China IGCC Development Proposal



GE's IGCC experience

Demo

(1984-89)



Coolwater

California

120 MW IGCC

DOE tech demo

7E

Commercial

(1996-present)



Polk I IGCC

Florida

250 MW IGCC

DOE demo project

7FA gas turbine

5 year construction

Large Commercial

(2012-present)



Edwardsport IGCC

Indiana

618 MW IGCC

7F syngas turbine

5 Year Construction



Partnering for growth in China

China IGCC joint study

- Assess technical & economic viability of China IGCC using GE technology
- Joint study w/ CPECC sponsored by US TDA
- Technology selections maximize efficiency while minimizing capital expenditure
- Create plan for future efficiency and cost improvements
- Completed by late 2011





GE-Shenhua Gasification JV

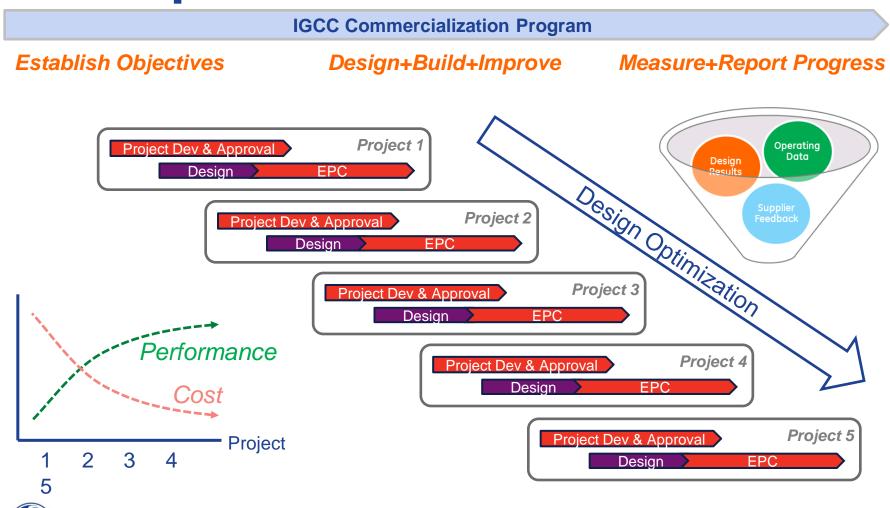
- 50-50 gasification licensing in China
- GE technology + Shenhua project & market expertise
- Commercial platform for Industrial licensing + IGCC advocacy
- Established in May 2012

IGCC Study Results

Study Parameter Target	Result
主要指标的目标值	结果
41-43% LHV Efficiency	42.2% LHV ✓
低位热效率: 41-43%	低位热效率: 42.2%
Output 800MW net	870 MW net ✓
净出力: 80万千瓦	净出力: 87万千瓦
Cost 8000-10000 RMB/KW (Gross Output Basis)	8928 RMB/KW ✓
成本:介于8千-1万人民币/千瓦(以毛出力计)	(~\$1380/KW)
Meet IGCC Emissions Standards 符合IGCC排放标准	Key Area Standard met ✓ IGCC主要单元满足排放标准
Water Consumption at a Maximum of 0.6 m³/GWs	Maximum met√
水耗: 不超过0.6方/百万千瓦	满足要求



China IGCC Commercialization Concept



imagination at work