

City of Nashua Petition for Valuation Pursuant to RSA 38:9

DW 04-048

Staff Request to Pennichuck Water Works; Pittsfield Aqueduct Company, Inc.;
Pennichuck East Utility, Inc.; and Pennichuck Corporation

Date of Request: May 4, 2006
Data Request No.: Staff 4-22

Date of Response: May 22, 2006
Witness: John Guastella

REQUEST: Regarding PWW's supplemental response to Nashua 3-11:

- a) Please provide a summary of the common assets replaced as a result of a taking of PWW, with costs assigned to each;
- b) Please indicate if these common assets are used by PEU only, PAC only, PWSC only, or some combination thereof;
- c) Please indicate the specific effect on cost of capital as a result of a taking of the assets of PWW;
- d) Please indicate the anticipated employee levels in the scenario envisioned by this response; and
- e) Please provide additional detail as to the increases projected for O & M expenses in each category and the reasons for those increases.

RESPONSE: a) For the quantity, unit price, and cost of the "common assets replaced," please see the attached schedules:

1. Operations Equipment (Work Schedule A) - contains the transportation equipment; tools, shop and garage equipment; laboratory furniture and equipment; communication equipment and general plant equipment that would need to be replaced.
2. Administrative Equipment (Work Schedule B) - contains the computer equipment, office equipment and office furniture and fixtures that would need to be replaced.
3. Will Street Facility (see the table at the bottom of Work Schedule G, provided in response to Staff 4-22(e) below) - The Will Street replacement cost of the structure is

\$1,059,111 based on the reproduction cost study performed by the Company's appraisal consultant and the cost of the land is \$300,000 based on acreage market value provided by a local land appraiser.

- b) The common assets would be shared by PEU, PAC and PWSC.
- c) The debt cost rates were derived from recent information from CoBank offering current rates in the range of 6.0 to 6.5 percent. In order to account for issuance fees and charges, the 6.5% cost rate was used in the financial projections for the restructured entity.

The equity cost rate of 11.5% used in the financial model was derived based on the recognition that smaller utilities are "riskier" by nature than larger utilities and the PUC's approval of an 11% ROE for PEU while affiliated with PWW. In recent years, allowed returns have been at a relatively low level. The return on equity I have used is reflective of more typical returns, given the long time period that my analysis is intended to cover.

- d) The anticipated reductions of equivalent full-time employee are as follows:

	Current	Anticipated
Corporate Officers	5	3
HR Department	2	2
IT Department	3	2
Accounting	7	5
Customer Service	8	5
Engineering	8	4
Service Company	2	2
Operations-Supervision & Admin.	13.5	8.5
Operations-Field employees	28	15
Totals	76.5	46.5

- e) For the detail of projected O&M expenses, please see the attached schedules. Following the schedules is a narrative which explains the detailed analysis of expense projections.

1. Expense Detail (Work Schedule C) - Summary schedule of expenses by category for existing system by division with PWW, and projected expense results if PWW is taken.

2. Supply & Distribution (Work Schedule D) - Production and T&D expense detail schedule. This information supports the Expense Detail schedule.
3. Engineering and Customer Service (Work Schedule E) - expense detail supporting the Expense Detail schedule.
4. Administrative and General (Work Schedule F) - expense detail supporting the Expense Detail schedule.
5. Other Operating Expenses (Work Schedule G) - Detailed schedule of operating expenses, other than O&M, supporting the Expense Detail schedule.
6. Narrative - Description and explanation of O&M projections and resulting change to expense categories.

Operations Equipment

Work Schedule A
 Page 1

Operations Equipment - Plant Asset Additions

	Quantity	Unit Price	Cost	Depreciation 10.62%
Transportation Equipment (Acct 341):				
Plow & Frame	2	3,410.86	6,821.72	724.47
Backhoe Bucket	1	167.19	167.19	17.76
Backhoe	1	95,461.44	95,461.44	10,138.00
Fork Lift	1	10,128.39	10,128.39	1,075.64
Aluminum Truck Box	5	100.00	500.00	53.10
Aluminum Black Box For Truck	1	482.20	482.20	51.21
Vehicle Lettering	22	200.00	4,400.00	467.28
Tag Along Trailer	1	12,988.70	12,988.70	1,379.40
Tag Along Trailer (Operations)	1	15,404.95	15,404.95	1,636.01
Excavator	1	43,000.00	43,000.00	4,566.60
Install Snow Plow	1	3,684.14	3,684.14	391.26
Compressor	1	18,445.23	18,445.23	1,958.88
Hydraulic Hammer	1	19,096.58	19,096.58	2,028.06
Jeep Cherokee	1	14,013.10	14,013.10	1,488.19
Chevy Express Van	1	19,610.43	19,610.43	2,082.63
Chevy G-2500 Van	1	19,555.49	19,555.49	2,076.79
Ford Focus	1	15,627.75	15,627.75	1,659.67
Supervisor Vehicle-Ops	1	21,867.36	21,867.36	2,322.31
Ford Taurus-Water Sply Mgr	1	18,649.54	18,649.54	1,980.58
WTP Vehicles	6	25,000.00	150,000.00	15,930.00
Ford Supercab P/U	1	22,426.02	22,426.02	2,381.64
Chevy Silverado	1	18,035.04	18,035.04	1,915.32
Ford F3500	5	30,000.00	150,000.00	15,930.00
Jeep Grand Cherokee	1	25,389.00	25,389.00	2,696.31
Ford Ranger-Engineering	2	21,000.00	42,000.00	4,460.40
Jeep Grand Cherokee-Admin	1	18,353.54	18,353.54	1,949.15
Jeep Grand Cherokee-Admin	1	29,914.67	29,914.67	3,176.94
Chevy One-Ton Dump Truck	1	45,000.00	45,000.00	4,779.00
Ford F650 Dump Truck	1	46,139.47	46,139.47	4,900.01
Dump Truck	2	68,145.68	136,291.36	14,474.14
Trucks-Operations Veh	2	55,000.00	110,000.00	11,682.00
			<u>1,133,453.31</u>	<u>120,372.75</u>

	Quantity	Unit Price	Cost	Depreciation 14.99%
Tools, Shop and Garage Equipmt (Acct 343):				
Light Tower	1	8,411.26	8,411.26	1,260.85
Grass Trimmer	1	704.90	704.90	105.66
Lawn Trimmer	1	345.36	345.36	51.77
Air Compressor	1	2,596.25	2,596.25	389.18
Hydrant Pressure Recorder	2	1,339.80	2,679.60	401.67
Gas Monitor	3	1,800.00	5,400.00	809.46
Pressure & Data Flow Logger	1	6,059.02	6,059.02	908.25
Pressure Recorder	1	564.15	564.15	84.57
Quik Cut Saw	2	1,073.56	2,147.11	321.85
Floor Jack	1	1,743.47	1,743.47	261.35
Grinder and Wrench Set	1	759.83	759.83	113.90
Mechanics Work Bench	1	914.55	914.55	137.09
Gate Wrenches	1	3,471.79	3,471.79	520.42
Tool Box	1	825.71	825.71	123.77
Vehicle Lift	1	13,748.57	13,748.57	2,060.91
			<u>50,371.57</u>	<u>7,550.70</u>

