

## **Air Permitting Discussion**

SECI Seminole Generating Station

Presented to Florida Department of Environmental Protection

Presented by:



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## **Air Permit Applications**

#### CAIR/Acid Rain Compliance Package

Units 1 and 2 upgrades

#### Unit 3 SCA

 Prospective netting analysis for Unit 3 and federally enforceable reductions from Units 1 and 2

### **Submittal Schedule**

#### 1<sup>st</sup> Application Package

- Units 1 and 2 Upgrades
- CAIR/Acid Rain Compliance Package
- DEP Pre-Application Meeting November 1, 2005
- Application Submittal Week of February 13<sup>th</sup>, 2006
- Commence Construction by September 2006

#### **CAIR/Acid Rain Issues**

- Permit application will address:
  - LNBs
  - SCRs
  - FGD Upgrades
  - Alkali Injection
  - CBO
  - Steam Turbine Upgrade

#### **CAIR/Acid Rain Issues**

#### LNBs

- Meet Acid Rain limit of 0.46 lb/MMBtu (annual average) by January 2008;
- Commence construction by 9/06; and
- No anticipated increase in CO emissions

#### **CAIR/Acid Rain Issues**

#### SCR

- Installed for CAIR and Unit 3 netting
- SCR design will result in SAM emission increase
- Alkali injection system for SAM control (considering sodium bisulfite, lime, or ammonia)

## SO<sub>2</sub> Issues

- FGD upgrades to modules, trays, mist eliminators, etc.
- Permit limit of 0.67 lb/MMBtu for Units 1 and 2, once upgrades are complete, associated with SO<sub>2</sub> Class I modeling

#### **CBO Unit Issues**

- Emission increase in PM, VOC insignificant;
- Emissions for NOx, SO<sub>2</sub> offset by Units 1 and 2 controls;
- CO emissions subject to PSD; and
  - BACT of 0.15 lb/MMBtu proposed
  - Propose initial RM 10 test for compliance
- Subject to NSPS Db
  - Will demonstrate compliance with 0.20 lb/MMBtu NOx limit using existing CEMs
  - CBO NOx limit does not alter facility baseline for Unit 3 netting purposes

# **Proposed Control Equipment Upgrades and Additions**

Proposed Modification	Commence Construction	Commence Operation
Unit 1 LNB	September 2006	October 2006
Unit 2 LNB	March 2007	April 2007
Unit 1 SCR/Alkali Injection	June 2007	December 2008
Unit 2 SCR/Alkali Injection	January 2008	December 2009
Unit 1 FGD Upgrade	January 2007	December 2008
Unit 2 FGD Upgrade	January 2007	December 2008
CBO Process	June 2007	December 2008
Steam Turbine Upgrades Unit 1	January 2007	June 2008
Steam Turbine Upgrades Unit 2	January 2008	June 2009

# **Unit 3 Application Package**

**Unit 3 Application Summary** 

- Unit 3 Netting Out of PSD for NOx, SO<sub>2</sub> and SAM
- Federally Enforceable Reductions from Units 1 and 2
- No Facility-Wide Increase in Mercury
- Separate DEP Meeting
- Submit Application in March 2006

# **Unit 3 Application**

- EPA's Comments on Scoping Document
  - Units 1 and 2 reductions creditable for PSD vs CAIR compliance;
  - Resolution of PSD Class I issue;
  - Regional haze modeling; and
  - Mercury control and modeling

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## Questions??