

Austin Energy's District Cooling Program

Austin Energy Utility Oversight Committee April 28, 2016

Jim Collins, Director On-Site Energy Resources





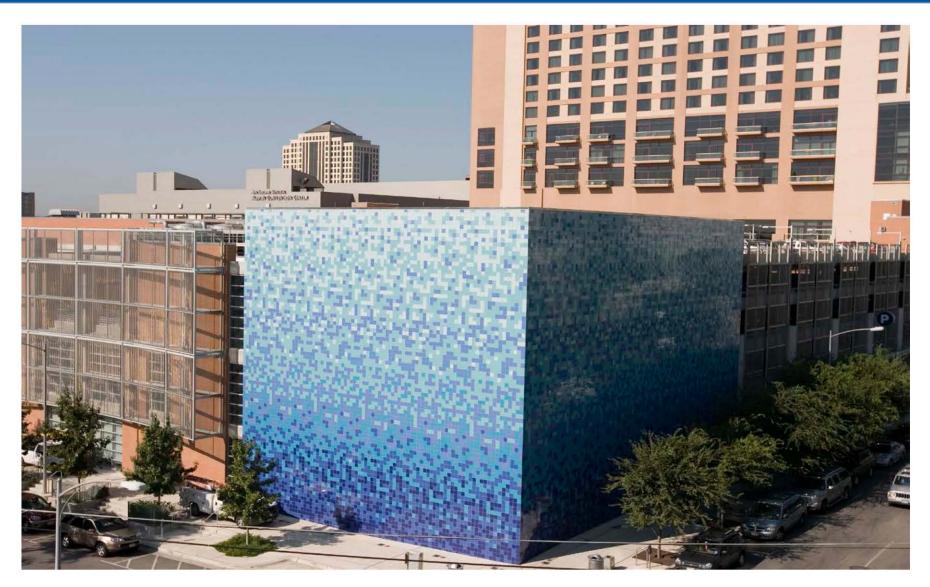
District Cooling



- An underground network of pipes providing chilled water to meet the cooling needs of multiple buildings
- Gathering load generates superior energy savings, reliability and quality than stand-alone systems
- District Cooling Program has connected 68 customers
- Over 18.6 million square feet of facilities (i.e. 165 City Halls)

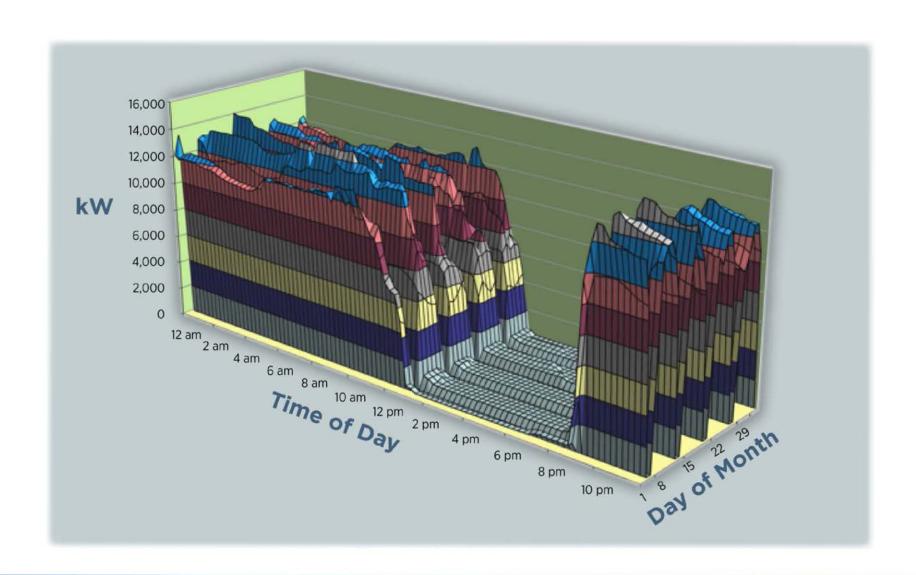


Keeping Austin Cool





Peak Demand Management





For District Cooling Customers:

- Reduces capital costs and frees up building space
- Must make financial sense over a stand-alone system
- Extraordinary reliability by design
- User-friendly system means low risk to customers

For the Community and Austin Energy:

- Supports compact and connected economic development
- Supports Austin Energy Resource, Generation and Climate Protection Plan to 2025
- Creates a long-term revenue stream
- Shifting peak electric demand means Electric Reliability Council of Texas (ERCOT) market and regulatory savings or avoided costs



