

Educational and Professional Background

Al-Azad Iqbal

I am employed by the New Hampshire Public Utilities Commission (PUC) as a Utility Analyst. My business address is 21 S. Fruit Street, Suite 10, Concord New Hampshire, 03301.

I received my Bachelor degree in Architecture (B. Arch) from Bangladesh University of Engineering and Technology. Later, I received my Masters (MS) in Environmental Management from Asian Institute of Technology and another Masters in City and Regional Planning (MCRP) from the Ohio State University. I was a Doctoral Candidate at the City and Regional Planning Department at the Ohio State University. After joining the PUC in 2007, I participated in several utility related training courses including Marginal cost training by NERA, Advanced Regulatory Studies at Institute of Public Utilities, Michigan State University, Depreciation Training by Society of Depreciation Professionals.

Prior to joining the PUC, I was involved in teaching and research activities in different academic and research organizations. Most of my research work was related to quantitative analysis of regional and environmental issues.

Attachment AI-1

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DA 16-560

Affiliate Agreement with Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
related to Concord Training Center

Staff Data Requests - Set 1

Date Request Received: 6/3/16
Request No. Staff 1-2

Date of Response: 6/14/16
Respondent: Steven Mullen

REQUEST:

Ref. para. 5. Please explain how the annual Granite State Proportionate Share estimate of \$146,556 was derived and provide supporting schedules. Please provide schedules in both hard copy and Excel.

RESPONSE:

Granite State's Proportionate Share of \$146,559 was calculated using a combination of actual and estimated costs. Please see Attachment Staff 1-2.xlsx.

Attachment AI-1

Concord Training Center Estimated Annual Operating Costs

Cost of building on books	4,109,880	
Accum Depr thru 3/31/16	<u>(118,365)</u>	
	<u>3,991,515</u>	
Return @ EnergyNorth WACC of 7.05%	281,402	
Annual Book Depreciation	118,364	From our books and records
Estimated Insurance on Bldg.	1,500	From Insurer
Utilities	39,762	Electric/Gas/Water/Internet/Phone (based on actuals and estimates)
Property Taxes	30,210	From tax bill
Routine Maintenance	<u>115,000</u>	Waste removal, Janitorial, HVAC/Plumbing, Alarm, Security, Lanscaping, Snow Removal, Fire Protection, Elevator Inspection, Pest Control, Repairs, etc. (based on actuals and estimates)
Total	<u>586,238</u>	
Percentage to GSE based on use @ 25%	<u>146,559</u>	

Attachment AI-2

Docket No. DG 14-180
Testimony of Christian P. Brouillard
Page 10 of 14

1 structural improvements in Nashua that include replacement of HVAC
2 equipment, single pane windows, roofing and roofing insulation, and the
3 installation of a proximity gate-opener in order to enhance security to
4 the Meter Building;

5 • In Tilton, the replacement of the hydraulic warehouse dock lift, the
6 replacement of the end-of-life HVAC equipment with high efficiency
7 heating and cooling equipment, and the construction of a conference
8 room;

9 • In Manchester the construction of a conference room and cubical space
10 on the second floor in Manchester with required stairwell and elevator
11 access, the renovation of the men's and women's locker rooms,
12 restroom facilities and field force staging room in Manchester to correct
13 structural deficiencies and meet code requirements, and the installation
14 of new roofing with insulation to meet current energy codes.

15

16 ii) New Training Center in Concord (2014: approximately \$1,450,000):
17 EnergyNorth will be constructing a new state of the art Training Center in
18 Concord. The new Liberty Utilities Training Center (LUTC) will be built at
19 10 Broken Bridge Road, Concord on property owned by the Company. The
20 new two-story building will be approximately 6,200 square feet and contain
21 two instructional classrooms to accommodate 15 students each, two offices,
22 one lab, two accessible restrooms, and an accessible lift to the second-floor

Attachment AI-2

Docket No. DG 14-180
Testimony of Christian P. Brouillard
Page 11 of 14

1 and a lunchroom. The new facility will serve as a multi-purpose training
2 center for year-round training of those employees who provide service to
3 EnergyNorth and/or Granite State, and will provide a variety of technical
4 hands-on training to meet federal and state mandated requirements for
5 training, certification and re-certification for gas and electric employees and
6 outside utility contractors. The LUTC outside grounds will have simulated
7 gas distribution “leak field” for leak classification and gas line training.

8
9 iii) Vehicle Purchases (2014; approximately \$630,000; and 2015:
10 approximately \$410,000): In 2014, the Company will take delivery of 11
11 cargo vans and three Transit Connect Vans. The 11 vans will be replacing
12 existing vans in Field Operations that are high mileage and older than 7
13 years in service. The 3 Transit connects are replacing SUVs presently used
14 for meter reading that also qualify for replacement. In the first quarter of
15 2015, the Company will be taking delivery of one backhoe, two utility
16 trailers, two mid-size crew trucks, and four full size pickup trucks, all used
17 for day-to-day gas operations.

