

BEFORE THE  
NEW YORK STATE  
PUBLIC SERVICE COMMISSION

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Proceeding on Motion of the Commission as to the  
Rates, Charges, Rules and Regulations of  
Central Hudson Gas & Electric Corporation  
for Electric Service

Case 17-E-\_\_\_\_\_

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Proceeding on Motion of the Commission as to the  
Rates, Charges, Rules and Regulations of  
Central Hudson Gas & Electric Corporation  
for Gas Service

Case 17-G-\_\_\_\_\_

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**DIRECT TESTIMONY OF THE  
TRAINING AND DEVELOPMENT PANEL**

July 28, 2017

**DIRECT TESTIMONY OF THE TRAINING AND DEVELOPMENT  
PANEL**

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1 I. INTRODUCTION

2 Q. Please state the names of the members of the Training and Development  
3 Panel ("Panel").

4 A. Our names are Jessica Caserto, Eileen Lomoriello, and Jill Sammon.

5 Q. Ms. Caserto, please state your current employer and business address.

6 A. I am employed by Central Hudson Gas & Electric Corporation ("Central  
7 Hudson" or the "Company") and my business address is 284 South  
8 Avenue, Poughkeepsie, New York 12601.

9 Q. Ms. Caserto, in what capacity are you employed by Central Hudson and  
10 what is your scope of responsibilities?

11 A. I am employed by Central Hudson as the Director of Real Property  
12 Services. In that capacity, my responsibilities include the planning,  
13 coordinating and development of certain Company projects. Additionally, I  
14 am responsible for the assessment, planning and acquisition of needed  
15 real estate and property rights and/or approvals for the construction of  
16 new or enhanced facilities while managing our property taxes.

17 Q. Ms. Caserto, what is your educational background and professional  
18 experience?

19 A. I am a 2005 Northeastern University graduate with a Bachelor of Science  
20 Degree in Business Administration and a dual-concentration in both  
21 Finance and Accounting. In 2016, I earned a Graduate Certificate in  
22 Project Management from Boston University. From 2005 through 2009, I  
23 worked for Deloitte & Touche. I joined Central Hudson at the end of 2009

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1 as an accountant in the Financial Reporting Department. In 2010, I was  
2 promoted to the Internal Audit Department and in 2013 I joined the Real  
3 Property Services Department as Associate Director. In 2014, I was  
4 promoted to my current position as Director of Real Property Services.

5 Q. Ms. Caserto, have you previously testified before the New York State  
6 Public Service Commission (“PSC” or the “Commission”)?

7 A. No, I have not.

8 Q. Ms. Lomoriello, please state your current employer and business address.

9 A. I am employed by Central Hudson and my business address is 284 South  
10 Avenue, Poughkeepsie, New York 12601.

11 Q. Ms. Lomoriello, in what capacity are you employed by Central Hudson and  
12 what is your scope of responsibilities?

13 A. I am employed by Central Hudson as Director of Strategic Planning. In  
14 that capacity, my responsibilities include: 1) coordinating the Company’s  
15 strategic planning activities; 2) overseeing the maintenance and  
16 development of the Company’s financial budgeting and planning system  
17 and tools; and 3) developing five-year financial forecast scenarios and  
18 sensitivity analyses to be used in developing the Company’s strategic plan  
19 and business plan, and in supporting the Company’s position in regulatory  
20 proceedings, rating agency reviews, and interaction with financial  
21 institutions.

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1 Q. Ms. Lomoriello, what is your educational background and professional  
2 experience?

3 A. I am a 1996 graduate of the University of Pennsylvania with a Master's  
4 Degree in Government Administration (Finance concentration), a 1992  
5 graduate of Barnard College/Columbia University with a Bachelor's degree  
6 in Political Science and have a Bachelor's degree in Accounting at SUNY  
7 New Paltz substantially completed. I joined Central Hudson as an  
8 Accountant in the Financial Reporting Group in 2006 and held various  
9 positions of increasing responsibility within the Accounting organization  
10 through 2010. From 2010 through 2015, I supervised Central Hudson's  
11 Credit & Collections operation within the Customer Service group. In  
12 2015, I became an Associate Director of Strategic Planning and in 2016 I  
13 was promoted to my current role as Director. Prior to joining Central  
14 Hudson, I held various positions in public accounting, public sector  
15 management, and tax and incentives consulting.

16 Q. Ms. Lomoriello, have you previously testified before the Commission?

17 A. No, I have not.

18 Q. Ms. Sammon, please state your current employer and business address.

19 A. I am employed by Central Hudson and my business address is 284 South  
20 Avenue, Poughkeepsie, New York 12601.

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1 Q. Ms. Sammon, in what capacity are you employed by Central Hudson and  
2 what is your scope of responsibilities?

3 A. I am employed by Central Hudson as the Director of Organizational  
4 Development and Employee Relations. In that capacity, my  
5 responsibilities include overseeing employee training and development,  
6 succession planning, employee performance, engagement, employee  
7 relations, and compliance.

8 Q. Ms. Sammon, what is your educational background and professional  
9 experience?

10 A. I am a 2000 Marist College graduate with a Bachelor of Science Degree in  
11 Business Administration and Paralegal Studies. I joined Central Hudson  
12 in 1990 as a Junior Clerk and held the role of Clerical Assistant from 1991  
13 until 2000. In 2000, I joined the Real Property Services Department and in  
14 2006 I was promoted to Director of Real Property Services. I remained in  
15 that position until 2014 when I assumed my current position as Director of  
16 Organizational Development and Employee Relations.

17 Q. Ms. Sammon, have you previously testified before the Commission?

18 A. No, I have not.

19 **II. PURPOSE OF TESTIMONY**

20 Q. What is the purpose of the Panel's testimony in these proceedings?

21 A. The purpose of our testimony is to illustrate the Company's plans to  
22 address its need for a more robust, centralized, and formalized approach

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1 to training and developing its employees. That type of approach will help  
2 enable the Company to adequately respond to emerging trends in the  
3 utility industry while simultaneously managing unprecedented changes in  
4 our workforce over the next few years as experienced employees retire.  
5 We will describe how the creation of a dedicated training department,  
6 development of a robust training curriculum, implementation of a  
7 modernized Human Resources Information System (“HRIS”) and  
8 construction of an integrated training facility will enable the Company to  
9 manage and deliver hands-on training in a more substantial and improved  
10 manner.

11 More specifically, in our testimony we will discuss:

- 12 • Central Hudson’s current training initiatives, labor resources and  
13 facilities;
- 14 • The need for an enhanced training program and the specific  
15 improvements that are required to address our needs; and
- 16 • A summary of the incremental costs and capital requirements  
17 associated with the proposed enhancements.

18 Q. Are you sponsoring any exhibits in support of your testimony?

19 A. Yes, we are sponsoring the following exhibits:

20 Exhibit \_\_ (TDP-1), entitled “Incremental Training Programs,”  
21 details the incremental training programs required for employees

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1 and the associated dollars required to implement and to support  
2 these programs;

3 Exhibit \_\_ (TDP-2), entitled "Facility Design Sketch," contains  
4 preliminary design sketches of the proposed training facility and  
5 Primary Control Center;

6 Exhibit \_\_ (TDP-3), entitled "Capital and Expense Requirements,"  
7 details the projected capital dollar and expense requirements for  
8 2018 through 2022 associated with the construction and  
9 maintenance of the proposed training facility and Primary Control  
10 Center;

11 Exhibit \_\_ (TDP-4), entitled "Facility Project Timeline," provides a  
12 preliminary proposed project timeline for the training facility and  
13 Primary Control Center; and

14 Exhibit \_\_ (TDP-5), entitled "Training Facilities Comparison," shows  
15 the results of our dedicated training facilities benchmarking.

