

VIRGIN ISLANDS WATER AND POWER AUTHORITY
Water Rate Case - PSC Docket No. 613

PSC Docket No. 613
Exhibit No. GCG-1

Calculation of Recommended Revenue Requirement

	<u>VIWAPA</u>	<u>Recommended</u>	
1. Total operating expenses	\$ 33,144,828	\$ 30,882,287	
2. Required for senior debt @ 1.75x	8,312,119	6,773,900	L.14
3. Total revenue without increase	<u>(37,550,028)</u>	<u>(36,668,977)</u>	L.17
4. Net revenue requirement	<u>\$ 3,906,920</u>	<u>\$ 987,210</u>	Sum
5. Total revenue without increase	\$ 37,550,028	\$ 36,668,977	L.3
6. Net revenue requirement	<u>3,906,920</u>	<u>987,210</u>	L.4
7. Total proposed revenue with rate relief	\$ 41,456,947	\$ 37,656,187	L.5 + L.6
8. Total operating expenses	<u>(33,144,828)</u>	<u>(30,882,287)</u>	L.1
9. Available for debt coverage	\$ 8,312,119	\$ 6,773,900	
10. Senior debt cost	\$ 3,870,800	\$ 3,870,800	L.13
11. Senior debt coverage	<u>2.15</u>	<u>1.75</u>	L.9 / L.10
<u>Supporting Calculations</u>			
12. Senior debt cost	\$3,870,800	\$ 3,870,800	GCG-2 L.25
13. Target DSCR	<u>2.15</u>	<u>1.75</u>	
14. Required for Senior Debt	<u>\$ 8,312,119</u>	<u>\$ 6,773,900</u>	L.12 x L.13
15. Total revenue with interim increase	\$ 39,106,011	\$ 39,106,011	
16. Interim increase	<u>1,555,984</u>	<u>1,555,984</u>	
17. Total revenue without increase	<u>\$ 37,550,028</u>	<u>\$ 37,550,028</u>	

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Revenue Requirement - per Authority

