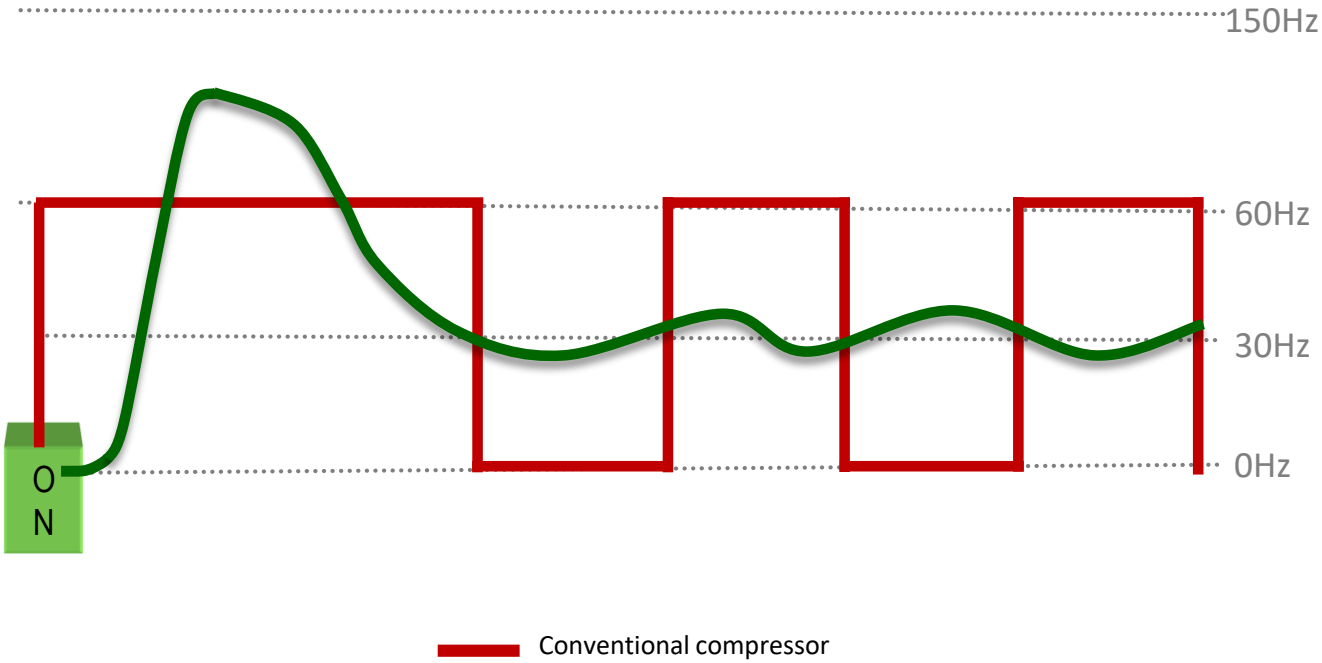
PAST….

- 10 SEER
- Operation to 32°F
- Back-up heating req'd at 32°F

PRESENT….