16

17 **III. CURRENT TRAINING PROGRAMS AND RESOURCES**

18 Q. Please summarize the current training programs the Panel will be  
19 addressing in this testimony.

20 A. The Company provides training to both its classified (union) workforce as  
21 well as to its management employees. We will first describe the current  
22 training program for our classified employees and then will summarize the



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1 training provided to our management employees. Finally we will describe  
2 the current training facilities used by Company employees.

3 Q. Please identify the number of full time equivalents (“FTEs”) currently  
4 employed at Central Hudson whose sole responsibility is training.

5 A. Central Hudson currently has one dedicated Training Coordinator whose  
6 responsibilities are entirely related to in-house training. This position is  
7 primarily administrative in nature and predominantly focuses on the  
8 documentation of in-house training (such as progression and safety and  
9 compliance training), not on the delivery of training to our employees.

10 Q. What is progression training?

11 A. Progression training occurs for specific classified roles that are part of an  
12 automatic progression series. It provides these classified employees with  
13 the knowledge and skills needed to qualify and progress to the next level  
14 of their classification.

15 Q. Please discuss the processes in place to identify, schedule, manage, and  
16 document training for the Company’s classified workforce.

17 A. The Training Coordinator, in conjunction with respective business unit  
18 supervision, works to identify, schedule and manage progression and  
19 safety and compliance training for the Company’s classified workforce.  
20 On-the-job training is identified, scheduled and managed by business unit  
21 supervision. The scheduling and managing of classified employee training  
22 is predominately a manual process with a variety of documentation tools

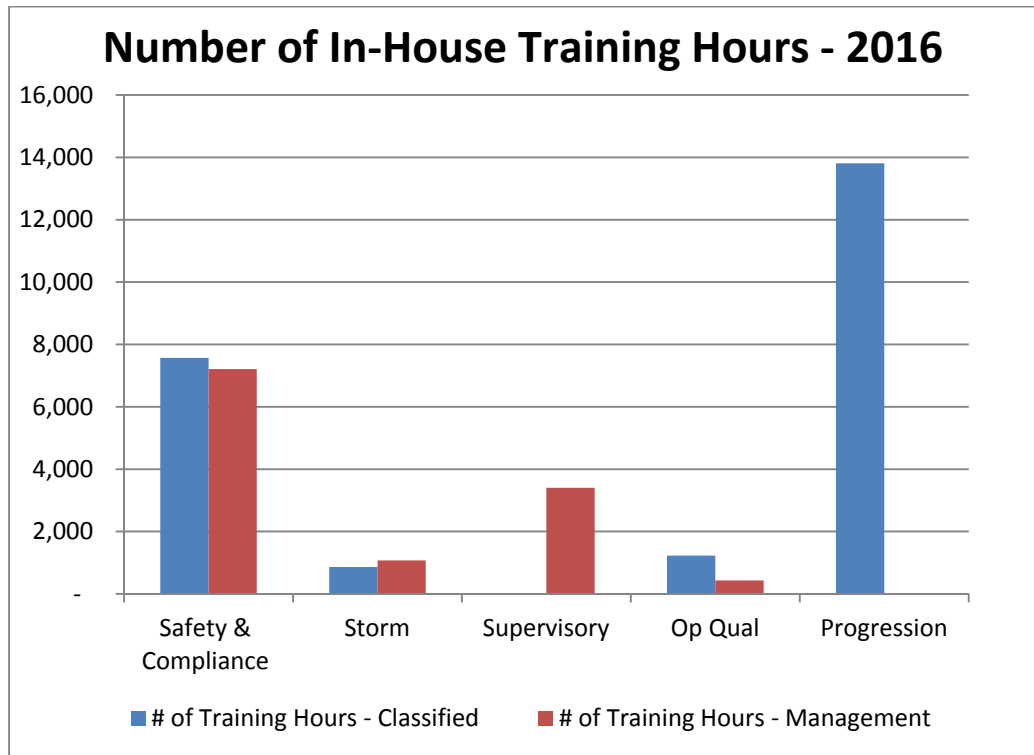
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1 being utilized. More specifically, the Training Coordinator documents  
2 training by employing a combination of online learning management  
3 programs, our legacy HRIS, and manual Excel spreadsheets.

4 Q. Please provide an overview of the Company's current training labor  
5 resources and curriculum for the Company's classified workforce.

6 A. Excluding on-the-job training, there are essentially two types of training  
7 offered for our classified workforce: progression training and safety and  
8 compliance training. Operator Qualification ("OQ") training is also  
9 provided to our gas operators. OQ training is comprised of enhanced  
10 training on specific tasks for pipeline operators. As illustrated in the chart  
11 below, progression, safety and compliance, and OQ training combined,  
12 accounted for over 30,000 of the nearly 36,000 total hours both  
13 management and classified employees spent completing in-house training  
14 (approximately 84%) documented in calendar year 2016. On average,  
15 more than a quarter of our classified employees are in progression training  
16 each year. Central Hudson anticipates that this trend will continue, if not  
17 increase, for the foreseeable future as more experienced employees  
18 retire.

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2 Q. Please further describe the Company's progression training.

3 A. The progression training is comprised of classroom-based and/or on-the-  
4 job training which provide employees with the knowledge and skills  
5 needed in order to qualify and progress to the next level of their  
6 classification. However, not all progression training is formally  
7 documented, and not all classified positions have defined or prescribed  
8 curriculum. For this group of classified employees, progression instruction  
9 occurs almost entirely through on-the-job training. Progression curriculum  
10 varies significantly based on the particular classified role. While the  
11 scheduling and recordkeeping of the progression curriculum is facilitated  
12 by Central Hudson's Training Coordinator, the content is primarily  
13 designed and delivered by foremen, chief mechanics or other experienced

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1 employees. We refer to these experienced employees as Subject Matter  
2 Experts (“SMEs”); training is neither their full-time nor their primary  
3 responsibility. However, in calendar year 2016 alone, the cumulative total  
4 hours of SME “instructor time” required to implement progression training  
5 was equivalent to approximately four FTEs.

6 In some instances, equipment-specific content may also be  
7 delivered by contractors or other vendors (i.e., Fisher gas regulator  
8 training). Progression training concludes once an employee has reached  
9 the top level in their classification (“first-class” or “1/C”). Lastly, safety and  
10 compliance training (i.e., pole-top rescue, fall protection, CPR/first aid) is  
11 currently delivered via a combination of online learning programs, external  
12 contractors (i.e., Health Quest, Safestart) or by the respective employees’  
13 supervisor and/or SME. The training is scheduled and documented by  
14 Central Hudson’s Training Coordinator.

15 Q. Please discuss the processes in place to identify, schedule, manage and  
16 document training for the Company’s management workforce.

17 A. Similar to the process employed for the classified workforce, excluding on-  
18 the-job and safety and compliance training, corporate training for the  
19 Company’s management workforce is identified, scheduled and managed  
20 via a combination of recommendations by the Director of Organizational  
21 Development and Employee Relations and business unit supervision, as  
22 we explain in more detail below. The majority of the technical training is

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1 identified, scheduled and managed by the individual business units. The  
2 Training Coordinator documents Company-sponsored in-house training for  
3 management employees using a combination of online learning  
4 management programs, our legacy HRIS and manual Excel spreadsheets.  
5 In addition, Central Hudson utilizes the Skillssoft on-line learning resource  
6 for documentation of employee completion of those modules.

