

**BEFORE THE PUBLIC UTILITIES COMMISSION
OF THE STATE OF COLORADO**

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**SEMI-ANNUAL PROGRESS REPORT OF)
PUBLIC SERVICE COMPANY OF COLORADO) Docket No. 11A-325E
FOR THE PAWNEE EMISSIONS CONTROL)
PROJECT)**

Semi-Annual Progress Report (Corrected)

Pawnee Emissions Control Project

September 20, 2012

INTRODUCTION

In various proceedings, the Commission has authorized Public Service Company of Colorado (“Public Service”) to proceed with the completion of specific components of its Clean Air Clean Jobs Act (“CACJA”) compliance plan, which the Commission approved in Docket No. 10M-245E. An issue that arose in various proceedings was whether the Company would be willing to provide reports to the Commission and interested parties updating them of the Company’s progress towards the completion of these projects. We indicated our willingness to do so and specified the information that we intended to report. Although the Commission has declined to require us to provide these reports, we believe that these reports provide useful information and that by providing this information now, we may lessen concern in subsequent rate cases regarding the costs of these projects. This report addresses the Cherokee Unit 2 synchronous condenser project.

OVERALL PROJECT STATUS

Engineering Update

Sargent & Lundy has been selected to provide consulting and balance of plant engineering services. Detailed engineering, equipment specifications development, and various engineering studies and evaluations are in progress.

Procurement Update

Contracts have been awarded for the supply of major equipment systems. There has been no major material departure from reported conceptual design.

The Flue Gas Desulphurization (“FGD”) systems, and Selective Catalytic Reduction (“SCR”) systems are being supplied by Babcock & Wilcox (“B&W”).

Detailed engineering is in progress and B&W has subcontracts in place for major subsystems such as lime preparation. Delivery of components will begin 1st quarter 2013.

The new Induced Draft ("ID") fans are being supplied by Howden-Variac. Detailed engineering is in progress.

Proposal evaluation for the new waste ash system is in progress with award expected to be in August.

Procurement of other equipment including Fabric Filter Dust Collectors ("FFDC) modifications, long lead electrical equipment, steam coil air heaters, compressed air equipment, pumps, and control valves are in progress.

Construction Update

Proposals for early construction activities including site development and FFDC compartment stiffening have been received and are being evaluated. The proposals for foundation installation are currently being evaluated. Development of technical specifications for the General Constructor is in progress with mobilization scheduled for January 2013.

PROJECT FINANCIAL PERFORMANCE

In our application in Docket No. 11A-325E, we provided a cost estimate for the project of \$238.6M in 2010 dollars. Included in this estimate was the cost of the Sorbent Injection for \$2.1 million. That portion of the project is complete and its actual costs were \$1.16 million. The remaining emission control projects, SCR and Scrubber, has an escalation factor applied to the CPCN estimate of 2.5% to project

and the current budget for the project. The budget of \$252.045 million is submitted in ATTACHMENT 1.0 CPCN Cost Summary.

In Attachment 2, Summary Cost Estimate, the term “CURRENT ESTIMATE” is the current expected completion cost for each planned contract. As contracts are awarded, the “CURRENT ESTIMATE” includes the actual contract value plus an allowance for changes over the contract lifecycle. The term “SPENT TO DATE” is the actual costs incurred through June 30, 2012.

We currently have approximately 47% of the total project direct cost under contract. The budgets shown in Attachment 2.0 are divided into direct costs and indirect costs. The direct cost contracts and purchase orders account for approximately 81% of total project costs. Public Service’s indirect costs account for 19% of the total project costs. As of June 30, 2012 we have spent \$25,322,858 or 10.0% of the Summary Cost Estimate of \$252.045 million.

PROJECTED VS. ACTUAL CONSTRUCTION SCHEDULE

The Company included with its supplemental direct testimony a schedule for project completion of December 2014. Attachment 3.0 is the Company’s project schedule reflecting current progress.

Respectfully submitted this 20th day of September, 2012.

ATTACHMENTS

- 1.0 CPCN Cost Summary
- 2.0 Summary Cost Estimate
- 3.0 Project Schedule

ATTACHMENT 1.0 CPCN Cost Summary

Pawnee Unit 1 SCR and LSD Summary Costs

Overall Project Construction Costs – As of August, 2010 x 1000 (2010 \$ with an escalation allowance)			
Item	Materials	Labor	Total
Owner Furnished SCR Equipment	\$15,923	\$18,641	\$34,564
Owner Furnished Scrubber Equipment	\$71,329	\$28,043	\$99,372
Mechanical Systems	\$21,232	\$9,215	\$30,447
Electrical Systems	\$2,138	\$800	\$2,938
Civil/Structural	\$0	\$0	\$0
Subtotal	\$110,622	\$56,699	\$167,321
Design and Contractor Overheads & Profit	\$10,348	\$5,670	\$16,018
TOTAL - Direct Costs	\$120,970	\$62,369	\$183,339
Allowance for Escalation (2.5%)			\$15,583
Contingency			\$21,227
AFUDC			\$0
Indirect Costs			\$31,896
TOTAL PROJECT COST			\$252,045
Interconnection Costs			
Other Costs			\$0
ALL-IN COST			\$252,045

Note: Allowance for Funds Used During Construction (AFUDC) is not included in the project construction costs.