Operations Equipment

Work Schedule A
Page 2

Laboratory Furniture & Equipmt (Acct 344):	Quantity	Unit Price	Cost	Depreciation 5.00%
Refrigerator	1	433.04	433.04	21.65
Desk/Chair	1	757.17	757.17	37.86
Water Test Kit	2	301.15	602.29	30.11
Gas in the Lab	1	2,664.41	2,664.41	133.22
Acid Cabinet	1	1,091.26	1,091.26	54.56
Algae Test Equipmt	1	666.83	666.83	33.34
Amperometric Titrator	1	1,227.70	1,227.70	61.39
Cod Reactor-Phosphate Testing	1	555.07	555.07	27.75
Conductivity Meter	1	1,615.26	1,615.26	80.76
Lab Equipment	1	6,824.11	6,824.11	341.21
Fecal Coliform Bath	1	965.97	965.97	48.30
Free Chlorine Monitor System	0	3,689.79	-	-
Spectrophotometer	1	6,741.05	6,741.05	337.05
Hot Block for Digesting Samples	1	3,831.03	3,831.03	191.55
Jar Tester Kit	1	1,306.09	1,306.09	65.30
Lab Fume Hood	1	14,131.64	14,131.64	706.58
Fume Hood Fan	1	5,200.00	5,200.00	260.00
Sampling Pump & Wiring	1	2,836.91	2,836.91	141.85
Sterimatic Autoclave	1	1,490.50	1,490.50	74.53
Microscope	1	3,281.35	3,281.35	164.07
Oxygen, Ph Analyzer & Recorder	1	5,715.18	5,715.18	285.76
Pe300 Balance	1	1,257.67	1,257.67	62.88
Ph Analyzer	1	1,962.72	1,962.72	98.14
Ph Meter with Case & Kit	2	600.00	1,200.00	60.00
Ph/Iso Meter	1	2,658.66	2,658.66	132.93
Pocket Colorimeter	1	438.29	438.29	21.91
Pocket Colorimeter-Chlorine	5	335.24	1,676.20	83.81
Pocket Colorimeter-Phosphate	6	323.66	1,941.96	97.10
Power Pod & Stand	1	1,355.98	1,355.98	67.80
Pure Water System/DI System	1	4,835.31	4,835.31	241.77
Spectrophotometer & Module Kit	1	5,564.55	5,564.55	278.23
Spectrophotometer-Lab Equip	1	3,245.49	3,245.49	162.27
Sterilizer	1	5,938.85	5,938.85	296.94
Thermolyne Incubator	1	2,726.80	2,726.80	136.34
Titrator, Amperometer	1	1,197.66	1,197.66	59.88
Tray Sealer	1	2,172.30	2,172.30	108.62
Turbidimeter	1	3,020.15	3,020.15	151.01
Water Bath-Bacteria Cultures	1	427.48	427.48	21.37
Water Distiller	1	810.86	810.86	40.54
Do Meter, Conductivity Meter	1	1,534.27	1,534.27	76.71
		105,902.06	105,902.06	5,295.09

Operations Equipment

Work Schedule A
Page 3

Communication Equipment (Acct 346):	Quantity	Unit Price	Cost	Depreciation 12.43%
Scada Hardware and Software	1	31,893.92	31,893.92	3,964.41
Scada Phase Iii	0	2,954.12	-	-
Scada Phase Iii	0	1,293.75	-	-
Scada Phase Iii	0	1,721.71	-	-
Scada Phase Iii	0	1,721.71	-	-
Scada Phase Iii	0	1,721.71	-	-
Scada Phase Iii	0	1,966.21	-	-
Scada Phase Iii	0	4,241.19	-	-
Scada Phase Iii	0	9,437.21	-	-
Scada Phase Iii	0	486.21	-	-
Scada Phase Iii	0	587.82	-	-
Scada Phase Iii	0	588.30	-	-
Scada Phase Iii	0	841.63	-	-
Scada Phase Iii	0	9,804.72	-	-
Scada Phase Iii	0	3,446.89	-	-
Antenna Trt Pit/Speakers Yard	1	842.12	842.12	104.68
Scada Phase Iii-Comm Syst	1	6,495.99	6,495.99	807.45
P200 Port Radio w/Charger	1	1,204.59	1,204.59	149.73
2-Way Radio-WTP	2	147.54	295.08	36.68
Sp50 Motorola Portable Radio & Chgr	5	270.00	1,350.00	167.81
Programmed Radio & Battery Charger	20	800.00	16,000.00	1,988.80
Radio Control Station	1	1,260.37	1,260.37	156.66
Telephone System	1	141,645.01	141,645.01	17,606.47
			<u>200,987.08</u>	<u>24,982.69</u>

Operations Equipment

Work Schedule A
Page 4

	Quantity	Unit Price	Cost	Depreciation 4.00%
General Plant (Acct 348):				
Refrigerator-Operations	1	421.12	421.12	16.84
Dig Safe Radio Freq Locator	1	2,133.87	2,133.87	85.35
Welder	1	678.44	678.44	27.14
Mig Welder	1	1,846.38	1,846.38	73.86
3500 Watt Generator	0	1,495.86	-	-
Fleet Diagnostic Tools	1	6,431.83	6,431.83	257.27
Data Media Safe	1	922.41	922.41	36.90
Camcorder	1	799.99	799.99	32.00
Bucket for Backhoe	1	1,256.45	1,256.45	50.26
Concrete Mixer	1	1,076.77	1,076.77	43.07
Chain Saw	1	433.01	433.01	17.32
Power Turner	1	3,735.03	3,735.03	149.40
Power Brooms-Operations	2	638.24	1,276.47	51.06
Starshaft Trimmer	1	434.71	434.71	17.39
Stihl Chain Saw	1	510.77	510.77	20.43
Stihl Cut Quick Cart	1	323.72	323.72	12.95
Trash Pump	1	2,281.86	2,281.86	91.27
WTP Snow Blower	1	1,471.60	1,471.60	58.86
Band Saw	1	1,347.51	1,347.51	53.90
Electric Multimeter/ Power Hand Tools	1	975.48	975.48	39.02
Multimeter Pwr Greaser, Air & Water Reel	1	1,822.74	1,822.74	72.91
Portable Air Cleaner-Operations	1	4,127.11	4,127.11	165.08
Portable Emergency Geoset	1	7,690.61	7,690.61	307.62
Portable Water Heating Unit	1	2,364.93	2,364.93	94.60
Steam Cleaner Unit	1	4,768.65	4,768.65	190.75
Road Signs and Stands	8	217.59	1,740.75	69.63
Safety Signs	1	8,351.44	8,351.44	334.06
Construction Meter	4	1,332.03	5,328.12	213.12
Meter Reader Testers	1	886.10	886.10	35.44
Meter Reader Testers	1	900.85	900.85	36.03
Meter Testing Machine	1	5,104.06	5,104.06	204.16
Backflow Testers	3	929.87	2,789.60	111.58
Qwik Freeze Kit	0	930.87	-	-
Tripod & Winch	1	2,745.60	2,745.60	109.82
Tripod/Transit	1	832.57	832.57	33.30
Yd Sander, Flat Bed Installatn	2	2,347.50	4,695.00	187.80
Pallet Truck	1	534.84	534.84	21.39
21" Lawn Mower	1	717.14	717.14	28.69
Homelite 2" Trash Pump	1	1,071.23	1,071.23	42.85
Homelite Blower	1	603.00	603.00	24.12
Homelite Weed Wacker	1	239.42	239.42	9.58
Honda Lawn Mower	1	288.25	288.25	11.53
Lawn Mower-Operations	2	310.30	620.59	24.82
Gas Unit & Charger-Operations	2	1,545.20	3,090.39	123.62
5kw Electric Unit Heater	1	373.66	373.66	14.95
Schonstedt Magnetic Locator	12	700.00	8,400.00	336.00
60-400 Combo Oxygen Meter	1	2,210.12	2,210.12	88.40
Flosearch Recorder	1	321.72	321.72	12.87
Pipe Locating Equipment	0	3,000.00	-	-
12 Vda Diaphragm Pump	10	200.00	2,000.00	80.00
3" Diaphragm Pump	0	1,970.67	-	-
Emergency Stand-By Pump	1	7,891.68	7,891.68	315.67
14" Cut-Off Saws	8	1,400.00	11,200.00	448.00