18
19 The joint testimony of Mr. Mullen and Mr. Gorman describes the Company’s
20 request for recovery of the costs of these projects through a step adjustment to
21 distribution rates.

22

Attachment AI-3

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DA 16-560

Affiliate Agreement with Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities
related to Concord Training Center

Staff Data Requests - Set 2

Date Request Received: 6/21/16
Request No. Staff 2-3

Date of Response: 7/1/16
Respondent: Mark Smith

REQUEST:

Ref. Response of Staff 1-4. Did Liberty perform any cost-benefit analysis concerning use of the training center? Identify and quantify all major and minor benefits and costs analyzed. Provide details with supporting analysis and work papers.

RESPONSE:

Yes, Liberty performed a cost benefit analysis concerning the use of the training center. The analysis was based on economic factors as well as non-economic factors. A cost estimate of utilizing the National Grid training facility in Millbury, Massachusetts was approximately \$375,000 per year, which included an analysis of six months of use by gas employees and 12 months of use by electric employees during 2013. See Attachment Staff 2-3.xlsx. That cost estimate includes incremental travel time and instructor's charges combined for electric and gas employees. It does not include the employee's basic hourly pay rate which would have been incurred regardless of where the training was held. As the cost estimate was based on the number of employees who attended training during that time period, the cost estimate is significantly less than the amount that would be calculated based on the amount of training that has been conducted and will be conducted going forward at the Liberty training center, as discussed below.

In addition to cost, other factors played a major role in the decision process. The arrangement with National Grid was temporary, like the Transition Service Agreements (TSAs) between Liberty and National Grid. Liberty did not have a written TSA with National Grid for training but did have a verbal commitment from National Grid to provide training services for a reasonable period of time until Liberty was ready to assume this obligation. When training in Millbury, Liberty employees were part of classes which included National Grid employees from Massachusetts and/or Rhode Island. Consequently the training they received was not specific to New Hampshire and in some cases conflicted with New Hampshire practices and procedures. Also, scheduling New Hampshire employees for this training was becoming increasingly difficult as Liberty employees were slotted into classes based on when openings were available. Priority was given to the National Grid employees. In many cases, the timing of available openings was in conflict with operational needs. Liberty also searched the local area for another

source of training and found no gas or electric training available that would in any way come close to meeting our needs. Consideration was given to utilizing an existing Liberty facility. The only facility reasonably centrally located and of sufficient size was a building in the Manchester yard. However, due to environmental and permitting issues, it was ruled out. For all of the above reasons the decision was made to build a training center.

Operator Qualifications (OQs) testing is also performed at the training center. Prior to construction of the training center, OQ testing was done using site visits to the various operating yards with testing logistics and conditions varying from site to site. Gas OQ testing criteria have also recently changed. As OQs expire, there is a new requirement to demonstrate proficiency by physically performing the respective task in addition to the current requirement to pass the written test. This requires even greater use of the training center as it allows the instructor to assess the individual's ability to perform the tasks in a controlled environment rather than in the field which is more difficult as logistics and conditions at the yards varied. There are approximately eighty-five OQ tasks. While every employee is not required to pass them all, each employee does have to pass a number of them. Specific OQ tasks vary by job function. Since it now controls the scheduling of training, Liberty is able to train and test more employees more efficiently than when Liberty relied on National Grid for training. In addition, local training keeps employees in the area and able to respond to an emergency situation if needed. The training center is also being used for basic gas and electric training for all non-field employees to provide them with a better understanding of the business. Such training would not have been possible with National Grid's facility given the constraints on use of that facility. To date, approximately 110 employees have been through this basic training. Liberty also plans to use the training center for public awareness training with first responders such as fire departments and police. It will also be used in our outreach efforts with technical high schools and colleges to educate students in careers in the utility industry. For all these reasons having a Liberty training facility provides many quantifiable and non-quantifiable benefits to the Company, its employees, customers and the communities served by Liberty.

Attachment AI-3

GAS and ELECTRIC OPERATIONS National Grid BASED VS. IN-HOUSE TRAINING ANALYSIS

GAS OPERATIONS National Grid						
TRAINING IF PERFORMED BY National Grid:	# TRAINEES	HOURLY O.T. EXP.	AVE. DAILY TRAVEL HRS.	REQ. DAYS	INCURRED O.T. TRAVEL COST	INCURRED National Grid Instructor COST: \$360/DAY per Student
MANAGEMENT (new):	1	\$0.00	4	20	\$0.00	\$7,200.00
UNION (new):	7	\$52.50	4	20	\$29,400.00	\$50,400.00
<i>Changing Positions / Departments</i>						
MANAGEMENT:	0	\$0.00	0	0		\$0.00
UNION:	8	\$52.50	4	20	\$33,600.00	\$57,600.00
ANNUAL SUB-TOTALS:					\$63,000.00	\$115,200.00
TOTAL ANNUAL ESTIMATED TRAINING EXPENSES BY National Grid - O.T. + Instructor Cost:						\$178,200.00

