

## **PLAINS CO<sub>2</sub> REDUCTION PARTNERSHIP (PHASE III)**

### **Quarterly Technical Progress Report**

*(for the period October 1 – December 31, 2007)*

*Prepared for:*

Industrial Commission of North Dakota  
600 East Boulevard Avenue  
Bismarck, ND 58505

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**October 1 – December 31, 2007**

**INTRODUCTION**

The Plains CO<sub>2</sub> Reduction (PCOR) Partnership has been established as a U.S. Department of Energy (DOE) National Energy Technology Laboratory (NETL) Regional Carbon Sequestration Partnership (RCSP). The PCOR Partnership is managed by the Energy & Environmental Research Center (EERC) at the University of North Dakota (UND) in Grand Forks, North Dakota. The PCOR Partnership region includes all or part of nine states (Iowa, Minnesota, Missouri, Montana, Nebraska, North Dakota, South Dakota, Wisconsin, and Wyoming) and four Canadian provinces (Alberta, British Columbia, Manitoba, and Saskatchewan).

The EERC was awarded a contract for Phase III activities in late September 2007. Phase III is a 10-year project, in three budget periods, running from October 1, 2007, to September 30, 2017. This progress report summarizes the activities for the reporting period (October 1 – December 31, 2007) for Phase III.

The activities for Phase III of the PCOR Partnership will include two large-volume sequestration demonstration tests (Figure 1) along with continued regional characterization and outreach. Thirteen tasks will be implemented; see Table 1 for the responsibility matrix.



Figure 1. PCOR Partnership Phase III sequestration field demonstration test sites.

**Table 1. Phase III Responsibility Matrix**

<b>Phase III Task Description</b>	<b>Responsible Party</b>
Task 1 – Regional Characterization	Erin O’Leary
Task 2 – Public Outreach and Education	Dan Daly
Task 3 – Permitting and NEPA Compliance	Lisa Botnen
Task 4 – Site Characterization and Modeling	Jim Sorensen
Task 5 – Well Drilling and Completion	TBA
Task 6 – Infrastructure Development	Melanie Jensen
Task 7 – CO <sub>2</sub> Procurement	John Harju
Task 8 – Transportation and Injection Operations	TBA
Task 9 – Operational Monitoring and Modeling	TBA
Task 10 – Site Closure	TBA
Task 11 – Postinjection Monitoring and Modeling	TBA
Task 12 – Project Assessment	Stephanie Wolfe
Task 13 – Project Management	Ed Steadman

## **SUMMARY OF SIGNIFICANT PHASE III ACCOMPLISHMENTS**

### **Task 1 – Regional Characterization**

The first PCOR Partnership geologic working group meeting was organized and facilitated following the 2007 PCOR Partnership Annual Meeting. Partners and prospective partners, such as the geological surveys of Missouri, Iowa, Minnesota, and North Dakota, as well as partners from British Columbia discussed geologic characterization activities occurring in their regions. The group decided to hold similar meetings twice a year. The next meeting is being planned for the May–June 2008 time frame.

The Phase III proposal/subcontract from the Missouri Department of Natural Resources for inclusion in Phase III Task 1 was sent to DOE December 27, 2007, for review. This was referred to as Unspecified Geological Survey No. 1 in the proposal.

### **Task 2 – Public Outreach and Education**

Phase III kickoff discussions were held with core outreach task personnel. Work was also initiated for the Phase III Prairie Public Broadcasting subcontract.

### **Task 3 – Permitting and NEPA Compliance**

During this reporting period, the IOGCC report entitled “Storage of Carbon Dioxide in Geologic Structures, A Legal and Regulatory Guide for States and Provinces” was reviewed. Knowledge of this comprehensive document has facilitated and will continue to facilitate numerous discussions with our partners and others as to the development of a regulatory framework for carbon sequestration activities.

Work began on the NEPA documents for the Fort Nelson and Williston Basin demonstration tests. Once these documents are completed, the next required steps can be determined before field work on the tests begins.

#### **Task 4 – Site Characterization and Modeling**

During this quarter, there were no significant developments associated with either site activities that advance the state of the art with respect to CO<sub>2</sub> flood EOR operations, sequestration in brine-saturated formations, or the MMV of such projects.

#### **Task 5 – Well Drilling and Completion**

This task has not begun (Quarter 1 – Budget Period 3; Year 2). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 6 – Infrastructure Development**

There were no significant accomplishments on this task during the reporting period.

#### **Task 7 – CO<sub>2</sub> Procurement**

Numerous discussions with potential CO<sub>2</sub> suppliers have taken place. Because of the sensitive nature of negotiations, specifics cannot be shared at the present time.

#### **Task 8 – Transportation and Injection Operations**

This task has not begun (Quarter 1 – Budget Period 4; Year 3). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 9 – Operational Monitoring and Modeling**

This task has not begun (Quarter 1 – Budget Period 4; Year 3). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 10 – Site Closure**

This task has not begun (Quarter 1 – Budget Period 5; Year 9). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 11 – Postinjection Monitoring and Modeling**

This task has not begun (Quarter 1 – Budget Period 5; Year 9). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 12 – Project Assessment**

This task has not begun (Quarter 1 – Budget Period 3; Year 2). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

## Task 13 – Project Management

Phase III of the PCOR Partnership was awarded at the beginning of this reporting period. Phase III of the PCOR Partnership started October 1, 2007. There are currently 23 partners in the reporting period October 1 – December 31, 2007. The membership, as of December 31, 2007, is listed in Table 2. The PCOR Partnership Phase III Project Management Plan (deliverable D63) was submitted to DOE on December 28, 2007, as a draft final.

