

Central Georgia EMC, New Coal, and Clean Energy Solutions



Amelia Shenstone
Southern Alliance for Clean Energy

Southern Energy Network
Community Meeting
July 23 and 25, 2011

Who is the Southern Alliance for Clean Energy?

- **Southern Alliance for Clean Energy** promotes responsible energy choices that ensure clean, safe, and healthy communities throughout the Southeast.
- We are also a partner of **Georgians for Smart Energy** – a coalition of organizations working to create a smart, clean energy future for Georgia.

OVERVIEW

- Electricity in Georgia
- New Coal Plants – risks
 - Cost
 - Ethics
 - Health
- Responsible Alternatives

Georgia's Energy Profile

- Coal is the primary source of electricity generation (66%) in Georgia and one of the state's top water users
- There are no coal reserves in Georgia; we export more dollars (\$2.62 billion*) to import coal than any other state.
- Very little electricity generated from renewable energy sources
- Against national trends, 3 new coal plants proposed in GA

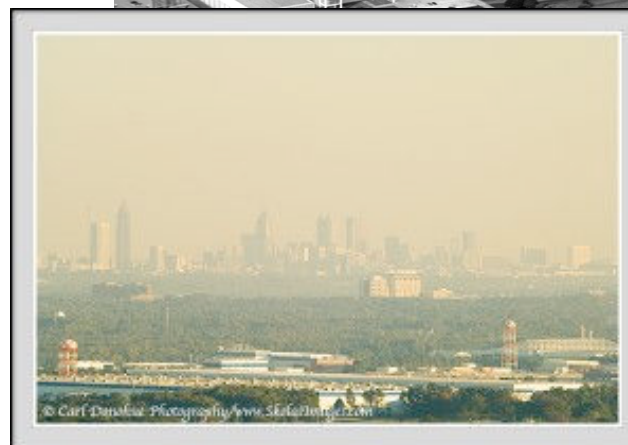
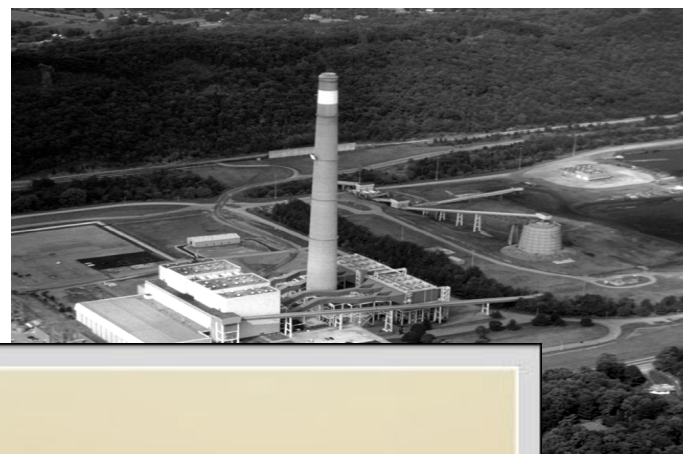


* "Burning Coal, Burning Cash." Union of Concerned Scientists, 2010. http://www.ucsusa.org/assets/documents/clean_energy/Burning-Coal-Burning-Cash_full-report.pdf

