



# Implementation of an Alternative Scrubber Design at Georgia Power's Plant Bowen

**APC/PCUG Conference**  
Saddlebrook Resort, Tampa, Florida  
July 24 - 29, 2005

Presented by Darryl R. Wall

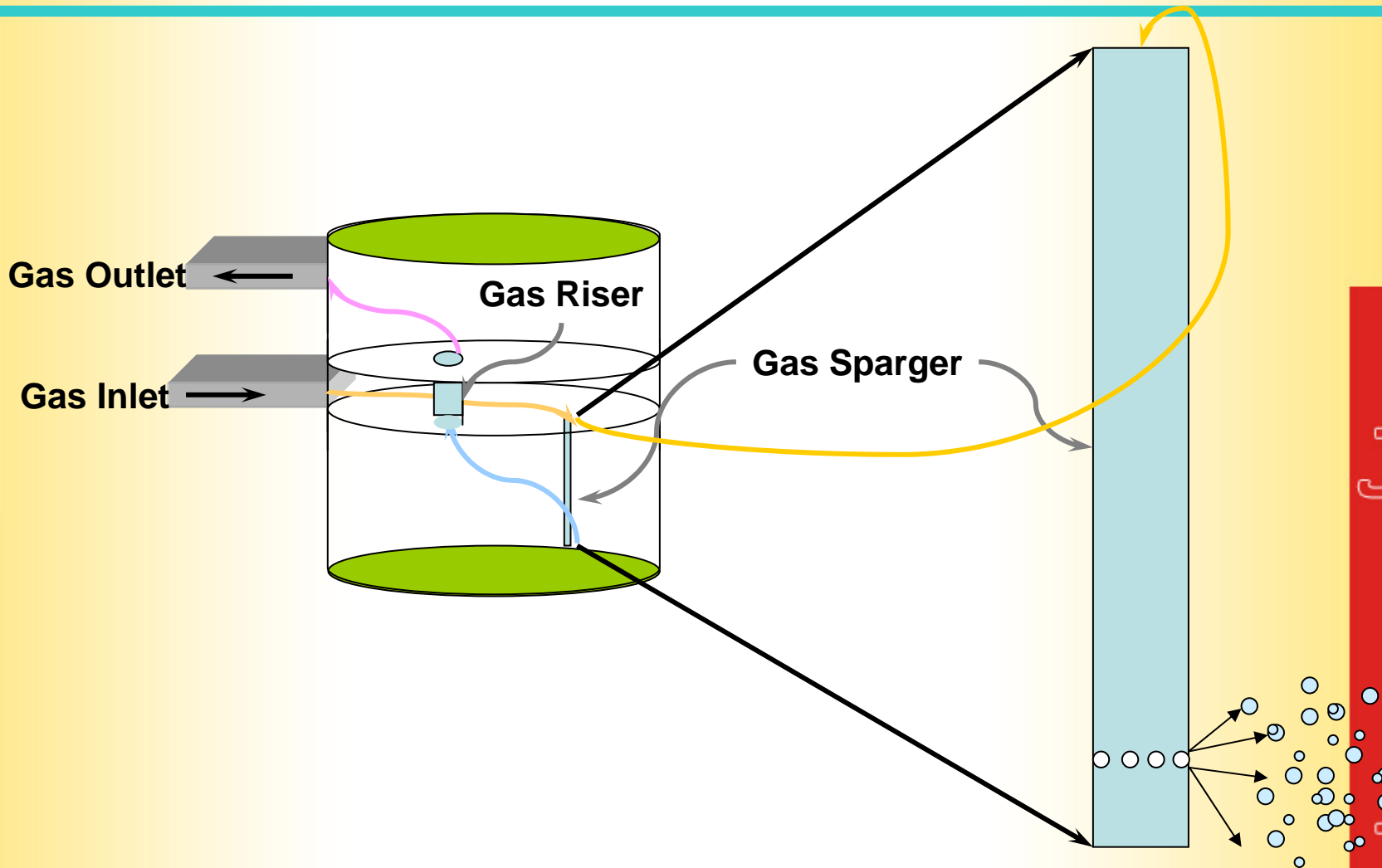


# Implementation of an Alternative Scrubber Design at Plant Bowen

- Basic Operation