## PHASE III PROGRESS OF WORK

### Task 1 – Regional Characterization

The Regional Characterization task entails the review, characterization, and update of the PCOR Partnership region's CO<sub>2</sub> sinks and sources for inclusion in the DSS. Activities in this reporting period include the following:

- The conversion of the DSS site to a .NET framework began. This development platform will allow for greater functionality and a more robust user experience in the GIS portion of the DSS.
- We worked with the Missouri Geological Survey on a scope of work for characterization activities in Missouri.
- The development of a share point Web site was initiated which will be the backbone of the Phase III demonstration project reporting system. Initially, the site will be used for the storage and retrieval of images and photos that are used by EERC staff and partners in many presentations and papers. The site has the potential to become a data warehouse and information site for Phase III data of many formats including documents, spreadsheets, and modeling output. It also has the capability of facilitating communication with built-in discussion boards and calendaring tools.

**Table 2. PCOR Partnership Team, Phase III**

UND EERC	Melzer Consulting	North Dakota Industrial
ALLETE	Minnkota Power Cooperative, Inc.	Commission Oil and Gas Research
Basin Electric Power Cooperative	Natural Resources Canada	Council
BNI Coal, Ltd.	North American Coal Corporation	Otter Tail Power Company
British Columbia Ministry of Energy, Mines and Petroleum Resources	North Dakota Industrial Commission	Prairie Public Television
Encore Acquisition Company	Department of Mineral Resources, Oil and Gas Division	Ramgen Power Systems, Inc.
Great Northern Power Development, LP	North Dakota Industrial Commission	Spectra Energy
Great River Energy	Lignite Research, Development and Marketing Program	U.S. Department of Energy
Lignite Energy Council		Westmoreland Coal Company
Montana-Dakota Utilities Co.		

- Other characterization activities related to specific PCOR Partnership tasks are reported under the individual tasks in this report.

## **Task 2 – Public Outreach and Education**

Task 2 will provide stakeholders and the general public with information on sequestration methods, opportunities, and developments, including updates on the demonstration projects. During the month of December, discussions were held with key personnel for the outreach task to review the overall Phase III effort, the focus of the first contract period, and their role in the outreach task activities.

Also during the month of December, the subcontract with Prairie Public Broadcasting was prepared and provided to them for review.

## **Task 3 – Permitting and NEPA Compliance**

The goal of Task 3 is to obtain all the permits and approvals that are needed to comply with state, provincial, and federal requirements.

- PCOR Partnership staff attended the PGS Energy Training Phone and Web Seminar, “Carbon Market Developments.”
- Analysis continued of carbon market strategies.
- PCOR Partnership staff continued to follow legislative actions occurring in Congress.
- Review continued of recent publications relating to regulating CO<sub>2</sub> sequestration and MMV issues.
- PCOR Partnership staff continue to follow the developments of various state and regional initiatives and completed an update of internal documents that outline these groups.
- PCOR Partnership staff followed the activities that occurred at the United Nations conference in Bali.
- The commitments made by the United States at the Bali conference were reviewed.
- A report on Canadian carbon CCS opportunities by the ICO<sub>2</sub>N group of companies was reviewed.
- Review of the new Energy Bill began.

## **Task 4 – Site Characterization and Modeling**

Task 4 is focused on evaluating the effectiveness of large-scale CO<sub>2</sub> sequestration in geological formations at two different sites. The first site will examine CO<sub>2</sub> sequestration in conjunction with EOR operations in a deep carbonate reservoir in the Williston Basin. The

second will examine CO<sub>2</sub> sequestration in a carbonate brine-saturated formation Basin in northwestern Canada.

Throughout this reporting period characterization activities on the project have continued. An experimental design package describing the baseline geological, geochemical, and geomechanical characterization activities that will be conducted for the site over the course of Task 4 was finalized. A site has been selected by Spectra Energy Transmission (SET), but has not been formally announced and must remain confidential until an official announcement of the project has been made by SET and the provincial government. Geological and hydrogeological investigations of the study area continue. This work provides in-depth knowledge of the likely study region and will ultimately give insight into the long-term movement of fluids through this system.

### **Task 5 – Well Drilling and Completion**

Task 5 will develop the engineering designs for the installation of necessary injection, production, and monitoring wells. This task has not begun (Quarter 1 – Budget Period 3; Year 2). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

### **Task 6 – Infrastructure Development**

Task 6 will develop the infrastructure associated with the capture, dehydration, compression, and pipeline transportation required to move the CO<sub>2</sub> from the source to the oil field. Activities included:

- Attendance at the Carbon Capture Status and Outlook Conference in Washington, D.C., on December 3–5, 2007, to learn more about issues related to transportation infrastructure.
- Development of a statement of work for the Ramgen compressor demonstration/evaluation portion of the task.

### **Task 7 – CO<sub>2</sub> Procurement**

This task involves the documentation of the procedures to procure CO<sub>2</sub> for EOR activities. Numerous discussions with potential CO<sub>2</sub> suppliers have taken place. Because of the sensitive nature of negotiations, specifics cannot be shared at the present time.

### **Task 8 – Transportation and Injection Operations**

This task will consist of monitoring and documenting commercial partner activities related to the CO<sub>2</sub> pipeline for leaks and corrosion, as well as performing inspections and security checks. This task has not begun (Quarter 1 – Budget Period 4; Year 3). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

### **Task 9 – Operational Monitoring and Modeling**

Task 9 will develop site characterization, modeling, and monitoring for the Williston Basin and the Fort Nelson test site. This task has not begun (Quarter 1 – Budget Period 4; Year 3). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

### **Task 10 – Site Closure**

Task 10 will require research to be conducted with regard to those site closure practices and procedures that would be applicable for this type of operation. This task has not begun (Quarter 1 – Budget Period 5; Year 9). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

### **Task 11 – Postinjection Monitoring and Modeling**

Postinjection monitoring and modeling will use the data generated by the site characterization and monitoring activities to provide the technical basis for the formal establishment of carbon credits that are directly linked to the volume of CO<sub>2</sub> injected into the site and a third-party carbon-trading entity to validate and ultimately monetize the credits derived for the Phase III tests. This task has not begun (Quarter 1 – Budget Period 5; Year 9). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

### **Task 12 – Project Assessment**

This task has not begun (Quarter 1 – Budget Period 3; Year 2). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

### **Task 13 – Project Management**

Project management involves the development and distribution of required project reports, as well as overall project management duties. The project manager (PM) and task leaders meet on a monthly basis to report the progress of their tasks and discuss any issues and corrective actions necessary. Each task leader is also responsible to communicate and keep track of any subcontractors they may have in their respective tasks. Task leaders are also responsible to provide the PM with written weekly updates. These updates should include highlights (including trip reports), issues (i.e., budget, staffing, technical issues, etc.), opportunities, and travel plans. The monthly updates can be found on the PCOR Partnership DSS homepage.