ELECTRIC OPERATIONS National Grid						
MANDATORY ANNUAL EXPERT & SAFETY COMPLIANCE TRAINING IF PERFORMED BY National Grid:	# TRAINEES	HOURLY O.T. EXP.	AVE. DAILY TRAVEL HRS.	REQ. DAYS	INCURRED O.T. TRAVEL COST	INCURRED National Grid Instructor COST: \$360/DAY per Student
MANAGEMENT:	16	\$0.00	6	3	\$0.00	\$17,280.00
UNION:	26	\$67.50	6	3	\$31,590.00	\$28,080.00
<i>REQUIRED PROFICIENCY / REFRESHER IF PERFORMED BY National Grid for existing employees:</i>						
MANAGEMENT:	0	\$0.00	0	0		\$0.00
UNION:	26	\$67.50	6	6	\$63,180.00	\$56,160.00
ANNUAL SUB-TOTALS:					\$94,770.00	\$101,520.00
TOTAL ANNUAL ESTIMATED TRAINING EXPENSES BY National Grid - O.T. + Instructor Cost:						\$196,290.00
ANTICIPATED Annual Incremental training expenses for a replacement Lineworker if replaced with a rated Lineworker:						
UNION:	1	\$67.50	6	30	\$12,150.00	\$10,800.00
ADDITIONAL TOTAL O.T. + Instructor Cost:						\$22,950.00

Total Cost For Gas and Electric \$374,490.00

Attachment AI-4

Liberty Utilities (Granite State Electric) Corp. d/b/a Liberty Utilities

DE 16-383
Distribution Service Rate Case

Staff Data Requests – Tech Session 1

Date Request Received: 11/18/16
Request No. Staff Tech 1-3

Date of Response: 12/2/16
Respondent: Steven Mullen
Mark Smith

REQUEST:

What are the actual costs incurred in the last three years. The response says they are actuals. Staff Attachment 11-5.xlsx is missing the Grid instructor piece. Please update the data request with the inclusion of Grid instructor piece.

RESPONSE:

The actual costs incurred by Liberty Utilities for gas, electric, and safety training are provided in Attachment Staff Tech 1-3.xlsx. The costs in the spreadsheet were determined based on reported attendance at the various training sessions. Attachment Staff Tech 1-3.xlsx contains a couple of corrections to Attachment Staff 11-5.xlsx as described in the response to Staff Tech 1-4.

The National Grid instructor costs were not missing from Attachment Staff 11-5.xlsx as the attachment provided actual costs incurred by Liberty Utilities. No actual costs for National Grid instructors were paid by Liberty Utilities during the years 2013-2015. Although some limited training of Liberty employees at the National Grid facility was performed in 2013, no bill was ever received for the instructor costs. No training of Liberty employees occurred at the National Grid facility during the years 2014 and 2015. The National Grid instructor costs of \$360/day/student used to determine a cost estimate in Attachment Staff 2-3 in DA 16-560 were based on the historical cost charged by National Grid. As stated in the response to Staff 2-3 in DA 16-560, the amounts derived in the related attachment were only a cost estimate.

Energy North											
Mandatory Technical Training & Operator Qualifications	# TRAINEES	Average Training Hours per Trainee	Average Training HoursTot	Ave. Hourly pay	Ave. OT hourly pay (\$52.5) x OT Hours	OT Hours for Training	Payroll inc/Burden (1.2362)	Gas Technical Training Staff	Annual Training Cost:	New Employees Average Training Hrs. Required	Existing Employees Average Training Hrs. Required
MANAGEMENT:											
Year 2013	7	24	168	45			\$9,345.67	\$9,205.00	\$18,550.67	0	24
Year 2014	7	24	168	45			\$9,345.67	\$8,568.00	\$17,913.67	0	24
Year 2015	7	24	168	45			\$9,345.67	\$8,568.00	\$17,913.67	0	24
UNION:											
Year 2013	87	25	2175	35	\$210.00	4	\$116,691.10	\$114,414.00	\$231,105.10	3 Emp. @ 120 hrs ea.=360	84 Emp. @ 21 hrs. ea.=1764
Year 2014	94	35	3290	35	\$262.50	5	\$172,851.67	\$115,056.00	\$287,907.67	7 Emp. @ 120 hrs ea.=840	87 Emp. @ 27 hrs.ea.=2349
Year 2015	94	27	2538	35	\$262.50	5	\$140,314.88	\$115,056.00	\$255,370.88	0	94 Emp. @ 27 hrs.ea.=2538
TOTAL GAS TRAINING EXPENSES:							\$457,894.66	\$370,867.00	\$828,761.66		
Total									\$828,761.66		