- Structure
- Mechanics
- Plant Bowen Application

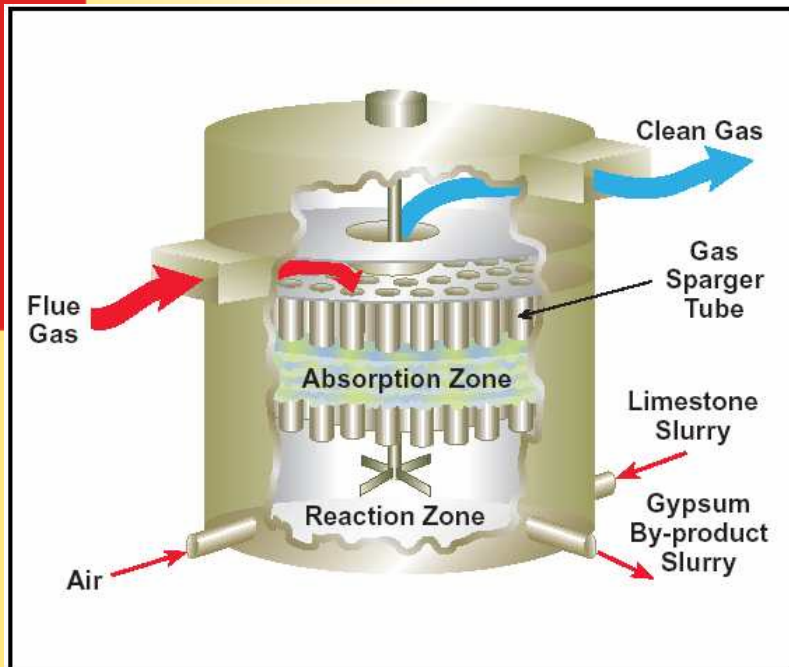
# Basic Operation

# Jet Bubbling Reactor (JBR)

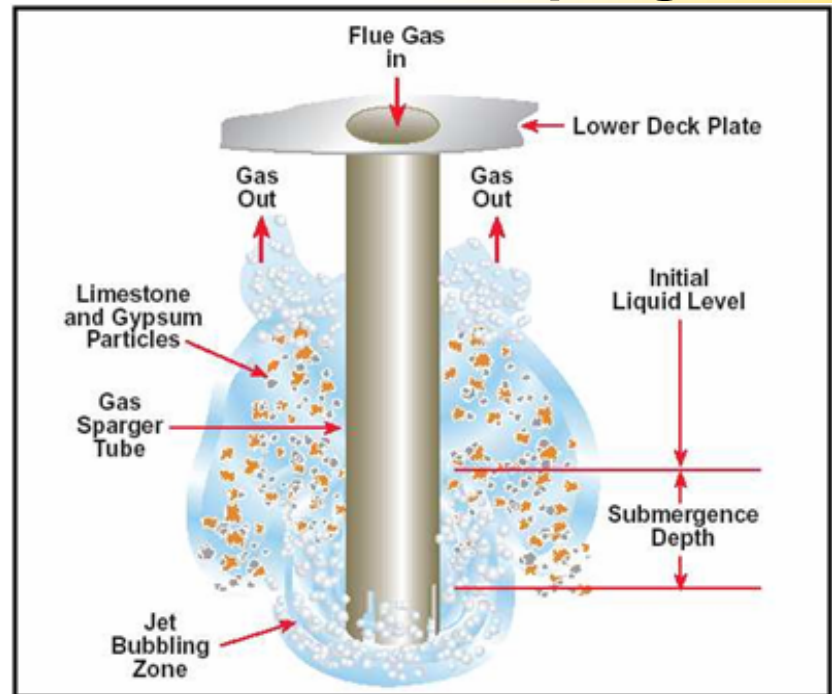


# Jet Bubbling Reactor

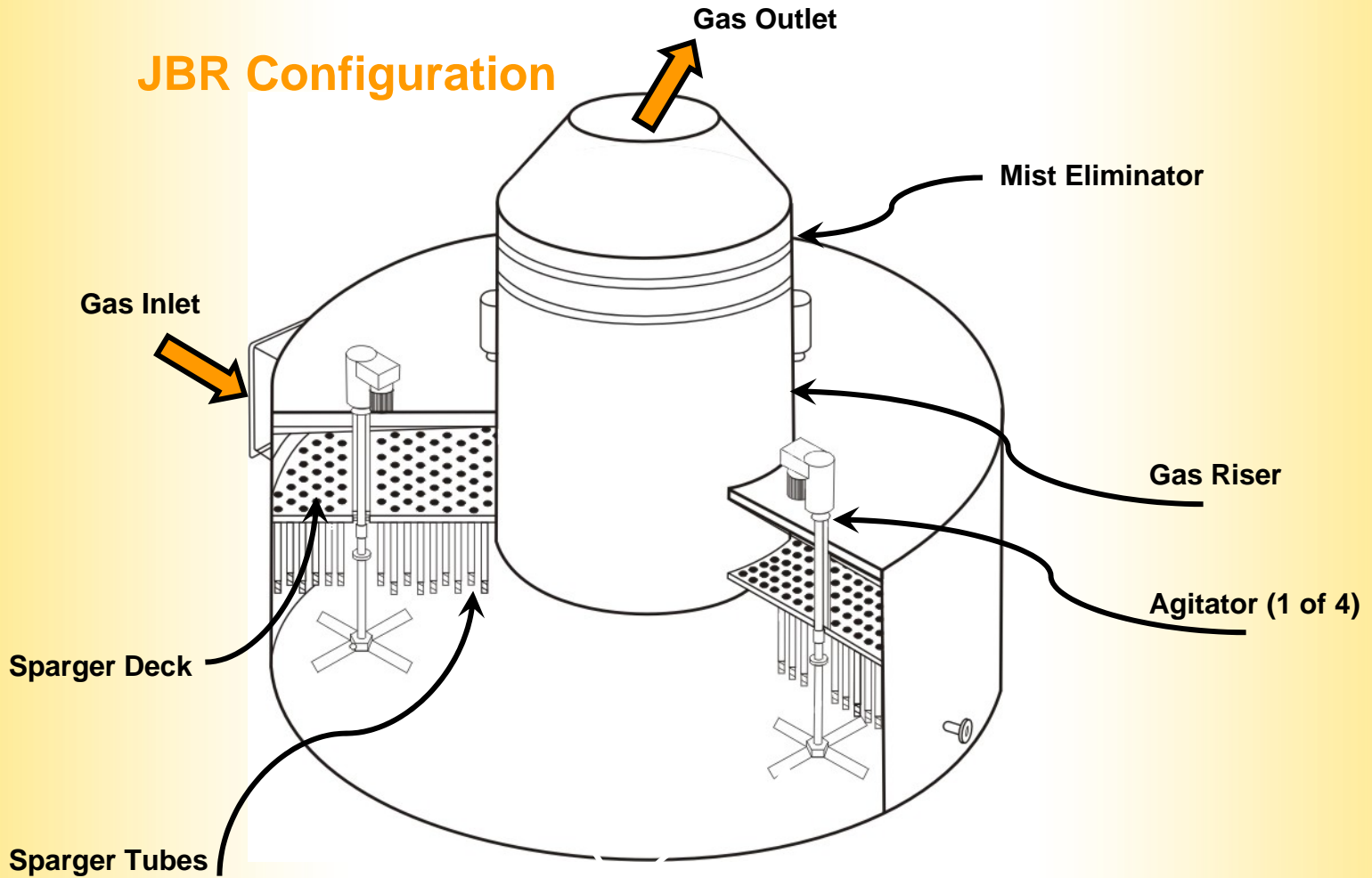