An internal Project Initiation Briefing was held during this reporting period to ensure that all EERC personnel involved in the project understand the scope, goals, budget, milestones, deliverables, quality objectives, and contractual requirements of the project.

Preparations were made for a special session of the North Dakota Lignite Research Council to discuss the PCOR Partnership Phase III Proposal. The meeting was held January 24, 2008, in Bismarck, North Dakota. Preparations have begun for the 2008 PCOR Partnership



Annual Meeting. The date and location are not yet decided, but discussions have been held with partners in Minnesota and Missouri to be the host location.

### PHASE III COST STATUS

The approved BP3 budget along with actual costs incurred and in-kind cost share reported are shown in Table 3. An expected spending plan by quarter of cash funds for BP3 is provided in Figure 2 and Table 4.

### PHASE III SCHEDULE STATUS

Table 5 contains all the Phase III deliverables and milestones and the submission dates for the reporting period. See Table 6 for a listing of all deliverables and milestones by quarter, with completion dates, for the duration of the project. See Table 7 for a listing of deliverables and milestones by quarter for BP3.

**Table 3. Phase III Budget**

Organization	Approved Budget	Actual Costs Incurred
DOE Share – Cash	\$5,300,000	\$88,728
Nonfederal Share – Cash	\$2,808,847	\$0
Nonfederal Share – In-Kind	\$5,577,212	\$0
Total	\$13,686,059	\$88,728

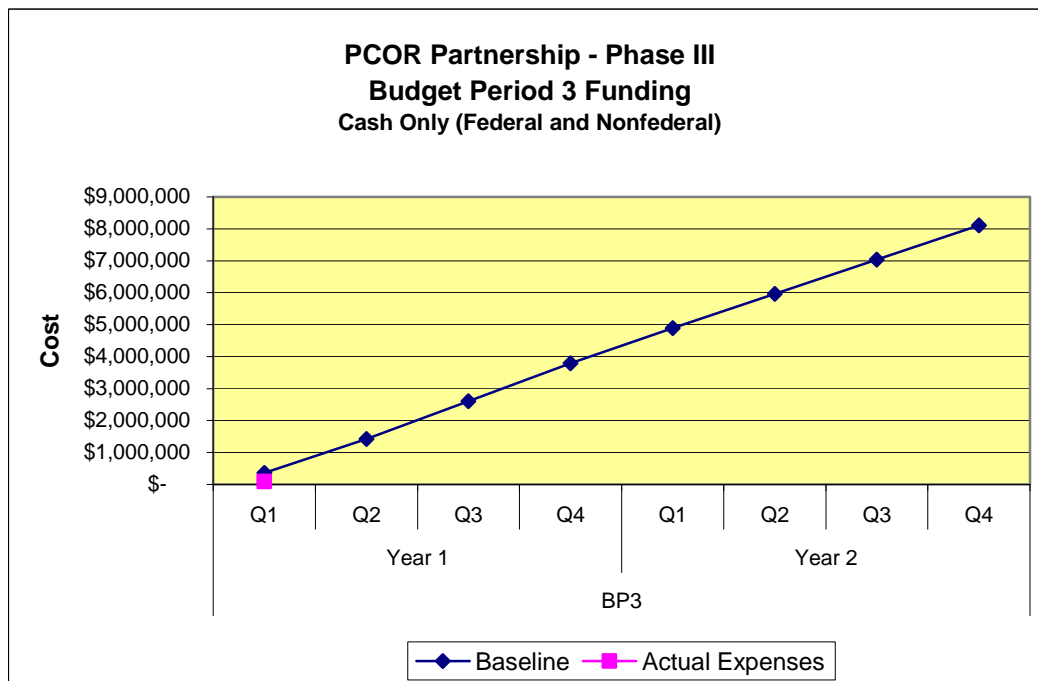


Figure 2. PCOR Partnership Phase III BP3 funding.

**Table 4. BP3 Spending Plan**

Baseline Reporting Quarter	Year 1								Year 2							
	Q1		Q2		Q3		Q4		Q1		Q2		Q3		Q4	
	Q1	Cum. BP Total	Q2	Cum. BP Total	Q3	Cum. BP Total	Q4	Cum. BP Total	Q1	Cum. BP Total	Q2	Cum. BP Total	Q3	Cum. BP Total	Q4	Cum. BP Total
<b>Baseline Cost Plan</b>																
Federal Share	\$ 358,125	\$ 358,125	\$ 596,875	\$ 955,000	\$ 716,250	\$ 1,671,250	\$ 716,250	\$ 2,387,500	\$ 746,875	\$ 3,134,375	\$ 721,875	\$ 3,856,250	\$ 721,875	\$ 4,578,125	\$ 721,875	\$ 5,300,000
Non-Federal Share	\$ -	\$ -	\$ 467,179	\$ 467,179	\$ 467,180	\$ 934,359	\$ 467,180	\$ 1,401,539	\$ 351,827	\$ 1,753,366	\$ 351,827	\$ 2,105,193	\$ 351,827	\$ 2,457,020	\$ 351,827	\$ 2,808,847
Total Planned	\$ 358,125	\$ 358,125	\$ 1,064,054	\$ 1,422,179	\$ 1,183,430	\$ 2,605,609	\$ 1,183,430	\$ 3,789,039	\$ 1,098,702	\$ 4,887,741	\$ 1,073,702	\$ 5,961,443	\$ 1,073,702	\$ 7,035,145	\$ 1,073,702	\$ 8,108,847
<b>Actual Incurred Cost</b>																
Federal Share	\$ 88,728	\$ 88,728														
Non-Federal Share	\$ -	\$ -														
Total Incurred Cost	\$ 88,728	\$ 88,728														
<b>Variance</b>																
Federal Share	\$ 269,397	\$ 269,397														
Non-Federal Share	\$ -	\$ -														
Total Variance	\$ 269,397	\$ 269,397														

