



# Mike Sloan on Austin “Generation Planning”

**Presented to:** Generation Resource Planning Task Force  
Austin, Texas  
May 28, 2014



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***What does  
Austin Want ?***

# ***Key Structural Issues***

- 1. AE Mission & Priorities***
- 2. Business Model***
- 3. Organization***
- 4. Oversight***

# ***What is AE's Mission ?***

**"Deliver clean, affordable, reliable energy  
and excellent customer service."**

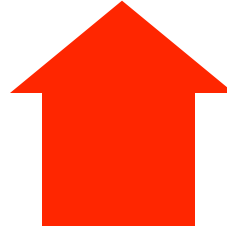
*In practice, other influences are:*

***... make \$\$\$ for city government***

***....maximize long-term benefits  
to people of Austin***

# Business Model Reform for "Clean & Affordable"

*Current Model*  
**GROWTH**

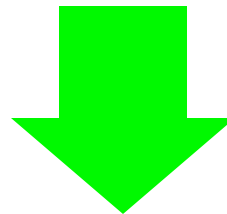


**%**

**Utility Revenue  
(Customer Bills)**

**General Fund  
Transfer (GFT)**

*Better Model*  
**REDUCE**



**FIXED**

*seek lower revenue requirements / stable GFT*

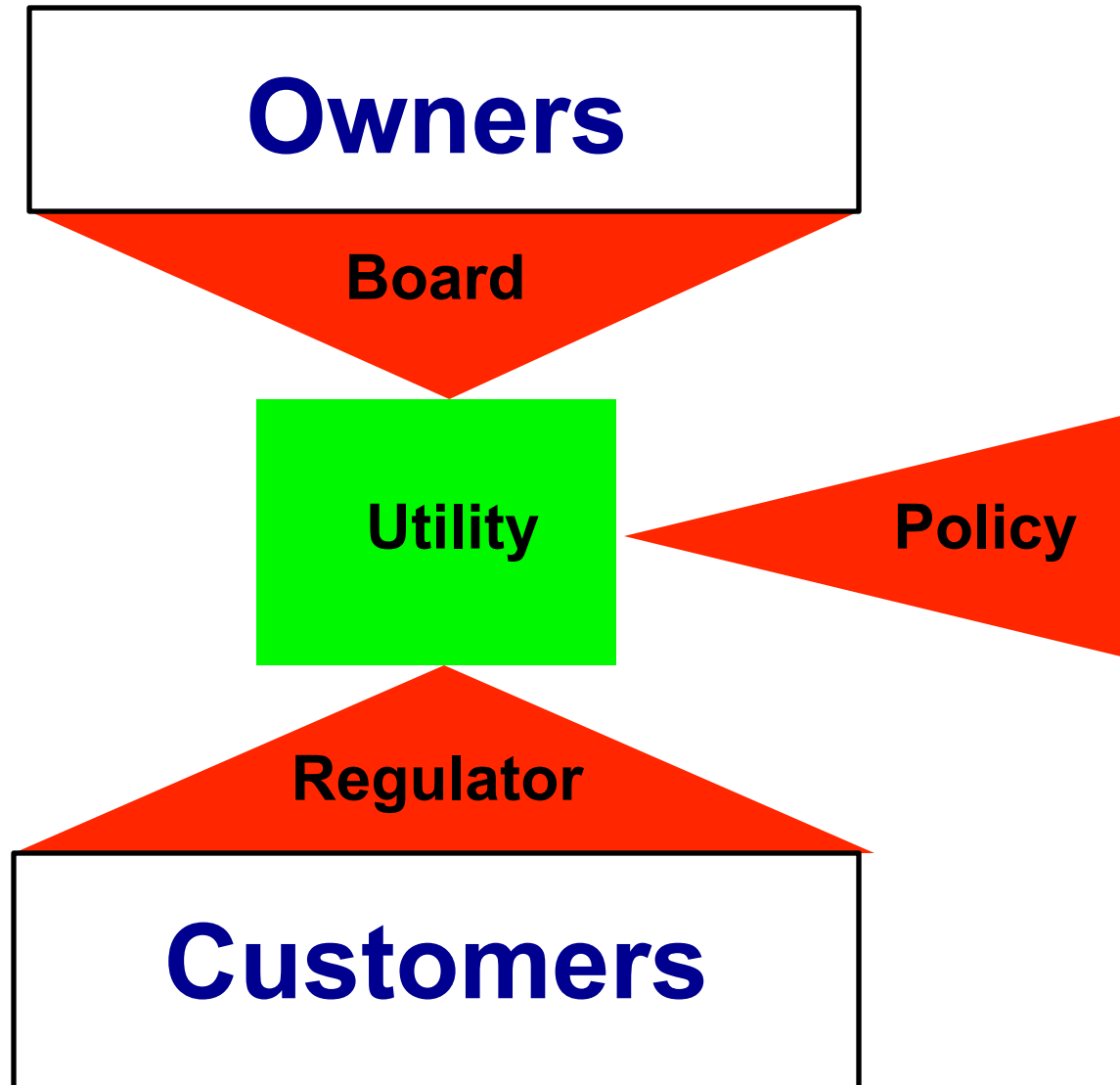
*Austin Energy currently seeks GROWTH in burning fuel & selling kWhs: bad for affordability and environment; change to a FIXED fund transfer allows City to reduce energy use*