## Reactor



## Individual Sparger



# Basic Operation

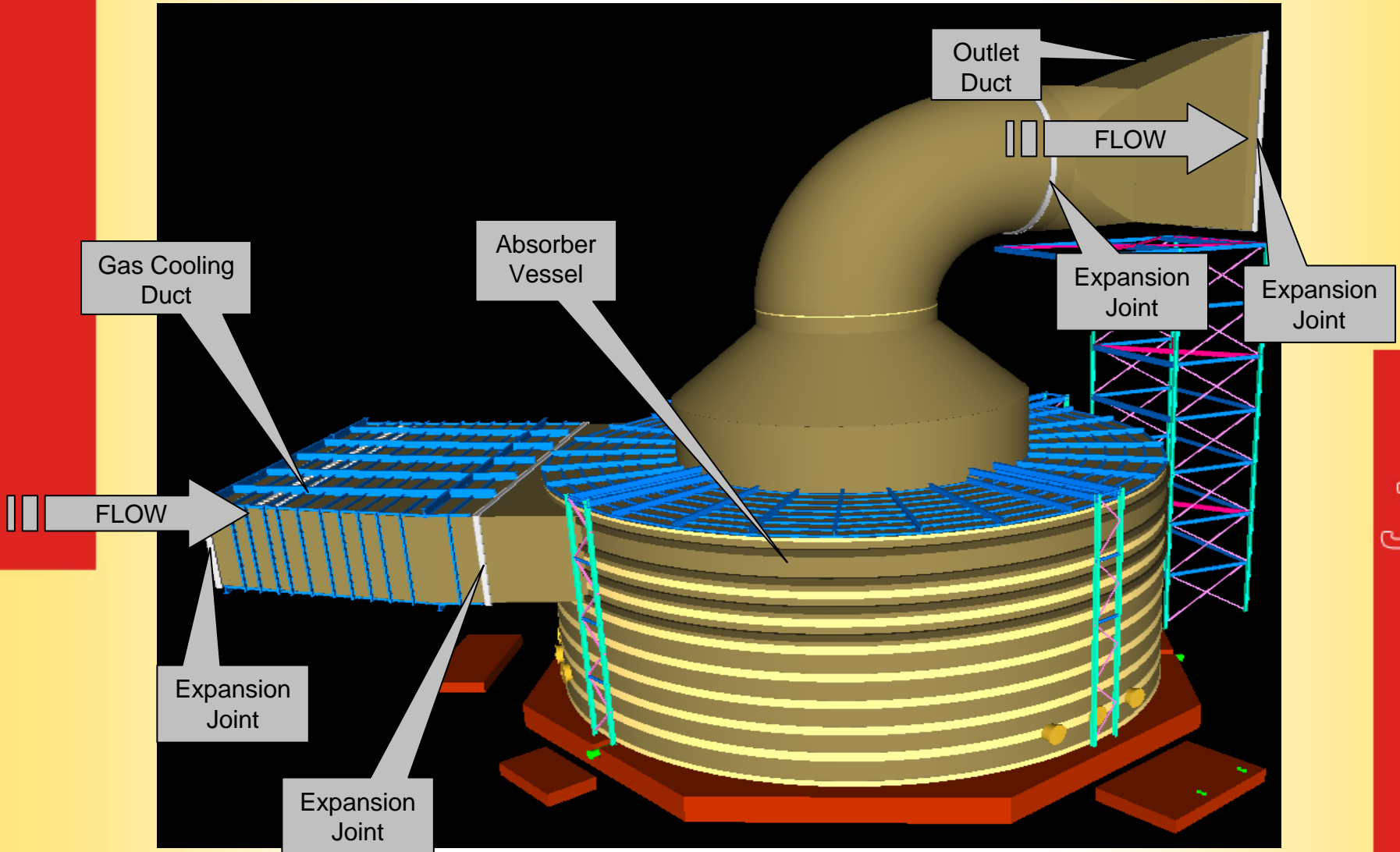


# Structure

## Structure

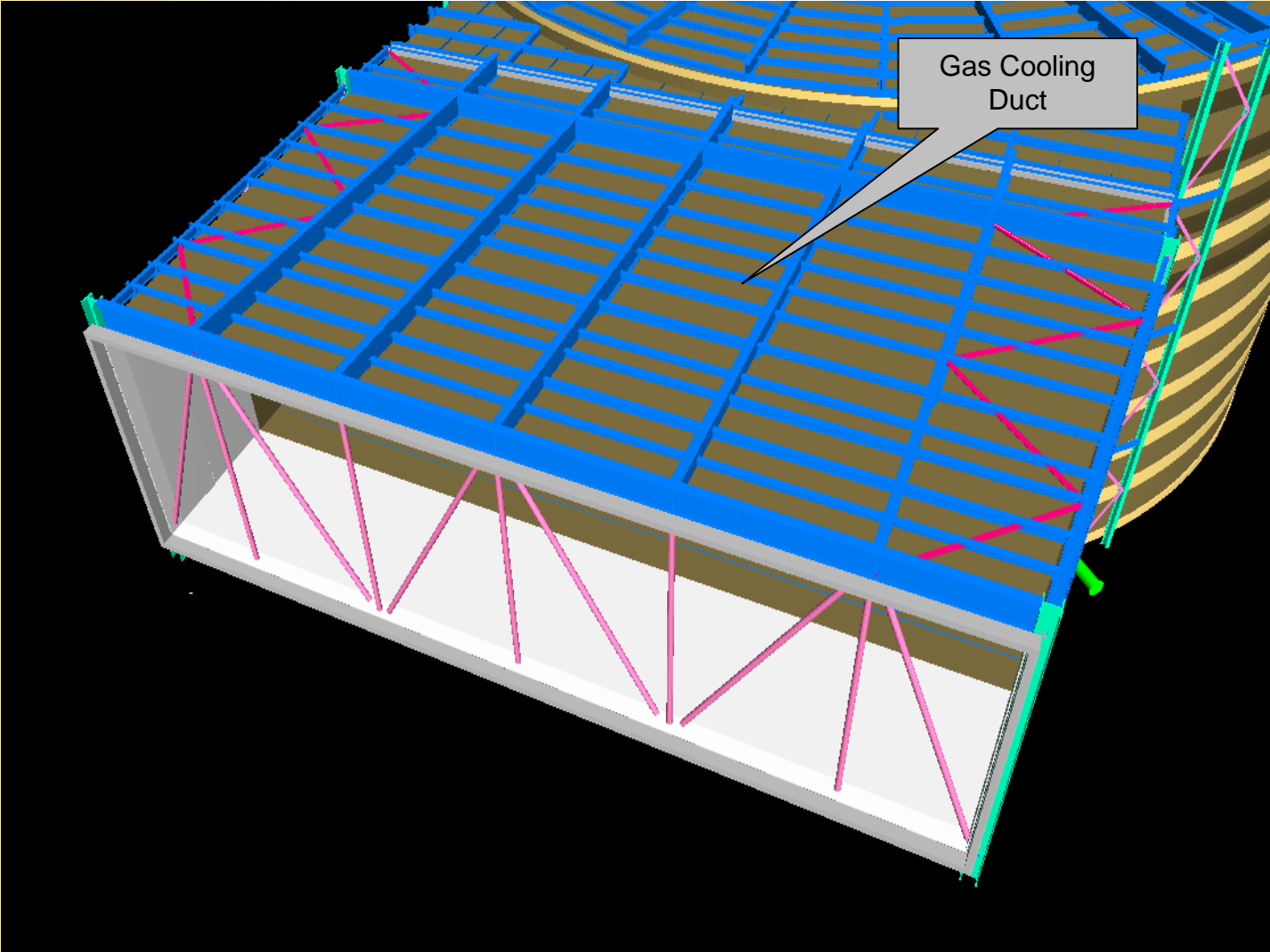
- What are the pieces?
- What is it made of?

# Southern Company Generation



one team • one future