7 Q. Please provide an overview of the Company's current training resources  
8 and curriculum for the Company's management workforce.

9 A. The Director of Organizational Development and Employee Relations  
10 identifies, schedules and implements supervisory and skills training for  
11 management employees, which is then delivered primarily by external  
12 resources (i.e., Finance Accounting Institute Utility Finance & Accounting,  
13 Prof. Bryan Garners Legal Writing in Plain English, Congers-Elsea 5 Day  
14 Root Cause Analysis). However, the vast majority of job-specific technical  
15 training is driven and selected by the individual business units and also  
16 provided externally by third parties. The technical training selected by the  
17 individual business units and provided externally by third parties is not  
18 centrally tracked nor administered by Human Resources.

19 Q. Please provide additional information concerning the types of training  
20 opportunities for the Company's management workforce.

21 A. Online training covering a variety of topics is available to all management  
22 employees. This self-guided and self-directed training offered by Skillssoft,

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1 supports employee development through targeted online learning aligned  
2 to the development needs of the organization and the individual. Content  
3 is delivered in the form of courseware and learning tracks comprised of  
4 text, books, videos and interactive practice activities. These courses and  
5 learning tracks can be used as reference tools to help answer day-to-day  
6 questions or as part of ongoing employee development. The content is  
7 accessible on-demand and focuses on personal and leadership  
8 development, offering targeted skills training in areas such as project  
9 management, business analysis, information technology and first-time  
10 supervisor and manager essentials. Lastly, safety and compliance training  
11 (i.e., CPR, Supervisory Drug & Alcohol Awareness) is currently delivered  
12 via a combination of online learning programs, external contractors (i.e.,  
13 Health Quest, Safestart) or by the respective employees' supervisor  
14 and/or SMEs. This non-technical training is scheduled and documented by  
15 Central Hudson's Training Coordinator.

16 Q. Please provide an overview of the Company's current training facilities.

17 A. The Company does not have a single dedicated and centralized training  
18 facility. Training occurs in several district offices where small multi-  
19 purpose rooms are pressed into service for training. Additionally, some  
20 training occurs at the Rifton Center and in other spaces available at our  
21 main headquarters in Poughkeepsie. Nearly all spaces identified for  
22 training are actually multi-purpose in nature and are used for various

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1 internal and external meetings, further reducing the availability of the  
2 space for training. Due in large part to the lack of a dedicated training  
3 facility, the vast majority of training for classified employees occurs on-the-  
4 job. A complete analysis of the current “training facilities” at Central  
5 Hudson was performed, and finalized in the beginning of 2017. Through  
6 this analysis, the Company determined that none of the existing locations  
7 are sufficient to provide the necessary centrally-located space to enable  
8 hands-on learning; new space is critical to the implementation of  
9 enhanced training for the Company. We further address the need for  
10 training program facilities enhancements in the next sections of our  
11 testimony.

**IV. NEED FOR TRAINING PROGRAM ENHANCEMENTS**

12  
13 Q. Please explain why it is necessary to enhance the Company’s current  
14 training program.

15 A. A formalized and centralized approach to training is necessary because of  
16 the changing demographics, unprecedented needs and growth of our  
17 workforce, emerging industry and technological advances, and increased  
18 safety standards. Simply meeting minimum requirements is not sufficient  
19 in this environment and exceeding standards and requirements is the  
20 Company’s goal. Central Hudson strives for both technical and operational  
21 excellence and to achieve this standard, the Company needs to  
22 continually enhance the availability of a well-trained workforce, which

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1           necessitates having in place necessary resources and tools to support  
2           such a high quality workforce.

3   Q.    Please describe the important changes occurring in current employee  
4           demographics.

5   A.    One of Central Hudson's greatest human resource challenges is and will  
6           continue to be the aging of the existing workforce. Focused training and  
7           development efforts, including a rigorous and formally documented  
8           training curriculum will be critical to ensure that the knowledge of our  
9           experienced workforce transfers effectively to the next generation of  
10          management and classified employees.

11                 A recent internal labor analysis indicates that out of the 604 current  
12                 classified employees (using 60 as our average retirement age):

- 13                 • 25 are currently eligible to retire (4%);
- 14                 • 85 will be eligible to retire in 5 years (14%); and
- 15                 • 155 are in automatic progression and still developing the necessary  
16                 skills to perform their jobs (26%).

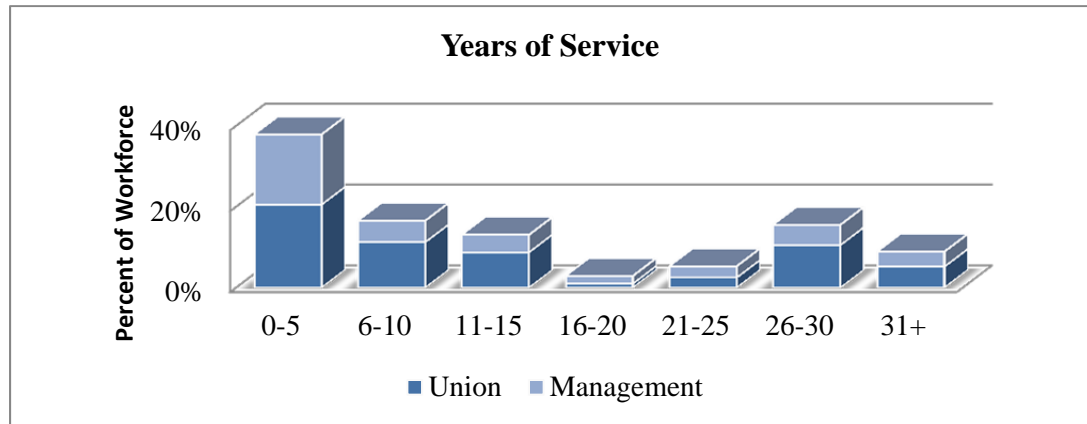
17                 Additionally, as illustrated below, approximately 38% of the entire  
18                 workforce has five or less years of service with Central Hudson and 54%  
19                 of all employees have ten or less years of service. This statistic further  
20                 highlights the Company's need for a formally-documented knowledge  
21                 sharing and training process so that key skills and knowledge can be



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provided.



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Q. Please further describe the Company's ongoing need to enhance its training activities.

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A. Due to evolving regulatory requirements, emerging technological advancements to our systems and more work being done on aging infrastructure, the need for skilled employees and higher levels of customer engagement is steadily increasing. This amplifies the need for a knowledgeable, skilled workforce familiar with all of our systems.

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The enhancements and emerging technologies being deployed on our electric system make it imperative that both our experienced electrical workers as well as those still in progression receive annual hands-on and scenario-based training exposing them to the various new devices deployed in the field. The Network Strategy and other grid modernization programs, the abundance of distributed generation in our service territory and the Company's evolving DSP responsibilities arising out of the REV initiative, Case 14-M-0101, increase Central Hudson's need for a training

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1 facility which enables hands-on and scenario-based training for our  
2 employees.

3 Changing customer expectations requiring higher levels of  
4 customer engagement and new modes of communication with our  
5 customers are further described in the testimony of the Customer  
6 Engagement Panel. The proliferation of distributed generation in our  
7 service territory is further described in the testimony of the DSP Panel and  
8 the EAM Panel. Both of these developing areas will require additional  
9 training programs to be created to ensure our employees have the  
10 knowledge and skills necessary to meet the demands of our changing  
11 business. Additionally, as discussed in the testimony of the Gas Safety  
12 Panel, the amount of work Central Hudson and its contractors are  
13 performing on our gas system as a result of the Company's accelerated  
14 Leak Prone Pipe replacement program has grown exponentially. The  
15 significant increase in work on our gas system as a result of the program  
16 and the continued evolution of requirements pertaining to OQ rules  
17 highlight the need for augmented training facilities which enable scenario-  
18 based training for gas pipe installation and repair.

