MITSUBISHI ELECTRIC TRANE HVAC US

SPEER
The South-central Partnership for Energy Efficiency as a Resource

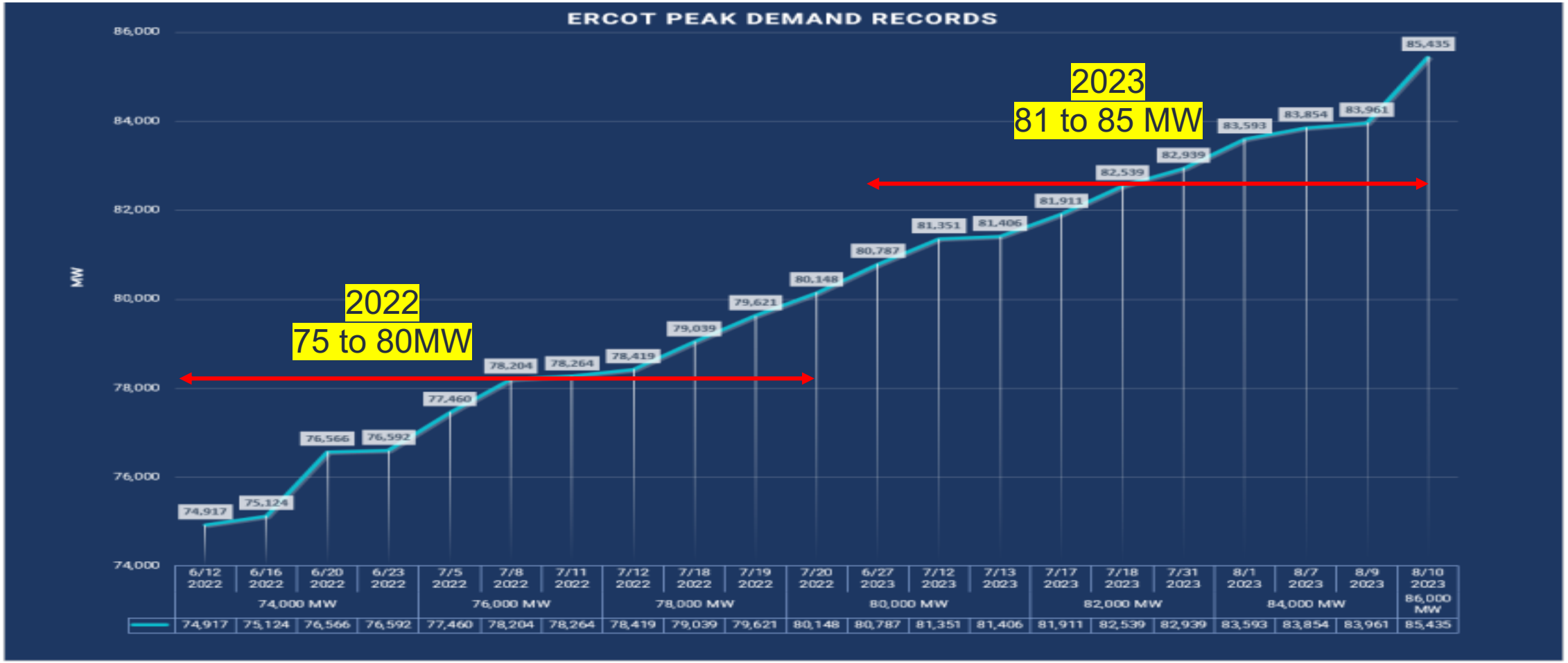
Advancing the Heat Pump Discussion in Texas

Sept 14, 2023

Kevin DeMaster
Mitsubishi Electric Trane HVAC
Sr. Mgr. Utilities & Electrification