Granite State Electric

Annual Expert & Mandatory Technical Training	# TRAINEES	Average Training Hours per Trainee	Average Training HoursTot	Ave. Hourly pay	Ave. OT hourly pay (\$ 60) x OT Hours	OT Hours for Training	Payroll inc/Burden (1.5659)	Electrics Technical Training Staff	Annual Training Cost:
MANAGEMENT:									
Year 2013	14	24	336	45			\$23,676.41	\$54,806.00	\$78,482.41
Year 2014	16	24	384	45			\$27,058.75	\$59,653.00	\$86,711.75
Year 2015	16	24	384	45			\$27,058.75	\$59,653.00	\$86,711.75
UNION:									
Year 2013	24	24	576	40	\$240.00	4	\$45,097.92	\$114,414.00	\$159,511.92
Year 2014	26	70	1829	40	\$300.00	5	\$126,775.26	\$115,056.00	\$241,831.26
Year 2015	26	38	1365	40	\$300.00	5	\$97,712.16	\$115,056.00	\$212,768.16
TOTAL ELECTRIC TRAINING EXPENSES:									\$866,017.26
Total									\$866,017.26

Environment-Health-Safety

Annual Environment-Health-Safety Training	# TRAINEES	Training Hours per Trainee	Training HoursTot	Ave. Hourly pay	Tot Symposium Hours for Gas (70 % Tot Hrs)	Tot Symposium Hours Electric (30 % Tot Hrs)	Payroll inc/Burden: Gas(1.2362) Elec(1.5659)	EHS Training Staff	Annual Training Cost:
GAS:									
Year 2013	94	9.47	890	35			\$38,507.63	N/A	\$38,507.63
Year 2014	101	4.55	460	35			\$19,902.82	N/A	\$19,902.82
Year 2015	101	7.33	740	35			\$32,017.58	N/A	\$32,017.58
Electric:									
Year 2013	40	20.33	854	40			\$53,491.14	N/A	\$53,491.14
Year 2014	42	6.79	285	40			\$17,851.26	N/A	\$17,851.26
Year 2015	42	10.00	420	40			\$26,307.12	N/A	\$26,307.12
Safety Symposim Combined: Ops & Eng + Other									
Year 2013	262	8.00	2100	35	63602.49	34528.10	\$98,130.59	N/A	\$98,130.59
Year 2014	288	8.00	2300	35	69659.87	37816.49	\$107,476.36	N/A	\$107,476.36
Year 2015	312	8.00	2500	35	75717.25	41104.88	\$116,822.13	N/A	\$116,822.13
TOTAL EHS TRAINING EXPENSES:									\$510,506.62

Attachment AI-5

Liberty Utilities (EnergyNorth Natural Gas) Corp. d/b/a Liberty Utilities

DG 14-180
Distribution Service Rate Case

Staff Data Requests - Set 2, Nos. 1-9

Date Request Received: 11/12/14
Request No. Staff 2-6

Date of Response: 11/26/14
Respondent: Richard MacDonald

REQUEST:

Ref. Brouillard Testimony, Bates p. 175-176. Where and how do the employees who provide service to EnergyNorth and /or Granite now get training to meet federal and state mandated requirements? Please provide the amount of test year training costs, the number of employees trained and the certifications and re-certifications earned.

RESPONSE:

Liberty employees all receive training on an annual recurring basis; the majority of the training is conducted during the winter months between January and March. During this period all employees receive training in safety, in operating and maintenance procedures and in Operator Qualification covered tasks. The winter training that occurs is conducted in New Hampshire at Liberty operating facilities. Newly hired employees attend a 6-week basic gas operations training program that covers safety, operating and maintenance procedures and Operator Qualification covered tasks, this training is given by National Grid at their Millbury MA, training facility under a standing service agreement. Liberty plans to conduct this training in New Hampshire in 2015.

The Company has started construction of its own training facility at the Broken Bridge facility in Concord, NH for training of both gas and electric field operations employees. The training center is scheduled for completion by March 31st, 2015. The current facility locations being utilized for training are inadequate in size and condition to accommodate the annual volumes of training hours and employee numbers. Utilization of third party training facilities and instructors causes limited availability and often times conflicts with operational requirements. Management and scheduling of the training program will be done more effectively and efficiently to minimize the impact to operational requirements in centralizing this function at a new facility. In having a state of the art facility we will be able to further customize training aids, equipment props and training material that pertain to the methods, procedures and requirements currently being performed by NH field personnel to assure the safety and compliance of the functions they perform.

During the test year 98 employees received training at a cost of \$448,210.00. The average cost for employees during the test year was \$4573.00