# Southern Company Generation



one team • one future

# Mandrel for Winding JBR



Southern Company Generation

# Winding Up with Chop Matt



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# Mechanics



## Mechanics

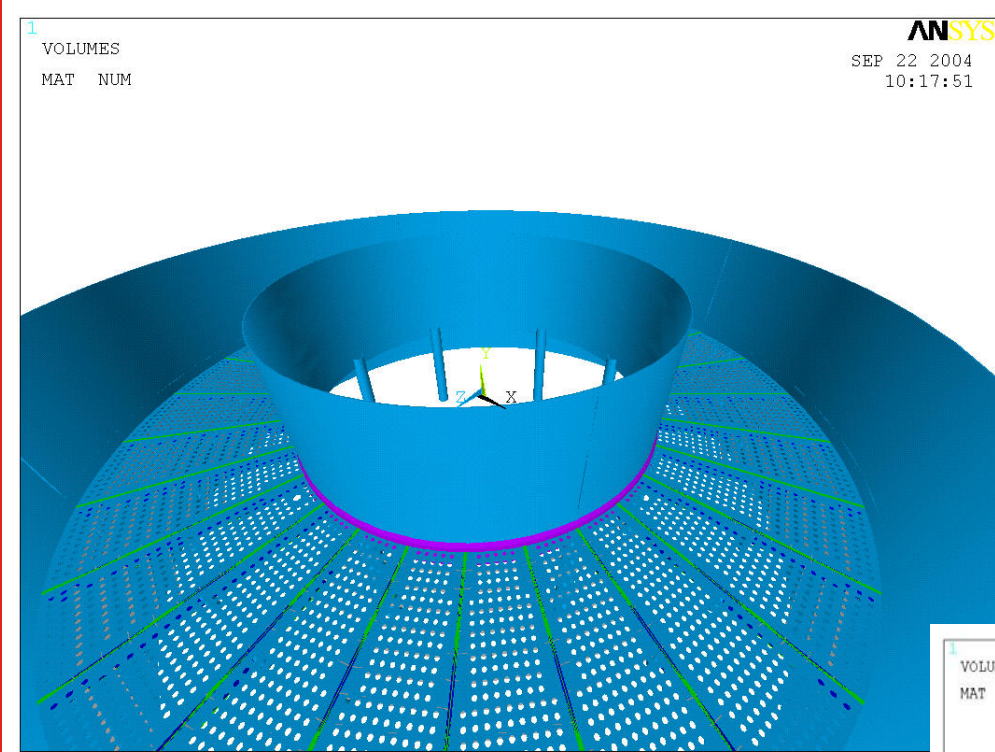
- Gas Cooling
- Sparging
- Oxidation Air