- Up to 33 SEER
- Operation below -13 °F
- 100% capacity at 5°F

INVERTER Technology



Technology Advancements - Zoned Comfort Solutions™

Connected Control Solutions

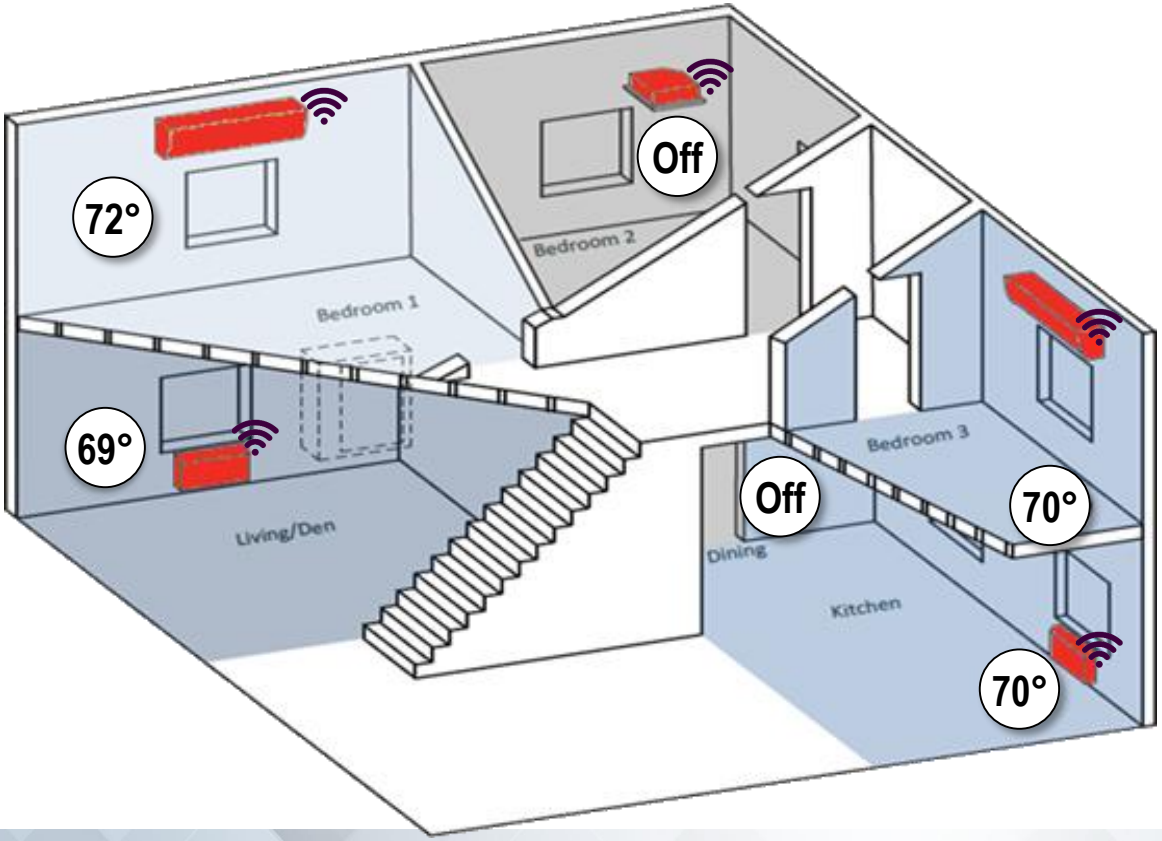
Customer choice to control & monitor their Mitsubishi Electric indoor units.