Operations Equipment

Work Schedule A
Page 5

Plastic Pipe Cutter & Attachmts	1	1,130.52	1,130.52	45.22
1/2" Hammer Drill	1	197.87	197.87	7.91
1/4"-1" Tap & Die Set	1	472.62	472.62	18.90
2 Bypass Hoses	2	926.08	1,852.16	74.09
Aluminum Diffuser (3)	3	949.98	2,849.94	114.00
Assorted Tools	1	799.47	799.47	31.98
Catco Steam Chief Comp-Steamer	2	1,000.00	2,000.00	80.00
Drill with Bits (Hildi)	1	2,039.03	2,039.03	81.56
Saw-Zall	1	348.55	348.55	13.94
Open Reel Rolltape Meas.	1	259.57	259.57	10.38
Misc Supplies	1	1,911.78	1,911.78	76.47
Tools for Utility Truck	1	8,327.10	8,327.10	333.08
Safety Line Tripod	1	2,894.63	2,894.63	115.79
Safety Tripod/Winch and Harness	1	2,179.46	2,179.46	87.18
Staging	1	1,757.52	1,757.52	70.30
Transmission Jack	1	1,007.95	1,007.95	40.32
Hydrant Wrench and Socket kit	1	6,537.18	6,537.18	261.49
King File	1	2,299.09	2,299.09	91.96
Cabinet Bench	1	360.71	360.71	14.43
Storage Cabinet	1	669.50	669.50	26.78
12' Step Ladder	1	433.89	433.89	17.36
Aluminum Shoring Boxes (2)	2	7,405.46	14,810.91	592.44
4"-12" Tapping & Hydra Stopping Units	1	48,966.59	48,966.59	1,958.66
Jack Hammers	4	1,500.00	6,000.00	240.00
A3 Tapping Machine	1	4,231.03	4,231.03	169.24
Adaptor & Drill Holder-D5 Tapping Mach.	1	191.40	191.40	7.66
B100 Tapping Machine	1	1,413.62	1,413.62	56.54
Compressor-Ingersoll Rand	0	12,047.49	-	-
D5 Tapping Machine	2	2,900.00	5,800.00	232.00
Drill Press	1	1,543.09	1,543.09	61.72
Drive Tool with Accessories	1	480.00	480.00	19.20
Emergency Pressure Reducing Valve	1	1,783.21	1,783.21	71.33
Hydraulic Generating Unit	1	9,808.66	9,808.66	392.35
Medium Rock Drill	1	1,449.04	1,449.04	57.96
Paving Breaker	1	930.61	930.61	37.22
Pipe Scaler Model 326	2	737.03	1,474.06	58.96
Hydrant Diffusers (Flushing)	2	943.70	1,887.41	75.50
Lift Winch w/ 60' Cable	1	1,619.10	1,619.10	64.76
3/4" Boring Tool	1	8,683.71	8,683.71	347.35
Tapping Machine 4",6",8" Socket/Wrench	1	4,385.30	4,385.30	175.41
Tapping Machine Accessories	1	19,921.73	19,921.73	796.87
Thawing Machine	2	2,000.00	4,000.00	160.00
Trench Box	0	16,150.47	-	-
Trench Boxes	1	29,828.34	29,828.34	1,193.13
Trench Compactor	1	5,239.67	5,239.67	209.59
Vacuum Excavator with Trailer	1	20,407.73	20,407.73	816.31
Vane Axial Fan with 15' Hose	1	747.12	747.12	29.88
			<u>357,998.46</u>	<u>14,319.90</u>

Administrative Equipment

Work Schedule B
 Page 1

Administrative Equipment - Plant Asset Additions

	Quantity	Unit Price	Cost	Depreciation 18.47%
Computer Equipment (Acct 347):				
BNA; Macola Upgrade; Acctg Server	1	8,000.00	8,000.00	1,477.60
Active Directory	1	8,000.00	8,000.00	1,477.60
Datamatic	1	2,000.00	2,000.00	369.40
GIS; Mapquest for Click	1	8,000.00	8,000.00	1,477.60
Ops; Scada; LIMS	1	10,309.00	10,309.00	1,904.07
Synergen; Oracle Forms	1	8,000.00	8,000.00	1,477.60
Munis	1	8,000.00	8,000.00	1,477.60
Voice Mail Phone System	1	8,321.00	8,321.00	1,536.89
Phone System Hardware	1	3,265.00	3,265.00	603.05
File Server	1	6,000.00	6,000.00	1,108.20
Synergen; Clicksoft; Oracle	1	8,000.00	8,000.00	1,477.60
Clicksoft Development	1	18,445.23	18,445.23	3,406.83
PC	30	2,000.00	60,000.00	11,082.00
Phone With Voice Mail	30	426.00	12,780.00	2,360.47
Wiring-Computer Systems	30	135.00	4,050.00	748.04
Printer	6	1,500.00	9,000.00	1,662.30
Misc Software	30	50.00	1,500.00	277.05
Network Port	3	775.00	2,325.00	429.43
Voice Port Hardware	1	4,433.33	4,433.33	818.84
Installation Costs	30	100.00	3,000.00	554.10
Network Firewall	1	2,400.00	2,400.00	443.28
Web Application	1	5,000.00	5,000.00	923.50
Backup Device with Software	1	6,000.00	6,000.00	1,108.20
Synergen Software	1	112,000.00	112,000.00	20,686.40
Macola Software	1	12,000.00	12,000.00	2,216.40
BNA Software	1	11,600.00	11,600.00	2,142.52
Ria-Thompson Software	1	12,116.00	12,116.00	2,237.83
ADP Software	1	5,000.00	5,000.00	923.50
AMR-Datamatic Software	1	7,000.00	7,000.00	1,292.90
AMR-Neptune Software	1	3,575.00	3,575.00	660.30
Clicksoft Software	1	159,690.00	159,690.00	29,494.74
Munis Software	1	140,859.00	140,859.00	26,016.66
Oracle License Software	1	10,000.00	10,000.00	1,847.00
OPS32 Software	1	15,000.00	15,000.00	2,770.50
LIMS Software	1	95,530.00	95,530.00	17,644.39
Knowledge Point Software	1	2,000.00	2,000.00	369.40
			<u>793,198.56</u>	<u>146,503.79</u>

	Quantity	Unit Price	Cost	Depreciation 18.47%
Office Equipment (Acct 347):				
Mail Folding Machine	1	2,000.00	2,000.00	369.40
Handheld Readers	7	5,000.00	35,000.00	6,464.50
Cradle/Rack for Handheld Readers	5	400.00	2,000.00	369.40
Advantage Probes	7	600.00	4,200.00	775.74
Datamatic Laptop	1	24,000.00	24,000.00	4,432.80
			<u>67,200.00</u>	<u>12,411.84</u>

	Quantity	Monthly Lease Unit Price	Annual Cost
Leased Office Equipment:			
Fax Copier	2	330.00	7,920.00
Encoder / Endorser	1	958.00	11,496.00
Postage Machine	1	618.00	7,416.00
Mail Opener	1	590.00	7,080.00
			<u>33,912.00</u>