**Table 5. Phase III Deliverables and Milestones for October 1 – December 31, 2007**

<b>Product</b>	<b>Date Submitted</b>
D63: Task 13 – Project Management Plan	12/28/07
D37: Task 4 – Fort Nelson Site Geological Characterization Experimental Design Package	12/28/07
M17: Task 4 – Fort Nelson Test Site Selection	12/28/07

**Table 6. Phase III Milestones and Deliverables**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 1 – Quarter 1 (October–December 2007)</b>		
M17: Task 4 – Fort Nelson Test Site Selected	12/31/07	12/28/07
D37: Task 4 – Fort Nelson Test Site – Site Geological Characterization Experimental Design Package	12/31/07	12/28/07
D63: Task 13 – Project Management Plan	12/31/07	12/28/07
<b>Year 1 – Quarter 2 (January–March 2008)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/08	
D38: Task 4 – Fort Nelson Test Site – Geomechanical Experimental Design Package	1/31/08	
M1: Task 1 – Three Target Areas Selected for Detailed Characterization	3/31/08	
M3: Task 3 – Start Environmental Questionnaire for Williston Basin Test Site	3/31/08	
M4: Task 4 – Williston Basin Test Site Selected	3/31/08	
M18: Task 4 – Fort Nelson Test Site Geochemical Work Initiated	3/31/08	
D11: Task 2 – Outreach Plan	3/31/08	
D30: Task 4 – Williston Basin Test Site – Geomechanical Experimental Design Package	3/31/08	
D27: Task 3 – Environmental Questionnaire – Fort Nelson Test Site	3/31/08	
<b>Year 1 – Quarter 3 (April–June 2008)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/08	
D14: Task 2 – General Phase III Fact Sheet	4/30/08	
D17: Task 2 – General Phase III Information PowerPoint Presentation	5/30/08	
M5: Task 4 – Data Collection Initiated for Williston Basin Test Site	6/30/08	
M6: Task 4 – Williston Basin Test Site Geochemical Work Initiated	6/30/08	
M7: Task 4 – Williston Basin Test Site Geological Characterization Data Collection Initiated	6/30/08	
D12: Task 2 – Demonstration Web Pages on the Public Site	6/30/08	
D28: Task 3 – Environmental Questionnaire – Williston Basin Test Site	6/30/08	
D31: Task 4 – Williston Basin Test Site – Geological Characterization Experimental Design Package	6/30/08	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 1 – Quarter 4 (July–September 2008)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/08	
M2: Task 1 – Demonstration Project Reporting System (DPRS) Prototype Completed	9/30/08	
M8: Task 4 – Williston Basin Test Site wellbore leakage data collection initiated	9/30/08	
D1: Task 1 – Review of Source Attributes	9/30/08	
D29: Task 3 – Permitting Action Plan	9/30/08	
D67: Task 4 – Fort Nelson Test Site – Simulation Report	9/30/08	
<b>Year 2 – Quarter 1 (October–December 2008)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/09	
D20: Task 2 – Video Support to PowerPoint and Web Site	12/31/08	
D57: Task 12 – Project Assessment Annual Report	12/31/08	
<b>Year 2 – Quarter 2 (January–March 2009)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/09	
D15: Task 2 – Williston Basin Test Site Fact Sheet	2/28/09	
D2: Task 2 – First Target Area Completed	3/31/09	
D24: Task 2 – PCOR Partnership Region Sequestration General Poster	3/31/09	
D66: Task 4 – Williston Basin Test Site – Simulation Report	3/31/09	
<b>Year 2 – Quarter 3 (April–June 2009)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/09	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	4/30/09	
D16: Task 2 – Fort Nelson Test Site Fact Sheet	5/29/09	
M9: Task 4 – Williston Basin Test Site B-Version Geological Model Development Initiated	6/30/09	
M10: Task 4 – Williston Basin Test Site Wellbore Leakage Data Collection Completed	6/30/09	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