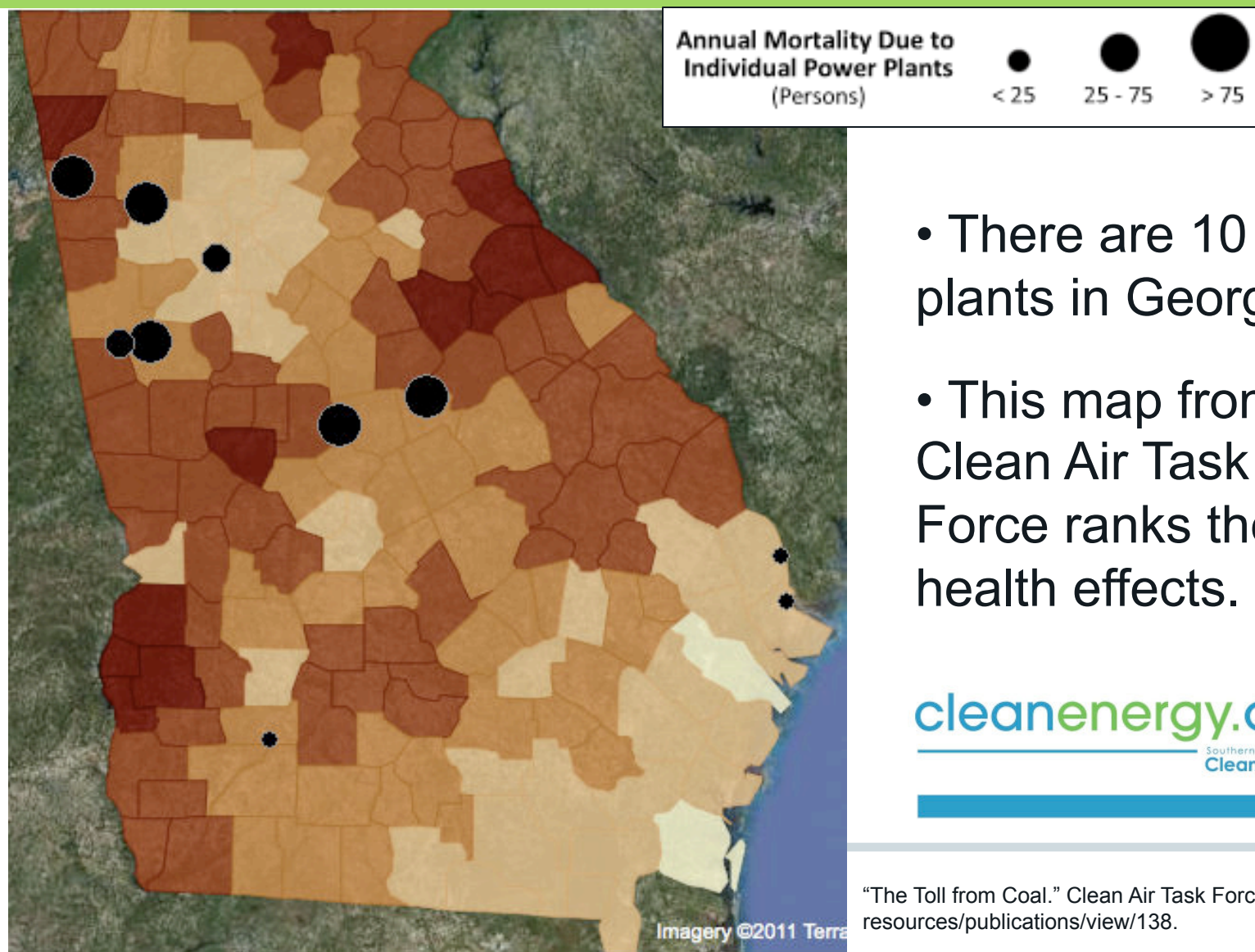
Air Pollution

Compared to other states, GA ranks:

- 4th for SO₂ (acid rain, heart & lung problems)
- 12th for NO_x (smog)
- 11th worst for CO₂
- 9th overall worst air pollution (NRDC)



Georgia's Energy Profile



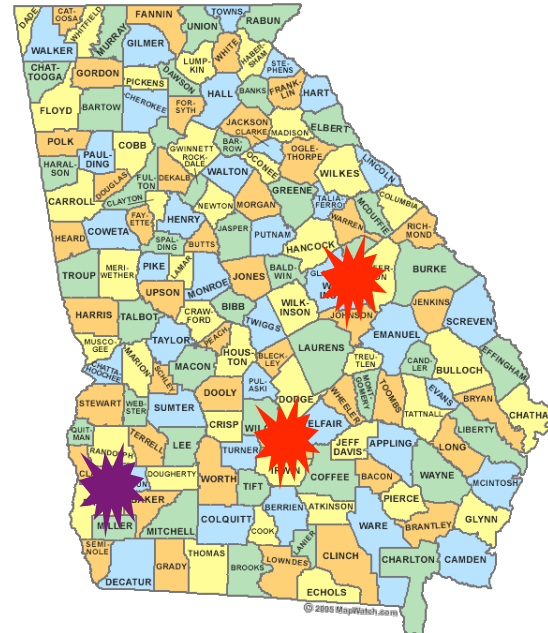
- There are 10 coal plants in Georgia.
- This map from the Clean Air Task Force ranks them by health effects.

cleanenergy.org
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"The Toll from Coal." Clean Air Task Force, 2010. <http://www.catf.us/resources/publications/view/138>.