# Basic Utility Structure

*In General: Utility owners make money from customers on prudent actions approved by a regulator*

*A Community-owned utility (such as AE) should have no conflict of interest since owner & customer are the same: the community*

*Austin City Council serves all major functions as Austin's Board, Regulator & Policy-maker*

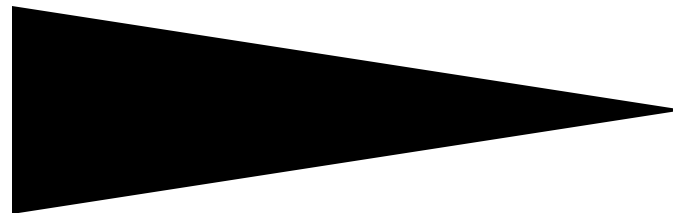


# Is Oversight of AE Sufficient ?

## Transparency:

**Transparent**

*stronger  
oversight*



**Secret**

*trust the  
utility*

## Governance:

*city council, board, etc*

## Oversight Staff:

*full-time professionals  
independent of utility?*

Austin Energy is likely the largest utility in the world governed by a city council, yet council has no full-time, professional energy advisors independent of the utility; many types of information on AE are no longer available to the public that previously were available.

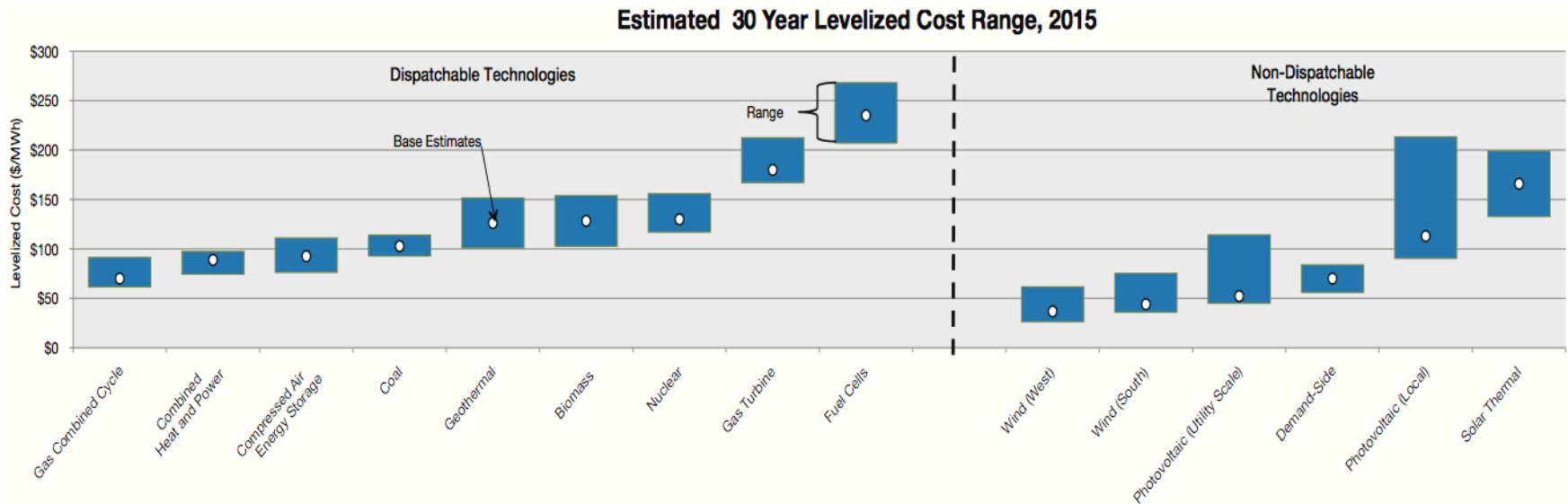
# ***Suggestions for Net Zero Carbon***

- 1. De-Carbonization Plan***
- 2. Seek Low-Cost, Clean Resources***
- 3. Maximize Efficiency & Local Solar***
- 4. Be Flexible*** (use market, voluntary rates, etc)