# Gas Cooling

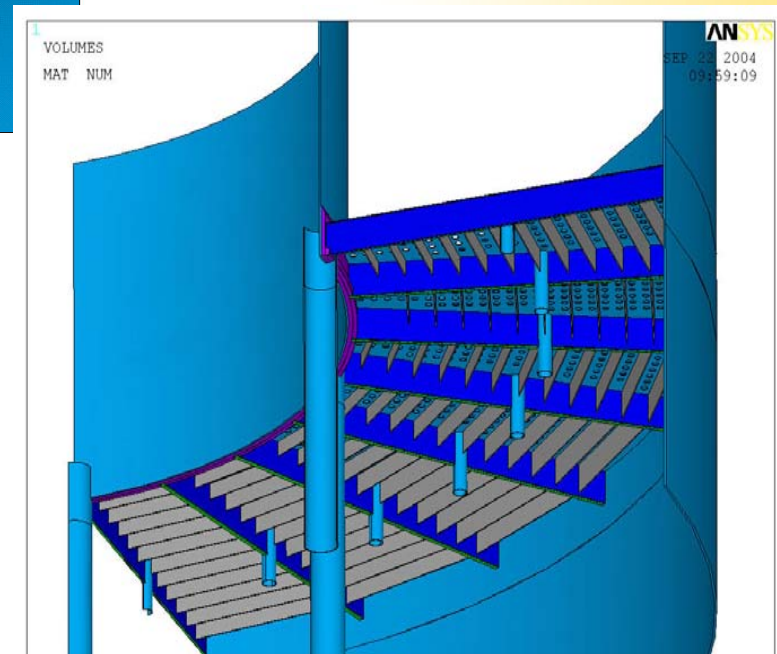
**C; Pre-quench Header**

**E; Gas Cooling Slurry Pipe 1st Stage Header**

**F; Gas Cooling Slurry Pipe 2nd Stage Header**



# Sparging



# Sparging



# Oxidation Air

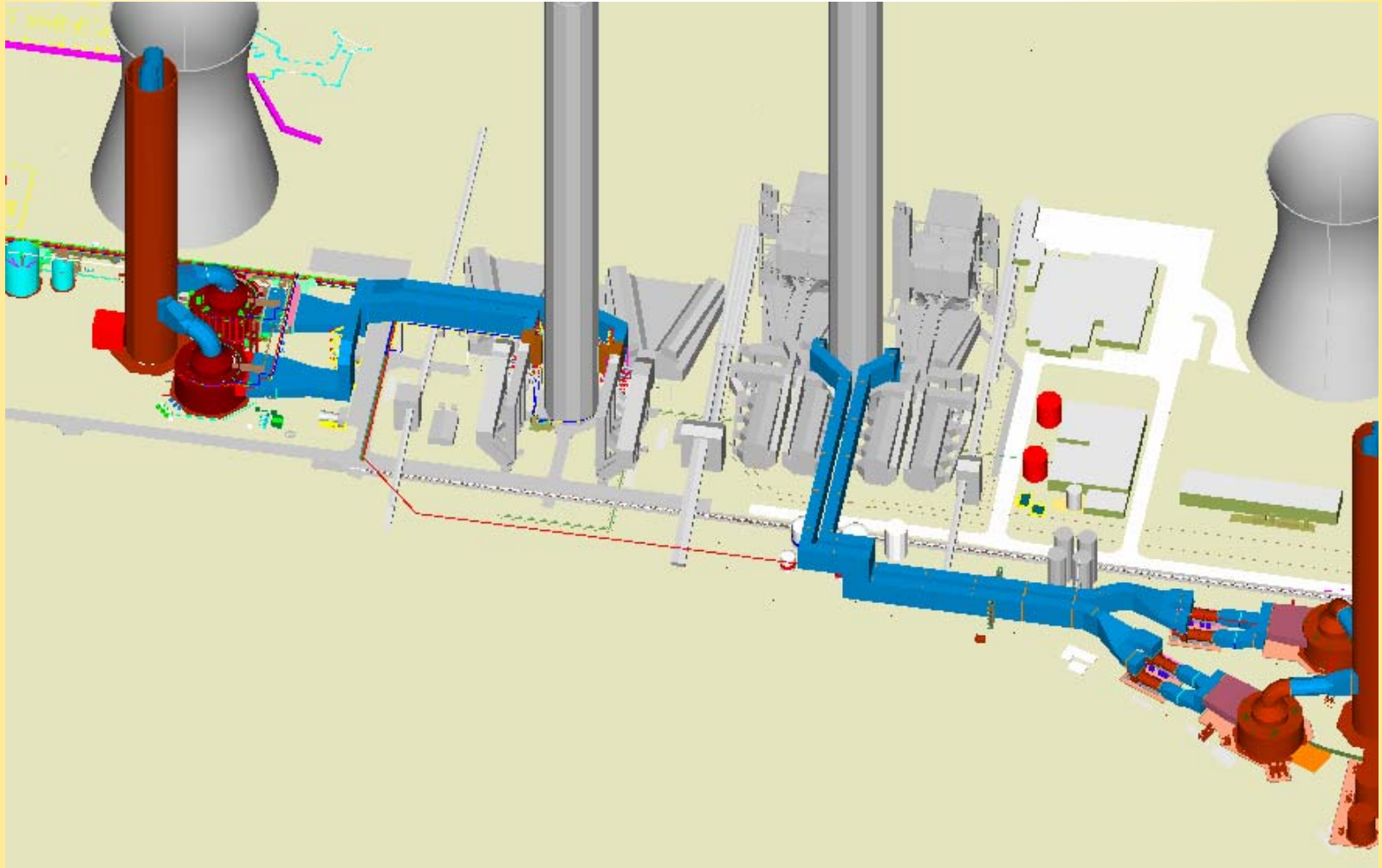


