State House Special Committee on Energy Briefing

COCK INLET REGION INC. An Alaska Native corporation

March 11, 2010



FIRE ISLAND WIND



Fire Island Wind Project

Alaska's first commercial-scale wind project

- Located on Fire Island, 3 miles west of Anchorage
- 36 1.5 megawatt GE wind turbine generators with a total nameplate capacity of 54 MWs
- 33% capacity factor
- Parallel 34.5kV subsea transmission line to RSS
- 50,000 MW per year
- Displaces1.5 Bcf of natural gas annually
- Meet demand for 18,000 Alaskan households





The Time Is Now

- Southcentral Alaska faces imminent shortages of local natural gas for heat and electricity
- Federal financial incentives in the Recovery Act signed into law by President Obama in February 2009
- CIRI will apply for cash grant in lieu of claiming federal production or investment tax credits
- 100% of federal dollars will be <u>credited to cost of the project</u> and will result in a lower cost of power to utilities
- Available for projects under construction by December 31, 2010 and commercially operational by December 31, 2012

2009 Milestones

- Wind resource assessment 33 percent capacity factor
- Micrositing
- Clearing
- Geotech









Critical Path Timeline

- **NOV 2009:** Fieldwork completed
- **DEC 2009:** Geotech results
- MAR 2010: 35 percent design completion
- MAY 2010: Integration/interconnection agreement
- **JUNE 2010**: Execute power purchase agreements

Project Timeline

- Authorize/mobilize contractors to achieve >5 percent spend in 2010 to qualify for Safe Harbor provision
- Secure Federal Cash Grant for up to 30 percent eligible cost of project
- Construct roads, prepare pad sites, electrical collection system, DVOR construction at AIA
- Tower erection, transmission line, commercial operation Q4 2011

Underground Coal Gasification

CIRI's UCG project

- Designed to produce alternative power source by 2014 that meets demand for reliable energy
- Underground coal gasification (UCG + CCS) project sized to fuel a new 100-MW combinedcycle power plant
- Create syngas (also know as a synthesis gas), which can be used to generate electricity or upgraded to synthetic natural gas or clean liquid fuels











Why CIRI & UCG

- Company committed to energy leadership and responsible environmental stewardship in addition to ownership of significant favorable coal resources
- Diversified portfolio of successful investments and developments
- Safe, reliable, proven technology that responsibly harnesses an abundant domestic energy resource
- Strong business investment that supports corporate goals and community needs

Current timeline

- Feb. 2009: Resource Assessment drilling begins
- **Apr. 2010:** Preliminary Resource Assessment results; Preliminary site selection
- May 2010: Pre-feasibility drilling begins
- **Oct. 2010:** Site characterization drilling begins
- **Dec. 2010:** Project permit application preparation begins
- Dec. 2012: Project permits received
- Jan. 2013: Above-ground project construction begins
- Jan. 2014: Commercial operations begin

Development challenges

- Carbon management compatible commercial scale carbon capture technology in exploratory stage
- Undefined regulatory regime no precedent exists for permitting UCG as a commercial project at federal or state levels
- Alternative financing structures early stage UCG technology requires investment capital, not traditional project finance



Opportunities

- Previously inaccessible resources converted to productive energy sources with existing, proven technology
- UCG with carbon capture results in lower emissions than combined-cycle natural gas power plant
- Potential increase 300-400 percent in recoverable coal reserves; CIRI owns significant coal reserves suitable for UCG development
- Scalable operations with value-added upgrade for export

CIRI Ownership