Plants Washington & Ben Hill

- 850 MW coal-fired plants
- Proposed by five EMCs in a consortium called Power4Georgians, LLC
- Plant Washington: 2007
- Plant Ben Hill: 2009
- Plant Longleaf: 2001



Plant Washington is EXPENSIVE

- Plant Washington is projected to cost \$2.1 billion (with Ben Hill, that's \$4.2 billion) but that estimate is out of date.
- The five EMCs have already invested \$37 million into “exploring” Plant Washington and Plant Ben Hill (nothing built yet)
- Central Georgia EMC has already spent more than **\$6 million** (\$150/customer)

Financial Risks

- Your rates: 2011 Georgia Watch report
 - Two plants, if they stay on budget, would be \$4.4 billion.
 - **Cost overruns are a serious risk.** Plant Washington alone is likely to cost **\$3.9 billion** (with financing)



Financial Risks

What does that mean for your rates?

If built, Plant Washington alone could raise rates

\$165-290 a year for an average household.

That's a **10-20% rate increase!**

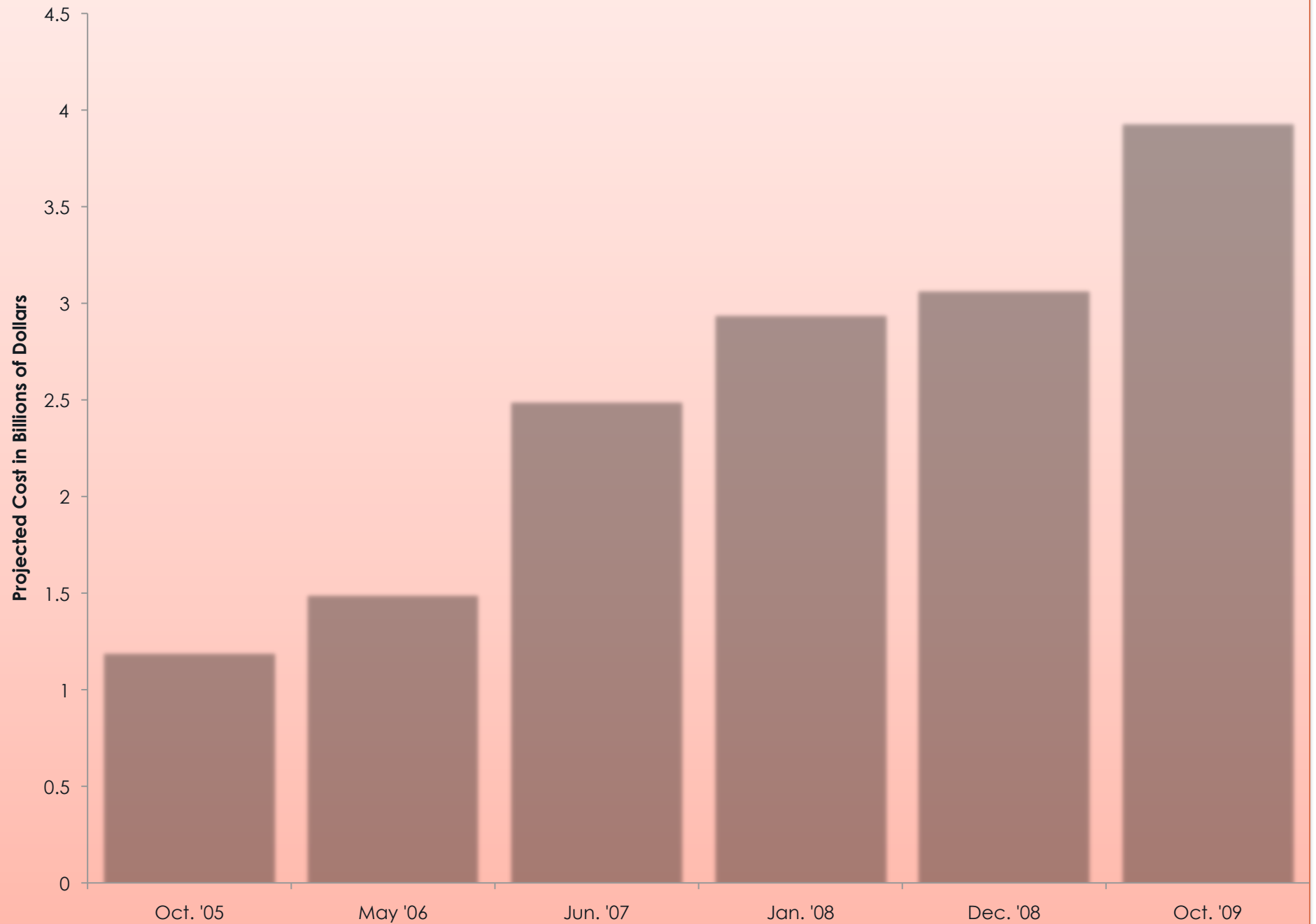


Case Study: AMP Ohio Plant

- Promises of the project
 - 750 MW Coal Fired Power Plant in coal country
 - Cost tripled between 2005 and 2009
 - 81 communities who contracted to purchase the power from the completed plant are on the hook for **over \$200 million** for project expenses incurred on research and development.