19 Q. What are some of the compliance and safety requirements driven by  
20 increased regulation and their impact on the Company and its workforce?

21 A. The two most critical compliance and safety initiatives are as follows:

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- 1           • Operator Qualification Program - OQ is a regulation of the Office of  
2 Pipeline Safety of the U.S. Department of Transportation (“DOT”).  
3 DOT's OQ regulation, 49 CFR 192 subpart N, requires operators to  
4 develop and maintain a qualification program for individuals  
5 performing tasks identified in the regulation (i.e., investigating leak  
6 or odor complaints). The intent of the OQ rule is to minimize human  
7 error by establishing a verifiable and qualified workforce. To comply  
8 with the requirements of this regulation, Central Hudson  
9 implemented an OQ Program. The Program includes increased  
10 training and testing hours; it has highlighted the need for live,  
11 scenario-based training and a dedicated resource to sufficiently  
12 manage the Program. As a result, Central Hudson has incurred  
13 additional training costs which will continue (and potentially  
14 increase) as the OQ Program compliance continues to evolve.
- 15           • Continuous monitoring of all current safety regulations to make  
16 certain that work methods and standards are written in accordance  
17 with such regulations (i.e., OSHA 1910.269) which stipulates work  
18 practices for the operation and maintenance of electric power  
19 generation, control, transformation, transmission, and distribution  
20 lines and equipment. In doing so, we must ensure all updates and  
21 changes are incorporated into policies and procedures and

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1                   communicated consistently to all affected work groups in a timely  
2                   manner.

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4                   **V.     RECOMMENDED TRAINING ENHANCEMENTS**

5     Q.     Please describe the specific enhancements to Central Hudson’s training  
6            programs and resources that the Company plans to pursue.

7     A.     The Company requires: 1) increased dedicated training labor resources to  
8            develop, implement and facilitate augmented training programs, curricula  
9            and methods of delivery; 2) the ability to centralize and enhance its  
10           training program scheduling, documentation, tracking and reporting; and  
11           3) a dedicated, modernized training facility which, among other things, will  
12           enable hands-on and scenario-based learning. Implementation of the  
13           enhanced programs and additional labor resources will allow us to  
14           formalize existing training, implement new training and identify further  
15           improvements required to achieve the Company’s desired comprehensive  
16           training.

17    Q.     What are the Company’s necessary additional labor resources that need  
18            to be dedicated to training?

19    A.     Central Hudson is creating a new centralized and dedicated training  
20            department so that it adequately supports its training needs. In addition to  
21            the existing Director of Organizational Development and Employee  
22            Relations and the Training Coordinator, there is an immediate need for

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1 four incremental FTEs. The revenue requirement impact associated with  
2 these additional FTEs is discussed in the testimony and exhibits of  
3 Company Witness McGinnis.

4 Q. Please describe the tasks identified for these four newly created positions.

5 A. Below is a high-level summary of the tasks by position:

- 6 • Work Methods & Safety Specialist – One FTE specializing in Electric  
7 T&D operations and one FTE specializing in Gas T&D operations.

8 These individuals will be responsible for the development,  
9 documentation, maintenance and instruction of new and existing work  
10 methods and procedures. In doing so, these employees will be  
11 charged with implementing new industry-leading practices as they  
12 apply to tools, equipment and work methods. These FTEs also will be  
13 responsible for ensuring alignment between the Company's  
14 documented work methods and the safety and compliance standards  
15 to which the Company must adhere. In addition, these employees will  
16 be responsible for assessing and coaching field personnel in proper  
17 work methods, procedures and safety practices. These individuals will  
18 also assist with managing and delivering progression and hands-on  
19 scenario-based training.

- 20 • Training Coordinator - Gas Compliance – One FTE overseeing full  
21 compliance of the Operator Qualification Program and its underlying  
22 regulations which were described earlier in testimony. As the lead, this

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1 individual will monitor, track and support all aspects of OQ compliance  
2 and training. He or she will provide support to the Director of  
3 Organizational Development and Employee Relations while  
4 simultaneously acting as a training business partner to gas engineering  
5 and operations. Additionally, this individual will monitor, track, assign  
6 and maintain employee OQ records and schedule all dates necessary  
7 for employees' recertification. Additional assignments include: 1)  
8 administration of any necessary updates to the Central Hudson  
9 Operator Qualification Program; 2) assessment of training needs  
10 (including but not limited to Operating & Maintenance procedures); 3)  
11 coordination, tracking and scheduling of other gas related trainings  
12 (i.e., progression training, supervisor-on-call, etc.); and 4)  
13 implementation of industry standardized curricula, augmented to  
14 include Company-specific practices and hands-on, scenario-based  
15 training.

- 16 • Training Specialist – Organizational Development – One FTE  
17 responsible for managing and conducting management employee  
18 training programs through development, identification, planning,  
19 execution and delivery of structured Company training. The Training  
20 Specialist will provide support to the Director of Organizational  
21 Development and Employee Relations and act as a Human Resource  
22 training partner, performing real-time needs analyses, annual training

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1 plan reviews with all business units, employee onboarding training,  
2 supervisor development, leadership development, training in support of  
3 succession planning, and implementation of initiatives to leverage  
4 Skillsoft.

5 Q. Does the Company anticipate additional labor resource requirements as a  
6 result of any pending or potential safety and compliance governmental  
7 mandates?

8 A. It is unknown at this time how, and to what extent, recent issues relating to  
9 OQ training programs for employees and third-party contractors and the  
10 continued evolution of OQ requirements may necessitate the Company's  
11 need for additional labor and non-labor resources. As such, Central  
12 Hudson requests full cost deferral authority for expenses not considered in  
13 the calculation of the revenue requirement, as a result of these or other  
14 governmental mandate changes.

15 Q. Did the Company benchmark its current training staffing levels against its  
16 industry peers?

17 A. Yes. In the 1st quarter of 2017, the Company performed a benchmarking  
18 analysis evaluating the dedicated in-house training labor resources at  
19 other New York, New Jersey and Canadian utilities, including fellow Fortis  
20 Companies. The analysis concluded that Central Hudson is clearly an  
21 outlier in terms of its lack of in-house labor training resources. As more  
22 particularly illustrated in the following chart, based on the various utilities

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1 surveyed during the evaluation, it was noted that other surveyed utilities  
2 have an average of a 1:175 dedicated trainer/employee ratio. As of March  
3 31, 2017, Central Hudson maintains a 1:1,008 dedicated trainer/employee  
4 ratio.

	<b>CHGE</b>	<b>NY 1</b>	<b>NY 2</b>	<b>NJ 1</b>	<b>Fortis 1</b>	<b>Fortis 2</b>	<b>Fortis 3</b>	<b>CAN 1</b>
<b>Dedicated Training Labor Resource</b>	1	32	100	32	7	4	4.5	6
<b>Employee Base</b>	1,008	6,800	14,940	7,316	1,150	500	638	1,200
<b>Ratio</b>	1:1,008	1:213	1:149	1:229	1:164	1:125	1:142	1:200

5 Q. Please further discuss the results of the benchmarking analysis.  
6 A. As we explained earlier in testimony, currently, the planning, development,  
7 and implementation of training is an incremental responsibility for some  
8 employees (SMEs) as part of their normal job functions. As previously  
9 indicated, in calendar year 2016 alone, the cumulative total hours of SME  
10 “instructor time” required to implement just progression training alone  
11 totaled 7,586 hours, or the equivalent of approximately 4 FTEs. While the  
12 need for SMEs involvement in training will never be eliminated, if the  
13 Company were to incorporate the required instructor time in the form of  
14 FTEs, Central Hudson’s dedicated trainer/employee ratio would be 1:202.  
15 While this trainer/employee ratio is still well below the industry benchmark  
16 identified above, it is an incremental step in the correct direction.