# Plant Bowen Application

## Plant Bowen Application

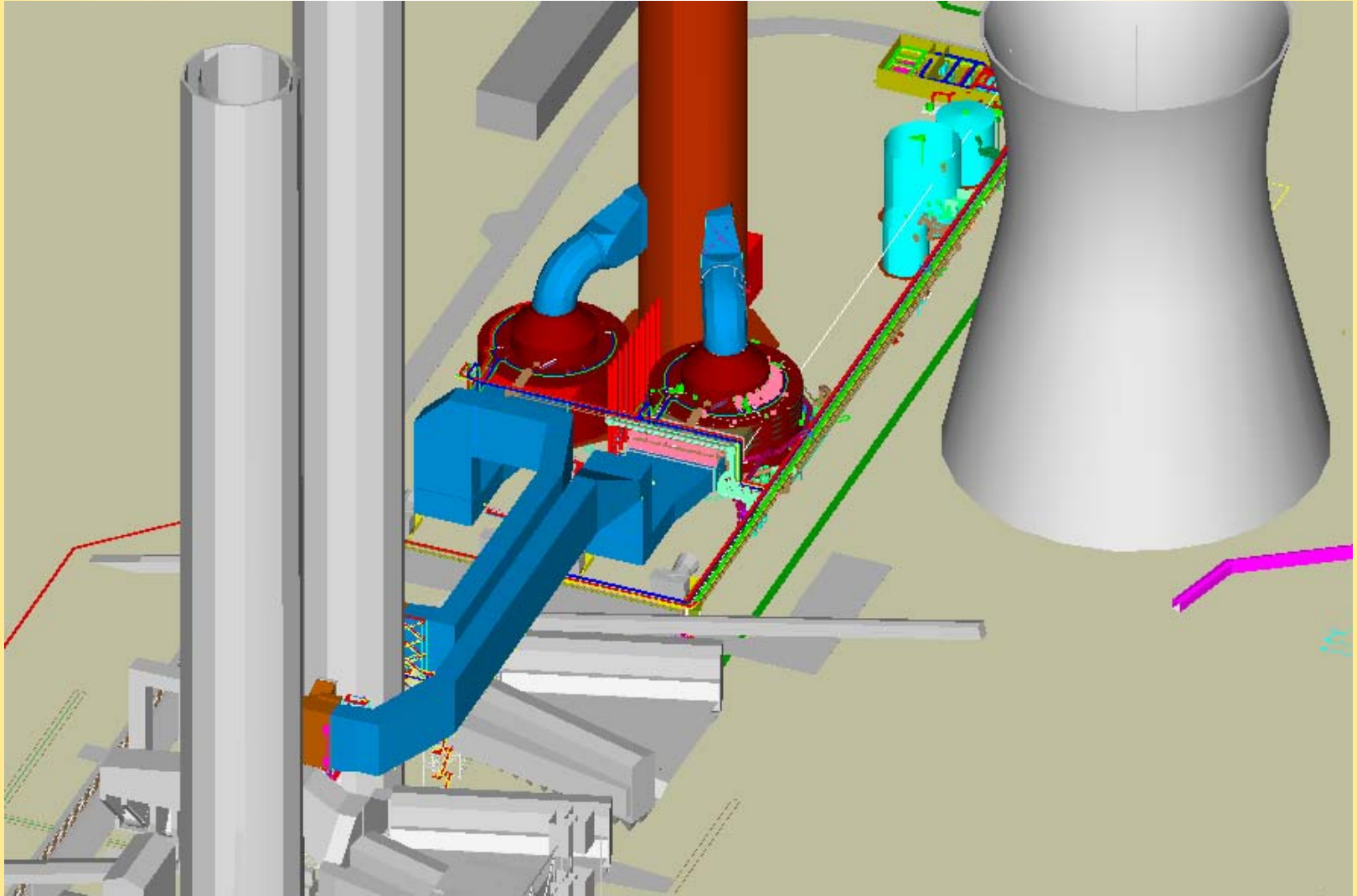
- Located near Cartersville, GA
- 4 Units, 2 x 750, 2 x 950
- 5 lb/MBtu Design Fuel
- 98% SO<sub>2</sub> Removal
- Design Templates