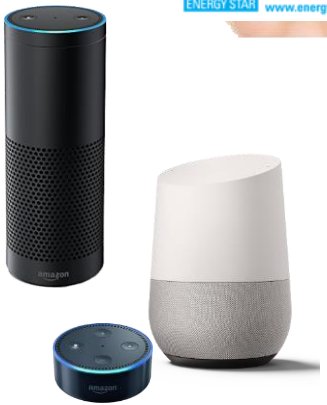
Any Smart Thermostat

Kumo Cloud

Kumo Station – Full Integrated Solution

Complete Control with Wi-Fi



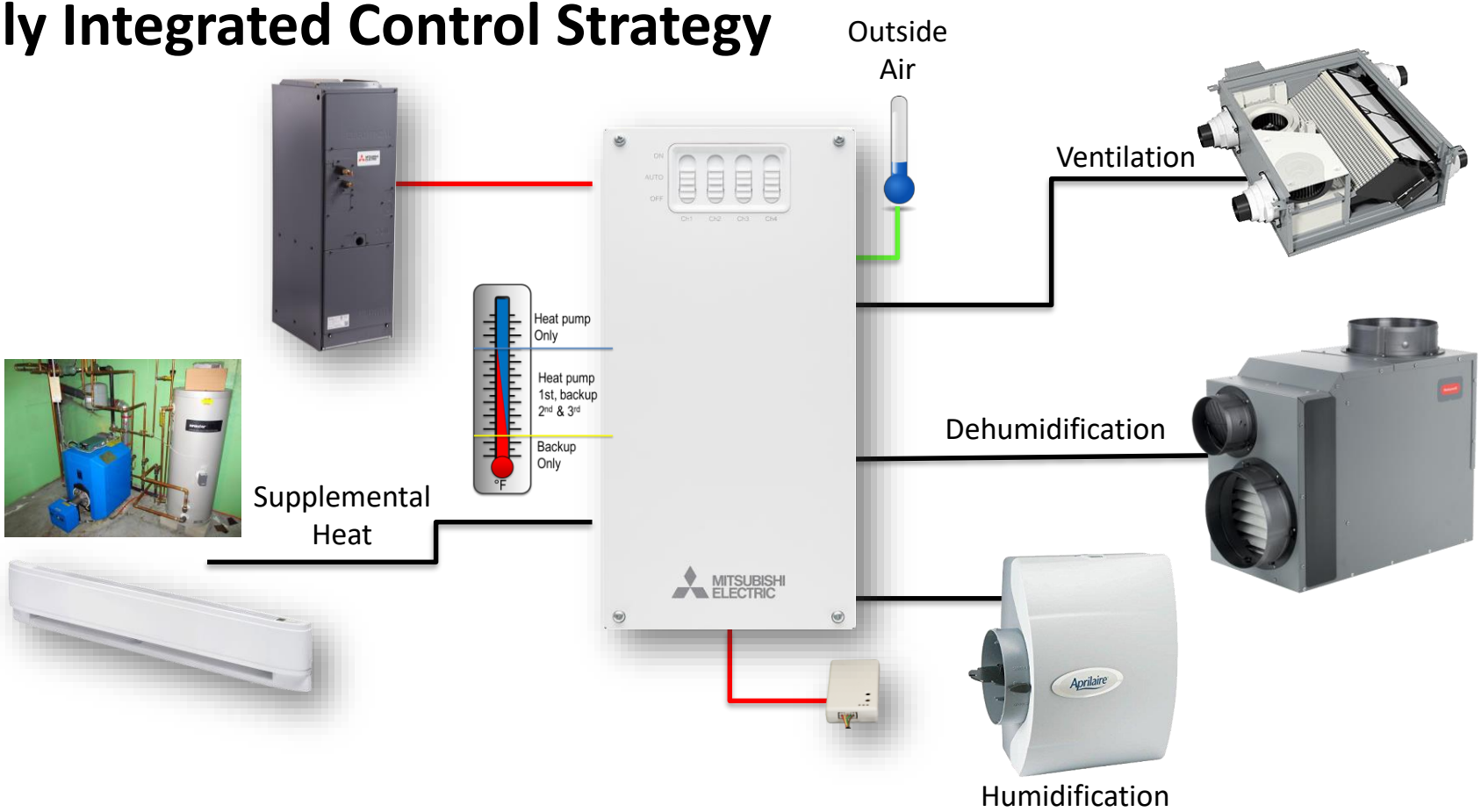


Available on the App Store

Google play

Available at amazon

Fully Integrated Control Strategy

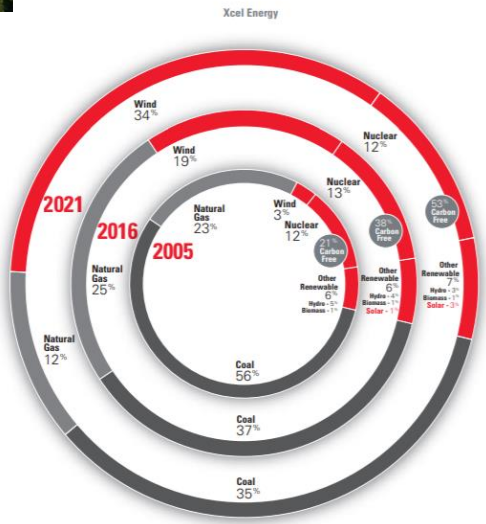


2019 Energy Star Most Efficient

Products must meet the following cooling and heating performance levels: 20 SEER, 12.5 EER and (for heat pumps) 10 HSPF.