Financial Business Model

Costs

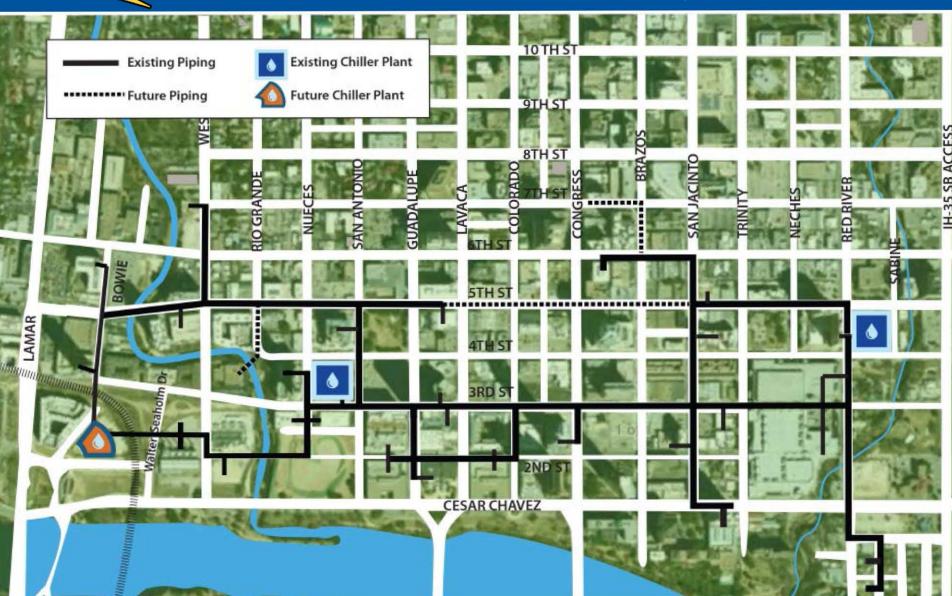
- Large initial capital investment
 - Plant
 - Piping transmission system
- Periodic additional capital investments
 - Distribution piping for customer connections
 - Heat exchangers and metering for customer's facility
 - Capacity increases at the plant

Revenues

- Long-term recovery of costs through customer charges and fees
 - Chilled water cost of service (same for all)
 - Recovery of connection in 15 years (varies on project specifics)
- Positive return on investments

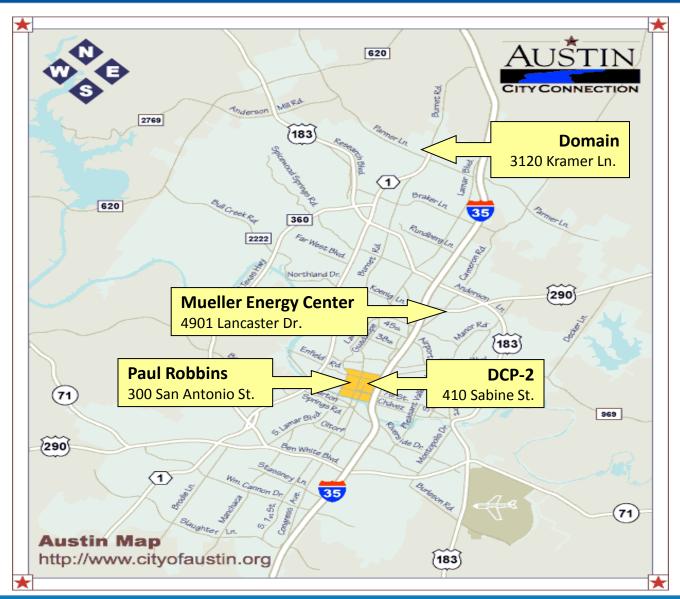


Downtown District Cooling





District Cooling Plant Locations





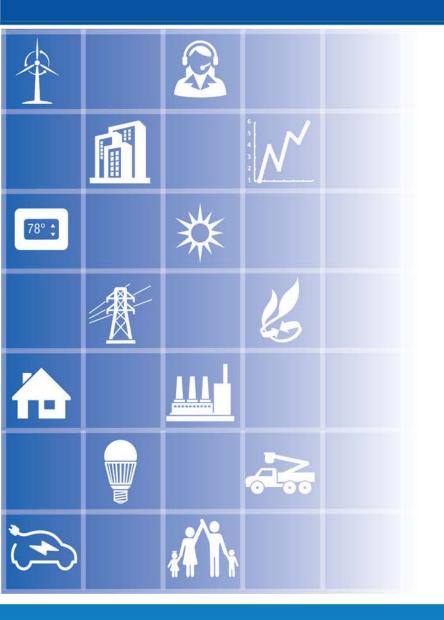
Program Recap

- 68 customers connected to District Cooling systems
- Sound financial model
- Providing 15MW of electric demand management toward 2025 goal of 20MW

Potential Expansion

- Expansion within existing plants
- Additional plants
 - Mueller expansion
 - Downtown expansion on Crescent Property
 - New satellite locations in support of Imagine Austin Plan
 Austin Community College/Highland Mall, South Central Waterfront,
 Central Health, and Innovation District

www.austinenergy.com





Thank you,

Questions?