***As a general rule:***

***Low-Cost  
is better than  
Expensive***

# AE Resource Cost Estimates



Source: Austin Energy, Generation Plan update materials (extract), 2014

**Lowest Cost Options:**

**wind**

**solar**

**DSM**

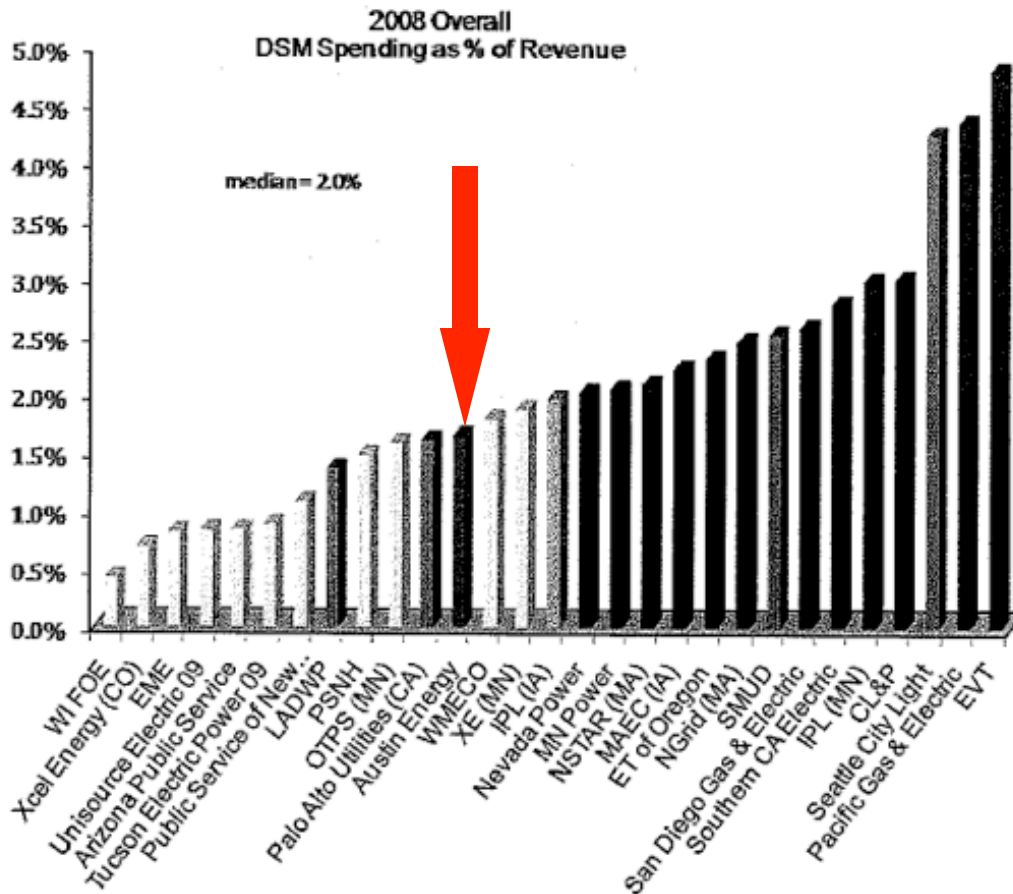
**natural gas**

There should be many DSM options at much lower cost than the range shown above

This graph is levelized cost only – it does not take into account the timing/value of resources

## Distributed Energy Services - Findings

# Energy Efficiency/DSM



This slide is from proprietary report on AE released to the public in 2012 (redacted form)

- AE spends less on energy efficiency as a percent of total retail revenues than most surveyed IOUs as well as two of four munis for which spending data was obtained (Seattle City Light and SMUD.)