	Actual 2011 HLT-1 Page 1	Subtract 2011	Subtotal	Add Budget 2013	Adjust to Projected 2013 HLT-1 Page 1	Projected FY 2013	Add Inflation HLT-1 Page 1	Revenue Deficiency with Interim Increase	Test Year with Interim and Base Increase
<u>Operating Revenues</u>									
1. Metered Water Revenues	\$ 23,915,443	\$(23,915,443)	\$ 0		\$ 27,433,500	\$ 27,433,500		\$ 27,433,500	HLT-3 p.2 L.39
2. Standpipe Revenues	1,527,528	(1,527,528)	0		681,536	681,536		681,536	HLT-3 p.2 L.44
3. Other Operating Revenues	393,688	(393,688)	0		426,216	426,216		426,216	HLT-3 p.2 L.49
4. Revenues from LEAC	<u>12,463,680</u>	<u>(12,463,680)</u>	<u>0</u>		<u>10,564,760</u>	<u>10,564,760</u>		<u>10,564,760</u>	HLT-3 p.2 L.48
5. Total Operating Revenues	\$ 38,300,339	\$(38,300,339)	\$ 0		\$ 39,106,011	\$ 39,106,011		\$ 39,106,011	\$ 41,409,947
<u>Operating Expenses</u>									
				HLT-1 Page 3	HLT-1 Page 4				
6. Personnel Costs	\$ 6,889,984	\$(6,889,984)	\$ 0	\$ 7,473,379	\$(1,915,122)	\$ 5,558,257	\$ 55,583	\$ 5,613,840	HLT-1 p.1 L.6
7. OPEB	1,427,920	(1,427,920)	0	1,494,603	(383,006)	1,111,597	11,116	1,122,713	HLT-1 p.1 L.7
8. Training and Education	16,912	(16,912)	0	58,500	0	58,500	1,170	59,670	HLT-1 p.1 L.8
9. Materials and Supplies	708,785	(708,785)	0	774,879	(450,000)	324,879	6,498	331,377	HLT-1 p.1 L.9
10. Maintenance and Repairs	2,076,920	(2,076,920)	0	3,015,892	(2,061,667)	954,225	38,169	992,394	HLT-1 p.1 L.10
11. Legal, Engineering & Professional Services	235,050	(235,050)	0	532,366	(8,750)	523,616	10,472	534,088	HLT-1 p.1 L.11
12. Bad Debt Expense	731,947	(731,947)	0	844,628	277,715	1,122,343	0	1,122,343	HLT-1 p.1 L.12
13. Other Operating Expense	1,594,363	(1,594,363)	0	1,615,654	0	1,615,654	32,313	1,647,967	HLT-1 p.1 L.13
14. Fuel Allocation to Water	12,800,427	(12,800,427)	0	12,702,467	(11,168,490)	1,533,977	0	1,533,977	HLT-1 p.1 L.14
15. Water Purchases & Taxes - Seven Seas	4,160,047	(4,160,047)	0	4,291,208	4,060,524	8,351,732	0	8,351,732	HLT-1 p.1 L.15
16. Water Purchases - Due Electric System	0	0	0	0	7,858,054	7,858,054	0	7,858,054	HLT-1 p.1 L.16
17. WHRB Steam Purchased by Electric	(1,481,280)	1,481,280	0	(1,560,000)	0	(1,560,000)	0	(1,560,000)	HLT-1 p.1 L.17
18. Allocations from Electric System	7,016,634	(7,016,634)	0	6,683,735	(1,106,241)	5,577,494	55,775	5,633,269	HLT-1 p.1 L.18
19. Allocations to Capital	(108,106)	108,106	0	(95,641)	0	(95,641)	(956)	(96,597)	HLT-1 p.1 L.19
20. Depreciation Expense	<u>3,858,654</u>	<u>(3,858,654)</u>	<u>0</u>	<u>3,910,457</u>	<u>(3,910,457)</u>	<u>0</u>	<u>0</u>	<u>0</u>	HLT-1 p.1 L.20
21. Total Operating Expenses	\$ 39,928,257	\$(39,928,257)	\$ 0	\$ 41,742,127	\$(8,807,439)	\$ 32,934,688	\$ 210,140	\$ 33,144,828	\$ 33,144,828
Excl depreciation									
22. Surplus (deficiency) at current rates	\$ (1,627,918)	\$ 1,627,918	\$ 0	\$(41,742,127)	\$ 47,913,450	\$ 6,171,323	\$(210,140)	\$ 5,961,183	<u>\$ 8,265,119</u>
23. Other Expenses (Income)	\$ (131,999)	\$ 131,999	\$ 0	\$(47,000)	\$ 0	\$(47,000)	\$ 0	\$(47,000)	HLT-1 p.2 L.25
24. Principal & Interest Payments on Debt	(3,866,563)	3,866,563	0					3,870,800	3,870,800 HLT-11 p.1 L.4
25. Average Capital Improvements Funded from Rates	requested							1,449,609	HVH-1 p.1 L.2
26. Average Payment to Credit Line - Prior Period Expenses	0							500,000	JAR-4 p.1 L.14
27. Average Transfer to Working Capital (Cash Reserve Fund)	0							813,177	JAR-3 p.1 L.19
28. Average Payment to Electric - Prior Period Allocated Expenses	unknown							<u>1,678,533</u>	JAR-4 p.1 L.12
29. Projected (deficiency) at interim rates								\$ 2,303,936	HLT-7 p.1 L.12
Interim rate increase								<u>1,555,984</u>	
30. Total interim and permanent rate deficiency								<u>\$ 3,859,920</u>	
31. Debt coverage								<u>1.55</u>	<u>2.15</u> L.22 / L.24

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Exhibit No. GCG-4

100% Reverse Osmosis

Convert from IDE production to RO

Lower personnel expense

1.	Business Plan adjustments	\$ 2,078,413	HLT-4 p.1 L.15
2.	Amount recognized by WAPA	<u>1,915,122</u>	HLT-4 p.1 L.15
3.	Personnel expense savings	\$ 163,291	L.1 - L.2
4.	Inflation factor	<u>1.01</u>	HLT-1 p.1 L.6
5.	Net personal expense savings	<u>\$ 164,924</u>	L.3 x L.4

Lower OPEB expense

6.	Net personal expense savings	\$ 164,924	L.5
7.	OPEB / personnel factor	<u>20%</u>	HLT-6 p.1 and Set 1-37D.
8.	Net OPEB expense savings	<u>\$ 32,983</u>	

Lower materials & supplies

9.	Business Plan adjustments	\$ 488,000	HLT-4 p.2 L.31
10.	Amount recognized by WAPA	<u>450,000</u>	HLT-4 p.2 L.31
11.	Personnel cost savings	\$ 38,000	L.9 - L.10
12.	Inflation factor	<u>1.02</u>	HLT-1 p.1 L.9
13.	Net personal expense savings	<u>\$ 38,760</u>	L.11 x L.12