Costs of Canceled AMP-Ohio Coal Plant



Other Examples

- **Wolverine Plant, Michigan:** 600 MW plant near Bay City: State public service commission report found that financing costs would require the cooperative to raise rates by nearly 60%
- **Smith Plant, Kentucky:** nearly \$1 billion, 250 MW plant extension in eastern KY: **Canceled** Nov. 2010 because it wasn't needed & due to public opposition, but had already spent \$150 on materials - raising rates to cover
- **Karn-Weadock Plant, Michigan:** 830 MW plant jumped from \$2 billion in 2007 to \$3.5 billion in 2009 and was **canceled**.

Questions:

Central Georgia EMC has not publicly disclosed

- the updated cost estimate for this plant
- Studies to show that we need it

The CGEMC Annual meeting on August 3 is your chance to ask these questions!



Risky Business

Q: Who's behind these expensive, coal plants?

A: Power4Georgians, a consortium of EMCs including CGEMC.

- Central Georgia is the 3rd largest spender.
- Looking deeper: Cobb EMC is the leader.

Risky Business

Who is Power4Georgians?

- Originally 10 EMCs, but 4 dropped out in April 2009. Cobb EMC bought Pataula, leaving 5.
 - Cobb EMC
 - Snapping Shoals EMC
 - Central Georgia EMC
 - Upson EMC
 - Washington EMC



What We Know

- Cobb EMC's CEO, Dwight Brown, is the "organizer" of Power4Georgians, LLC & an early promoter of Plant Washington
- Dwight Brown, was re-indicted on 35 counts of racketeering, theft, false statement, and threatening witnesses on July 7, 2011.
- Brown is business partners with Dean Alford, the man in charge of Plant Washington (head of Allied Energy Services)



Risky Business

- Dean Alford is the spokesman for Power4Georgians
- He worked for Dwight Brown as a VP at Cobb Energy, and his company, Allied Energy Services, was a fully owned subsidiary of Cobb Energy
- Allied got a **no-bid** contract to build the plants. Allied has **never built a coal plant**.



Questions

Central Georgia EMC has not publicly disclosed how much it has paid Power4Georgians, Allied Energy Services, or Dean Alford.

The CGEMC Annual Meeting on August 3 is your chance to ask.



Health and Environmental Impacts

Coal plants cause many health problems:

- Air pollution (heart & lung disease)
- Mercury poisoning
- Deposits toxic ash on land
- Strains water supply



Health Effects of Coal Plants

The Clean Air Task Force estimates that coal plants in Georgia cause:

- 536 deaths
- 396 hospital admissions
- 728 heart attacks
- More than 13,000 asthma attacks



The total cost is over \$6 billion annually.

Health Effects of Coal Plants

- Plant Washington and Plant Ben Hill would each emit:
 - sulfur dioxide (SO₂), which causes respiratory trauma; children are particularly at risk because they spend more time running around outdoors.
 - nitrogen oxides (NO_x), which cause respiratory distress in healthy people and send asthmatic people to the emergency room.
 - particulate matter so tiny it can enter the bloodstream through the lungs, causing respiratory illness, heart disease and even premature death.

Mercury



- Mercury is a neurotoxin that interferes with brain and nervous system.
- EPA estimates that only **19.82 pounds of mercury per year** make the fish in the Ogeechee too toxic to eat.
- The river already receives nearly 2x this amount of mercury from air pollution (36.16 lbs/year).
- Plant Washington **alone** would emit 3 times more mercury.