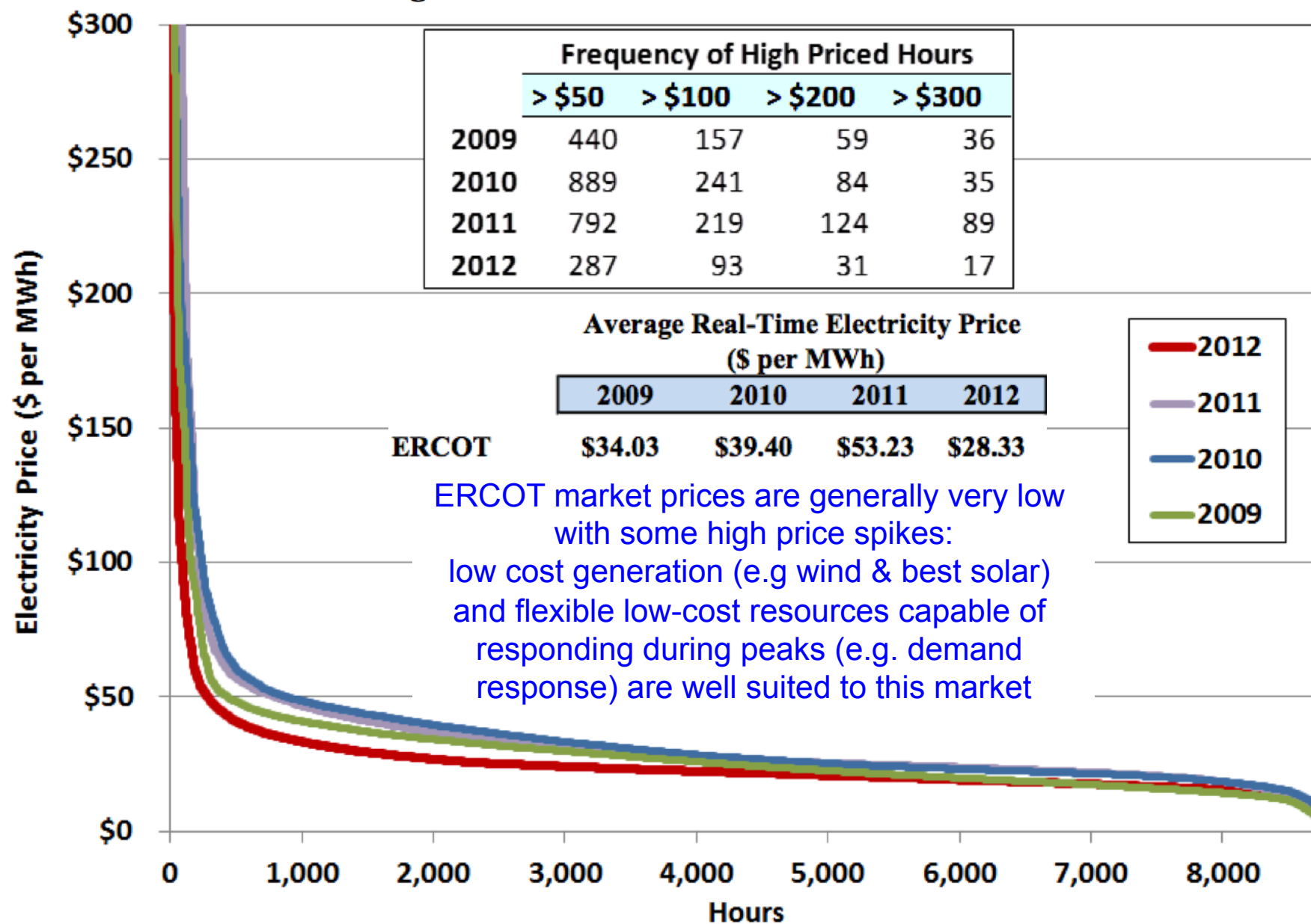
this source is illustrative of contrasting info from third party sources that differs from info provided by AE

Source: Utility DSM reports and NCI analysis

Source: Navigant Consulting, "Benchmarking and Program Review" Dec 2010.