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1 Q. What training enhancements will the requested incremental FTEs provide  
2 for classified employees?

3 A. The three incremental FTEs will directly support the classified employee  
4 training. The addition of these new resources will allow the Company to  
5 achieve the following initiatives: 1) formalization and documentation of  
6 current training initiatives and work practices; 2) confirmation that training  
7 content is aligned with Company standards, industry best practices and  
8 applicable regulations (i.e., OSHA 1910.269); 3) incorporation of industry  
9 standardized curricula (i.e., GTI, MEA); 4) centralization of training  
10 administration, scheduling and tracking; and 5) implementation of annual  
11 refresher training, Field Crew Leader Training, as well as “Train the  
12 Trainer” training for our SMEs.

13 Q. What programmatic enhancements will the incremental FTE provide for  
14 management employees?

15 A. Central Hudson must increase its offerings to provide our management  
16 employees with the tools and resources they require to be successful, and  
17 we must have sufficient resources to do so. The addition of this Training  
18 Specialist will allow the Company to develop and implement new and  
19 enhanced initiatives covering such topics as: 1) New Employee  
20 Onboarding; 2) New Supervisor Onboarding; and 3) Leadership  
21 Development Training. This additional labor resource also will provide  
22 support to business area supervision by: 1) identifying emergent training

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1 required; 2) assisting with implementation of area initiatives; and 3)  
2 serving as the Company liaison to external training partners.

3 Q. Please discuss the non-labor training enhancements Central Hudson  
4 plans to implement.

5 A. The Company plans to implement a number of technical and corporate  
6 initiatives, as more particularly described in Exhibit \_\_ (TDP-1). Initiatives  
7 include industry standardized curricula, various supervisory and  
8 leadership training and other specialized technical training. These  
9 incremental programs will be administered and managed by the newly  
10 created training positions we described previously in our testimony.  
11 Additionally, in an effort to achieve technical and operational excellence,  
12 the Company has engaged Mosaic to perform a corporate training needs  
13 analysis. Mosaic is a national training and workforce consulting firm that  
14 focuses on the utility and oil and gas industries. During 2018, Mosaic will  
15 perform a gap analysis of our current training approach. Mosaic will then  
16 identify proposed modifications to our training strategy, by leveraging  
17 industry best practices which will result in a roadmap for future training  
18 offerings.

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1 Q. Please describe the Company’s proposed mechanism to increase its  
2 ability to identify, schedule, manage, document and report on training  
3 activities.

4 A. In Central Hudson’s Comprehensive Staffing and Audit Implementation  
5 Plan submitted on March 23, 2017 in Case 13-M-0449, the Company  
6 adopted Recommendation 8, which stated that Central Hudson should  
7 formalize and execute plans to enhance its HRIS capabilities. Accordingly,  
8 a comprehensive strategy is being developed to formally analyze various  
9 solutions and identify which system is best to execute. The  
10 implementation process for the new system will begin in 2018.

11 The project will replace the existing legacy system, TotalHR, with  
12 an upgraded solution allowing the Company to better support our 1,000+  
13 employee base. The Company requires a new HRIS to enable automation  
14 and systems integration for many business processes including: 1) the  
15 identification, scheduling, managing, documenting and reporting of training  
16 activities; 2) performance management; 3) payroll and benefits  
17 administration; 4) recruiting; and 5) overall resource management.  
18 Additionally, a new HRIS will enable the implementation of a critically  
19 important Learning Management System (“LMS”).

20 The upgrade to a modernized and updated LMS will enable Central  
21 Hudson to centrally track and manage all aspects of employee training  
22 and development in addition to providing the framework to assess training

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1 and learning goals for individuals and organizations. It will allow easier  
2 access to meaningful data such as employee certifications, skills and  
3 professional development. It also will improve our ability to gauge the  
4 current status of the workforce and identify trends likely to impact the  
5 Company in the future as a large portion of the current workforce prepares  
6 for retirement. A comprehensive LMS will reduce current redundancies by  
7 eliminating the storage of similar data in multiple sources and will facilitate  
8 and enhance continued corporate compliance by automating the  
9 identification and assignment of training based on job title/classification  
10 which is currently a manual process. This will reduce data entry errors  
11 and make the process more accurate and efficient.

12 The costs associated with HRIS replacement are summarized in  
13 the testimony and exhibits of Company Witness Holtermann.

14 Q. Please describe the Company's approach to developing a new centralized  
15 modern training facility.

16 A. The Company's plan is to design and implement an Employee Safety,  
17 Training and Development Academy ("Training Academy"), which would  
18 be housed in a new training facility adjacent to the Company's proposed  
19 Primary Control Center described in the testimony of the DSP Panel. In  
20 designing this facility, an in-house Project Team was assembled to  
21 benchmark numerous training facilities at the other Fortis Companies,  
22 utilities in New York and the greater Northeast, and other additional sites

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1 as needed. The summarized findings as illustrated in Exhibit \_\_ (TDP-5)  
2 highlight Central Hudson's outlier status due to our lack of a dedicated  
3 training facility sufficient to enable scenario-based training.

4 Q. What facilities will be included at the new Training Academy?

5 A. The Project Team worked with an architect to develop a complete  
6 preliminary conceptual design which will address immediate-term and  
7 long-term training needs. It is anticipated that the full realization of the  
8 Training Academy will span multiple years and Rate Plans. Phase One of  
9 the project (2018 – 2020), which is described in this testimony, has been  
10 designed to provide Central Hudson with the following:

- 11 • 50+ acre site with all necessary permitting and site work complete;
- 12 • Outdoor gas village training area;
- 13 • Outdoor electric training area; and,
- 14 • Main building which will serve immediate-term needs by offering:
  - 15 ○ Multi-purpose classrooms;
  - 16 ○ Office space for the existing and proposed Training Staff;
  - 17 ○ Kitchen and dining space;
  - 18 ○ Auditorium with divider walls enabling the space to be broken into 3
  - 19 large meeting and/or classrooms; and
  - 20 ○ Indoor, garage-style training space for the Electric Operations, Gas
  - 21 Operations and Operations Services work groups.

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1           The full conceptual preliminary design for the Company's proposed  
2           Training Academy is included as Exhibit \_\_ (TDP-2). While the Company  
3           has developed robust plans, the facility has also been designed such that  
4           it can be modified and updated as employee/industry demands and needs  
5           are more fully identified, or as they may change in the future.

6   Q.    What next steps have been identified by the Company?

7   A.    A high level project timeline has been developed and is included as  
8           Exhibit \_\_ (TDP-4). In the immediate term, the Company has identified a  
9           number of potentially suitable sites for the proposed training facility and  
10          has begun preliminary discussions with some property owners. The  
11          Company will continue to evaluate these parcels for suitability for both the  
12          proposed Training Academy as well as the Primary Control Center. The  
13          sites will be analyzed based on costs associated with:

- 14                   • Anticipated site work, permitting and municipal approvals;
- 15                   • Access to natural gas;
- 16                   • Connectivity to the Network Strategy facilities; and
- 17                   • Other parameters identified by the Project Team in order to  
18                   construct a secure Primary Control Center.