- Achievement with Top Tier HVAC Efficiency and Controls
- Mitsubishi has 56 of 63 (89%) Mini-Split Models

The Grid IS Getting Cleaner!



Source: 2016 Xcel Climate Change & Greenhouse Gas Emissions CRR2016

PNM to be carbon free five years sooner

BY KEVIN ROBINSON-AVILA / JOURNAL STAFF WRITER
Monday, April 22nd, 2019 at 2:14pm

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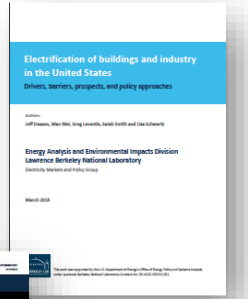
ALBUQUERQUE, N.M. — Public Service Company of New Mexico says all its electric generation will be carbon-free by 2040, five years earlier than required under the state's new Energy Transition Act.

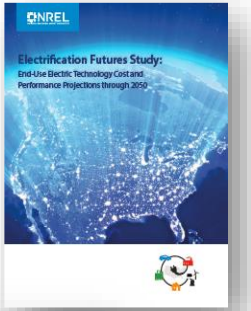
PNM President, Chairman and CEO Pat Vincent-Collawn
JOURNAL FILE PHOTO

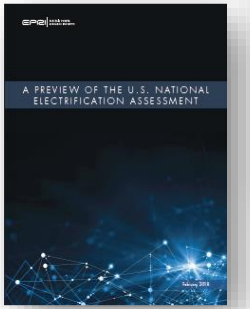
PNM President, Chairman and CEO Pat Vincent-Collawn announced a plan to accelerate its clean-energy goals Monday afternoon during an event at the Indian Pueblo Cultural Center. Gov. Michelle Lujan Grisham, members of the state's U.S. congressional delegation, and local and state officials attended the event, timed to coincide with Earth Day.

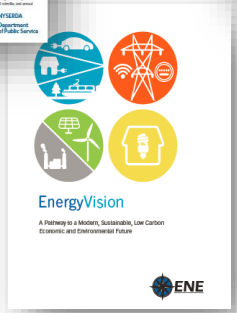
- Xcel Energy Carbon Free by 2050
- By 2021 Heat Pump has 10% reduced CO^2 levels over Nat. Gas (CRR Rev 2018)