Item	Budget	Actual
Mercury Emissions Control	\$2,171	\$1,159

ATTACHMENT 2.0 Summary Cost Estimate Report



Pawnee CACJA Summary Cost Estimate

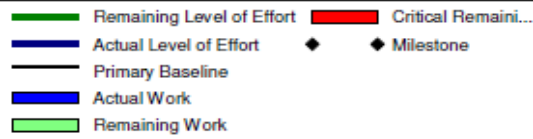
CONTRACT		Baseline Estimate	Current Estimate	Budget Delta	Spent to-date	
Description		01-Jun-10	01-Jun-12		\$	%
Direct Contracts						
AE	Engineering & Service Contracts	12,934,711	13,456,061	-521,350	4,570,959	35.3%
CC	Construction Contracts	74,091,618	99,054,090	-24,962,472	390,866	0.5%
OE	Owner Furnished Equipment	116,645,938	92,421,360	24,224,578	18,449,936	20.0%
Totals		\$203,672,267	\$204,931,511	-\$1,259,244	\$23,411,761	11%
Indirects						
ZA	Misc Site P.O.s	2,345,000	2,345,000	0	10,928	0.5%
ZH	Xcel Energy Costs	5,653,513	5,753,513	-100,000	138,630	2.5%
ZL	Xcel Energy Labor	4,584,220	4,584,220	0	1,283,908	28.0%
ZS	Staff Augmentation Contracts	4,250,000	5,085,000	-835,000	477,631	11.2%
ZZ	Contingency and Escalation	31,539,542	29,345,298	2,194,244	0	0.0%
Totals		\$48,372,275	\$47,113,031	\$1,259,244	\$1,911,097	4.0%
ENERGY SUPPLY TOTAL		\$252,044,542	\$252,044,542	\$0	\$25,322,858	10.0%

ATTACHMENT 3.0 Project Schedule

Activity ID	Activity Name	Start	Finish	Rem. Duration	2012				2013				2014				2015				2016
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1		
Pawnee SCR & FGD Project					16-Dec-10 A	11-Dec-14	624														
Milestones / General					03-Jan-11 A	11-Dec-14	537														
M0100	Project Start	03-Jan-11 A		0																	
M0110	Award A/E		27-May-11 A	0																	
M0130	CPUC Written Order		14-Feb-12 A	0																	
M0120	Receive Air Permit		01-Nov-12	0																	
M0125	Start SCR/FGD Construction	07-Jan-13		0																	
M0800	Commercial Operation		05-Aug-14	0																	
M0810	Acceptance		17-Sep-14	0																	
M0900	Project Complete		11-Dec-14	0																	
Feasibility/Justification					15-Apr-11 A	14-Feb-12 A	0														
J1010	CPUC	15-Apr-11 A	14-Feb-12 A	0																	
Planning / Design					16-Dec-10 A	21-Dec-12	122														
D2100	Prep Spec/Bid/Eval/Negotiate-Owner's Engr	03-Jan-11 A	27-May-11 A	0																	
D2130	Prepare/Submit Air Permit Application	01-Dec-11 A	04-Jun-12 A	0																	
E2550	Structural Detail Design	19-Dec-11 A	30-Oct-12	85																	
D2110	Environmental Permitting Process/Approval	16-Dec-10 A	01-Nov-12	87																	
E2530	Electrical/I&C Detail Design	19-Dec-11 A	21-Dec-12	122																	
D2310	Planning/Design	03-Jan-11 A	21-Dec-12	122																	
E2520	Mechanical Detail Design	19-Dec-11 A	20-Dec-12	121																	
Procurement					31-May-11 A	17-May-13	225														
SCR Procurement					31-May-11 A	19-Apr-13	205														
P3110	Spec/Bid/Eval/Negotiate/Award Reactor Housing Equip	31-May-11 A	27-Feb-12 A	0																	
P3242	Spec/Bid/Eval/Negotiate/Award Air Preheater Modifications	31-May-11 A	27-Feb-12 A	0																	
P3290	Spec/Bid/Eval/Nego/Award Inlet/Outlet Ductwork	31-May-11 A	27-Feb-12 A	0																	
P3320	Fabricate & Deliver Inlet/Outlet Ductwork	04-Jun-12 A	01-Apr-13	191																	
P3120	Mfg/Deliv Reactor Housing Equipment	05-Mar-12 A	19-Apr-13	205																	
P3254	Mfg/Deliv Air Preheater Modifications	21-Feb-12 A	19-Apr-13	205																	
P3210	SCR Procurement	31-May-11 A	19-Apr-13	205																	

