

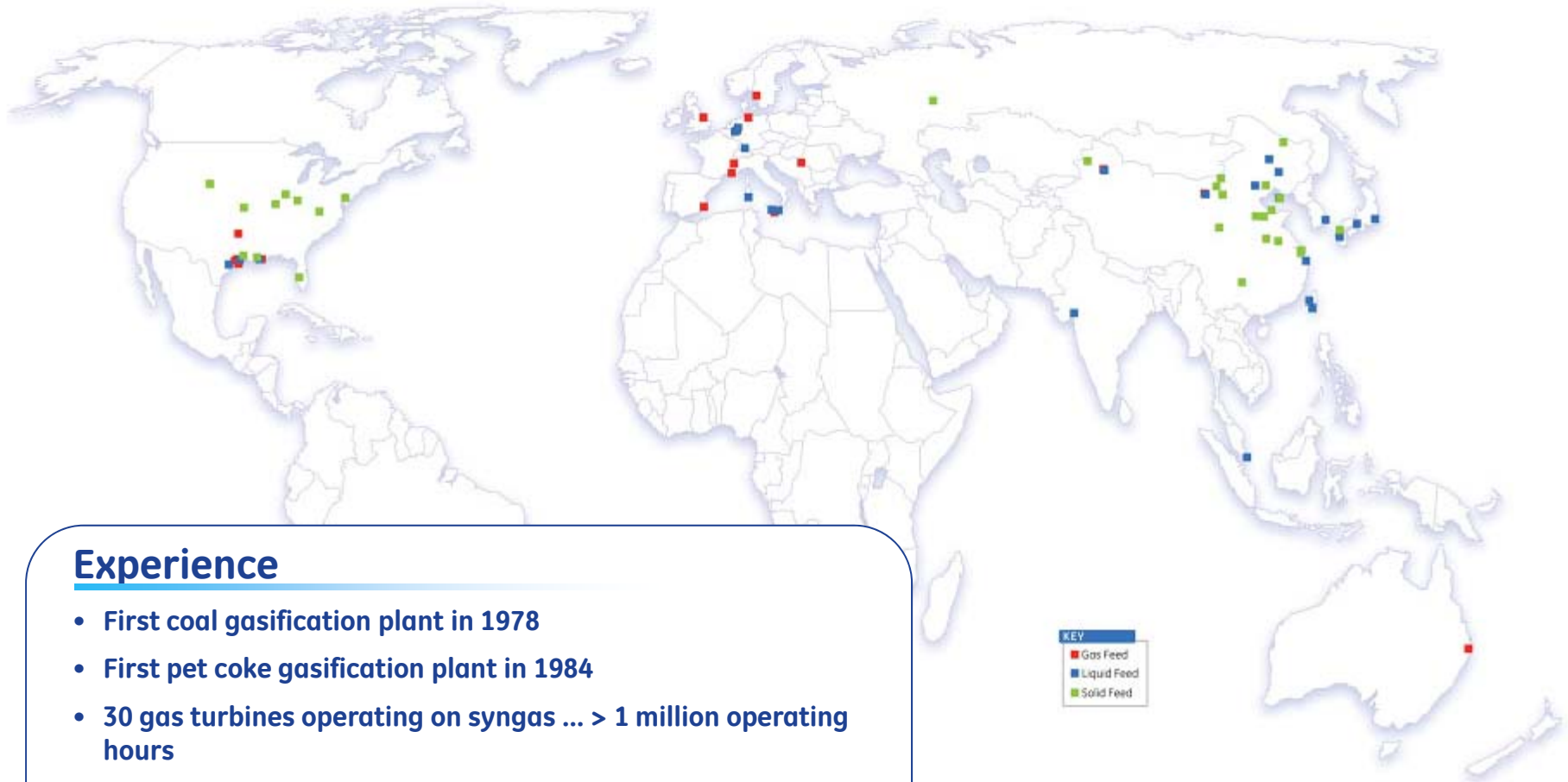
Projects on 3 continents

Keith White, General Manager, Gasification



Gasification leader

Over **65** facilities and **145** gasifiers operating worldwide



Experience

- First coal gasification plant in 1978
- First pet coke gasification plant in 1984
- 30 gas turbines operating on syngas ... > 1 million operating hours
- IGCC leader... >3 GW with GE Energy technologies
- 40 projects globally that separate CO₂



Projects underway

- Duke Energy Edwardsport IGCC
- Wandoan Power Project
- Hydrogen Energy
- China IGCC with CPECC
- Shenhua Baotou: MTO
- High Plains Gasification Advanced Technology Center