19   Q.    Please discuss the enhanced training opportunities that the new Training  
20          Academy will provide.

21   A.    As we previously explained, the Company is subject to increasing  
22          educational and training requirements associated with technology

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1           advancements, regulatory policies, and other general business-related  
2           obligations that cannot be met with our existing training programs, internal  
3           staffing and facilities. Based upon the best practices analysis we  
4           identified previously in our testimony, the Company has demonstrated that  
5           it lags the industry in providing training for our employees.

6                        During the Project Team’s benchmarking visit to the Con Ed  
7           Learning Center, it was noted that when the facility was built in 1993, it  
8           was to fulfill former Chairman Eugene R. McGrath’s vision – the industry  
9           was evolving, generating plants were going to be divested and the  
10          workforce had to be retrained for new positions in the company. Chairman  
11          McGrath sought to position the company to be the ‘utility of the future’ and  
12          as such proposed the development of the Learning Center - a state-of-the-  
13          art facility, in a campus environment, dedicated to learning and employee  
14          development.

15                      Central Hudson believes that the industry is in the midst of  
16          unprecedented change and modernization, and shares that same vision  
17          for a ‘utility of the future.’ By consolidating all the training and educational  
18          programs into one department and physical location and focusing on  
19          improving the delivery and content of all the delivered training, the  
20          Company can achieve its goal of having nearly every task which an  
21          employee is required to perform be covered in the employee’s training  
22          program. Additionally, with traditional classroom material covered while in

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1 close proximity to the equipment training area, learning modules will be  
2 more impactful, salient points will be reinforced by actual live  
3 demonstrations and thus, the training will be more powerful.

4 The Training Academy will offer hands-on and scenario-based  
5 training opportunities for all Central Hudson employees. Hands-on  
6 learning engages people who are tactile or kinesthetic learners, who need  
7 movement to learn best. It also engages those who are auditory learners,  
8 who talk about what they're doing, and visual learners, who have the  
9 opportunity to see how things are performed. It will also provide a safe  
10 environment for new employees to learn our systems so that they can  
11 perform their work effectively in the field and enable a more efficient  
12 delivery of development programs for management employees. A  
13 centralized facility will also allow Central Hudson to provide instructional  
14 support to its contractors and create significant opportunities to coordinate  
15 with educational institutions, municipal and emergency services agencies,  
16 fostering continued, meaningful partnerships in the communities in which  
17 we operate.

18 Q. Please explain how the proposed facility will enable a more effective and  
19 efficient delivery of safety and technical skills training to field forces.

20 A. Currently, electric and gas technical training is scheduled at regular  
21 intervals throughout the progression of an apprenticeship. However, it is  
22 performed in an ad hoc manner and performed at different locations, by



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1 various instructors, as time and available space permits. Often times, in  
2 order to perform progression testing, actual equipment must be taken out  
3 of service. This method of implementing training is inefficient as it cannot  
4 be executed consistently or in as controlled of an environment.

5 The proposed facility will enable live scenario-based training for our  
6 employees. This type of practical training allows for repeatability, practice  
7 of procedures in a real life situation as well as in the face of adversity –  
8 while simultaneously performing work in a safe and controlled  
9 environment. Additionally, the facility will allow for group-based training,  
10 which provides the opportunity for open dialogue and discussion on work  
11 practices and procedure application. It also permits the training facilitator  
12 to start, stop, and/or correct training for maximum learning effectiveness.

13 Q. Will the facility also support additional types of training?

14 A. Yes. Experienced workers will have the opportunity to use the facility to  
15 learn and practice either to reinforce skills necessary to perform their  
16 current job or to acquire updated skills and training needed to successfully  
17 support the advanced systems, tools, and devices that make up the future  
18 electrical grid and gas system. Many employees are only exposed to  
19 training sufficient enough to achieve mandated regulatory guidelines and  
20 to progress to the next worker classification step. Beyond that, due in part  
21 to our current training capacity limitations, training is greatly reduced after  
22 an employee reaches “first-class.” Offering employees annual refresher

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1 training will enable them to better maintain and augment their skills,  
2 particularly given the technological and rapid changes occurring  
3 throughout the industry.

4 Q. What design elements have been developed as part of the training facility  
5 to support the electric field forces?

6 A. Both indoor and outdoor facilities for electric field forces have been  
7 incorporated into the design of the training facility. The indoor training area  
8 will provide for comprehensive training on a large assortment of  
9 equipment during periods of inclement weather. The main indoor electric  
10 training room will consist of multiple utility poles with installed equipment  
11 that linemen encounter in the field such as voltage regulators, re-closers,  
12 and distribution transformers as well as an assortment of programmable  
13 equipment. This equipment will be located at ground level so the  
14 apprentice can focus on wiring and training without any additional  
15 distractions. The conductors will be wired such that they can be either de-  
16 energized or energized, depending on the training. This will allow trainees  
17 to work on energized equipment in a controlled setting, without the risk of  
18 negatively impacting customers.

19 The indoor low-build construction will allow for the instruction of  
20 how to properly apply rubber cover-up to primary connections. Learning  
21 this skill is important because there are many different switches and styles  
22 of cover which can be utilized on the various switches. Additionally, the

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1 proposed design includes stations for practicing assorted work practices,  
2 such as transformer bank connections with phasing, voltage and  
3 amperage locations for testing and training on specific types of  
4 transformer banks. Different types of secondary construction will be  
5 displayed at eye-level which mimics real-life conditions and also allows for  
6 effective instruction to larger groups.

7 The main indoor electric area will feature a metering wall, which will  
8 include different types of residential metering and hook ups – both  
9 overhead and underground, as well as network metering for underground  
10 network systems. Additionally, commercial 3-phase metering will be  
11 demonstrated in different configurations of wye and delta, and the  
12 associated 3-phase transformer banks will be installed to facilitate testing  
13 of different voltages and motor rotation. Lastly, an area will be designated  
14 for employees to practice splicing and terminating assorted cables.

15 Q. How do these proposed indoor electric training facilities compare to the  
16 Company's existing indoor electric training facilities?

17 A. Central Hudson does not currently have any indoor electric training  
18 facilities whereby skills can be demonstrated and/or practiced or where  
19 equipment can be displayed. The aforementioned small multi-purpose  
20 rooms located in district offices do not contain the equipment or training  
21 capabilities as outlined above.

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1 Q. Please discuss the outdoor facilities designed for the electric field forces.

2 A. The outdoor electric yard will feature both distribution and transmission  
3 structures and equipment and will be installed to replicate the different  
4 types of construction used in the field. The Company plans to construct  
5 the facility to capture the most common designs and angles on our system  
6 so that employees can learn and practice real-life scenarios in the training  
7 environment.

8 The overhead distribution pole line yard will have the capability of  
9 being fully energized to facilitate training in a realistic, but safe and  
10 controlled setting. Different sized conductors will be run throughout the  
11 outdoor yard to simulate the different work practices needed with different  
12 sized conductors. Additionally, various transformer banks will be installed  
13 and mounted low which allows employees to learn how to phase in  
14 transformer banks and troubleshoot simulated voltage issues. This  
15 distribution yard will have all of the major types of equipment that a  
16 lineperson may potentially encounter on Central Hudson's system.