[http://www.austinchronicle.com/media/content/1292117/ae\\_benchmarking\\_and\\_program\\_review\\_2.pdf](http://www.austinchronicle.com/media/content/1292117/ae_benchmarking_and_program_review_2.pdf)

Figure 4: ERCOT Price Duration Curve



# ***Big Ideas***

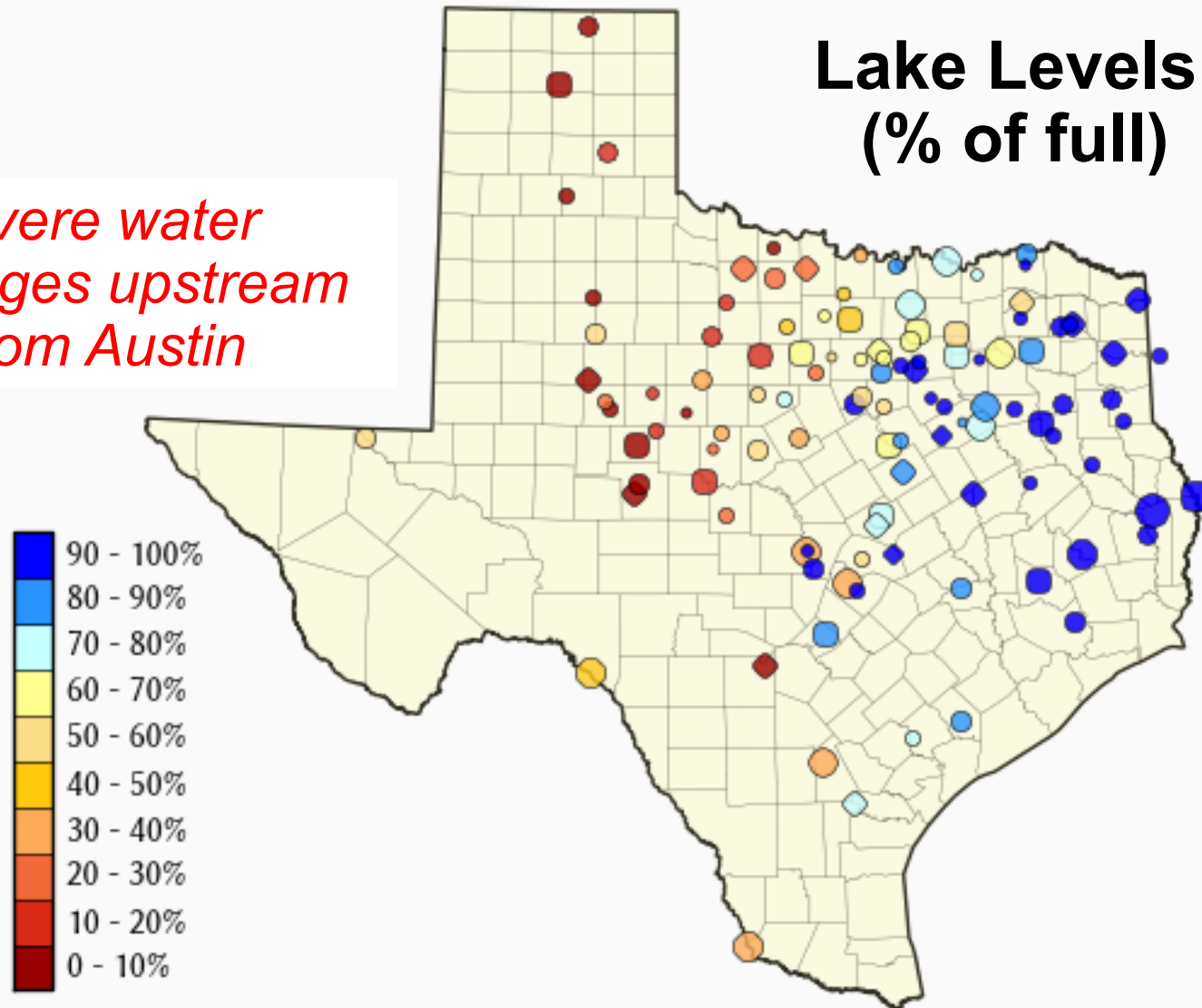
***(use AE to help solve Austin Problems)***

***Water:*** *manufacture fresh water using de-salinization operated as energy "storage" for AE*

***Traffic:*** *electric mass transit with electric car carriers*

# *De-Salinization operated for Energy Storage*

*severe water  
shortages upstream  
from Austin*



<http://www.waterdatafortexas.org/reservoirs/statewide>

# ***AE can help spearhead Electric Transportation***

*Austin Energy  
owns / owned  
about 1,000  
railroad cars for  
transporting coal*

*Austin could sell this  
coal asset & re-invest in  
higher priorities, such as  
EV programs or electric  
mass transit*



*Photo Source: U.S. EIA*