Duke Energy: Edwardsport IGCC plant

September 2009

- 618MW using Indiana coal
- COD in 2012



Duke Energy: Edwardsport IGCC plant

October 2010



Current status

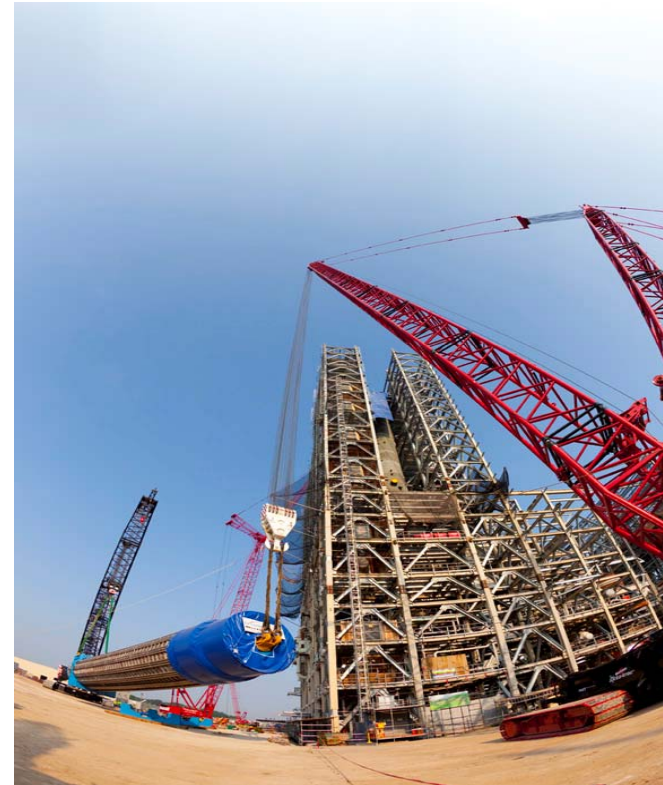
October 29, 2010

Engineering	99%
Procurement	98%
Overall construction	58%
Site preparation	100%
Piling	100%
Underground work	96%
Concrete foundations	94%
Structural steel erection	85%
Piping installation	43%
Wire & cable installation	20%