Title/Description	Due Date	Actual Completion Date
<b>Year 2 – Quarter 4 (July–September 2009)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/09	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	7/31/09	
D40: Task 4 – Fort Nelson Test Site – Geomechanical Final Report	7/31/09	
D42: Task 5 – Williston Basin Test Site – Injection Experimental Design Package	8/31/09	
M11: Task 4 – Williston Basin Test Site Baseline Hydro Data Collection Completed	9/30/09	
M12: Task 4 – Williston Basin Test Site Geochemical Work Completed	9/30/09	
M19: Task6 – Capture, Dehydration, and Compression Technology Selected	9/30/09	
D9: Task 1 – Updated DSS	9/30/09	
D1: Task 1 – Review of Source Attributes	9/30/09	
D3: Task 1 – Permitting Review – One State and One Province	9/30/09	
D43: Task 5 – Williston Basin Test Site – Monitoring Experimental Design Package	9/30/09	
D47: Task 6 – Topical Report on the Preliminary Design of Advanced Compression Technology	9/30/09	
D60: Task 13 – Site Development, Operations, and Closure Plan	9/30/09	
D61: Task 13 – Site Commercialization Plan	9/30/09	
D64: Task 4 – Williston Basin Test Site – Site Characterization Report	9/30/09	
D65: Task 4 – Fort Nelson Test Site – Site Characterization Report	9/30/09	
<b>Year 3 – Quarter 1 (October–December 2009)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/09	
M13: Task 4 – Williston Basin Test Site B-Version Geological Model Development Completed	12/31/09	
M14: Task 4 – Williston Basin Test Site Geological Characterization Data Collection Completed	12/31/09	
M15: Task 4 – Williston Basin Test Site Baseline Hydro B-Model Completed	12/31/09	
D41: Task 4 – Fort Nelson Test Site – Geochemical Final Report	12/31/09	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	12/31/09	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	12/31/09	
D57: Task 12 – Project Assessment Annual Report	12/31/09	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 3 – Quarter 2 (January–March 2010)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/10	
D11: Task 2 – Outreach Plan	3/31/10	
D32: Task 4 – Williston Basin Test Site – Geomechanical Final Report	3/31/10	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	3/31/10	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	3/31/10	
<b>Year 3 – Quarter 3 (April–June 2010)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/10	
D13: Task 2 – Public Site Updates	6/30/10	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/10	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/10	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/10	
D25: Task 2 – Williston Basin Test Site Poster	6/30/10	
D33: Task 4 – Williston Basin Test Site – Geochemical Final Report	6/30/10	
D34: Task 4 – Williston Basin Test Site – Baseline Hydrogeological Final Report	6/30/10	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	6/30/10	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	6/30/10	
<b>Year 3 – Quarter 4 (July–September 2010)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/10	
D70: Task 4 – Fort Nelson Test Site – Best Practices Manual – Simulation Report	8/31/10	
M16: Task 4 – Williston Basin Test Site Final Geological Model Development Completed	9/30/10	
D1: Task 1 – Review of Source Attributes	9/30/10	
D10: Task 1 – DPRS Update	9/30/10	
D26: Task 2 – Fort Nelson Test Site Poster	9/30/10	
D35: Task 4 – Williston Basin Test Site – Best Practices Manual – Site Characterization	9/30/10	
D36: Task 4 – Williston Basin Test Site – Wellbore Leakage Final Report	9/30/10	
D48: Task 7 – Procurement Plan and Agreement Report	9/30/10	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 3 – Quarter 4 (July–September 2010), continued</b>		
D50: Task 9 – Williston Basin Test Site – Site Characterization, Modeling, and Monitoring Plan	9/30/10	
D52: Task 9 – Fort Nelson Test Site – Site Characterization, Modeling, and Monitoring Plan	9/30/10	
D68: Task 4 – Fort Nelson Test Site – Best Practices Manual – Site Characterization	9/30/10	
D69: Task 4 – Williston Basin Test Site – Best Practices Manual – Simulation Report	9/30/10	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	9/30/10	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	9/30/10	
<b>Year 4 – Quarter 1 (October–December 2010)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/10	
M20: Task 6 – Capture, Dehydration, and Compression Technology Design Completed	10/31/10	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	12/31/10	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	12/31/10	
D57: Task 12 – Project Assessment Annual Report	12/31/10	
<b>Year 4 – Quarter 2 (January–March 2011)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/11	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	3/31/11	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	3/31/11	
<b>Year 4 – Quarter 3 (April–June 2011)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/11	
D21: Task 2 – Williston Basin Test Site 15-minute Video	6/30/11	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/11	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/11	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/11	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	6/30/11	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	6/30/11	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 4 – Quarter 4 (July–September 2011)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/11	
D1: Task 1 – Review of Source Attributes	9/30/11	
D4: Task 1 – Permitting Review – Two Additional States	9/30/11	
D9: Task 1 – Updated DSS	9/30/11	
D45: Task 6 – Topical Report on the Integrated Capture Plant and Its Shakedown	9/30/11	
D46: Task 6 – Topical Report on Pipeline Route Selection, Design, and Construction	9/30/11	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	9/30/11	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	9/30/11	
<b>Year 5 – Quarter 1 (October–December 2011)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/11	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	12/31/11	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	12/31/11	
D57: Task 12 – Project Assessment Annual Report	12/31/11	
<b>Year 5 – Quarter 2 (January–March 2012)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/12	
D5: Task 1 – Second Target Area Completed	3/31/12	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	3/31/12	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	3/31/12	
<b>Year 5 – Quarter 3 (April–June 2012)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/12	
D13: Task 2 – Public Site Updates	6/30/12	
D22: Task 2 – Fort Nelson Test Site 15-minute Video	6/30/12	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/12	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/12	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/12	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	6/30/12	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	6/30/12	

Continued...



**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 5 – Quarter 4 (July–September 2012)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/12	
D1: Task 1 – Review of Source Attributes	9/30/12	
D10: Task 1 – DPRS Update	9/30/12	
D44: Task 5 – Williston Basin Test Site – Drilling and Completion Activities Final Report	9/30/12	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	9/30/12	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	9/30/12	
<b>Year 6 – Quarter 1 (October–December 2012)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/12	
D14: Task 2 – General Phase III Fact Sheet	12/31/12	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	12/31/12	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	12/31/12	
D57: Task 12 – Project Assessment Annual Report	12/31/12	
<b>Year 6 – Quarter 2 (January–March 2013)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/13	
D15: Task 2 – Williston Basin Test Site Fact Sheet	3/31/13	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	3/31/13	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	3/31/13	
<b>Year 6 – Quarter 3 (April–June 2013)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/13	
D16: Task 2 – Fort Nelson Test Site Fact Sheet	6/30/13	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/13	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/13	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/13	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	6/30/13	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	6/30/13	
<b>Year 6 – Quarter 4 (July–September 2013)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/30/13	
D1: Task 1 – Review of Source Attributes	9/30/13	
D6: Task 1 – Permitting Review – Three States and Two Provinces	9/30/13	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 6– Quarter 4 (July–September 2013), continued</b>		
D9: Task 1 – Updated DSS	9/30/13	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	9/30/13	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	9/30/13	
<b>Year 7 – Quarter 1 (October–December 2013)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/13	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	12/31/13	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	12/31/13	
D57: Task 12 – Project Assessment Annual Report	12/31/13	
<b>Year 7 – Quarter 2 (January–March 2014)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/14	
D24: Task 2 – PCOR Partnership Region Sequestration General Poster	3/31/14	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	3/31/14	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	3/31/14	
<b>Year 7 – Quarter 3 (April–June 2014)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/14	
D13: Task 2 – Public Site Updates	6/30/14	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/14	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/14	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/14	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	6/30/14	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	6/30/14	
<b>Year 7 – Quarter 4 (July–September 2014)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/14	
D1: Task 1 – Review of Source Attributes	9/30/14	
D7: Task 1 – Third Target Area Completed	9/30/14	
D10: Task 1 – DPRS Update	9/30/14	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	9/30/14	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	9/30/14	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 8 – Quarter 1 (October–December 2014)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/14	
D75: Task 3 – Updated Permitting Action Plan	10/30/14	
D25: Task 2 – Williston Basin Test Site Poster	12/31/14	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	12/31/14	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	12/31/14	
D57: Task 12 – Project Assessment Annual Report	12/31/14	
<b>Year 8 – Quarter 2 (January–March 2015)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/15	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	3/31/15	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	3/31/15	
<b>Year 8 – Quarter 3 (April–June 2015)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/15	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/15	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/15	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/15	
D26: Task 2 – Fort Nelson Test Site Poster	6/30/15	
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	6/30/15	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	6/30/15	
<b>Year 8 – Quarter 4 (July–September 2015)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/15	
D1: Task 1 – Review of Source Attributes	9/30/15	
D8: Task 1 – Permitting Review – Three States and One Province	9/30/15	
D9: Task 1 – Updated DSS	9/30/15	
D49: Task 8 – Transportation and Injection Operations Final Report	9/30/15	
D51: Task 9 – Williston Basin Test Site – Monitoring for CO <sub>2</sub> , EOR, and Sequestration Best Practices Manual	9/30/15	
D53: Task 9 – Fort Nelson Test Site – Monitoring for CO <sub>2</sub> Sequestration in a Brine Formation Best Practices Manual	9/30/15	