# Plant Bowen Application



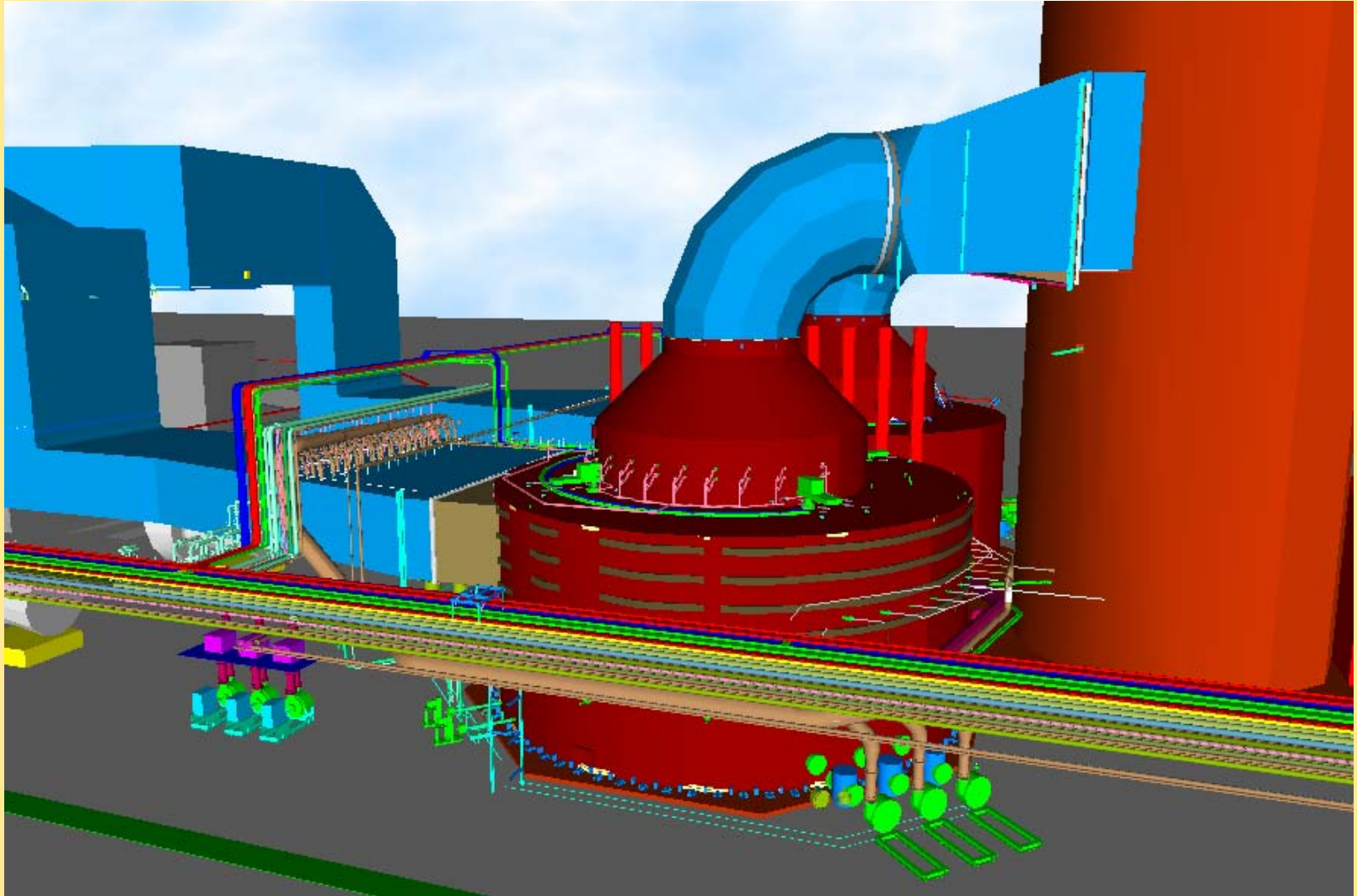
one team • one future

# Plant Bowen Application



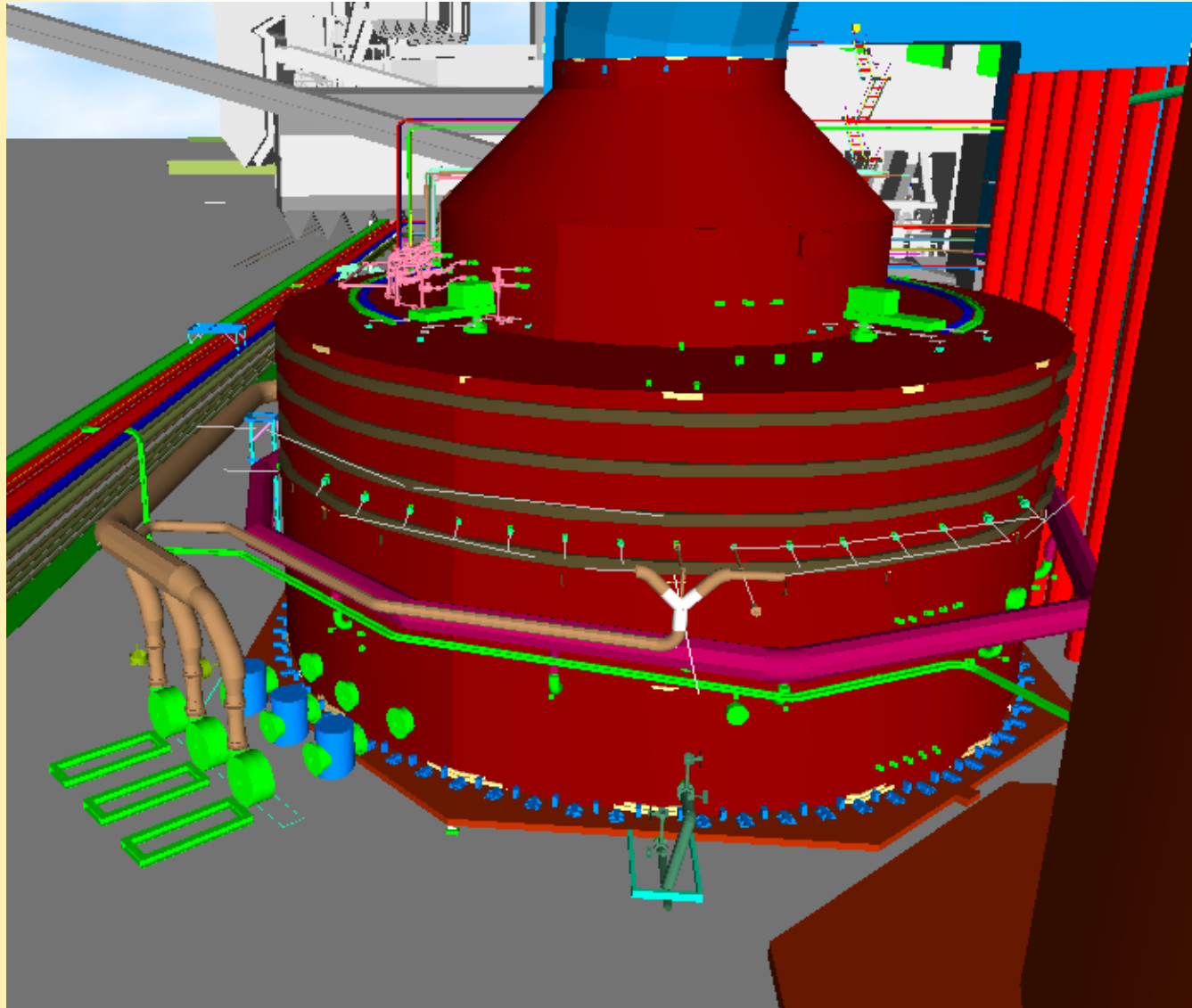
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# Plant Bowen Application