Administrative Equipment

Work Schedule B
Page 2

Office Furniture and Fixtures (Acct 340)	Quantity	Unit Price	Cost	Depreciation 7.45%
Cabinet for Lunchroom	1	600.00	600.00	44.70
Storage Credenza - Reception	1	1,314.00	1,314.00	97.89
Boardroom Hutch	1	2,393.00	2,393.00	178.28
Desk & File Cabinets -Ops	8	4,189.31	33,514.45	2,496.83
20" Flat Screen TV - Conf Room	1	297.97	297.97	22.20
Shelf Task Lighting	4	94.80	379.20	28.25
Adjustable Chart - Conf Room	1	331.46	331.46	24.69
Hutch - Exec Office	1	2,137.00	2,137.00	159.21
Marker Board - Controller Ofc	1	223.87	223.87	16.68
Stylefile - Engr	1	1,975.00	1,975.00	147.14
Lateral File - Engr	1	771.94	771.94	57.51
Large Format Printer - Engr	1	14,015.00	14,015.00	1,044.12
Coffee Brewer	1	249.95	249.95	18.62
Microwave	1	79.99	79.99	5.96
Office Furniture - Admin Ofc	23	6,949.55	159,839.68	11,908.06
Task Chair - Engr	1	315.00	315.00	23.47
4 Drawer Lateral File - Cust Srev	1	429.20	429.20	31.98
Workstation - Ops	1	2,498.31	2,498.31	186.12
Walnut Bookcase	1	168.75	168.75	12.57
Shredder	1	790.00	790.00	58.86
Bookcase - Cust Serv	2	130.20	260.40	19.40
Filing Cabinets - Engr	1	2,054.75	2,054.75	153.08
Workstation - Engr	1	6,597.86	6,597.86	491.54
Refrigerator	1	399.00	399.00	29.73
Firesafe/Media Cooler	1	1,560.00	1,560.00	116.22
			<u>233,195.79</u>	<u>17,373.11</u>

Expense Detail

PEU & PAC Operating Expense Schedule

Work Schedule C
Page 1

	Annual Existing Expense-With Allocated Costs					Existing Costs		Annual Expense w/o PWW				Total without PWW	
	PWW	PEU	PAC	PWSCO	RealEstate	Total with PWW	Total without PWW	PEU	PAC	PWSCO	RealEstate		
Production Expenses													
Direct Labor (Union)	313,552	132,750	30,498	101,713	-	578,513	264,961	160,237	40,247	119,149	-	319,633	Ref. Sply&Dist
Power Purchased	966,814	146,886	5,347	-	-	1,118,848	152,033	146,886	5,347	-	-	152,033	Ref. Sply&Dist
Chemicals	500,986	55,289	6,143	11,867	-	574,285	73,299	77,101	6,143	29,924	-	113,168	Ref. Sply&Dist
Other Expenses	-	-	-	58,783	-	58,783	58,783	-	-	58,783	-	58,783	Ref. Sply&Dist
Other Prod Matl & Sply, Equipmt, Other	913,308	668,893	17,150	165,198	-	1,764,348	851,040	677,403	19,230	167,406	-	864,039	Ref. Sply&Dist
	2,694,660	1,003,416	59,139	337,559	-	4,094,777	1,400,116	1,061,427	70,967	375,282	-	1,507,656	
Transportation Expense	20,293	-	-	-	-	20,293	-	7,122	935	1,677	412	10,147	Ref. Sply&Dist
Supervisory Wages (Non-Union)	358,650	72,800	9,400	17,200	4,300	480,550	103,700	197,948	25,852	46,900	11,670	262,170	Ref. Sply&Dist
Total Production (Water Sply) Expenses	3,071,803	1,076,218	68,539	354,759	4,300	4,575,619	1,503,816	1,266,497	97,554	423,839	12,082	1,799,973	
T & D Expenses													
Direct Labor (Union)	408,565	165,835	37,484	225,383	-	837,287	428,702	229,312	46,400	385,697	-	661,409	Ref. Sply&Dist
Power Purchased	-	-	-	-	-	-	-	-	-	-	-	-	Ref. Sply&Dist
Chemicals	-	-	-	-	-	-	-	-	-	-	-	-	Ref. Sply&Dist
Other Prod Matl & Sply, Equipmt, Other	17,494	56,490	6,171	478,913	-	557,068	539,575	95,290	12,638	476,913	-	584,841	Ref. Sply&Dist
	426,059	222,325	43,656	702,296	-	1,394,396	968,277	324,602	59,038	862,610	-	1,246,250	
Office Supplies & Expense (With SI)	30,180	7,400	1,000	1,700	400	40,880	10,500	14,335	1,937	3,283	775	20,340	Ref. Sply&Dist
Transportation Expense	143,213	25,900	3,400	8,100	1,500	180,113	36,900	63,210	8,298	14,887	3,681	90,057	Ref. Sply&Dist
Supervisory Wages (Non-Union)	214,487	47,100	6,100	11,200	2,800	281,687	67,200	126,157	16,348	29,890	7,438	179,633	Ref. Sply&Dist
Total T&D (Distribution) Expenses	813,939	302,725	54,156	721,296	4,700	1,896,815	1,082,677	528,304	85,622	910,681	11,873	1,536,479	
Meter Reading	96,080	29,829	3,881	114,860	-	244,430	148,350	-	-	-	-	-	Ref. Sply&Dist
Meter Reading Transfers & Exceptions	32,066	16,155	2,288	6,180	-	56,669	24,603	-	-	-	-	-	Ref. Sply&Dist
Total T&D Expenses w/ Meter Reading	942,085	348,708	60,105	842,316	4,700	2,197,915	1,255,830	528,304	85,622	910,681	11,873	1,536,479	
Engineering Expenses													
Salaries	298,594	60,200	7,800	14,200	3,800	384,394	85,800	160,674	20,818	37,900	9,608	229,000	Ref. Engr&CS
Departmental Expenses	8,041	-	-	-	-	8,041	-	3,949	512	932	236	5,629	Ref. Engr&CS
Transportation Expense	4,583	-	-	-	-	4,583	-	2,401	311	566	144	3,422	Ref. Engr&CS
Total Engineering Expenses	311,199	60,200	7,800	14,200	3,800	396,999	85,800	167,024	21,641	39,398	9,968	238,051	
Customer Acct & Collection Expenses													
Collections	56,893	8,240	2,670	-	-	67,803	10,910	8,240	2,670	-	-	10,910	Ref. Engr&CS
Meter Reading	-	-	-	-	-	-	-	-	-	-	-	-	Ref. Engr&CS
Meter Reading Transfers & Exceptions	-	-	-	-	-	-	-	-	-	-	-	-	Ref. Engr&CS
Billing & Accounting	134,188	39,373	4,550	21,193	-	199,302	65,116	50,621	13,677	26,543	-	90,842	Ref. Engr&CS
Water Ban	20	-	-	-	-	20	-	-	-	-	-	-	Ref. Engr&CS
Uncollectible Accounts	26,716	7,724	2,352	1,760	-	38,561	11,846	7,724	2,352	1,760	-	11,846	Ref. Engr&CS
Total Customer Expense	217,614	55,338	9,582	22,953	-	305,687	87,872	66,588	18,709	28,303	-	113,598	