17 The availability of new training facilities will also support the  
18 Company's storm damage assessment efforts and wires down orientation  
19 and/or training, which will enhance the safety of all employees,  
20 contractors, and the public. Storm events may require deployment of  
21 personnel to assignments that are outside their normal job functions and  
22 areas of expertise. Similarly, foreign crews working on a storm may be

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1 unfamiliar with aspects of the Company's system. The outdoor electric  
2 distribution yard will enable the Company to provide training to these  
3 employees and contractors regarding their assigned tasks during storm  
4 emergencies. This training would supplement the classroom training that  
5 is currently provided. The availability of scenario based instruction and the  
6 actual demonstration of equipment will provide employees with a superior  
7 learning experience and knowledge base.

8 The transmission yard will be built around the distribution yard and  
9 have a number of different transmission structures so that employees can  
10 develop skills required to perform energized transmission work and  
11 practice proper tower rescue techniques. Having different transmission  
12 structures – wood poles, steel poles, steel towers – will enable us to  
13 demonstrate, and allow employees to practice how to use various fall  
14 protection when working on the assorted structures in the event of a  
15 rescue. The minimum size requirement for the electric distribution and  
16 transmission yard is 10 acres.

17 Q. How do these proposed facilities compare to the existing pole yard at the  
18 Rifton Center?

19 A. The portion of the Rifton property that contains the outdoor electric training  
20 yard is difficult to access and requires a 4-wheel drive vehicle for entry. If  
21 there was an emergency at the outdoor electric training yard, response  
22 times would be lengthened due to the difficulty of access. The training

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1 space is very limited and the topography of the land offers little to no  
2 opportunity for expansion. A recent re-route of two operational electric  
3 transmission lines has further compressed the training area. The  
4 hydrology of the land also compromises the ability to train employees  
5 because the amount of water run-off at the site often makes the ground  
6 too wet to conduct training and limits the ability to bring trucks to the site.  
7 In fact, fault locating training has been canceled or postponed because the  
8 ground is too wet to effectively demonstrate skills.

9 The current outdoor electric training yard contains one small  
10 overhead distribution pole line which then feeds a series of underground  
11 conductors. The conductors feed to 5 different padmount transformers;  
12 there are neither meter stations nor underground residential services to  
13 mimic a real-life scenario. While not practical or feasible at Rifton,  
14 additional space, facilities and equipment are needed to mimic various  
15 overhead distribution scenarios such as spacer cable construction and  
16 other new and emerging equipment and technologies (i.e., wireless  
17 attachments, communication facilities, etc.).

18 In addition to the distribution facilities, there are four “transmission”  
19 structures at the current training site. There are two wooden dead-end  
20 structures, an ‘H’ frame structure and a wooden pole with steel arms. Due  
21 to site limitations, the set up does not at all mimic real-life. For example,  
22 there are only two conductors instead of the requisite four, the structures

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1 are not full sized, but rather 20 feet in the air, and there is limited span  
2 length between structures which precludes practicing actual conditions  
3 such as moving conductors with full span weight.

4 Additionally, the lack of certainty in the ability to conduct scheduled  
5 training, based on weather and conditions of the site, limits planning of  
6 certain activities. For example, having equipment, such as a digger  
7 available to practice skills such as setting a pole cannot be reasonably  
8 arranged.

9 Q. Please discuss the proposed facility design developed to support the  
10 substation electrician field forces.

11 A. Our Operations Services group is responsible for the following work  
12 groups: Rigging, Construction Maintenance, Electricians, Substation  
13 Technicians and Roving Mechanic Operators. The proposed facility  
14 includes two indoor classrooms/laboratories dedicated to training this work  
15 group. The first room is designed for substation protection and control  
16 training and the second room is designed for training Electricians and  
17 Roving Mechanics.

18 The substation protection and control room will contain actual  
19 relaying, communication and controls equipment as well as a classroom  
20 setup to conduct lectures. This classroom for programmable logic controls  
21 ("PLC") and controls using 61850 protocols will be developed to allow  
22 students to become familiar with the newest technology deployed in the

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1 field. This classroom could also be used by Protection Engineers to test  
2 new equipment, devices and protection schemes.

3 A second room for Electricians and Roving Mechanics will contain  
4 power transformers, breakers, tap changers and switchgear that will be  
5 used for teaching overhauls, maintenance and repairs. Electrical panels  
6 similar to those at the Con Ed Learning Center will be constructed to allow  
7 students to learn and practice proper wiring techniques as well as  
8 troubleshoot problems. Classroom tables will allow for lectures on theory,  
9 practices and procedures. The efficient design of this room will  
10 accommodate both lectures and hands-on training and as such, there will  
11 be limited downtime while transitioning from classroom style learning to  
12 skills performance.

13 Q. How will the dedicated training facilities for Operations Services improve  
14 training for these employees?

15 A. Currently, there are no training facilities available for those employees in  
16 our Operations Services group. Primarily all training occurs on-the-job  
17 under the supervision of a qualified employee, and live equipment is taken  
18 out of service in order to conduct progression testing.

19 With the addition of the classrooms/laboratories at the training  
20 facility, Central Hudson will no longer need to take equipment out of  
21 service to facilitate progression testing for employees and the potential for  
22 outages as a result of a misstep during progression testing would be



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1 eliminated. Additionally, the spaces will allow for continuing education of  
2 1/C employees on new technology and equipment that frequently changes  
3 in today's utility industry.

4 Q. Please explain the facility design components that will support gas field  
5 forces.

6 A. Both indoor and outdoor facilities for gas field forces have been  
7 incorporated into the design of the training facility. These facilities will be  
8 used to train operating and maintenance personnel to better recognize  
9 and react to abnormal operating conditions. Additionally, there will be  
10 ample space to allow groups of employees to practice skills  
11 simultaneously and to train on specific covered tasks evaluated on the OQ  
12 examination.

13 The gas-flow laboratory will allow for virtually any configuration of  
14 natural gas valves, regulators, manifolds or data-monitor devices to be  
15 assembled for study and/or testing. Compressed air will be used inside the  
16 lab to safely simulate flowing gas. Employees will utilize the gas-flow lab  
17 to learn about the myriad types—and conditions—of pipe and equipment  
18 they can possibly encounter in the field, while also testing and training on  
19 gas meters, regulators, heaters, flow meters, valve operation, filters,  
20 strainers, and other related equipment. The lab will feature multiple steel,  
21 high table desk stations with air, and power connections to facilitate  
22 individual hands-on regulator repair and allow for instruction to one or

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1 several trainees at a time, providing for critical regulator training. Station  
2 inspections and maintenance performance simulations, station operation  
3 demonstrations and other OQ covered tasks will be performed in this area  
4 as well.

5 Q. Please further describe the types of gas training facilities that will be  
6 available.

7 A. A gas utilization equipment and training room will be fully equipped with  
8 natural gas and compressed air serving multiple boilers, furnaces, stoves,  
9 water heaters, and related equipment. The compressed air will enable the  
10 simulation of testing for leaks, performing re-lights and troubleshooting the  
11 appliances. Additionally, this space will feature several gas meter set  
12 piping installation stations, simulating through-the-wall penetrations, multi-  
13 meter sets, low-pressure and high-pressure single meter sets as well as  
14 some large commercial meter sets. Training on this equipment will enable  
15 Commercial Representatives and Gas Mechanics to train on various  
16 meter set installations (an OQ covered task) and customer pipe  
17 installations. The piping stations will be modular, allowing for installation,  
18 removal and storage of different regulator set-ups and commercial/  
19 industrial metering sets. This area will also be used for hands-on training  
20 for indoor corrosion inspections.