Texas Grid Needs Better HVAC Load

New All-Time Peak Demands 2022-2023



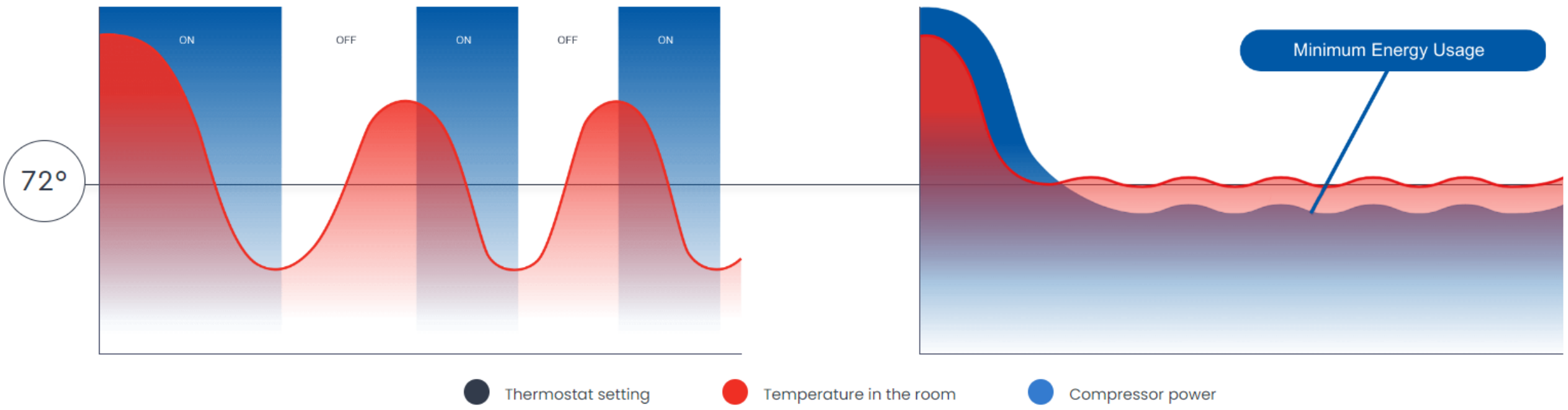
Heat Pumps are NOT EQUAL.
Variable Speed (Inverter) Compressor Grid Friendly

Conventional Systems

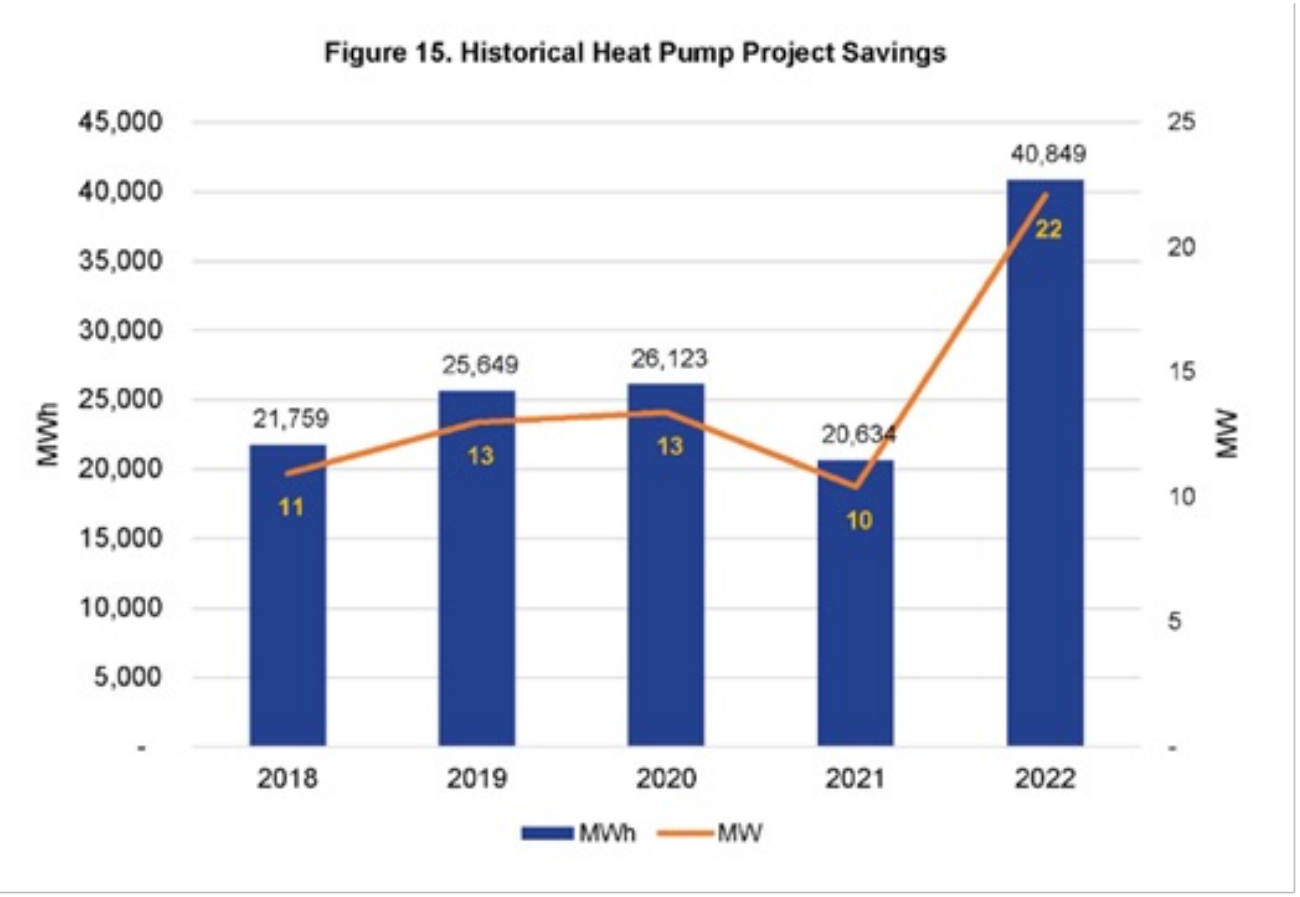
ON/OFF operation produces energy spikes and uneven temperature control

