

## St. Johns River Power Park (SJRPP) Boilers

### Interesting Facts

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- SJRPP includes 2 boilers – Unit 1 and Unit 2
- The overall boiler structures are 240 feet high
- Each boiler, including its support steel, weighs 11,500 tons
- The boilers were supplied by Foster Wheeler Energy Corporation
- They began service in 1987 for Unit 1 and 1988 for Unit 2
- Each boiler is fed by 7 pulverizers
- Each boiler has 28 coal burners
- Each burner includes a natural gas burner for initial coal ignition
- The furnace operates at a slightly negative pressure so that should there be any leaks, air leaks into the furnace instead of hot flue gas leaking out.
- At its hottest point, the flue gas exceeds 2,000 degrees F.
- Large fans force air into the furnace for combustion
- Other large fans remove flue gas and create the slight vacuum mentioned above
- Approximately 10% of the coal is made up of non-combustible ash
- Ash has to be periodically removed from the furnaces
- The boilers include soot blowers which use steam to clean the ash from the tubes
- Much of the ash produced was sold and recycled for use in making concrete
- The high alloy steel pipes that transfer the steam from the boilers to the turbines are 28 inches in diameter and over 4 inches thick
- Coals burned have come from the US, Colombia, Poland, Venezuela and Australia