Expense Detail

Work Schedule C
Page 2

Admin & General Expense															
Office Salaries & Wages	1,018,379	209,600	27,100	49,600	12,400	1,317,279	298,900	609,255	78,698	144,037	38,009	888,000	Ref. A&G		
Officer's Salaries	789,998	130,100	16,800	30,800	7,700	975,398	185,400	282,796	36,518	88,949	16,737	403,000	Ref. A&G		
Office Supplies & Expense	29,470	7,016	821	6,855	400	44,563	15,093	7,858	920	7,878	448	18,904	Ref. A&G		
Rental Exp Parking	520	-	-	-	-	520	-	-	-	-	-	-	Ref. A&G		
Ofc Equipmt Rental/Lease	37,031	8,300	1,100	2,000	500	48,931	11,900	23,653	3,135	5,899	1,425	33,912	Ref. A&G		
Courier & Express Mail	6,017	1,400	200	300	100	8,017	2,000	1,400	200	300	100	2,000	Ref. A&G		
Rent Exp - HECOP	149,074	33,200	4,300	7,900	2,000	196,474	47,400	137,814	17,824	32,748	8,290	196,474	Ref. A&G		
Office Exp - Manchester St	20,842	4,600	600	1,100	300	27,442	6,600	12,569	1,639	3,006	820	18,033	Ref. A&G		
Superv Fees / Special Services	178,005	8,929	521	38,168	-	225,822	47,817	8,929	521	38,168	-	47,817	Ref. A&G		
Temp Employees	(13,800)	9,700	1,200	2,300	600	-	13,800	9,700	1,200	2,300	600	13,800	Ref. A&G		
Regulatory Commission Exp	42,734	8,510	1,280	-	-	52,524	9,790	8,510	1,280	-	-	9,790	Ref. A&G		
*Other Expenses	-	-	-	11,141	-	11,141	11,141	-	-	11,141	-	11,141	Ref. A&G		
*Marketing / PR	-	-	-	215,389	-	215,389	215,389	-	-	215,389	-	215,389	Ref. A&G		
Insurance	414,161	28,196	30,314	33,002	-	505,673	91,512	28,196	30,314	33,002	-	91,512	Ref. A&G		
Boiler & Machinery Insurance	(1,400)	1,000	100	200	100	-	1,400	1,000	100	200	100	1,400	Ref. A&G		
Officer's Life Insurance	12,542	-	-	-	-	12,542	-	4,473	578	1,059	285	6,374	Ref. A&G		
Total Benefits	330,672	-	-	-	-	330,672	-	-	-	-	-	-	Ref. A&G		
Office (Admin) Benefits & PR Tax	470,750	104,900	13,500	24,800	6,200	620,150	149,400	304,628	39,349	72,019	18,005	434,000	Ref. A&G		
Officer Benefits & PR Tax	245,200	54,600	7,100	12,900	3,200	323,000	77,800	118,774	15,337	28,119	7,030	169,280	Ref. A&G		
Engineer Benefits & PR Tax	135,050	30,100	3,900	7,100	1,800	177,950	42,900	80,337	10,409	18,950	4,804	114,500	Ref. A&G		
Production/Distrib. Benefits & PR Tax	289,100	59,900	7,800	14,200	3,500	354,500	85,400	182,053	21,000	38,395	9,554	231,002	Ref. A&G		
Tuition Reimbursement	3,240	-	-	-	-	3,240	-	-	-	-	-	-	Ref. A&G		
Training	38,991	-	-	-	-	38,991	-	-	-	-	-	-	Ref. A&G		
Meals	7,560	165	487	3,276	-	11,488	3,927	165	487	3,276	-	3,927	Ref. A&G		
Sup Exec Retirement Plan	83,402	18,700	2,400	4,400	1,100	110,002	28,800	-	-	-	-	-	Ref. A&G		
Meeting & Conventions	52,486	-	-	-	-	52,486	-	-	-	-	-	-	Ref. A&G		
Memberships	55,055	-	-	692	-	55,748	692	-	-	692	-	692	Ref. A&G		
Public Relations	52,404	11,874	505	5,265	-	70,048	17,844	11,874	505	5,265	-	17,644	Ref. A&G		
Misc General Expense	34,121	(1,353)	2,161	22,314	-	57,243	23,122	(1,353)	2,161	22,314	-	23,122	Ref. A&G		
Recruitment Fees	10,171	-	-	-	-	10,171	-	-	-	-	-	-	Ref. A&G		
Recruiter Fees	(8,900)	6,200	800	1,500	400	-	8,900	6,200	800	1,500	400	8,900	Ref. A&G		
Charitable Contributions	37,842	125	140	500	-	38,607	765	125	140	500	-	765	Ref. A&G		
Maini-Manchester St	18,149	4,000	500	1,000	200	23,849	5,700	16,736	2,092	4,184	837	23,849	Ref. A&G		
Maini-Ofc Furniture & Equipmt	8,905	1,600	200	400	100	9,205	2,300	4,208	526	1,052	263	8,049	Ref. A&G		
Maini-Communication Equipmt	9,164	2,000	300	500	100	12,064	2,900	5,467	820	1,367	273	7,928	Ref. A&G		
Transportation Expense	5,147	1,200	100	300	100	6,847	1,700	2,417	201	604	201	3,424	Ref. A&G		
Vehicle Lease	8,780	2,000	300	500	100	11,880	2,900	8,055	1,208	2,014	403	11,680	Ref. A&G		
Maini-Misc Gen Equipment	485	-	-	-	-	485	-	-	-	-	-	-	Ref. A&G		
Maini-Computers	102,534	22,200	2,400	5,681	2,000	134,816	32,281	72,585	7,847	18,576	6,539	105,547	Ref. A&G		
Transfer Exp Credit (Overheads)	(844,114)	-	-	-	-	(844,114)	-	-	-	-	-	-	Ref. A&G		
Total A&G Expenses	3,807,768	768,962	128,929	504,084	42,900	5,250,643	1,442,874	1,928,223	275,809	780,500	113,103	3,097,835			
Professional Fees	55,000	11,000	2,000	3,000	-	71,000	16,000	24,408	4,438	6,658	-	35,500	50.0% Based on Judgement		
D&O Insurance	165,000	33,000	5,000	10,000	-	213,000	46,000	74,419	11,278	22,551	-	108,248	50.8% Based On Officer's Salaries		
Stockholders Expenses	737,000	150,000	20,000	43,000	2,000	952,000	215,000	332,093	44,279	95,200	4,428	478,000	50.0% Based on Judgement		
Pennichuck Corp Allocated OH Expense	957,000	194,000	27,000	58,000	2,000	1,236,000	279,000	430,918	59,992	124,407	4,428	619,746			
Total O&M Expense	9,307,669	2,503,427	289,955	1,794,311	57,500	13,982,862	4,655,193	4,387,553	559,327	2,307,128	151,474	7,405,482			
Depreciation Expense	2,468,106	552,405	85,463	17,067	4,000	3,127,041	858,935	913,503	125,461	10,711	2,284	1,051,959	Ref. OtherOpExp		
CIAC Amortization	(323,214)	(87,882)	(23,888)	-	-	(434,984)	(111,770)	(85,098)	(23,888)	-	-	(108,984)	Ref. OtherOpExp		
Amortization Expense	85,224	44,955	17,828	4,668	-	152,875	87,451	44,955	17,828	4,888	-	87,451	Ref. OtherOpExp		
Leasehold Amortizations	92,100	20,600	2,600	4,900	1,200	121,400	29,300	65,353	10,773	20,303	4,972	121,400	Ref. OtherOpExp		
Rent-HECOP FitUp Allow	(54,145)	(12,100)	(1,600)	(2,900)	(700)	(71,445)	(17,300)	(49,970)	(6,608)	(11,976)	(2,891)	(71,445)	Ref. OtherOpExp		
Gain From Forgiveness SRF Debt	-	(7,968)	-	-	-	(7,968)	(7,968)	(7,968)	-	-	-	(7,968)	Ref. OtherOpExp		
Gain on Property	(308,934)	(6,751)	-	-	-	(314,685)	(5,751)	(5,751)	-	-	-	(5,751)	Ref. OtherOpExp		
Taxes Other	1,900,702	333,101	28,901	-	-	2,162,704	381,601	341,426	29,800	1,885	-	372,910	Ref. OtherOpExp		
Income Taxes	1,100,029	25,743	2,075	99,012	-	1,225,659	126,830	-	-	-	-	-	Ref. OtherOpExp		
Total Operating Expenses	14,167,537	3,366,531	410,933	1,917,058	82,000	19,924,060	5,756,623	5,624,005	712,483	2,332,718	155,839	8,825,056			