Mitsubishi Electric Trane Systems

Optimum control of frequency maintains temperature

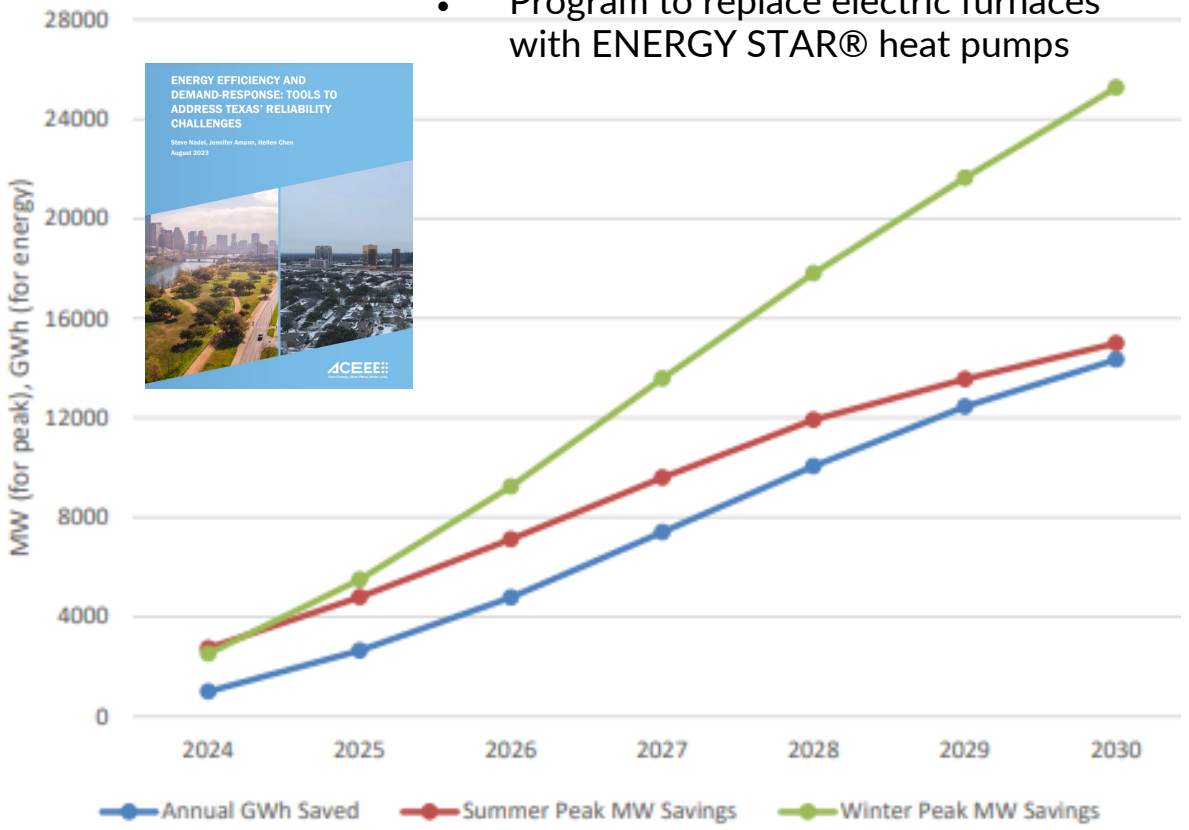


Heat Pumps Are Logical Choice per PUCT and ACEEE



Efficiency measures

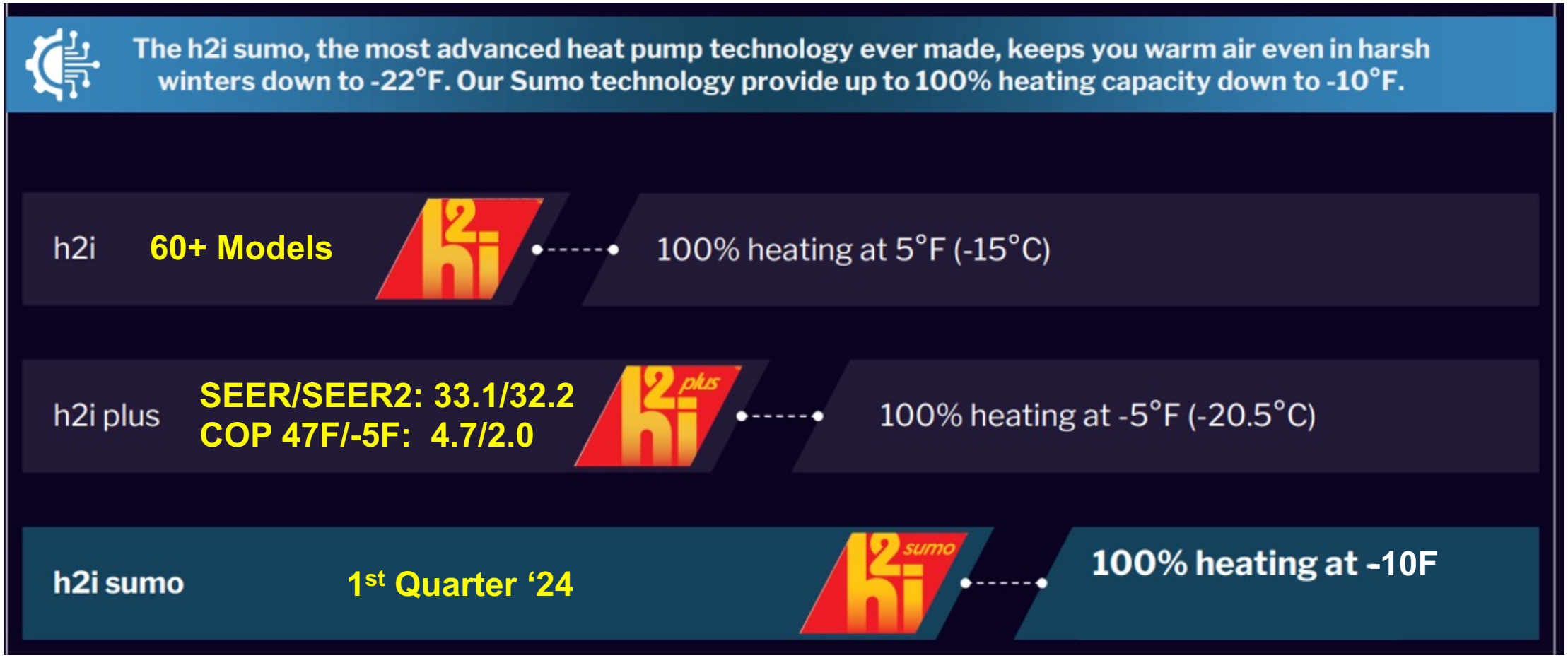
- Program to replace electric furnaces with ENERGY STAR® heat pumps



DRAFT Volume 1. PUCT Statewide Energy Efficiency Portfolio Report PY2022
July 1, 2023

Figure ES-1. Cumulative annual energy and peak savings by year from the sum of the programs analyzed

Cold Climate Products Solve Winter and Summer Peaking in Texas



Dual Fuel Solutions Are Additional Strategies to Maintain Grid Resiliency

Ducted Hybrid or All-Electric?

intelli-HEAT™ Dual Fuel System

This smart system not only improves air conditioning efficiency on hot days, but also determines the best source of heat (gas or electricity) on cold days, so your HVAC system is always running at peak efficiency and comfort.

Ducted All-Electric Air Handler

Our all-electric ducted indoor air handlers can replace older, less efficient central units and furnaces while using existing ductwork. The horizontal-ducted units take up less space and allow you to more efficiently manage smaller comfort zones with compact duct runs.