State of Florida



Hublic Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE:

September 12, 2012

TO:

Ann Cole, Commission Clerk, Office of Commission Clerk

FROM:

Charles Murphy, Senior Attorney, Office of the General Counsel

RE:

Docket Number 110262-EI - Petition for approval of new environmental program

for cost recovery through Environmental Cost Recovery Clause, by Tampa Electric

Company

Please place the attached Worksheet for Conveyor and Dome Scenarios and related email in the above-referenced docket file.

CWM/tef

Charles Murphy

From:

Jenny Wu

Sent:

Wednesday, September 12, 2012 9:20 AM

To:

Charles Murphy

Subject:

FW: New gypsum storage facility

Attachments: Worksheet for Conveyor and Dome Scenarios.xlsx

Charles.

You may want to place it in the docket No. 110262-EI.

Thanks, Jenny

From: Bryant, Howard T. [mailto:htbryant@tecoenergy.com]

Sent: Wednesday, September 12, 2012 8:59 AM

To: David Dowds

Cc: Jenny Wu; Beasley, Jim

Subject: RE: New gypsum storage facility

Dave.

Please see attached file which contains tabs for the conveyor and dome options. At first glance, prior to review of the worksheets, it would seem as you think, namely, the levelized revenue requirement for the conveyor should be greater than the dome simply based upon the capital cost. However, two key differences exist and drive the evaluation. These are provided below.

- 1. The dome evaluation has a higher O&M cost due to the increased transportation cost of moving product from its production point to the storage point.
- 2. The conveyor option has an estimated transportation savings (NPV of \$16,968,136) associated with the fact that the conveyor will mechanically deliver gypsum production to a point within close proximity to National Gypsum and make the cost of their "pick-up" of material favorable to the point that an anticipated cost saving will inure to Tampa Electric through a contract arrangement reflecting the reduced cost of product delivery experienced by National Gypsum. Simply stated, National Gypsum would not incur their current delivery costs and those cost savings would then be anticipated for receipt to Tampa Electric through a contract arrangement.

In other words, for the dome option, National Gypsum will receive product in the same manner currently used, namely, they use their trucks to come to the production site and pick up their gypsum purchases. In the conveyor option, no one uses trucks to move the product. It is conveyed to the new storage area, located adjacent to National Gypsum thereby creating the transportation savings estimated in the conveyor analysis.

If you have further questions, please let me know. Thanks, Howard

From: David Dowds [mailto:DDowds@PSC.STATE.FL.US]

Sent: Tuesday, September 11, 2012 7:03 AM

To: Bryant, Howard T.

Cc: Jenny Wu

Subject: New gypsum storage facility

I know we discussed this but I am still struggling with one aspect of your response to Staffs Sixth Data NUMBER - DATE

06135 SEP 12 º

Request, No. 13.

On page 6 of the responses to the Sixth Request, it indicates that the estimated cost of the conveyor system is \$24,057,000, and the estimated cost of the dome is \$4,690,000. On page 13 it indicates that the levelized revenue requirement of the reduced scope storage facility with the conveyor system is \$3,066,032 per year; the reduced scope storage facility with the dome is shown to be \$3,089,770. Since the cost of the conveyor system is 5 times that of the dome, I cannot understand how the levelized revenue requirement of the dome can by greater than that of the conveyor system. Could we see the actual work papers that support these amounts? Perhaps there is something that we are missing.

Dave Dowds
Supervisor, Industry Development, Industry Development & Market Analysis Division
Florida Public Service Commission
(850)413-6542
ddowds@psc.state.fl.us