Coal Combustion Waste (CCW)

- Contains arsenic, mercury, lead, chromium and cadmium
- Storage of this waste is not regulated AT ALL in Georgia.
- Pollutants enter the environment
 - Dust particles
 - Leaching into groundwater or surface water

Health Effects of Coal Plants

- Coal Plant air pollution disproportionately affects communities of color.*



- Asthma attacks send African Americans to the emergency room at **3 times** the rate of others.
- 71% of African Americans live in areas that violate air quality standards, compared to 58% of others.
- In 19 states, African Americans are more than **TWICE** as likely to live in neighborhoods where pollution causes the greatest health danger.



* Facts from "Air of Injustice." Clean Air Task Force and the Coalition for the Peoples' Agenda, 2002. http://www.catf.us/resources/publications/files/Air_of_Injustice.pdf

Guzzling water

DROUGHT



- Electric utilities use 68 percent of all surface water – biggest user in state.
- Average household electricity use consumes 3 times more water than its water use.
- Plant Washington would use up to 15 million gallons of water a day.

Questions

Is it worth paying *more* for power that harms our breathing, and harms our kids and grandkids?

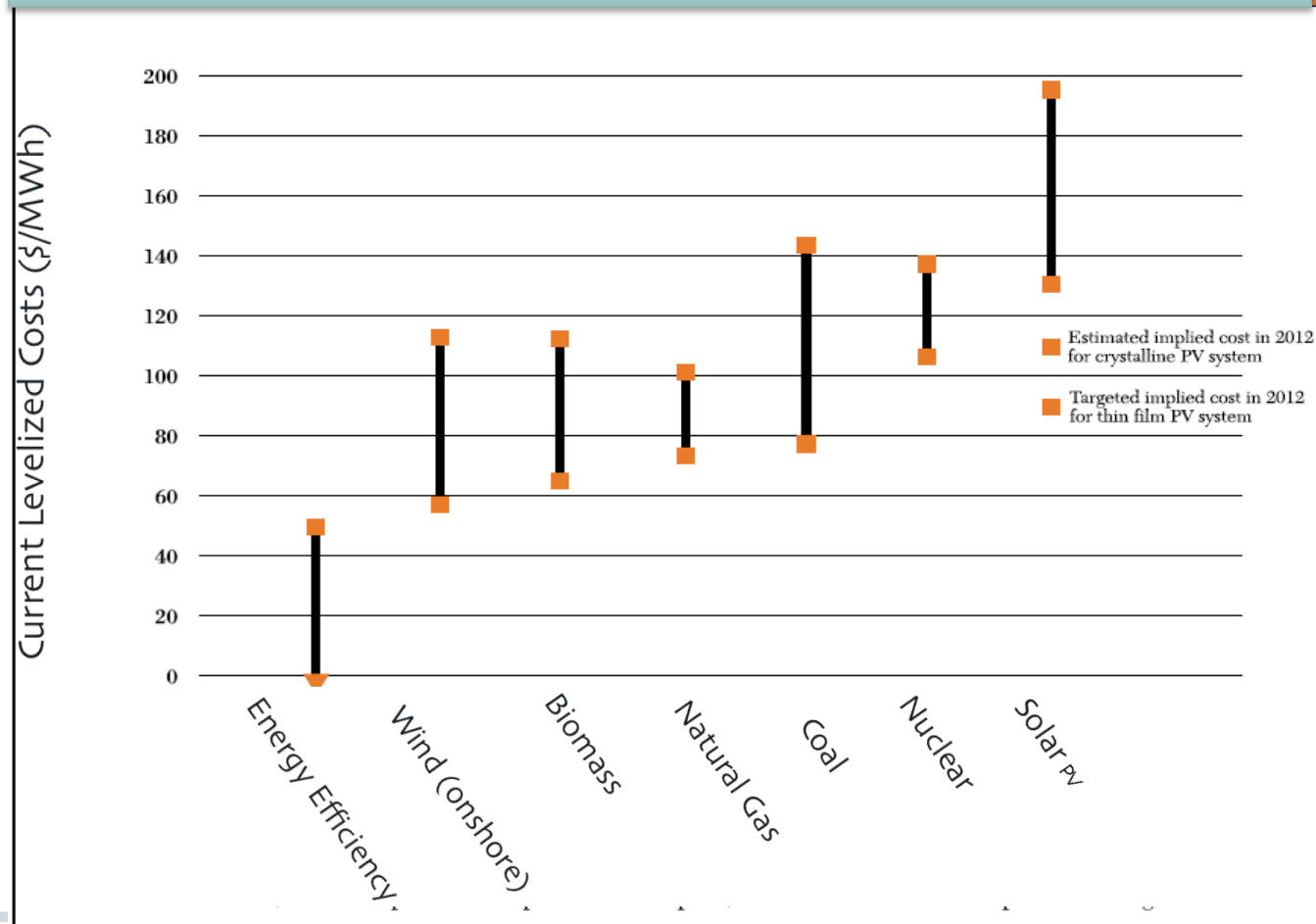
With frequent drought conditions in south Georgia, is this how we want to use our precious water resources?

