- 1. Please provide comments you have on legal aspects of the Clean Power Plan or proposed standards of performance for Modified and Reconstructed Sources that you believe are important for the Commission to review.
  - The City is concerned that EPA is not providing sufficient time to review and comment on its proposals, which are comprised of two major components – one for existing utility units and one for reconstructed and modified units. Although EPA has provided 120 days, the complexity of the proposal and the current lack of supporting documentation that EPA has provided result in the need for additional time in which to evaluate the proposals and develop meaningful comments. Evaluation of the proposed emission rate goals for Florida and their "building block" components requires an extensive analysis of the state's generation and transmission systems and their associated capabilities and limitations. A thorough review of EPA's analysis (when the information becomes available) requires months rather than weeks.
  - Of the four "building blocks" EPA proposes as part of a "system of emission reduction" under its "Option 1" approach, only the first can be applied by individual sources subject to the proposal. The other three measures are out of the control of any particular regulated source and are predicated on actions by others. This is inconsistent with EPA's obligations under the CAA.
  - As currently construed, the Clean Power Plan imposes obligations that are outside the scope of the powers of the regulatory agency that would implement and enforce environmental regulations. In order to have such delegate such authority would require a restructuring of state government that would take a number of years, which is well outside the timeframe described by the rule.
- 2. Please provide comments you have on technical aspects of the Clean Power Plan or proposed standards of performance for Modified and Reconstructed Sources that you believe are important for the Commission to review.
  - The data that the EPA has used to generate the proposed emissions rate of 740 lbs CO2/mWh for the state of Florida is flawed. EPA has used nameplate generation capacity ratings, when in actuality either summer generation ratings or a weighted average of summer and winter ratings would be more accurate. In many cases, a facility is unable to reach the capacity that EPA believes is achievable.
  - Physical incapacitation of the ability for some electrical generation units to reach significant percentage of capacity. In COT's case, at the Hopkins facility a new combustion turbine was paired with an old steam turbine and permitted as a two on one configuration, although at this time only one CT is paired with the steam turbine. The steam turbine is rated as 260 MW, but truly only 140 MW (when duct burners are being used) can be obtained from this unit. That's 120 MW that EPA proposes is available from this unit, which isn't possible.

- EPA's use of net rather than gross electricity generation as a basis for the emission rate goals in the proposal. Use of net generation penalizes utilities for the electricity that is used to power pollution control systems that are, in fact, mandated by other federal environmental regulations. In addition, EPA's proposed new source CO2 standards under section 111(b) are based on gross generation. For consistency, gross generation should also be used for the section 111(d) standards. Furthermore, the administrative burden of documenting electricity use of auxiliary systems involved is onerous.
- EPA states that conservation and demand side management programs will be included in building block 4 of the Clean Power Plan. No guidance has been given on how states can implement this block. Some direction or guidance should be given prior to states submitting State Implementation Plans.
- EPA's four building blocks were designed independent of each other, yet there is doubt that any consideration was given to the interplay of the four building blocks with each other. A more thorough analysis of this mixing of building blocks is not only necessary but could point to inconsistencies in EPA's plan.
- An analysis of increased maintenance costs, down-time and the effects on the life-cycle
  of natural gas combined cycle units that will now be utilized on a more frequent basis in
  order to achieve the 70% capacity factor, is needed. A natural degradation of the
  machines is expected to occur on a more rapid pace and thus a reduction in the
  capability of the machines is expected in later years.

## 3. Please provide input on the assumptions EPA employed in setting the Florida-specific interim and final emission targets in the Clean Power Plan.

- The Clean Power Plan supposes the ability of facilities to dispatch units in a manner that ignores that certain generating units in specific locations are important for electric grid support and that the system many not be able to accommodate significant shifts in unit dispatch order and extent.
- Tallahassee's load profile for the area being served by the City does not allow for high utilization factor.
- EPA expects Florida utilities to increase demand-side energy efficiency by 1.5% per year. Sustaining this goal is unprecedented. Because of efficiency improvements already made, achieving additional increase in demand-side energy efficiency will be difficult. In addition, adoption of these measures is up to the customer, so no regulatory body or utility can force energy efficiency measures to be implemented.
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- Fuel flexibility is particularly important for Florida, given our peninsular geography and susceptibility to hurricanes and the accompanying power outages and potential for fuel curtailments. EPA failed to consider this critical factor in its analysis.
- EPA assumed very little growth in customer demand despite Florida experiencing a growth in population. In addition to replacing generation by older units, EPA needs to

consider the effect of increased population growth on demand and the need to bolster generation fleets.

EPA assumes that a mix of renewables: wind, hydro, solar and biomass will be plentiful, however, if all facilities must employ renewables only solar and biomass are viable options in Florida. In order to meet the expected demand and achieve the proposed emissions targets, Tallahassee would need to invest in enough land to accommodate our future needs. With solar requiring approximately ten acres per MW, the City would need about 5000 acres in order to produce enough megawatts to lower our intensity to the 740 lb/mWh required by the rule, but this does not account for future growth. This represents a significant and costly investment, which the City would have no choice by to pass on to its customers. Additionally, in order to ensure reliability and viability of the project, any solar project would still not obviate the need to build more generation to meet peak demand at any given time.

## 4. Should the effects of actions implemented after 2005, which resulted in a lower CO2 footprint, be included in the EPA's Clean Power Plan, and if so, explain how and why?

- The City supports the adoption of an earlier baseline than 2012 for a number of reasons:
  - In reviewing the building blocks identified in the proposed rule, Tallahassee has been an early adopter of these building blocks. As a result of these actions, Tallahassee has reduced its carbon emissions by 42% from 1990, down to 960 lbs/MWH while simultaneously experiencing a 41% increase in customer demand. The City modernized the City's generation fleet to become one of the most modern and efficient electric generating systems in the state by retiring older generating units and replacing them with state-of-the art high efficient simple cycle and combined cycle generating units. This action alone has come at a cost of over \$300 million to the City's total asset value.
  - Tallahassee has implemented a vigorous and aggressive demand side management program prior to the proposed baseline year of 2012. EPA analyzed the impact of DSM in only one year (2011 to 2012) and extrapolated its impact in future years in order to reach the 2030 emissions target. Tallahassee's efforts from 2005 and beyond should be credited as it's had the desired effect of deferring the need for additional generation.
  - COT relies almost exclusively (>99%) on clean burning pipeline quality natural gas, doing so prior to the lowest natural gas prices that the country has seen in years.

## 5. Please discuss the achievability of meeting EPA's proposed Florida-specific interim and final emission targets in the Clean Power Plan.

• While EPA is asking states to achieve the proposed limits through coal retirements and increasing the use of NG plants, as well as increasing renewable energy and DSM programs (de facto outside the fence regulation), it is apparent that EPA will require reductions from natural gas facilities like Tallahassee. There isn't much more low-

hanging fruit that the City will be able to take advantage of in order to accomplish the goals without substantial investment in renewables.