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Reduced Scope with Conveyor

	Transportation			Transportation	Gypsum			
Year	С	apital	O&M	Savings	Sub-Total	Revenue	Total	
	2012	\$0	\$8,949,690	\$0	\$8,949,690	\$2,441,226	\$6,508,465	
	2013	\$0	\$74,961	\$0	\$74,961	\$2,890,079	(\$2,815,118)	
	2014	\$0	\$1,884,606	\$0	\$1,884,606	\$3,119,071	(\$1,234,465)	
	2015	\$8,844,717	\$755,002	\$1,159,131	\$8,440,588	\$3,397,653	\$5,042,935	
	2016	\$8,639,448	\$837,481	\$1,393,685	\$8,083,245	\$3,789,196	\$4,294,049	
	2017	\$8,434,178	\$941,532	\$1,566,780	\$7,808,929	\$4,030,006	\$3,778,924	
	2018	\$8,228,910	\$1,047,070	\$1,601,249	\$7,674,731	\$4,118,775	\$3,555,956	
	2019	\$8,023,640	\$1,063,750	\$1,636,477	\$7,450,913	\$4,210,743	\$3,240,170	
	2020	\$7,818,370	\$1,080,949	\$1,672,479	\$7,226,839	\$4,305,130	\$2,921,709	
	2021	\$7,613,100	\$1,099,525	\$1,709,274	\$7,003,351	\$3,314,141	\$3,689,211	
	2022	\$7,407,831	\$1,117,721	\$1,746,878	\$6,778,674	\$3,387,086	\$3,391,589	
	2023	\$7,202,561	\$1,134,951	\$1,785,309	\$6,552,203	\$3,460,397	\$3,091,807	
	2024	\$6,997,293	\$1,153,734	\$1,824,586	\$6,326,441	\$3,538,371	\$2,788,070	
	2025	\$6,792,023	\$1,172,130	\$1,864,727	\$6,099,426	\$3,615,982	\$2,483,444	
	2026	\$6,586,753	\$1,190,960	\$1,905,751	\$5,871,962	\$3,695,377	\$2,176,586	
	2027	\$6,381,483	\$1,210,939	\$1,947,677	<i>\$5,644,745</i>	\$3,776,165	\$1,868,580	
	2028	\$6,176,214	\$1,231,206	\$1,990,526	\$5,416,894	\$3,860,648	\$1,556,246	
	2029	\$5,970,945	\$6,729,712	\$2,034,318	\$10,666,339	\$3,945,291	\$6,721,049	
	2030	\$5,765,676	\$10,463,007	\$2,079,073	\$14,149,610	\$4,031,951	\$10,117,659	
	2031	\$5,560,406	\$10,509,143	\$2,124,813	\$13,944,736	\$4,119,453	\$9,825,284	
	2032	\$5,355,136	\$10,964,869	\$2,171,558	\$14,148,447	\$4,211,643	\$9,936,804	
	2033	\$5,149,866	\$11,221,355	\$2,219,333	<i>\$14,151,888</i>	\$4,304,448	\$9,847,439	
	2034	\$4,944,596	\$11,425,904	\$2,268,158	\$14,102,342	\$4,398,908	\$9,703,434	
	2035	\$4,739,329	\$8,306,258	\$2,318,057	\$10,727,530	\$4,472,976	\$6,254,554	
	2036	\$4,534,059	\$1,376,489	\$2,289,976	\$3,620,572	\$4,514,690	(\$894,118)	
	2037	\$4,328,789	\$1,399,712	\$2,337,903	\$3,390,598	\$4,613,739	(\$1,223,141)	
	2038	\$4,123,519	\$1,402,520	\$1,879,341	\$3,646,697	\$4,658,293	(\$1,011,596)	
	2039	\$3,918,249	\$1,413,392	\$1,617,760	\$3,713,881	\$4,726,949	(\$1,013,068)	
	2040	\$3,712,980	\$1,438,843	\$1,684,313	\$3,467,511	\$4,834,399	(\$1,366,889)	
	2041	\$3,507,712	\$1,445,176	\$1,294,138	\$3,658,751	\$4,893,050	(\$1,234,299)	
	2042	\$3,302,442	\$1,457,821	\$1,018,809	\$3,741,454	\$4,966,774	(\$1,225,320)	
	2043	\$3,097,172	\$1,482,896	\$1,041,113	\$3,538,956	\$5,076,031	(\$1,537,076)	
	2044	\$2,891,902	\$1,508,634	\$1,066,478	\$3,334,058	\$4,404,136	(\$1,070,078)	
	2045	\$2,686,632	\$1,329,022	\$1,088,012	\$2,927,642	\$2,438,904	\$488,738	
	2046	\$2,481,363	\$1,351,207	\$1,110,953	\$2,721,618	\$2,490,340	\$231,278	
	2047	\$2,276,095	\$1,373,938	\$1,135,749	\$2,514,284	\$2,545,935	(\$31,651)	
	2048	\$2,070,825 \$1,965,555	\$1,398,156 \$1,424,749	\$1,163,800	\$2,305,181 \$2,101,099	\$2,608,833 \$2,659,063	(\$303,652) (\$557,963)	
NPV	2049	\$1,865,555 \$67,810,167	\$1,421,748 \$34,823,802	\$1,186,203 \$16,968,136	\$85,665,833	\$46,571,625	(\$557,963) \$39,094,208	