33

Water Supply & Distribution Departmental Expense Schedule

Production Expenses	Annual Existing Expense- Direct Cost				Annual Existing Expense- With Allocated Costs				Existing Costs
	PWW	PEU	PAC	PWSCD	PWW	PEU	PAC	PWSCD	
Supervision	31,137	-	-	-	31,137	-	-	-	31,137
Op Labor - WTP	194,464	25,471	-	-	194,464	25,471	-	-	219,935
Production- Treatment Labor	17,360	-	-	-	17,360	-	-	-	34,498
Production- Source Sply Labor	19,878	-	8,726	-	19,878	8,726	-	-	28,604
Pullback Labor	149,412	-	-	-	149,412	-	-	-	149,412
Booster Sta Maint-Labor	-	177,477	-	-	-	177,477	-	-	177,477
Production-Vacay/Holiday Allowance	81,850	-	-	-	81,850	-	-	-	81,850
Total Labor	774,102	177,477	25,590	101,713	670,402	250,277	34,980	118,813	1,078,881
Fuel Purchased-Comm Sys	3,364	-	-	-	3,364	-	-	-	3,364
Power Purchased	966,814	5,347	-	-	966,814	5,347	-	-	1,118,848
Purchased Water	182,125	514,285	-	-	182,125	514,285	-	-	696,410
Maint & Expense - 1 Plant	74,914	7,249	4,781	-	74,914	7,249	4,781	-	86,924
Maint & Expense - Snow Sta	213	-	-	-	213	-	-	-	213
Maint & Expense - Merr River	271	-	-	-	271	-	-	-	271
Lab Expense (In-House)	62,878	4,803	3,548	-	62,878	4,803	3,548	-	71,289
Lab Expense - Outside Testing	564,930	40,762	2,040	-	564,930	40,762	2,040	-	609,732
Chemicals	600,986	55,289	8,143	-	600,986	55,289	8,143	-	664,418
Other Prod Maint & Supplies	11,296	37,494	165,196	-	11,296	37,494	165,196	-	213,986
WTP-Office Supplies	7,226	-	-	-	7,226	-	-	-	7,226
Office Expense	-	2,253	735	-	-	2,253	735	-	3,011
Comm System	512	-	-	-	512	-	-	-	512
Maint Structures	66,155	7,458	73,591	-	66,155	7,458	73,591	-	147,204
Maint of Equipment	38,440	-	3,538	-	38,440	-	3,538	-	41,978
Maint of Pumpback Equipment	249,601	460	250,061	-	249,601	460	250,061	-	500,121
Maint of Pumpback Equipmt	10,038	-	10,038	-	10,038	-	10,038	-	20,076
Transportation Expense	20,293	-	-	-	20,293	-	-	-	20,293
Booster Sta-Maint,Repairs,Sply	141,811	18,600	-	-	141,811	18,600	-	-	160,411
Total Production Expenses	3,175,503	1,003,418	59,139	337,559	4,575,819	3,071,903	1,078,218	68,539	4,575,819
Direct Labor (Union)	493,998	132,750	30,498	101,713	758,959	213,552	132,750	30,498	1,126,210
Power Purchased	966,814	146,686	5,347	-	966,814	146,686	5,347	-	1,118,848
Chemicals	500,986	55,289	8,143	-	500,986	55,289	8,143	-	564,418
Other Prod Maint & Sply, Equipmt, Other	732,982	17,130	186,186	-	732,982	17,130	186,186	-	936,301
Transportation Expense	20,293	-	-	-	20,293	-	-	-	20,293
Supervisory Wages (Non-Union)	460,550	-	-	-	460,550	-	-	-	460,550
Total Production (Water Sply) Expenses	3,175,503	1,003,418	59,139	337,559	4,575,819	3,071,903	1,078,218	68,539	4,575,819
Retr Orlabor	1,799,873	-	-	-	1,799,873	-	-	-	1,799,873
50% based on 30 vs 60 veh.	282,170	412	-	-	282,170	412	-	-	282,582
Company Provided	1,507,058	-	-	-	1,507,058	-	-	-	1,507,058
Company Provided	804,039	-	-	-	804,039	-	-	-	804,039
Company Provided	58,783	-	-	-	58,783	-	-	-	58,783
Company Provided	113,168	-	-	-	113,168	-	-	-	113,168
At Existing	132,033	-	-	-	132,033	-	-	-	132,033
Retr Orlabor	319,833	-	-	-	319,833	-	-	-	319,833

Engineering & Customer Service

Engineering & Customer Service Departmental Expense Schedule

Work Schedule E
Page 1

	Annual Existing Expense-Direct Cost				Total with PWW	Annual Existing Expense-With Allocated Costs					Existing Costs		Annual Expense w/o PWW				Total without PWW		
	PWW	PEU	PAC	PWSCO		PWW	PEU	PAC	PWSCO	RealEstate	Total with PWW	Total without PWW	PEU	PAC	PWSCO	RealEstate			
Engineering Expenses																			
Salaries	384,394	-	-	-	384,394	288,594	60,200	7,800	14,200	3,600	384,394	85,800	160,874	20,818	37,900	9,808	229,000	Ref Officers&Ofc	
Departmental Expenses	8,041	-	-	-	8,041	8,041	-	-	-	-	8,041	-	3,949	512	932	238	5,829	70% Based on Judgement	
Transportation Expense	4,563	-	-	-	4,563	4,563	-	-	-	-	4,563	-	2,401	311	586	144	3,422	75% # of employee w/Trans	
Total Engineering Expenses	396,999	-	-	-	396,999	311,199	60,200	7,800	14,200	3,600	396,999	85,800	167,024	21,841	39,398	9,988	238,051		
Customer Acct & Collection Expenses																			
Collections	56,893	8,240	2,870	-	67,803	56,893	8,240	2,870	-	-	67,803	10,910	8,240	2,870	-	-	10,910	At Existing	
Meter Reading	96,080	29,829	3,681	114,860	244,430	96,080	29,829	3,681	114,860	-	244,430	148,350	-	-	-	-	-	* In Operation Labor Costs	
Meter Reading Transfers & Exceptions	32,066	16,155	2,288	8,160	58,669	32,066	16,155	2,288	6,160	-	56,889	24,803	-	-	-	-	-	* In Operation Labor Costs	
Billing & Accounting	134,186	39,373	4,550	21,193	199,302	134,186	39,373	4,550	21,193	-	189,302	65,118	50,821	13,677	28,543	-	90,842	See Calc. Below	
Water Ban	20	-	-	-	20	20	-	-	-	-	20	-	-	-	-	-	-	-	
Uncollectible Accounts	28,716	7,724	2,362	1,780	38,581	28,716	7,724	2,362	1,780	-	38,581	11,848	7,724	2,362	1,780	-	11,848	At Existing	
Total Customer Expense	345,960	101,321	15,532	143,973	608,786	345,960	101,321	15,532	143,973	-	608,786	280,826	66,586	18,709	28,303	-	113,598		
Existing Billing & Accounting Expense	134,186	39,373	4,550	21,193	199,302						Projected Billing & Accounting Expense:								
Number of Annual Bills	156,182	67,364	17,638	34,880							Number of Annual Bills	67,364	17,638	34,880					
Notices Issued	23,027	5,888	1,411	2,072							Notices Issued	5,888	1,411	2,072					
Billing Costs @ \$.21	32,798	14,148	3,704	7,321							Billing Costs @ \$.235	15,831	4,145	8,192					
Notices Cost @ \$.05	1,151	284	71	104							Notices Cost @ \$.055	313	78	114					
Postage @ \$.35 avg	62,723	25,568	6,667	12,926							Postage @ \$.38 avg	27,760	7,239	14,034					
Billing & Postage	96,873	39,999	10,442	20,350	167,664						Billing & Postage	43,903	11,461	22,340					
Other Billing & Accounting Costs					31,838						Other Billing & Accty Costs	6,718	2,218	4,203					
# of Events (C/R, Notes, Apptmts)	180,348	57,804	19,002	38,034	272,988						(C/R, Notes, Apptmts)								
Allocation by Relative # of Events	18,701	6,718	2,218	4,203	31,838														
Total Billing & Accty Costs	115,374	46,717	12,858	24,553	199,302						Total Billing & Accty Costs	50,821	13,677	28,543					

