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The Ideal Plan Balances...

- Economics, affordability, and social equity
- Environmental improvements and impacts
- Flexibility to respond to changing market and regulatory forces

Portfolio Approach...

Cost-Effective and Socially Conscious Conservation

- Our current programs offer a good base and credibility
- RIM is the standard test used by Florida utilities. It assures that every ratepayer benefits, and assures that cross subsidies do not occur
- Additional conservation now may delay our capacity demands by perhaps a year, but must not unfairly burden low and moderate income customers
- But truly meaningful conservation is cultural and must be seen as each citizen's worthy contribution to the common good – IT'S UP TO EACH OF US – It's individual conscience and choice that may be at some level catalyzed by GRU educational programs, however...
- A traditional funding mechanism, i.e., municipal bonds and grants, for large conservation investments does not exist
- The City should set an example of conservation best practice, and...
- GRU can raise the conservation bar in commercial lighting and air conditioning, and...
- Development opportunities exist for low-income weatherization in collaboration with local community service providers
- Eliminate all charges for installation of photo-voltaic systems
rate in = rate out

To burn or not to burn, that is the question.

Unfortunately... It's burn

Our capacity needs for 2012 cannot be cost-effectively met by any alternative technology or combinations thereof

We must address the consequences of CO₂ emissions!

Circulating Fluidized Bed Boiler (CFB)

- Omnivorous boiler capable of burning wood, coal and petroleum coke
- Provides fuel flexibility options during periods of supply fluctuation
- Regulated emissions (NO_x, SO₂, and small particulates, PM_{2.5}) will markedly decrease from today's levels for both DH3 and retrofit DH2 - a serious economy of scale
- Fluidized bed offers good metal (i.e. Hg, vanadium, etc.) removal
- Carbon intensity will diminish, i.e., mass carbon per MW
- Total carbon emissions will increase, unless otherwise mitigated

Incorporate Biomass

- Design CFB for up to 110 MW (50% of 220 MW capacity) of wood waste
- CFB offers up to 50% higher efficiency and 50% lower carbon intensity than small biomass units, and more advanced emission controls than smaller units
- Initiate immediately a comprehensive analysis of local sustainable biomass supply and economic/environmental consequences of harvesting

The Green House Gas Reduction Fund

An innovative approach to reducing carbon emissions
Focus the experts and concerned citizens on actual reductions

- Given natural gas is the least carbon intense burn, and...
- Future natural gas cost and supply is very problematic
- The estimated difference in cost to incorporate natural gas verses CFB is invested in local carbon mitigation programs to reduce local carbon emissions to the natural gas standard, such as...
- Renewable energy project development - Gainesville could become a national center for the advancement of viable technologies
- Provides potential funding for non cost-effective energy conservation
- Could help solve transportation emission problems
- Appointed professional czar in consultation with citizen task force identifies opportunities and recommends programs to City Commission
- No designated sunset for GHG Program - periodic review by city commission

We must move forward to progress

Process Considerations

Year 1 - Acquire top professional services to do a design

- Issue an RFP for competitive proposals (3-4 months)
- Provides the basis for the permitting process
- Provides the basis for alternative project proposals
- Provide design against which alternatives will be compared
- 6-9 months design finalized

Year 2 - Provide for true peer review

- Creative, innovative, national and international professionals
- If the project can be done better, cheaper or with less risk then this process should reveal the alternatives
- RFP administered (2006) by City Auditor to emphasize independence
- 1 year process

Year 3 - Needs Determination before the Florida Public Service Commission

- Must prove need for additional generation capacity
- Must prove RIM cost effective energy conservation has been addressed

Power Plant Siting Approval from the Governor and his/her cabinet

- Significant opportunities for interveners, critics

Year 4 - Finalize power plant design

- Purchase major equipment (e.g., boiler, turbines, etc)
- Majority of the capital costs.

Direct staff to draft and recommend to the City Commission a process time line to include emphasis to major decision points.