Lower Maintenance & Repairs

14.	Business Plan adjustments	\$ 2,214,000	HLT-4 p.3 L.43
15.	Amount recognized by WAPA	<u>2,061,667</u>	HLT-4 p.3 L.43
16.	Personnel cost savings	\$ 152,333	L.14 - L.15
17.	Inflation factor	<u>1.04</u>	HLT-1 p.1 L.10
18.	Net personal expense savings	<u>\$ 158,427</u>	L.16 x L.17

Lower Other Professional Services

19.	Business Plan adjustments	\$ 9,500	HLT-4 p.4 L.56
20.	Amount recognized by WAPA	<u>8,750</u>	HLT-4 p.4 L.56
21.	Personnel cost savings	\$ 750	L.19 - L.20
22.	Inflation factor	<u>1.02</u>	HLT-1 p.1 L.11
23.	Net personal expense savings	<u>\$ 765</u>	L.21 x L.22

Lower bad debt expense

24.	Lower LEAC revenue	\$ 881,050	L.30
25.	Bad debt rate	<u>2.87%</u>	HLT-1 p.4 L.18
26.	Lower bad debt expense	<u>\$ 25,286</u>	

27.	Total cost saving	<u>\$ 421,145</u>	L.5 + L.8 + L.13 + L.18 + L.23 + L.26
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Lower fuel cost and lower LEAC Revenue

28.	IDE cost of production	\$ 1,533,977	HLT-5 p.1 L.13
29.	RO production cost on same volume	<u>652,927</u>	L.33
30.	Cost saving, RO versus IDE	<u>\$ 881,050</u>	L.28 - L.29

Calculation of RO Production Cost

31.	IDE-produced water, switched to RO	194,904	HLT-5 p.1 L.11
32.	RO base rate	<u>\$ 3.35</u>	HLT-5 p.1 L.15
33.	RO production cost	<u>\$ 652,927</u>	L.31 x L.32

OPEB Expense

	<u>VIWAPA</u> (A)	FY13 total OPEB cost used for Water <u>System filing</u> (B)	Updated FY14 total <u>OPEB cost</u> (C)	<u>Recommended</u> (D)	
1. Adopted FY13 budget	\$ 1,494,603	\$ 10,995,005	\$ 6,505,285	\$ 884,294	C / B x A
2. Water allocation adjustment	<u>(383,006)</u>			<u>(383,006)</u>	
3. Projected FY13	\$ 1,111,597			\$ 501,288	
4. Inflation adjustment, 1%	<u>11,116</u>			<u>5,013</u>	.01 x L.3, HLT-1 p.1 L.7
5. Adjusted expense	<u>\$ 1,122,713</u>			<u>\$ 506,301</u>	
6. Reduction in expense				<u>\$ 616,412</u>	L.5, A - D

- (B) Ex. 1-37C, p. B-3.
Request 1-37C: the calculation of OPEB expense using GASB 45.
Response: See Exhibit 1-37(C), which sets forth the calculation of the OPEB Expenses at Section B of the OPEB Actuarial Report.
- (C) Docket 612, Ex. 1-27A, p. B-3.

Supporting data

	<u>Electric</u>	<u>Water</u>	<u>Combined</u>	
Fiscal 2011 cost, contributions and adjustment amounts from Docket 612, Ex. 1-27A Support				
7. Annual OBEP Cost	\$ 7,757,446	\$ 1,819,648	\$ 9,577,094	
8. Contributions made	<u>1,670,003</u>	<u>391,729</u>	<u>2,061,732</u>	
9. Increase in Net OPEB Costs	<u>\$ 6,087,443</u>	<u>\$ 1,427,919</u>	<u>\$ 7,515,362</u>	
10. FY11 annual OPEB cost per actuary report (6/30/11)			\$ 9,577,095	Docket 613, Ex. 1-37C, page B-3.
11. FY14 annual OPEB cost per actuary report (1/11/13)			6,505,285	Docket 612, Ex. 1-27A, page B-3.

	Total Annual OPEB Cost at Fiscal Year End (\$000s)	<u>Exhibit 1-27A</u>
12.	2011	\$ 9,577 A-3 and F-1
13.	2012	5,795 B-3 and F-1
14.	2013	6,012 B-3
15.	2014	6,505 B-3
16.	2015	6,739 B-3
17.	2016	7,335 B-3