~3,000 People at site

Overall project ~ 78% complete

- Steel ~85%
- Piping ~ 43%
- Cable ~ 20%

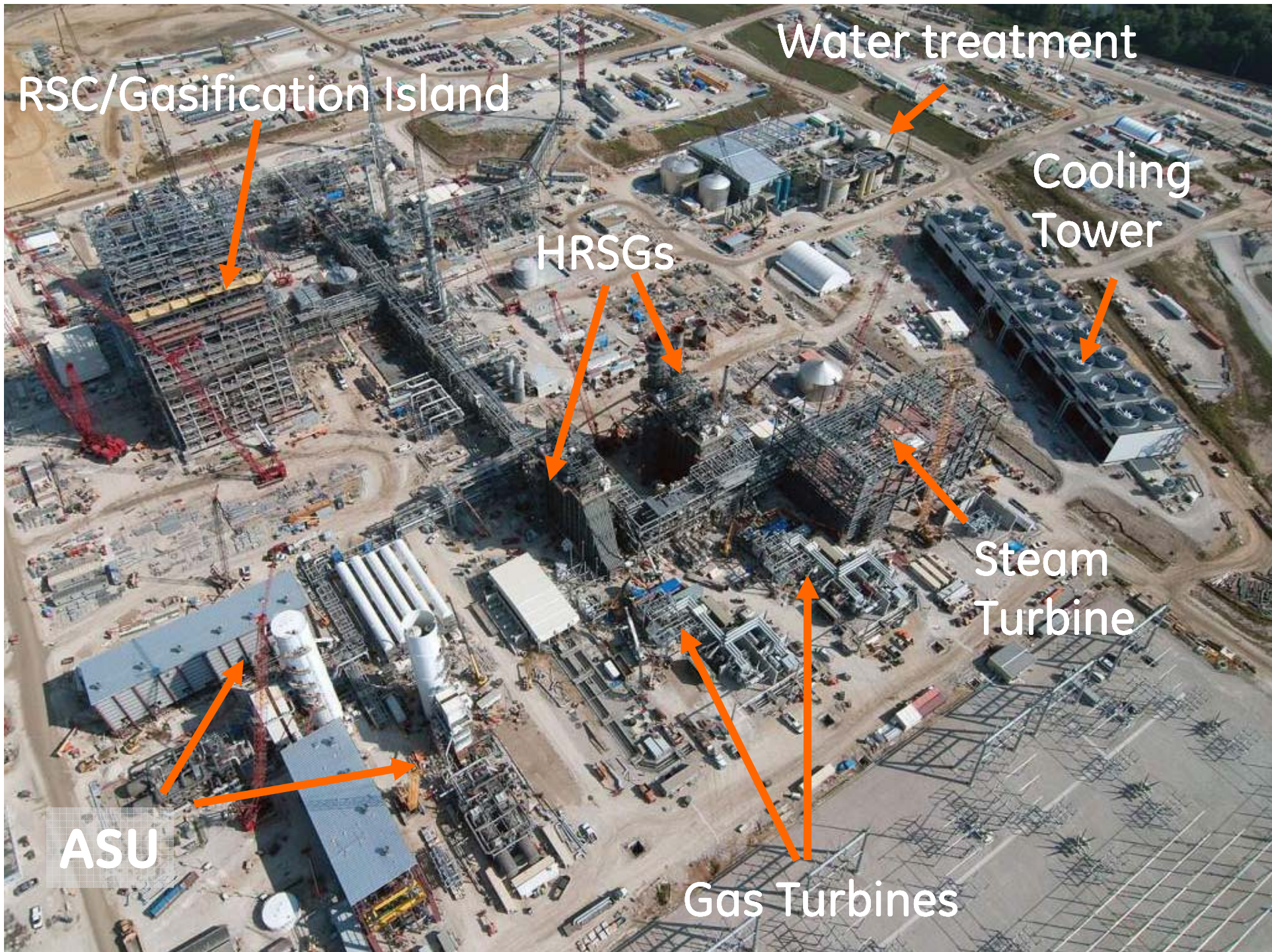


2010 achievements

Shipped & Installed

- Gas turbines
- Steam turbines
- ST generators
- GT generators
- RSC
- Controls system
- Simulator
- Gasifiers





RSC/Gasification Island

Water treatment

Cooling Tower

HRSGs

Steam Turbine

ASU

Gas Turbines

Australia IGCC + CCS

Wandoan Power Project

- Surat Basin, Queensland
- Consortium of GE Energy & Stanwell Corp.
- Alliance with Xstrata Coal for CO2 transport & storage
- 400MW IGCC + 90% CCS project
- Shortlisted CCS Flagships candidate
- Surat Basin coal
- Current status:
 - Target COD 2015
 - Pre-FEED funded
 - Fuel supply, site access secured



WandoanPower
a carbon solution



First commercial IGCC + CCS

Hydrogen Energy California



Hydrogen Energy (BP/Rio Tinto)

250 MW near Bakersfield, Calif.

FEED ~Q3 2010

COD 2016

GE scope

- Gasification license
7F syngas turbine (expected)
- Feedstock: coal/petcoke blend
(up to 75% coal, 100% petcoke)

Hydrogen energy scope

- \$308MM from DOE CCPI 3
- 90% carbon capture
(2MM tons/year to EOR & sequestration)



imagination at work

GE's IGCC technology to China

GE and CPECC Sign Agreements with USTDA to Advance Commercial Scale IGCC

Cleaner Coal Technology Moves Forward in China

BEIJING, CHINA – April, 2010 – Marking a critical step toward the deployment of “cleaner coal” technology in China, GE (NYSE: GE) and China Power Engineering Consulting Group Corporation (CPECC) signed agreements with the U.S. Trade and Development Agency (USTDA).



- Joint study by GE and CPECC ... US gov't funding
- Develop plant concept, estimate cost & performance, agree on next steps to a full project
- First step in proposed broader IGCC cooperation between GE & CPECC

Successful startups in China 2010

11 successful start-ups in China in last 5 years

Most recent...

- 5+2 trains
- 2+1 trains
- 2+1 trains
- 1+1 trains



+9 in engineering/construction



Shenhua Baotou: MTO facility



- China Shenhua Coal to Liquid and Chemical Co. Ltd., Baotou, Inner Mongolia
- 5 GE 900 ft³ gasifiers + 2 spares
- Successful start-up in summer 2010...PDP delivery May '07, large bore inspection Oct. '09
- 1.8 million tons of methanol per year from syngas (at full production)



Largest coal to MTO plant in the world.

Wyoming: coal research

- Nominal 5MW Thermal ~ 1 tph
- Gasifier, no turbine
- Dry and slurry feed capability
- 2,000 hrs yearly testing
- Testing platform for commercial release of new technologies
- Dry feed, warm gas clean-up, water treatment, coal pretreatment, slag additives



**High Plains Gasification Advanced
Technology Center Cheyenne, Wyoming**

Site acquired, FEED progressing, air permit application submitted

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