

# Thermal Energy

WATER AND NATURAL  
RESOURCES COMMITTEE  
CLOVIS NM, JULY 26, 2013

# WHAT ARE GEOTHERMAL HEATPUMPS

[http://www.youtube.com/watch?feature=player\\_embedded&v=y\\_ZGBhy48YI](http://www.youtube.com/watch?feature=player_embedded&v=y_ZGBhy48YI)

# WHY THERMAL ENERGY IS A NATURAL FIT TO RECEIVE REC'S

- Already recognized as a renewable energy by the state of New Mexico
- Already receives a 30% state tax credit as a renewable energy by the state of New Mexico
- Has proven to show .65+ KW demand reduction per ton of installed geothermal heat pumps
  - This information we plan to validate ourselves with a pilot program we are currently conducting

# Continued

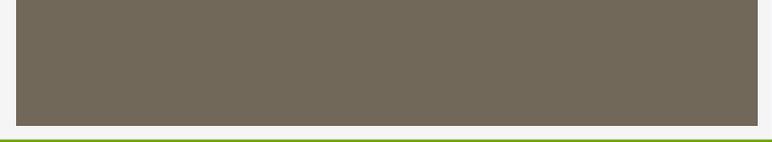
- Most energy efficient form of space conditioning available. EER rating exceeding 40.
- Has ability to remove electric water heating from summer peak thru a desuperheater.
  - Also gathering additional data with our pilot.
- Reduction in demand will lead to lower overall cost of power to end users
- Helps control/reduce additional power plant needs

# Continued

- Additional avenue to meet renewable energy mandates by electric utilities.
- Only demand side management program that does not infringe on member's lifestyles.
- For every kwh of electricity used by the heat pump, 4-6 kWhs of energy are coming from the ground's heat thru an earth heat exchanger.
- Constant, measurable thermal energy, regardless of time, season, or weather conditions.

# Win, Win...Win

- Over all less usage for end user..
- Lower demand costs for co-ops/ utilities
- Lower peak usage for generation plants allows for lower energy costs and smaller, more efficient power plants being build in the future.



Questions?