Continued...

**Table 6. Phase III Milestones and Deliverables (continued)**

<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 8 – Quarter 4 (July–September 2015), continued</b>		
D71: Task 9 – Williston Basin Test Site – Quarterly Summary of Operations	9/30/15	
D72: Task 9 – Fort Nelson Test Site – Quarterly Summary of Operations	9/30/15	
<b>Year 9 – Quarter 1 (October–December 2015)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/15	
D14: Task 2 – General Phase III Fact Sheet	12/31/15	
D23: Task 2 – Sequestration in Carbon Management – 30-minute Video	12/31/15	
D57: Task 12 – Project Assessment Annual Report	12/31/15	
<b>Year 9 – Quarter 2 (January–March 2016)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/16	
D11: Task 2 – Outreach Plan	3/31/16	
D15: Task 2 – Williston Basin Test Site Fact Sheet	3/31/16	
D55: Task 11 – Report on Cost-Effective Long-Term Monitoring Strategies for the Williston Basin Test Site	3/31/16	
D56: Task 11 – Report on Cost-Effective Long-Term Monitoring Strategies for the Fort Nelson Test Site	3/31/16	
<b>Year 9– Quarter 3 (April–June 2016)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/16	
D13: Task 2 – Public Site Updates	6/30/16	
D16: Task 2 – Fort Nelson Test Site Fact Sheet	6/30/16	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/16	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/16	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/16	
<b>Year 9 – Quarter 4 (July–September 2016)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/16	
D1: Task 1 – Review of Source Attributes	9/30/16	
D10: Task 1 – DPRS Update	9/30/16	

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**Table 6. Phase III Milestones and Deliverables (continued)**