Pennichuck Water Works, Inc. DW 04-048
Staff 4-22 - Attachment 5 of 8
Work Schedule E
1 Page

A. Water Supply and Distribution - O&M Expense Projections

Information provided by the Company was used to develop the operations departmental costs. The Company developed its projections by analyzing the direct (union employee) labor and labor hours devoted to the field work, meter reading, construction, maintenance, flushing, customer premise visits, etc. necessary to provide water service for PEU, PAC and PWSCO during 2005. The number of full time employees at various pay scales, the hours worked per employee, over-time hours, employee grades or levels necessary, employee benefits and payroll taxes were all factored into the Company's direct labor projections. The Company's direct labor projections are based on the need for 5 union employees in the Water Supply Department and 10 union employees in the Distribution Department.

The Company's projections of Water Supply Department non-labor expenses contain the following assumptions:

The purchased power costs are projected to remain at existing levels.

The cost of chemicals is projected to increase based on the future inability to accommodate bulk volume delivery. A change to a lesser volume container delivery for chlorine and phosphate products would become necessary. Based on vendor information, chlorine would increase from \$.74 to \$2.43 per gallon and zinc ortho phosphate would increase from \$4.85 to \$8.00 per gallon. These price increases would result in \$21,811 and \$18,057 of higher chemical cost for PEU and PWSCO, respectively. The cost of materials, supplies, and equipment expenses would remain at existing levels, but would increase with the inclusion of \$13,000 of duty stand-by pay for one employee at \$250 per week.

The Company's projections of Distribution Department non-labor expenses contain the following assumptions:

The purchased power costs are projected to remain at existing levels.

The projected materials, supplies, and equipment expenses are increased by 10% or \$5,649 and \$617 for PEU and PAC, respectively and no impact on PWSCO. This increase is based on lost purchasing power with vendor estimates of 10% to 15% due to orders of lesser volume. The other increase within this category of expense would reflect the inclusion of \$59,000 of duty stand-by pay for three employees at \$250 per week.

The Company provided projections that non-union supervision and technical personnel would decrease from 8 to 5 employees in the Water Supply Department and decrease from 5 full-time and one part-time to 3 full-time and one part-time employee in the Distribution Department. With this information, an Operations Labor Schedule was developed which shows the current allocation of operations labor and benefits by PWW and the projected operations labor and benefits without PWW. The projected non-union salaries are based on average existing wages by employee class and the projected total wages and benefits are spread to PEU, PAC, PWSCO and the real estate affiliate based on the percentages currently allocated by PWW as shown on the schedule. The total

operations labor costs without PWW developed on this Operations Labor Schedule are carried over to the Water Supply and Distribution Departmental Expense Schedule.

Existing transportation expenses within the Water Supply and Distribution Departments are currently allocated by PWW to its affiliated divisions. The projected expense levels without PWW are based on the need for 30 versus 60 vehicles, or 50% of the existing costs, and spread to the divisions based on the existing percentages of allocated PWW transportation expense with PWW excluded.

The Will Street-office supplies and expense within the Distribution Department are currently allocated by PWW to its affiliated divisions. The projected level of this expense is 50% of the existing cost without PWW. This projection is based on consideration of field personnel levels, number of customers, and pricing expectations. These projected costs are then spread to the divisions based on the existing relative percentage of allocated Will Street-office supplies and expenses by PWW.

1. Summary of Projected Water Supply Departmental O&M Expenses:

The PEU water supply costs are projected to increase by \$190,279. Non-union wages increase \$125,148; Union wages and benefits increase \$27,487; transportation expenses increase \$7,122; chemical costs increase \$21,811; and other expenses increase \$8,710.

The PAC water supply costs are projected to increase by \$29,015. Non-union wages increase \$16,252; Union wages and benefits increase \$9,749; transportation expenses increase \$935; and other expenses increase \$2,079.

The PWSCO water supply costs are projected to increase by \$69,080. Non-union wages increase \$29,700; Union wages and benefits increase \$17,436; transportation expenses increase \$1,677; chemical costs increase \$18,057; and other expenses increase \$2,210.

The Real Estate Affiliate share of allocated costs is projected to increase by \$7,782. Non-union wages increase \$7,370 and transportation expenses increase \$412.

2. Summary of Projected Water Distribution Departmental O&M Expenses:

The PEU water distribution costs are projected to increase by \$179,596. Non-union wages increase \$79,057; Union wages (including meter reading) and benefits increase \$17,494; transportation expenses increase \$37,310; Will Street supplies and expenses increase \$6,935; and other expenses increase \$38,800.

The PAC water distribution costs are projected to increase by \$25,516. Non-union wages increase \$10,248; Union wages (including meter reading) and benefits increase \$2,966; transportation expenses increase \$4,898; Will Street supplies and expenses increase \$937 and other expenses increase \$6,467.

The PWSCO water distribution costs are projected to increase by \$68,365. Non-union wages increase \$18,690; Union wages and benefits increase \$39,294; transportation expenses increase \$8,787; and Will Street supplies and expenses increase \$1,593.

The real estate affiliate's share of allocated costs is projected to increase by \$7,173. Non-union wages increase \$4,638; transportation expenses increase \$2,161; and Will Street supplies and expenses increase \$375.

B. Engineering - O&M Expense Projections

The personnel levels of the restructured Engineering Department are determined through discussion with PWW administrative personnel. The existing staff of one Department Manager, three Engineering Inspectors, two full-time and one part-time Draftsman, and an Administrative Assistant is reduced to one Manager, two Inspectors, and one Draftsman.

The existing engineering departmental expenses are \$396,999 consisting of \$384,394 for salaries, \$8,041 of departmental expenses, and \$4,563 of transportation costs. The staffing reductions result in projected salaries of \$229,000. The departmental expenses are projected at 70% of existing costs, or \$5,629, based on judgment (with consideration given for projected staff levels, lost purchasing power, etc.). Transportation costs are estimated at 75% of existing costs, or \$3,422 based on vehicular needs for a manager and two inspectors versus a manager and three inspectors. All Engineering Expenses are spread to PEU, PAC, PWSCO and the real estate affiliate at the same percentage as PWW allocated existing costs to the affiliated divisions.

1. Summary of Projected Engineering Departmental O&M Expenses:

The existing engineering costs for PEU of \$60,200, PAC of \$7,800, PWSCO of \$14,200 and the real estate affiliate of \$3,600 reflect only the allocation of salaries. PWW is absorbing the remaining salaries of \$298,594, plus \$8,041 of departmental expenses and \$4,563 of transportation costs.

The PEU engineering costs are projected to increase from \$60,200 to \$167,024. Salaries increase by \$100,474; departmental expense by \$3,949; and transportation costs by \$2,401.

The PAC engineering costs are projected to increase from \$7,800 to \$21,641. Salaries increase by \$13,018; departmental expense by \$512; and transportation costs by \$311.