Reduced Scope with Dome

				Gypsum	
Year	Capital	O&M	Sub-Total	Revenue	Total
201	2 \$0	\$8,949,690	\$8,949,690	\$2,441,226	\$6,508,465
201	3 \$0	\$74,961	\$74,961	\$2,890,079	(\$2,815,118)
201	4 \$5,631,719	\$2,102,747	\$7,734,466	\$3,119,071	\$4,615,394
201	5 \$5,503,981	\$1,449,968	\$6,953,949	\$3,397,653	\$3,556,296
201	6 \$5,376,244	\$1,333,663	\$6,709,907	\$3,789,196	\$2,920,712
201	7 \$5,248,508	\$1,352,498	\$6,601,006	\$4,030,006	\$2,571,000
201	8 \$5,120,769	\$1,394,880	\$6,515,649	\$4,118,775	\$2,396,874
201	9 \$4,993,033	\$1,425,068	\$6,418,101	\$4,210,743	\$2,207,357
202	0 \$4,865,296	\$1,456,072	\$6,321,368	\$4,305,130	\$2,016,237
202	1 \$4,737,559	\$1,441,230	\$6,178,789	\$3,314,141	\$2,864,648
202	2 \$4,609,821	\$1,472,297	\$6,082,118	\$3,387,086	\$2,695,032
202	3 \$4,482,084	\$1,494,750	\$5,976,834	\$3,460,397	\$2,516,437
202	4 \$4,354,348	\$1,540,262	\$5,894,610	\$3,538,371	\$2,356,239
202	5 \$4,226,610	\$1,571,401	\$5,798,011	\$3,615,982	\$2,182,029
202	6 \$4,098,872	\$1,603,786	\$5,702,658	\$3,695,377	\$2,007,282
202	7 \$3,971,136	\$1,634,402	\$5,605,538	\$3,776,165	\$1,829,373
202	8 \$3,843,399	\$1,679,744	\$5,523,143	\$3,860,648	\$1,662,495
202	9 \$3,715,662	\$7,191,961	\$10,907,623	\$3,945,291	\$6,962,333
203	0 \$3,587,924	\$10,940,360	\$14,528,284	\$4,031,951	\$10,496,333
203	1 \$3,460,187	\$10,993,722	\$14,453,909	\$4,119,453	\$10,334,457
203	2 \$3,332,450	\$11,476,967	\$14,809,417	\$4,211,643	\$10,597,775
203	3 \$3,204,713	\$11,751,674	\$14,956,387	\$4,304,448	\$10,651,938
203	4 \$3,076,976	\$11,972,121	\$15,049,097	\$4,398,908	\$10,650,190
203	5 \$2,949,238	\$8,710,433	\$11,659,671	\$4,472,976	\$7,186,696
203		\$1,459,417	\$4,280,919	\$4,514,690	(\$233,771)
203	, , ,	\$1,490,387	\$4,184,151	\$4,613,739	(\$429,588)
203	· · ·	\$1,500,369	\$4,066,396	\$4,658,293	(\$591,897)
203		\$1,519,332	\$3,957,622	\$4,726,949	(\$769,327)
204	• • •		\$3,863,605	\$4,834,399	(\$970,794)
204	, , ,	\$1,567,836	\$3,750,652	\$4,893,050	(\$1,142,398)
204	• • •	\$1,588,375	\$3,643,453	\$4,966,774	(\$1,323,321)
204	. , .	\$1,622,277	\$3,549,619	\$5,076,031	(\$1,526,413)
204	. , ,	\$1,657,035	\$3,456,640	\$4,404,136	(\$947,497)
204		\$1,485,901	\$3,157,768	\$2,438,904	\$718,864
204	, , ,	\$1,517,508	\$3,061,637	\$2,490,340	\$571,297
204		\$1,549,868	\$2,966,261	\$2,545,935	\$420,326
204	• • •	\$1,583,185	\$2,871,842	\$2,608,833	\$263,009
204	. , ,	\$1,616,834	\$2,777,752	\$2,659,063	\$118,690
NPV	\$47,024,115	\$38,944,396	\$85,968,511	\$46,571,625	\$39,396,886