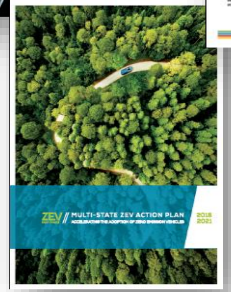
Market Shift – Electrification

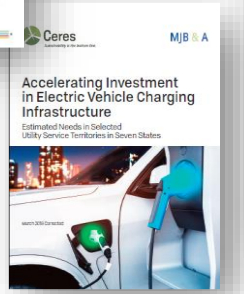


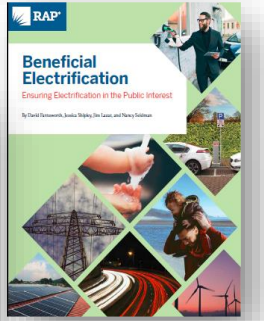


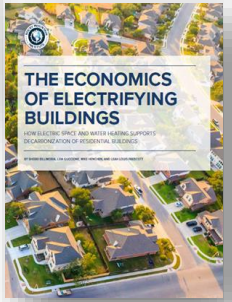












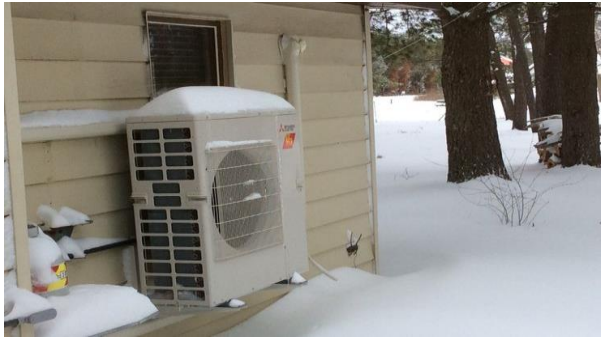
Two choices

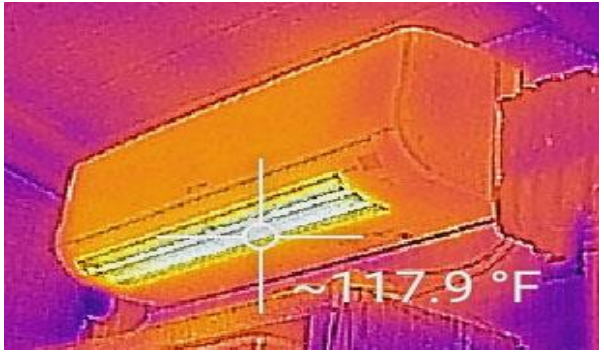
+

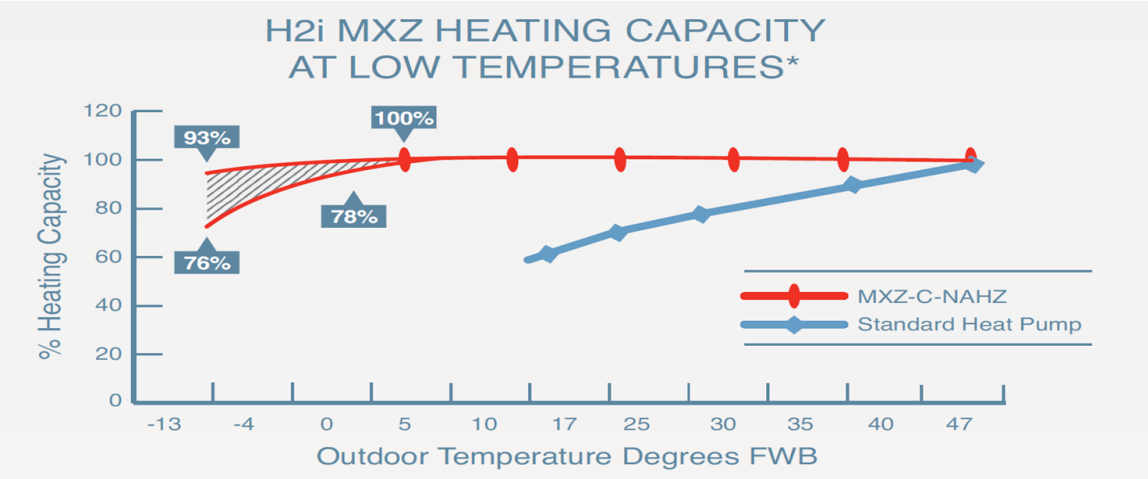
SO WHY MINI-SPLIT HEAT PUMPS?

- Grid Getting Cleaner
- They Work

Cold Climate…Not Problem!



