



Blended CFB Ash and Limestone Base Course

by
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JRE Jackson Research Engineers **JEA**

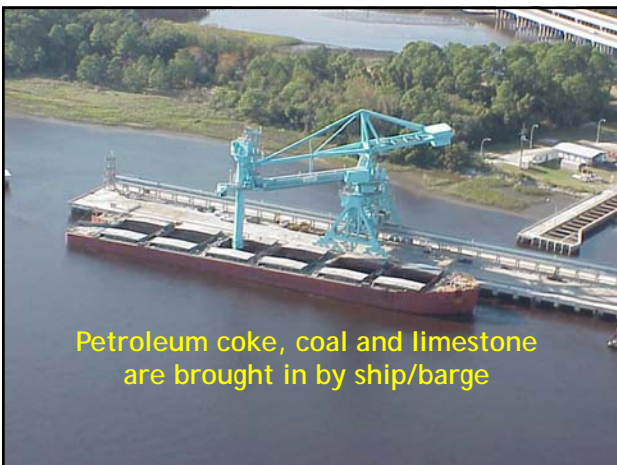
PRESENTATION AGENDA

- Overview of JEA (formerly Jacksonville Electric Authority)
- Circulating Fluidized Bed (CFB) Process
- Byproduct Utilization Environmental Approval Process
- EZBase Production
- EZBase Applications
- EZBase "Plus" Production
- EZBase "Plus" Applications
- Questions?

JEA General Information

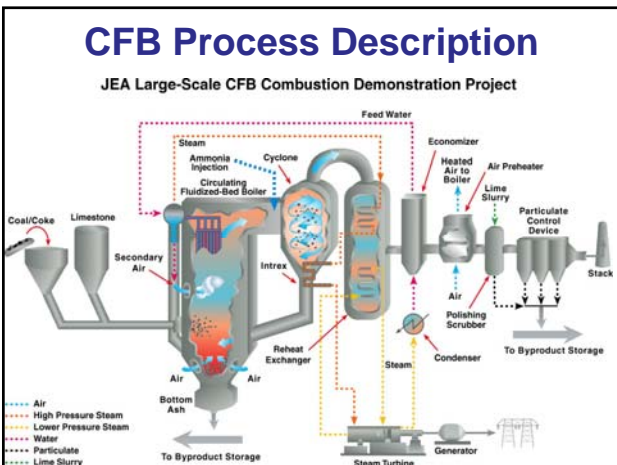
- **Largest Municipally Owned Utility in FL, 8th Largest in US**
 - Service in Four Counties (Duval, Clay, Nassau, St. Johns)
- **450,000 Electric Customers**
 - 2360 Megawatts Generation Capacity
 - 1160 Megawatts Solid Fuel
- **Treat/Produce 110 MGD Water**
- **Treat 85 MGD Wastewater**
- **Northside Generating Station**
 - Units 1 & 2, 640 megawatts
 - 1.4 million tons pet coke/year
 - 200,000 tons coal/year
 - 600,000 tons limestone/year
 - 600,000 tons byproduct (ash)/year











CFB Combustion Byproducts



EZBase Processing

Ash Storage Silos

Slurrying Process

48 hours of reaction time

$CaO \rightarrow CaOH$

Ash mixed with water (slurry) at 75% bed ash/25% fly ash ratio

Flowchart components: Bed Ash Silo, Rotary Feeder, Bed Ash Cluster, Measuring Silo, Fly Ash Silo, Fly Ash Weigher, Fly Ash Mound, Fly Ash Character, Caster Tank Weighing Character, Transfer Pipe, Gable Pump, EPF Slurry Pit.

EZBase Processing

Material excavated from slurry pit after 48 hours

Material placed in wind row for drying

Material spread for milling

Material milled to <3.5 inches

Material collected and stockpiled

EZBase loaded for transport to customers

The Future...

- EZBase Plus
 - Improved Constructability
 - Reduced Moisture Sensitivity
 - Improved In-Place Density
 - Proven Performance
 - JaxPort
 - 160 Acres
 - 300,000 Tons



EZBase PLUS Processing



EZBase PLUS Processing

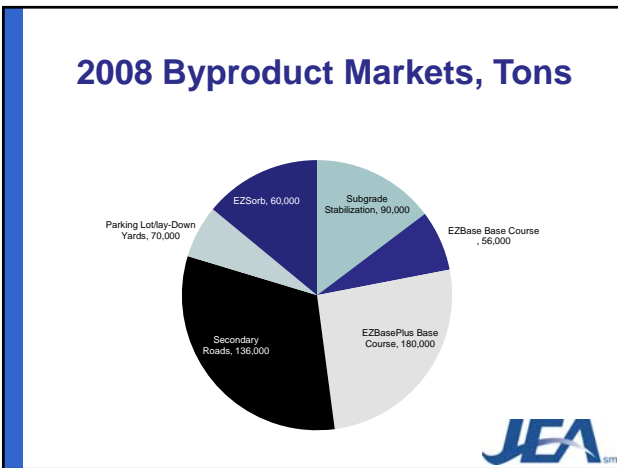












Questions/Comments

EZBase.org

JRE Jackson Research Engineers **JEA**

JaxPort Mitsui Terminal



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