Re: Page B-71, Replace Battery Banks and Chargers, $430,400

Q. Please restate the cost benefit analysis provided on page 13 of the report filed under Section H, Tab 4, to include details.

A. The details were inadvertently left out of the final document. Details of the estimates are attached.

PROJECT COST / BENEFIT ANALYSIS TEMPLATE

Battery Replacement

Flooded Cell Battery

Flooded Cell

Note: Costs are shown as positive values;Benefits as negative values

Current Year	**2007**
Present Worth Year	2007
Number of Years in Study	20
Discount Rate	7.0%
Total In-service Project Cost	$ 48,400
In-service Year	2007
Other Project Cost ***after*** In-service (if applicable)	$ -
Other Project Year (if applicable)	
Replacement Cost (if applicable)	$ -
Replacement Year (if applicable)	
Project cost in Ending (**E**) or Beginning (**B**) Year $$	
O&M costs - 75% Materials, 25% Labour (**75**) or 50% Materials, 50% Labour (**50**) or User (**U**)	

A	B	C	D	E	F	G	H	I	J	K	L
Year		Annual O&M Cost $	Annual Fuel Price (if applicable)	Annual Fuel Cost $	Other Cost $	Total Costs $	Benefit 1 *(specify)* $	Benefit 2 *(specify)* $	NET $	P.W. January 2007	Cumulative Present Worth
0	2007	-		-	-	48,400	-	-	48,400	48,400	48,400
1	2008	-		-	-	-	-	-	-	-	48,400
2	2009	-		-	-	-	-	-	-	-	48,400
3	2010	-		-	-	-	-	-	-	-	48,400
4	2011	-		-	-	-	-	-	-	-	48,400
5	2012	-		-	-	-	-	-	-	-	48,400
6	2013	-		-	-	-	-	-	-	-	48,400
7	2014	-		-	-	-	-	-	-	-	48,400
8	2015	-		-	-	-	-	-	-	-	48,400
9	2016	-		-	-	-	-	-	-	-	48,400
10	2017	-		-	-	-	-	-	-	-	48,400
11	2018	-		-	-	-	-	-	-	-	48,400
12	2019	-		-	-	-	-	-	-	-	48,400
13	2020	-		-	-	-	-	-	-	-	48,400
14	2021	-		-	-	-	-	-	-	-	48,400
15	2022	-		-	-	-	-	-	-	-	48,400
16	2023	-		-	-	-	-	-	-	-	48,400
17	2024	-		-	-	-	-	-	-	-	48,400
18	2025	-		-	-	-	-	-	-	-	48,400
19	2026	-		-	-	-	-	-	-	-	48,400
20	2027	-		-	-	-	-	-	-	-	48,400
						-			-	-	-
-	-	-		-	-	-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-
						-			-	-	-

Assumptions & Notes:

1. Battery residual value at year 16 is based on an assumed 20 year life and straight line depreciation..
2. O&M costs for VRLA and flooded cell batteries are equal and are not included.
3. Charger replaced at the same time as VRLA and is not included.
4. Battery cost based quotes for 360 AH battery obtained in 2005 and escalated to 2007.

Date Revised		
Date Printed	20-Jun-2007	1:14 PM

PROJECT COST / BENEFIT ANALYSIS TEMPLATE

Battery Replacement

VRLA Battery

VRLA

Note: Costs are shown as positive values;Benefits as negative values

Current Year	**2007**
Present Worth Year	2007
Number of Years in Study	20
Discount Rate	7.0%
Total In-service Project Cost	$ 43,000
In-service Year	2007
Other Project Cost ***after*** In-service (if applicable)	$ -
Other Project Year (if applicable)	
Replacement Cost (if applicable)	
Replacement Year (if applicable)	
Project cost in Ending (**E**) or Beginning (**B**) Year $$	
O&M costs - 75% Materials, 25% Labour (**75**) or 50% Materials, 50% Labour (**50**) or User (**U**)	

A	B	C	D	E	F	G	H	I	J	K	L
Year		Annual O&M Cost $	Annual Fuel Price (if applicable)	Annual Fuel Cost $	Other Cost $	Total Costs $	Benefit 1 *(specify)* $	Benefit 2 *(specify)* $	NET $	P.W. January 2007	Cumulative Present Worth
0	2007	-		-	-	43,000	-	-	43,000	43,000	43,000
1	2008	-		-	-	-	-	-	-	-	43,000
2	2009	-		-	-	-	-	-	-	-	43,000
3	2010	-		-	-	-	-	-	-	-	43,000
4	2011	-		-	-	-	-	-	-	-	43,000
5	2012	-		-	-	-	-	-	-	-	43,000
6	2013	-		-	-	-	-	-	-	-	43,000
7	2014	-		-	-	-	-	-	-	-	43,000
8	2015	-		-	-	-	-	-	-	-	43,000
9	2016	-		-	-	-	-	-	-	-	43,000
10	2017	-		-	51,146	51,146	-	-	51,146	24,299	67,299
11	2018	-		-	-	-	-	-	-	-	67,299
12	2019	-		-	-	-	-	-	-	-	67,299
13	2020	-		-	-	-	-	-	-	-	67,299
14	2021	-		-	-	-	-	-	-	-	67,299
15	2022	-		-	-	-	-	-	-	-	67,299
16	2023	-		-	-	-	-	-	-	-	67,299
17	2024	-		-	-	-	-	-	-	-	67,299
18	2025	-		-	-	-	-	-	-	-	67,299
19	2026	-		-	-	-	-	-	-	-	67,299
20	2027	-		-	-	-	-	-	-	-	67,299
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-
						-			-		-

Assumptions & Notes:

1. Battery replaced after eight years.
2. O&M costs for VRLA and flooded cell batteries are assumed to be equal and are not included.
3. Charger replaced at the same time as flooded cell and is not included.
4. Battery cost based quotes for 360 AH battery obtained in 2005 and escalated to 2007.

Date Revised		
Date Printed	5-Sep-2007	1:36 PM