21 To facilitate practicing various OQ covered tasks, additional  
22 dedicated space has been designated for a cathodic and coating center, a

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1 stopping and tapping room and a pipe joining room. Lastly, a welding shop  
2 with an isolated training space between stations has been designed with  
3 hoods installed over each station for proper ventilation. On days when  
4 classes are not scheduled, the welding shop training area can also be  
5 used as a fabrication area for material. The welding shop will allow our  
6 welders to have more craft-specific weld time and more experience to  
7 enhance their skill set and proficiency. Further, by building the materials  
8 in-house as opposed to purchasing the pre-fabricated material, we will  
9 have better quality control.

10 Q. How do these proposed facilities compare to the existing facilities in the  
11 district offices?

12 A. The proposed facilities are far superior. The facilities in the district offices  
13 are not sufficiently equipped to conduct the aforementioned training, nor  
14 do they offer the opportunity to expand to enable such training. The  
15 facilities in the district offices are small and more effective for corrective  
16 and/or ad-hoc training.

17 Q. Please discuss the outdoor segment of the facility that will support gas  
18 field forces training.

19 A. The proposed facility includes a "Gas Village," which simulates a mini-  
20 community with houses, apartments, commercial buildings, and streets as  
21 well as natural gas distribution pipelines and other underground utility  
22 infrastructure. Both natural gas and compressed air will be available which

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1 enables employees to learn and practice safety skills in a specially-built,  
2 mini-community complete with buildings and a functioning gas distribution  
3 system beneath the streets. Water lines, underground electric, overhead  
4 phone, drainage basins, and other utility props will be installed in the  
5 ground to simulate actual field conditions. Trainees will able to install  
6 actual meters, inspect and repair functioning underground pipelines,  
7 respond to emergency situations, and prepare for various other real-life  
8 scenarios.

9 This area will be used for first response, leak classification, leak  
10 detection, mark-outs, gas emergency tag-out drills, and supervisor on-call  
11 training. Further, this area will allow for coordinated training with fire  
12 departments, municipalities and other emergency service responders.  
13 Unified emergency response training will be developed and offered to  
14 those agencies on an annual basis.

15 Q. Does the Company plan to include additional facilities for other types of  
16 training?

17 A. Yes. Additional space is designated for backhoe, dump truck, excavator,  
18 and other large equipment training. A portion of this area will be reserved  
19 for a “free” digging space to practice skills without obstructions. A separate  
20 section will have underground props to simulate real conditions so that  
21 Gas Mechanics can practice the installation of gas mains.

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1           A cathodic field has been incorporated into the design as well,  
2           which will allow employees to be able to practice installing test stations,  
3           and anodes and to test couplings. They will be able to practice installing  
4           steel, cast iron, and plastic pipe below grade and then subsequently  
5           perform current demands tests, annual pipe to soil voltage surveys, over  
6           the line surveys, soil resistivity tests, and similar activities. This area may  
7           also be utilized for mark-out training. Additionally, an ignition field will  
8           enable the simulation of below grade migration pattern leaks, an above  
9           grade leak that ignites and an ignition due to a dig in.

10           Lastly, confined space training will be constructed as an above-  
11           ground simulated vault. It will include a large platform around the top,  
12           which will act as a viewing platform and will also enable easy access to  
13           equipment. Best practices indicate that confined space training should  
14           always be done above ground to ensure safety.

15 Q.    How do these proposed outdoor gas training facilities compare to the  
16           Company's existing outdoor gas facilities?

17 A.    Central Hudson does not currently have any outdoor gas training facilities  
18           that can accommodate skills demonstration and/or practice of those skills.  
19           The Company also does not currently have centralized space to display all  
20           necessary equipment for training.

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1 Q. Has the Company identified ways the training facility can be used to  
2 partner with and engage the community?

3 A. Yes. Central Hudson currently has a very limited ability to provide  
4 instructional support to its contractors and no significant opportunities to  
5 coordinate training on our system with educational institutions,  
6 municipalities and emergency services agencies. The work that utility  
7 employees perform is very technical and has serious safety implications to  
8 the employee, to co-workers, and the public. Accordingly, the proposed  
9 facility will provide meaningful and scenario-based training opportunities  
10 for Company employees, first responders, fire departments, and municipal  
11 agencies. Central Hudson envisions annual instruction to municipal and  
12 emergency services agencies at the proposed training facility will include  
13 for example, wires-down/storm, live fire, dig-in, and gas odor response.

14 The Company ultimately envisions a partnership with first  
15 responders to create standard operating procedures. Potential areas that  
16 would be covered include: better incident alert communication protocols,  
17 including pre-incident alerts where feasible, and clarity on what actions to  
18 take or to avoid. Additional procedures that would increase safety of  
19 personnel (Company and partners) and facilities will also be identified.

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**VI. PROJECTED INCREMENTAL TRAINING EXPENSE**

Q. Has the Company quantified the incremental costs associated with the enhanced programs?

A. Yes. Costs for incremental training programs, labor resources and facilities have been captured in a variety of schedules supporting the Company's revenue requirements and capital expenditures. However, for ease of identification the following schedules have been developed and are listed below.

- Training Programs
  - Labor: The four incremental labor resources are included in Exhibit \_\_ (SAM-2) of the testimony of Company Witness McGinnis.
  - Non-Labor: Please see Exhibit \_\_ (TDP-1) for a schedule showing incremental training programs required and the dollars needed to support these programs. Additionally, please refer to the Consulting & Professional Services projection in the Revenue Requirements Panel Testimony for costs associated with the training strategy and roadmap by Mosaic.
- Training Facility
  - Please see Exhibit \_\_ (TDP-3) for a schedule detailing the projected capital dollar and expense requirements for 2018 through 2022 associated with the construction and maintenance of the proposed Training Academy and Primary Control Center. The

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1                   projected capital expenditures are also summarized in the exhibits  
2                   of Company Witness Haering.

3 Q.     Please further describe the projected capital dollar and expense  
4           requirements listed in Exhibit \_\_ (TDP-3).

5 A.     To align with the 5 year capital expenditures presented in the exhibits of  
6           Company Witness Haering, projected capital dollar and expense  
7           requirements associated with the construction and subsequent  
8           maintenance of both the proposed Training Academy and Primary Control  
9           Center are presented for 2018 through 2022. The operating and  
10          maintenance expense components have been segregated into items  
11          which have been included in the Company's revenue requirement and  
12          also estimated costs that have not been reflected in the revenue  
13          requirement.

14 Q.     Are there any operating and maintenance expenses associated with the  
15          Training Academy or Primary Control Center included in the revenue  
16          requirement for the Rate Year?

17 A.     No.

18 Q.     Are there any operating and maintenance expenses associated with these  
19          facilities beyond the Rate Year that have been reflected in the Company's  
20          work papers filed in this proceeding?

21 A.     Yes. The estimated incremental expense associated with property taxes,  
22          provided by the Company's Property Tax Panel, and site security expense



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1 provided by Company Witness Nuzzo are reflected in Exhibit \_\_ (TDP-3)  
2 beginning in 2021. These amounts have been provided to the Company's  
3 Revenue Requirement Panel for purposes of developing work papers  
4 supporting the revenue requirement beyond the Rate Year.

5 Q. Please further explain the projected expense requirements noted in  
6 Exhibit \_\_ (TDP-3) for the proposed Training Academy and Primary  
7 Control Center which have not been included in the Company's revenue  
8 requirement.

9 A. Based on the stage of the project at the time of filing, the certainty, timing  
10 and magnitude of these expense items are unknown and therefore the  
11 Company requests update at the time of Brief on Exceptions. The  
12 Company requests full symmetrical deferral of all expense items related to  
13 the proposed Training Academy and Primary Control Center not  
14 considered in the calculation of the revenue requirement.

15 Q. Does this conclude your direct testimony at this time?

16 A. Yes, it does.