█ Remaining Level of Effort █ Critical Remaini...
█ Actual Level of Effort ◆ Milestone
— Primary Baseline
█ Actual Work
█ Remaining Work

Activity ID	Activity Name	Start	Finish	Rem. Duration	2012		2013				2014				2015				2016
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
FGD Procurement					213														
P3130	Spec/Bid/Eval/Negotiate/Award SO2 Removal System	31-May-11 A	16-Dec-11 A	0															
P3150	Spec/Bid/Eval/Negotiate/Award Reagent Feed System	31-May-11 A	16-Dec-11 A	0															
P3170	Spec/Bid/Eval/Negotiate/Award Flue Gas System Ductwork	31-May-11 A	16-Dec-11 A	0															
P3190	Spec/Bid/Eval/Negotiate/Award Solids Handling	27-Jan-12 A	07-Aug-12	26															
P3180	Mfg/Deliv Flue Gas System Ductwork	02-Apr-12 A	04-Jan-13	130															
P3140	Mfg/Deliv SO2 Removal System	02-Apr-12 A	01-Mar-13	170															
P3220	FGD Procurement	31-May-11 A	01-May-13	213															
P3200	Mfg/Deliv Solids Handling	08-Aug-12	18-Mar-13	155															
P3160	Mfg/Deliv Reagent Feed System	02-Apr-12 A	01-May-13	213															
BOP Procurement					225														
P3280	BOP Procurement	19-Dec-11 A	02-Jul-12	0															
P3380	Structural Vendor Engrg Doc/Info	19-Dec-11 A	04-Sep-12	45															
P3390	Mech Vendor Engrg Doc/Info	30-Apr-12 A	02-Oct-12	65															
P3400	Elec/I&C Vendor Engrg Doc/Info	30-Apr-12 A	02-Oct-12	65															
P3410	Structural Steel Dwg's	23-Feb-12 A	23-Oct-12	80															
P3310	Spec/Bid/Eval/Nego/Award BOP Equip	16-Jan-12 A	05-Nov-12	89															
P3230	Spec/Bid/Eval/Nego/Award Mech/Struct Construction Pkg	29-May-12 A	21-Dec-12	122															
P3253	Mfg/Deliv Pumps, Piping & BOP	06-Nov-12	09-May-13	130															
P3420	Fabricate & Del Structural Steel	24-Oct-12	17-May-13	145															
Construction / Installation					449														
BOP Construction					449														
C4020	Mobilize Mechanical/Structural Contractor	24-Dec-12	22-Jan-13	20															
C4140	U/G Utilities & Foundations	27-Aug-12*	14-Mar-13	140															
C4050	BOP Construction	24-Dec-12	09-May-14	352															
C4025	Tie In Outage	28-Feb-14*	10-May-14	72															
C4105	Install I&C	28-Mar-14	30-May-14	45															
C4040	BOP Construction/Installation	07-Jun-13	30-May-14	250															
SCR Installation					215														



Pawnee SCR FGD Project

Data Date: 02-Jul-12

Activity ID	Activity Name	Start	Finish	Rem. Duration	2012	2013				2014				2015				2016	
					Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1
C4045	Erect SCR Steel Structure	08-Apr-13	13-Aug-13	90				■	■										
C4055	Install SCR Equipment & Piping	10-Jul-13	10-Feb-14	150				■	■	■									
C4028	SCR Construction	08-Apr-13	15-Jan-14	197				■	■	■									
C4035	Install Inlet/Outlet Ductwork	23-Jul-13	15-Jan-14	123				■	■	■									
FGD Construction		30-Jan-13	06-Feb-14	261				■	■	■									
C4125	Erect FGD Steel Structure	30-Jan-13	26-Jun-13	105				■	■										
C4075	Install Reagent Feed System	02-May-13	04-Nov-13	130				■	■										
C4095	Install Solids Handling Equipment & Piping	05-Aug-13	06-Feb-14	130				■	■	■									
C4065	Install SO2 Removal Equipment & Piping	27-Jun-13	31-Dec-13	130				■	■	■									
C4085	Install Flue Gas System Ductwork	27-Jun-13	31-Dec-13	130				■	■	■									
C4115	FGD Construction	02-May-13	31-Dec-13	169				■	■	■									
Commissioning / Start-up		12-May-14	17-Sep-14	90															
S5210	Test/Checkout/Start Up	12-May-14	05-Aug-14	60															
S5110	Performance Testing/Reliability Testing	06-Aug-14	17-Sep-14	30															
S5220	Commissioning/Start-Up	12-May-14	17-Sep-14	90															
Close-out		18-Sep-14	11-Dec-14	60															
F6100	Project Closeout	18-Sep-14	11-Dec-14	60															

- Remaining Level of Effort
- Actual Level of Effort
- Primary Baseline
- Actual Work
- Remaining Work
- Critical Remaini...
- ◆ Milestone