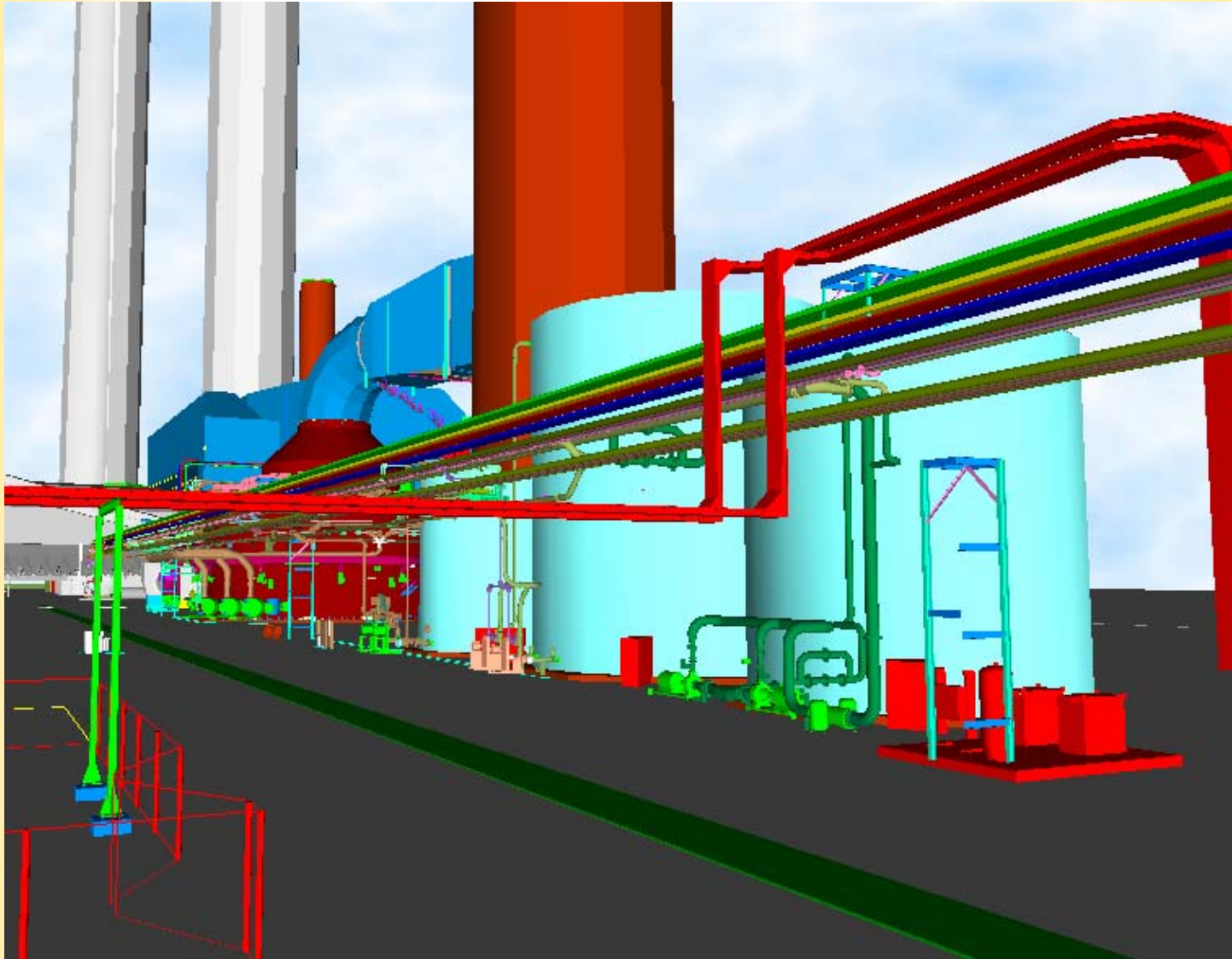
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# Plant Bowen Application



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# Plant Bowen Application



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Questions  
or  
Comments?