

## 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-

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 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

DOCUMENT NUMBER-DATE

06135 SEP 12 º

FPSC-COMMISSION CLERK

## Charles Murphy

From:	Jenny Wu
Sent:	Wednesday, September 12, 2012 9:20 AM
То:	Charles Murphy
Subject:	FW: New gypsum storage facility
	Martin Land Contract Contract Contract

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 HUMBER-DATE

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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		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	\$5,644,745	\$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	\$14,151,888	\$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	\$1,398,156	\$1,163,800	\$2,305,181	\$2,608,833	(\$303,652)
	2049	\$1,865,555	\$1,421,748	\$1,186,203	\$2,101,099	\$2,659,063	(\$557,963)
NPV		\$67,810,167	\$34,823,802	\$16,968,136	\$85,665,833	\$46,571,625	\$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)
2014	\$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	5 \$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	\$5,120,769	\$1,394,880	\$6,515,649	\$4,118,775	\$2,396,874
201	\$4,993,033	\$1,425,068	\$6,418,101	\$4,210,743	\$2,207,357
202	\$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
2024	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	\$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	3 \$3,843,399	\$1,679,744	\$5,523,143	\$3,860,648	\$1,662,495
202	\$3,715,662	\$7,191,961	\$10,907,623	\$3,945,291	\$6,962,333
203	\$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
2034	4 \$3,076,976	\$11,972,121	\$15,049,097	\$4,398,908	\$10,650,190
203		\$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		\$1,553,052	\$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	\$\$\$,944,396	\$85,968,511	\$46,571,625	\$39,396,886