The CGEMC Annual Meeting on August 3 is your chance to ask.



Solutions on Hand

Costs of Various Electric Power Resources²



Creech, et al. "Power of Efficiency," World Resources Institute, Southface, and the Southeast Energy Efficiency Alliance, April, 2009. Chart adapted from Lazard's 2009 "Levelized Cost of Energy Analysis – Version 3.0". http://www.southface.org/ez/media/power-of-efficiency_wriseeasouthface_april2009.pdf

Efficiency

- Using BETTER TECHNOLOGY to provide the same function
- Quickest and cheapest way to meet demand is to save energy
- **Lowers electric bills**
- ACEEE found that Georgia could avoid building 7 power plants the size of Plant Washington



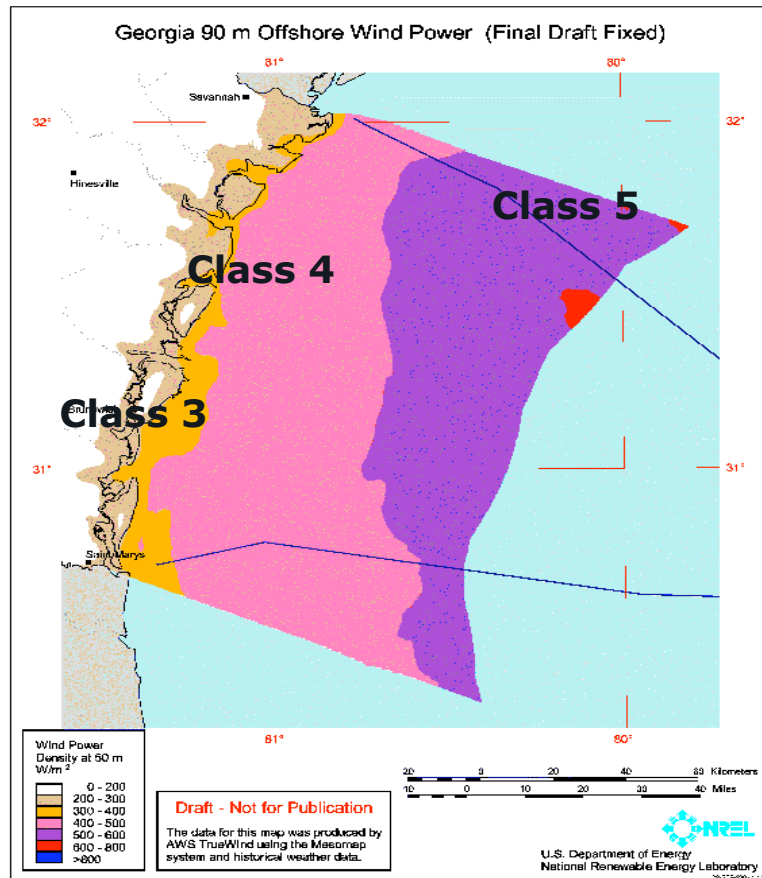
Biomass

- Georgia has enough biomass potential to sustainably meet 12% of the state's energy needs (UGA report)
- Locally produced energy source (Georgia has no coal)



Georgia Offshore Wind Map

90-M above Sea Level



Source: AWS Truewind, 2006



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Solar Power

- Solar generation prices constantly decreasing
- Tax credits reduce cost
- Local economy: this project in TN has panels made in Memphis



Questions

Central Georgia EMC has not disclosed any studies comparing Plants Washington and Ben Hill with other options.

The CGEMC Annual Meeting on August 3 is your chance to ask.



TAKE ACTION!

- ✓ Use Central Georgia energy saving incentives to upgrade your home
- ✓ Contact Central Georgia EMC and tell them you want to see an investment in Clean Energy not coal!
- ✓ Write a letter to your local paper

✓ Visit our website: cleanenergy.org

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TAKE ACTION!

- ✓ Attend the Central Georgia EMC annual meeting of members:

10am Wednesday, Aug 3

CGEMC HQ

923 S. Mulberry St., Jackson

Ask your Board for answers!