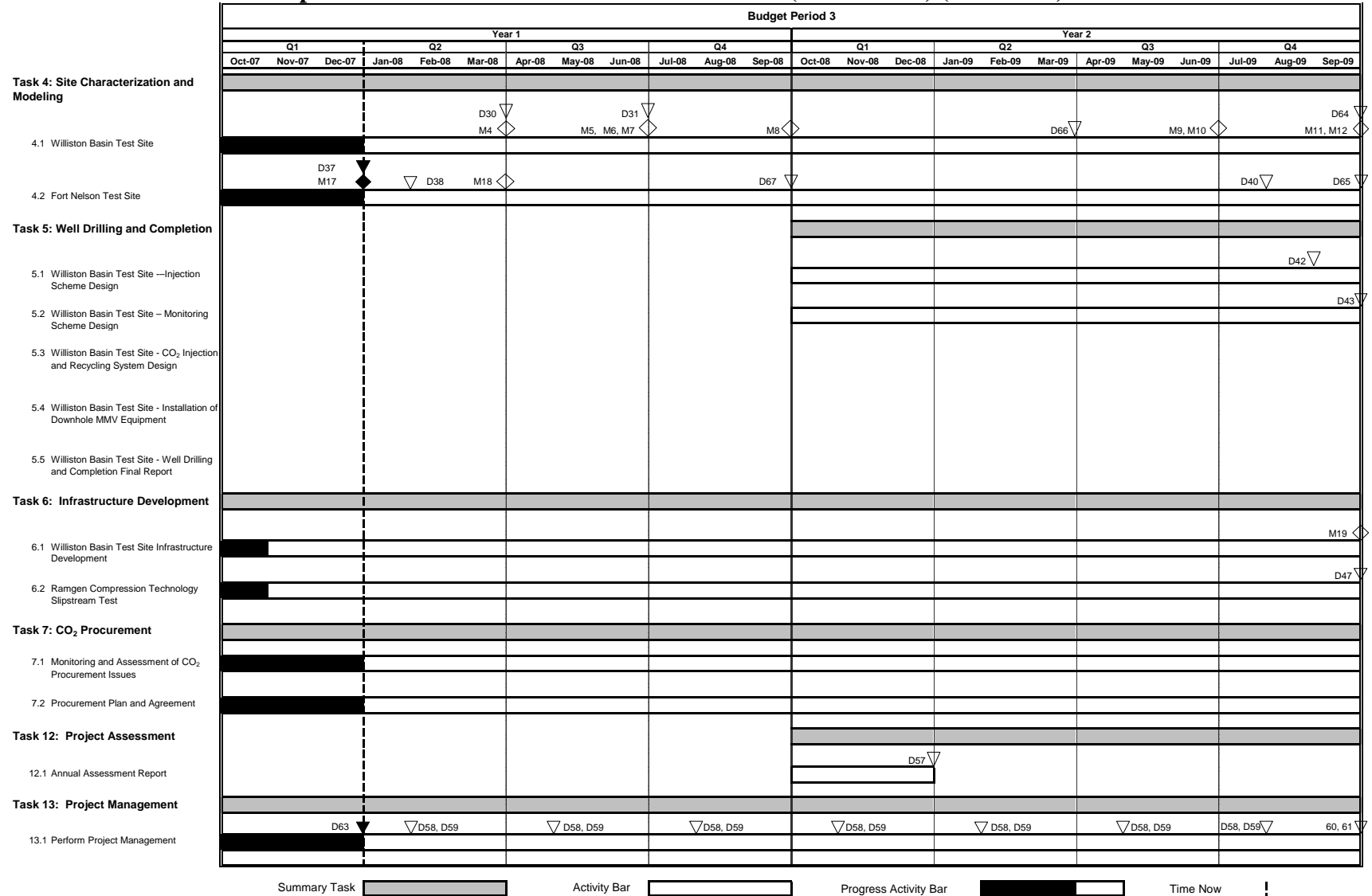
<b>Title/Description</b>	<b>Due Date</b>	<b>Actual Completion Date</b>
<b>Year 9 – Quarter 4 (July–September 2016), continued</b>		
D73: Task 11 – Williston Basin Test Site – Progress Report on Monitoring and Modeling Fate of CO <sub>2</sub>	9/30/16	
D74: Task 11 – Fort Nelson Test Site – Progress Report on Monitoring and Modeling Fate of CO <sub>2</sub>	9/30/16	
<b>Year 10 – Quarter 1 (October–December 2016)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/16	
D57: Task 12 – Project Assessment Annual Report	12/31/16	
<b>Year 10 – Quarter 2 (January–March 2016)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	1/31/17	
<b>Year 10 – Quarter 3 (April–June 2017)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	4/30/17	
D17: Task 2 – General Phase III Information PowerPoint Presentation	6/30/17	
D18: Task 2 – Williston Basin Test Site PowerPoint Presentation	6/30/17	
D19: Task 2 – Fort Nelson Test Site PowerPoint Presentation	6/30/17	
<b>Year 10 – Quarter 4 (July–September 2017)</b>		
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	7/31/17	
D54: Task 10 – Site Closure Report	9/30/17	
D73: Task 11 – Williston Basin Test Site – Progress Report on Monitoring and Modeling Fate of CO <sub>2</sub>	9/30/17	
D74: Task 11 – Fort Nelson Test Site – Progress Report on Monitoring and Modeling Fate of CO <sub>2</sub>	9/30/16	
D76: Task 3 – Best Practices Manual – Permitting	9/30/17	
D62: Task 13 – Final Report	9/30/17	
D58/D59: Task 13 – Quarterly Progress Report/Milestone Quarterly Report	10/31/17	

Table 7. PCOR Partnership Phase III BP3 Milestones and Deliverables (Gantt chart)



Continued...

**Table 7. PCOR Partnership Phase III BP3 Milestones and Deliverables (Gantt chart) (continued)**



Continued...

**Table 7. PCOR Partnership Phase III BP3 Milestones and Deliverables (Gantt chart) (continued)**

Key for Phase III Deliverables (D) ▼		Key for Phase III Milestone (M) ◆	
D1	Review of Source Attributes	M1	Three Target Areas Selected
D2	First Target Area Completed	M2	DPRS Prototype
D3	Permitting Review – One State and One Province	M3	Start Environmental Questionnaire for WB Test Site
D9	Updated DSS	M4	WB Test Site Selected
D11	Outreach Plan	M5	Data Collection Initiated for WB Test Site
D12	Demonstration Web Pages on the Public Site	M6	WB Test Site Geochemical Work Initiated
D14	General Phase III Fact Sheet	M7	WB Test Site Geological Characterization Data Collection Initiated
D15	Williston Basin (WB) Test Site Fact Sheet	M8	WB Test Site Wellbore Leakage Data Collection Initiated
D16	Fort Nelson Test Site Fact Sheet	M9	WB Test Site B-Version Geological Model Development Initiated
D17	General Phase III Information PowerPoint Presentation	M10	WB Test Site Wellbore Leakage Data Collection Completed
D18	WB Test Site PowerPoint Presentation	M11	WB Test Site Baseline Hydro Data Collection Completed
D19	Fort Nelson (FN) Test Site PowerPoint Presentation	M12	WB Test Site Geochemical Work Completed
D20	Video Support to PowerPoint and Web Site	M17	FN Test Site Selected
D24	PCOR Region Sequestration General Poster	M18	FN Test Site Geochemical Work Initiated
D27	FN Test Site – Environmental Questionnaire	M19	Capture, Dehydration, and Compression Technology Selected
D28	WB Test Site – Environmental Questionnaire		
D29	Permitting Action Plan		
D30	WB Test Site – Geomechanical Experimental Design Package		
D31	WB Test Site – Site Geological Characterization Experimental Design Package		
D37	FN Test Site – Site Geological Characterization Experimental Design Package		
D38	FN Test Site – Geotemechanical Experimental Design Package		
D40	FN Test Site – Geomechanical Final Report		
D42	WB Test Site – Injection Experimental Design Package		
D43	WB Test Site – Monitoring Experimental Design Package		
D47	Topical Report on the Preliminary Design of Advanced Compression Technology		
D57	Project Assessment Annual Report		
D58	Quarterly Progress Report		
D59	Milestone Quarterly Report		
D60	Site Development, Operations, and Closure Plan		
D61	Site Commercialization Plan		
D63	Project Management Plan		
D64	WB Test Site – Site Characterization Report		
D65	FN Test Site – Site Characterization Report		
D66	WB Test Site – Simulation Report		
D67	FN Test Site – Simulation Report		



## **ACTUAL OR ANTICIPATED PHASE III PROBLEMS OR DELAYS**

### **Task 1 – Regional Characterization**

The Missouri Geological Survey developed a scope of work for a subcontract, which DOE has approved. However, this subcontract cannot be finalized until the specific requirements for providing detailed expenditure information have been identified so they can be included in the subcontract.