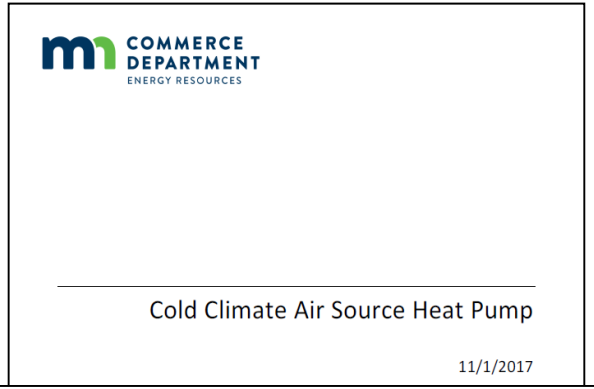


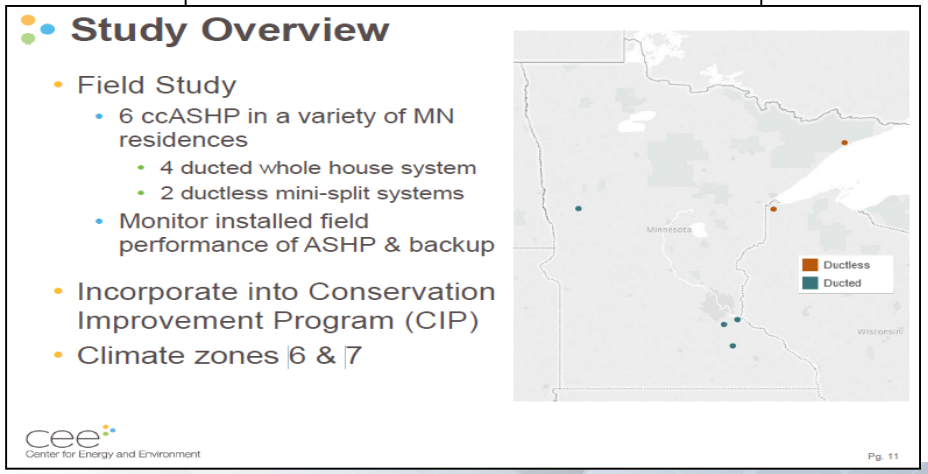


Cold Climate Heat Pump Research!

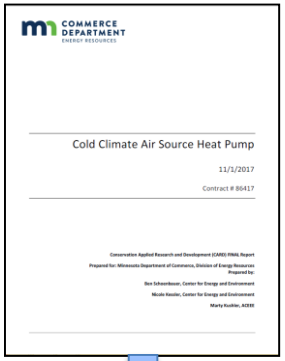
cee Center for Energy and Environment

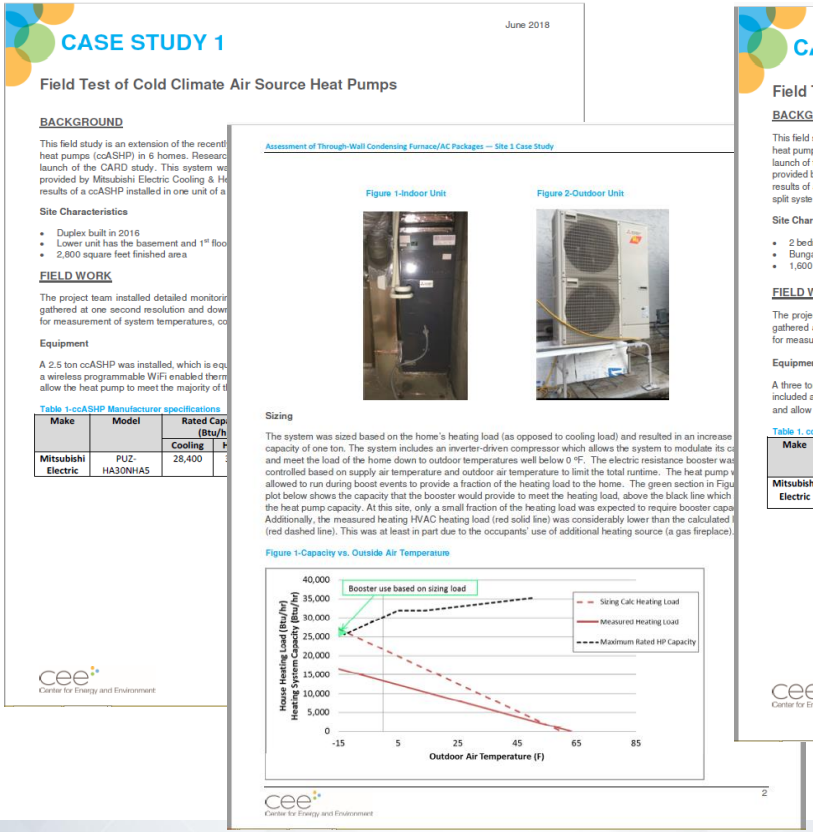
- Research Cold Climate Heat Pumps
  - Capability of Cold Climate Technology
  - Compared Heat Pumps w/propane backup
  - Ductless HP displacement strategy

