

## FY07-LXI (61)-157

### “North Dakota Partnership in the Canadian Clean Power Coalition Phase III”

Submitted by: Basin Electric Power Cooperative

Principal Investigator: Gavin McCollam

#### PARTICIPANTS

<u>Sponsor</u>	<u>Cost Share</u>
Basin Electric Power Cooperative	\$16,250
Dakota Gasification Co.	\$16,250
Great Northern Power Development MDU	\$16,250
Otter Tail Power Co.	\$16,250
Westmoreland Coal Company	\$16,250
Great River Energy	\$16,250
Minnesota Power	\$16,250
NDIC	<u>\$130,000</u>
Total Cost	\$260,000

Project Schedule – 3 years

Contract Signed – 8/15/07

Start Date – 6/1/07

Completion Date – 12/31/09

Project Deliverables

Status Reports:

12/31/07(✓); 6/30/08(✓);

12/31/08( ); 6/30/09( )

Final Report: 12/31/09( )

#### **OBJECTIVE / STATEMENT OF WORK:**

The Canadian Clean Power Coalition (CCPC) Phase III is intended to support the development of advanced coal utilization technologies including gasification, oxy-fuel combustion, and various carbon removal technologies that can be applied to conventional coal power plants. Phase III of the CCPC is designed to lead to construction of a supercritical pulverized coal plant using lignite and an Integrated Gasification Combined Cycle plant using subbituminous, both of which will be designed to capture CO<sub>2</sub> emissions.

#### **STATUS**

##### **Through February 4, 2008**

Much of the focus thus far has involved various Edmonton Power Corporation Utilities, Inc activities based on Genesse-sub-bituminous coal usage in an IGCC initiative combined with carbon capture technologies. These activities and the lessons learned are applicable to lignite users to a large extent. The SaskPower oxyfuel facility designed to use lignite has been postponed due to high cost estimates. The CCPC is in the process of developing a business plan which should be completed in the next quarter.

##### **Through September 15, 2008**

EPCOR Utilities announced they have selected Siemens Fuel Gasification Technology as the technology provider for design of a coal gasification facility. If investment and construction decisions go as planned, a near-zero emissions 270 MW (net) generating facility will be commissioned into service by 2015. EPCOR has selected Jacobs Consultancy as the project FEED

contractor; the FEED study is currently in Phase II project development and scheduled for completion in 2009. A report has been completed that outlines the differences between supercritical and gasification technologies as well as those technologies with and without CO<sub>2</sub> capture capabilities.