### **Task 2 – Public Outreach and Education**

Work on several critical Phase II outreach deliverables precluded sufficient Phase III activity during this reporting period. Efforts are under way to resolve this issue. Task 2 should be back on schedule during the next quarter.

### **Task 3 – Permitting and NEPA Compliance**

Nothing to note at this time.

### **Task 4 – Site Characterization and Modeling**

Nothing to note at this time.

### **Task 5 – Well Drilling and Completion**

Nothing to note at this time.

### **Task 6 – Infrastructure Development**

Work on this task has been delayed while the plans for the CO<sub>2</sub> capture and geologic sequestration for the demonstration projects are finalized. Once the specific carbon capture and sequestration strategy for the demonstration project has been finalized, planned task activities related to CO<sub>2</sub> capture, compression, and pipeline design and routing can begin.

### **Task 7 – CO<sub>2</sub> Procurement**

Nothing to note at this time.

### **Task 8 – Transportation and Injection Operations**

Nothing to note at this time.

### **Task 9 – Operational Monitoring and Modeling**

Nothing to note at this time.

### **Task 10 – Site Closure**

Nothing to note at this time.

### **Task 11 – Postinjection Monitoring and Modeling**

Nothing to note at this time.

### **Task 12 – Project Assessment**

Nothing to note at this time.

### **Task 13 – Project Management**

Nothing to note at this time.

## **PHASE III PRODUCTS OR TECHNOLOGY TRANSFER ACTIVITIES**

### **Task 1 – Regional Characterization**

PCOR Partnership staff organized and facilitated the first PCOR Partnership geologic working group meeting, following the 2007 PCOR Partnership Annual Meeting. Partners and prospective partners, such as the geological surveys of Missouri, Iowa, Minnesota, and North Dakota, as well as partners from British Columbia discussed geologic characterization activities occurring in their regions. The group decided to hold similar meetings twice a year. The next meeting is being planned for the May–June 2008 time frame.

### **Task 2 – Public Outreach and Education**

Nothing to note at this time.

### **Task 3 – Permitting and NEPA Compliance**

Activities included the following:

- An overview was presented of accomplishments and plans for Phase II regulatory and permitting activities at the 2007 PCOR Partnership Annual Meeting.
- PCOR Partnership staff met with representatives from Spectra Energy and the British Columbia government to discuss regulatory issues in British Columbia, and the United States.
- PCOR Partnership staff met with a representative from Blue Source, LLC, to discuss CO<sub>2</sub> sequestration market and regulatory activities in the region.

- Development of a permitting flowchart was completed for PCOR Partnership Phase II field validation tests. Once the flowcharts are finalized, they will be incorporated in the DSS system.

#### **Task 4 – Site Characterization and Modeling**

During this reporting period, the deliverable entitled “D37: Fort Nelson Site Geological Characterization Experimental Design Package” and milestone entitled “M17: Fort Nelson Test Site Selection” were both submitted to DOE for approval on December 28, 2007.

#### **Task 5 – Well Drilling and Completion**

This task has not begun (Quarter 1 – Budget Period 3; Year 2). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 6 – Infrastructure Development**

No products have been developed or technology transfer activities undertaken during the reporting period.

#### **Task 7 – CO<sub>2</sub> Procurement**

Numerous discussions with potential CO<sub>2</sub> suppliers have taken place. Because of the sensitive nature of negotiations, specifics cannot be shared at the present time.

#### **Task 8 – Transportation and Injection Operations**

This task has not begun (Quarter 1 – Budget Period 4; Year 3). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 9 – Operational Monitoring and Modeling**

This task has not begun (Quarter 1 – Budget Period 4; Year 3). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 10 – Site Closure**

This task has not begun (Quarter 1 – Budget Period 5; Year 9). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

#### **Task 11 – Postinjection Monitoring and Modeling**

This task has not begun (Quarter 1 – Budget Period 5; Year 9). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

## **Task 12 – Project Assessment**

This task has not begun (Quarter 1 – Budget Period 3; Year 2). Once activities are initiated, the information will be communicated and detailed in the quarterly progress report.

## **Task 13 – Project Management**

During this reporting period, the deliverable entitled “D63: Task 13 – Project Management Plan” was submitted to DOE for approval on December 28, 2007.

## **MEETINGS/TRAVEL**

Representatives from the PCOR Partnership participated in and/or presented at the following meetings and conferences in this reporting period:

- October 18–19, 2007: PCOR Partnership Annual Meeting, EERC, Grand Forks, North Dakota
- October 25–26, 2007: Ducks Unlimited Carbon Kickoff Meeting, Bismarck, North Dakota
- October 26, 2007: Senate Energy Staff Briefing on the Phase III Carbon Sequestration Partnerships Project Awards, Washington, D.C.
- October 31 – November 1, 2007: National Conference of State Legislatures Advanced Coal Technologies Energy Institute, Tampa, Florida
- November 5, 2007: Zama Quarterly Meeting, Calgary, Alberta
- November 6–8, 2007: International Energy Agency Meeting, Edmonton, Alberta
- November 7–9, 2007: Clean Power in the West Summit, San Francisco, California
- November 11–14, 2007: Society of Petroleum Engineers Annual Technical Conference, Anaheim, California
- November 14–16, 2007: Carbon Reduction Project Development and Finance, Houston, Texas
- November 28, 2007: Presented to a graduate chemical engineering class at UND, Grand Forks, North Dakota
- December 3–5, 2007: Carbon Capture Status and Outlook Conference, Washington, D.C.
- December 11–13, 2007: POWER-GEN International, New Orleans, Louisiana
- December 12–13, 2007: Regional Carbon Sequestration Review Meeting, Pittsburgh, Pennsylvania

Materials presented at these meetings are available to partners on the PCOR Partnership Decision Support System (DSS, © 2007 EERC Foundation) Web site (<http://gis.undeerc.org/website/pcorp/>).

## **REFERENCES**

None.