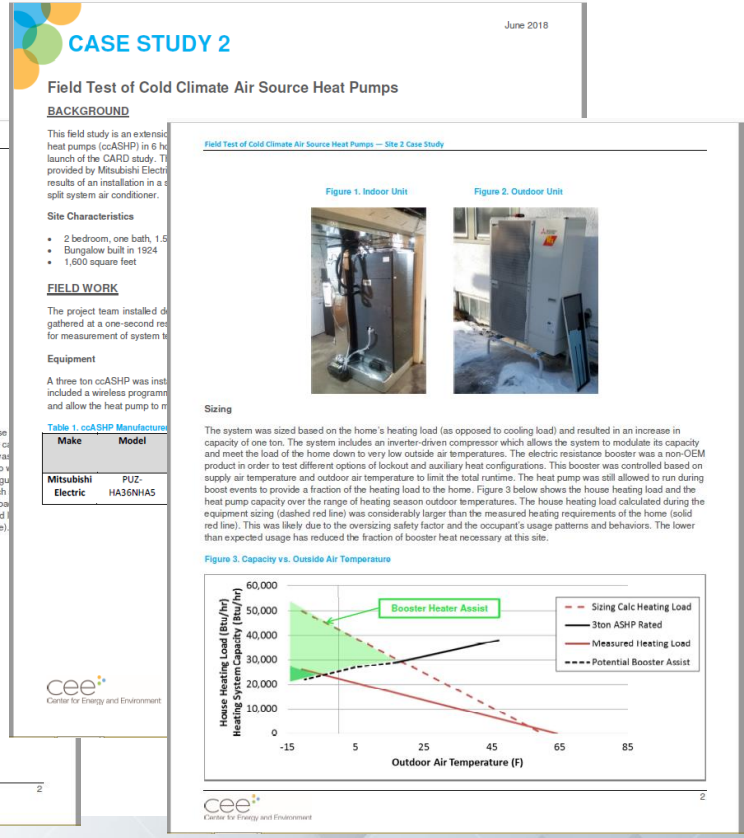




Addendum - Cold Climate Air Handler – Sole Source

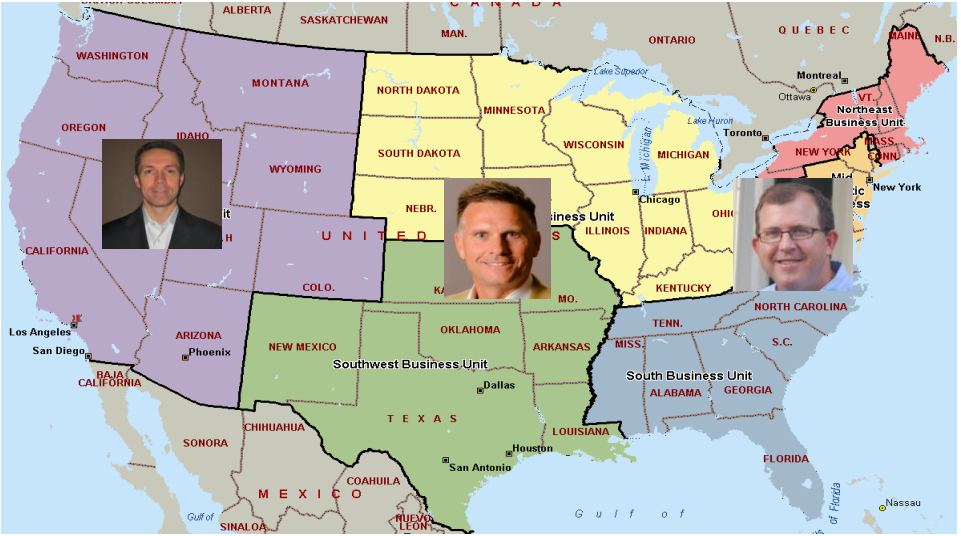






Utility Team

- 3 Utility Managers - Support Utilities & Implementers C
- Emphasis to Educate, Transform Markets, Best Practice Programs



MITSUBISHI ELECTRIC
COOLING & HEATING

Mini-Split & VRF Best Practice Program Recommendations

Your Energy Star Partner Here to Serve!!

Kevin DeMaster

Manager, Utility & Efficiency Programs

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