The PWSCO engineering costs are projected to increase from \$14,200 to \$39,398. Salaries increase by \$23,700; departmental expense by \$932; and transportation costs by \$566.

The real estate affiliate's share of allocated engineering costs is projected to increase from \$3,600 to \$9,988. Salaries increase by \$6,008; departmental expense by \$236; and transportation costs by \$144.

C. Customer Service - O&M Expense Projections

The collection function is currently provided by one employee at an annual cost of \$67,803 with direct charges of \$56,893 to PWW, \$8,240 to PEU and \$2,670 to PAC. The projected annual expense of \$10,910 remains at the same level for PEU and PAC. The meter reading and meter reading transfers and exceptions expenses are removed from customer service departmental costs and are reflected in the direct (union) labor costs of the Water Distribution Department as presented in the Company's operation projections. The salaries of customer service employees are recorded and projected within the category of administrative office salaries.

The billing and accounting expense consists of the cost of materials, supplies and postage relating to the issuance of customer bills and notices, and cash receipts, customer correspondence and customer appointment activity. The customer service department provided information on the number of annual events for each of these functions by division. The existing divisional billing and accounting costs were analyzed by multiplying the number of bills issued at the cost of \$.21 per bill, the number of notices issued at the cost of \$.05 per notice and the number of bills and notices at the average postage cost of \$.35 as provided by the Company. The remaining costs represent the cost related to cash receipts, customer notes and appointments activities and are allocated based on the number of relative events for each division.

The Company anticipates the cost of bills and notices will increase by 10 to 12% based on lesser purchase volume per its vendors. The projected billing and accounting costs are derived by multiplying the number of bills issued at a cost of \$.235 per bill, notices at a cost of \$.055 per notice, and postage at a cost of \$.38 per bill and notice issued. All other billing and accounting costs are projected at to remain at existing levels.

The uncollectible accounts costs are projected to remain at existing levels.

1. Summary of Projected Customer Service Departmental O&M Expenses:

PEU's customer service costs, excluding meter reading, are projected to increase by \$11,248 based on the analysis of billing and accounting cost by event and anticipated increased costs for bills, notices and postage.

PAC's customer service costs, excluding meter reading, are projected to increase by \$9,127 based on the analysis of billing and accounting cost by event and anticipated increased costs for bills, notices and postage.

PWSCO's customer service costs, excluding meter reading, are projected to increase by \$5,350 based on the analysis of billing and accounting cost by event and anticipated increased costs for bills, notices and postage.

There are no customer service cost impacts on the real estate affiliate.

D. Administrative and General - O&M Expense Projections

The Company provided a list of current Officers, administrative office, engineering, and service company personnel with annual salaries by position. They also provided a list of personnel needed under the corporate restructuring without the affiliation with PWW. This information is used to develop the projected administrative personnel costs. The existing 2005 salary levels are used for the development of projected salaries with certain positions eliminated under the restructuring proposal. The number of Officers is reduced from 5 to 3 positions with total salaries of \$403,000. The H.R. department remains at 2 positions with total salaries of \$121,000, but will require the administrative assistant to perform tasks for other departments. The I.T. department is reduced from 3 to 2 positions with total salaries of \$124,000. The accounting department is reduced from 7 to 5 positions with total salaries of \$297,000. The customer service department is reduced from 7 full-time and 1 part-time positions to 5 full-time positions with total salaries of \$204,000. The service company remains at 2 positions with total salaries of \$122,000, but will require the administrative assistant to perform tasks for other departments. The current Officers' salaries (\$975,398) and administrative office salaries (\$1,317,279) with PWW are allocated among all divisions. The projected Officers' salaries (\$403,000) and administrative office salaries (\$868,000) are spread to the remaining divisions based on the same relative percentage as PWW's current allocations.

Office supplies and expenses in the amount of \$15,093 are projected at the existing levels of \$5,693 in direct costs and \$9,400 in allocated costs for each division (excluding PWW) and increased by 12% for anticipated pricing adjustments due to lost purchasing power.

Office equipment rental and lease expenses in the amount of \$33,912 are based on monthly lease costs, as provided by the Company, for 2 fax/copier machines, an encoder/endorser machine, a postage machine and a mail opener. These costs are spread to the divisions at the same relative percentage as PWW's current allocations. The 2005 office equipment lease expense was \$48,931.

The current office space is subject to a three-year lease agreement; therefore, the projected expense reflects the current annual lease amount of \$196,474 which is spread to each division at the same relative percentage as PWW's current allocation of rent expense.

The 2005 Manchester Street telephone expense was \$27,442, maintenance of office furniture and equipment was \$9,205, and maintenance of communication equipment was \$12,064. The projected costs of \$18,033, \$6,049 and \$7,928, respectively are based on 65.7% of existing costs, consistent with the reduction in administrative employees.

These expenses are spread to each division at the same relative percentage as PWW's current allocation.

The 2005 Officers' life insurance expense was \$12,542. The projected cost of \$6,374 is based on 51% of existing expense, related to the reduction in Officers' salaries, and is spread to each division at the same relative percentage as PWW's current allocation.

Administrative office, engineering, and non-union water supply and distribution employee benefits (including payroll taxes) are projected at 50% of their respective salary projections. Officers' benefits (including payroll taxes) are projected at 42% of their respective salary projections. These percentages were provided by the Company.

The Manchester Street maintenance expense of \$23,849 and vehicle lease expense of \$11,680 are projected to remain the same levels and are spread to each division at the same relative percentage as PWW's current allocation.

The 2005 transportation expense was \$6,847. The projected cost of \$3,424 is based on 50% related to a fleet of 30 versus 60 vehicles and is spread to each division at the same relative percentage as PWW's current allocation.

Computer maintenance costs are projected at 18% of the projected replacement software asset costs. This percentage represents an accepted industry average as provided by the Company's I.T. Manager. The 2005 maintenance costs were \$134,816. The projected costs are \$105,547 which is spread to each division at the same relative percentage as PWW's current allocation.

Supervisory fee/special services expense, regulatory commission expense, PWSCO other expenses, PWSCO marketing/PR expense, meals expense, membership fees, public relations costs, miscellaneous general expense, and charitable contributions are all projected to remain at the direct cost levels booked to PEU, PAC and PWSCO. These expenses do not impact the real estate affiliate's costs.

The PWW allocated \$2,000 of the \$8,107 courier/express mail costs; \$13,800 of the \$57,203 temporary employee expense; \$1,400 of the \$5,835 boiler and machinery insurance; and \$8,900 of the \$36,739 recruitment fees to its affiliates. These expense items are projected to remain at the allocated levels.

Parking rental of \$520, executive retirement plan of \$110,002, meetings and conventions cost of \$52,486, maintenance of miscellaneous equipment of \$485, and transfer expense credits of \$844,114 (an expense reduction for PWW) were eliminated, because it is anticipated they would not exist without PWW.

1. Summary of Projected Administrative Departmental O&M Expenses:

PEU's administrative expenses are projected to increase \$1,159,261. Labor related expenses increase \$954,215; office rent and expenses increase \$113,225; and equipment/vehicle lease and maintenance expenses increase \$91,821.

PAC's administrative expenses are projected to increase \$148,880. Labor related expenses increase \$123,289; office rent and expenses increase \$14,662; and equipment/vehicle lease and maintenance expenses increase \$10,930.

PWSCO's administrative expenses are projected to increase \$276,417. Labor related expenses increase \$225,728; office rent and expenses increase \$27,574; and equipment/vehicle lease and maintenance expenses increase \$23,115.

The real estate affiliate's share of administrative expenses is projected to increase \$70,203. Labor related expenses increase \$56,504; office rent and expenses increase \$6,858; and equipment/vehicle lease and maintenance expenses increase \$6,841.