

BEFORE THE  
STATE OF NEW YORK  
PUBLIC SERVICE COMMISSION

---

In the Matter of  
Central Hudson Gas and Electric Corporation

Case 14-E-0318 and 14-G-0319

November 2014

---

Prepared Exhibits of:

Brian P. O'Keefe  
Utility Security Specialist II

Office of Electric, Gas and Water  
State of New York  
Department of Public Service  
Three Empire State Plaza  
Albany, New York 12223-1350

Request No.: DPS-3, IR-369  
Requested by: DPS  
Date of Request: August 28, 2014  
Witness:  
Subject: Security of Infrastructure

**Question:**

Please fully explain why Central Hudson has projected significantly increased security beginning July, 2015. Provide all studies, reports, etc. that Central Hudson has relied upon that demonstrate a need for this increase.

**Response:**

Please refer to the Company's response to DPS-3, IR-370 for the demonstrated need for the increase in funding. Proper cost of service regulation provides revenues that allow for the recovery of prudently incurred costs that are just and reasonable in order to provide safe, reliable and cost-effective service. The resetting of electric and gas delivery rates on July 1, 2015 should reflect this tenet of cost of service regulation.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory Planning  
Analyst  
Date of Response: September 8, 2014

Request No.: DPS-3, IR-370  
Requested by: DPS  
Date of Request: August 28, 2014  
Witness:  
Subject: Security of Infrastructure

**Question:**

Page 41 of the Revenue Requirements Panel testimony states, "Occurrences of violence in the workplace and physical attacks on utility infrastructure have necessitated this increase." Fully explain this statement and provide supporting documentation showing number of incidents at each Central Hudson location.

**Response:**Explanation of Statement:

Over the last several years, the news media reporting of high profile incidents of mass shootings at workplaces have led to an increase of security awareness and access control into Central Hudson facilities due to the possibility of Workplace Violence at Central Hudson.

As a proactive measure since 2010, Central Hudson's Corporate Security division has annually provided mandatory "Active Shooter Awareness Training" for employees. The heightened awareness at Central Hudson offices and facilities in the service territory has put all employees in the unfamiliar position of assisting Corporate Security in monitoring access control at all of our district offices and facilities. Employees are asked to "challenge" unknown persons on Central Hudson property and within district offices. Central Hudson employees should not have to assume the role of a Security Guard when they come to work.

Trained uniformed Security Guard personnel are needed at all Central Hudson district offices and for the patrol of specified critical substation facilities in the service territory.

The hiring of additional Security Guard personnel will be utilized to 1) help prevent crime against Central Hudson facilities; 2) maintain a security presence which does not currently exist at district offices; and 3) assist Central Hudson's customers and employees. The presence of uniformed Security Guards at the workplace provides peace of mind and a sense of security and lets customers and employees know that the Company is concerned about their safety and has taken steps to insure it.

The presence of Security Guard personnel at all Central Hudson district offices will be a deterrent to crime as criminals will think twice about targeting Central Hudson facilities that have a uniformed presence and that are patrolled by uniformed personnel.

Security Guards at district offices can provide customer service by directing customers at a district office and escorting customers, visitors and employees to their cars after dark. A security guard at a front desk or property entrance will act as a sentry to assist with controlling access to Central Hudson property.

Supporting Documentation:

In recent years during storm restoration, and when service has been locked for non-payment, Central Hudson has had to alert law enforcement about angry customers who may threaten to appear at a district office to confront an employee because they believe that their service has not been timely restored. Security Guard personnel, not employees working at a Central Hudson's District Office, should be alerted to defend employees at the District Office against an angry customer.

In April 2013 the PG&E Metcalf electric substation was sabotaged for over 50 minutes by rifle fire resulting in over 150 bullet holes to critical equipment and cut communications. This incident heightened the awareness for power-transmission security. Additional Central Hudson Security Guards will be utilized for patrolling specified critical substations in the service territory during business and off hours. The additional security guard personnel will assist with preventing substation sabotage and copper ground wire thefts. Incidents of trespass, criminal mischief and larceny at Central Hudson district offices and substation facilities from 2010 through 2014 to date is attached and identified "IR-370 Attachment 1."

In addition, an employee awareness article regarding the theft of copper ground wire from Central Hudson electric substations was published in the August 29th, 2014 Company newsletter and is attached and identified as "IR-370 Attachment 2."

**Document(s) Attached:**

IR-370 Attachment 1  
IR-370 Attachment 2

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; Regulatory Planning  
Analyst  
Date of Response: September 8, 2014

**2010 Incidents**

Type of Case	Last Name	First Name	Loss Amount	Date of Loss	Recovered Amount	Date of Recovery	Comments
Criminal Mischief	Sturgeon Pool	Substation	3,790.00	05/22/2010	80.00	08/14/2010	Crim Mischief damage to ctrl hse & pipes.Rosendale PD/SP arrests.
Criminal Mischief	Newburgh	Office	650.00	11/03/2010			Trespass / Criminal Mischief
Larceny	Eltings Corners	Office	7,550.50	04/13/2010			Larceny of copper wire from district office.Disc. 04/13,04/14, & 04/19
Larceny	Newburgh	Office	1,816.50	06/03/2010			Larceny copper wire 2am 06/03/10.New Windsor PD.
Larceny	Newburgh	Office	666.00	06/29/2010			Larceny of copper wire 06/29/10
Larceny	Newburgh	Office	2,000.00	07/14/2010			Larceny of 3 Stihl chain saws from CH vehicle.
Larceny	Fishkill	Office	100.00	07/30/2010			Larceny of copper wire from yard.
Larceny	Rock Tavern	Substation	2,300.00	08/25/2010			Larceny of copper grounds from structures. SP Montgomery
Larceny	Ohioville	Substation	214.50	09/02/2010	214.50	09/03/2010	Larceny misc wire from sub prop. New Paltz PD arrest.
Larceny	East Walden	Substation	2,092.24	09/14/2010			Larceny copper wire / crim mischief SP Montgomery
Larceny	Newburgh	Office	4,318.00	10/06/2010			Larceny of wire
Larceny	Newburgh	Office	2,894.00	12/02/2010			Larceny of tools from vehicle
Larceny	Todd Hill	Substation	750.00	12/20/2010			Larceny / Trespass - NYSP notified
Larceny	Fishkill	Office	100.00	08/04/2010	194.00	12/01/2010	Larceny of copper wire from yard.

**Loss \$28,752.74**

**2011 Incidents**

Type of Case	Last Name	First Name	Loss Amount	Date of Loss	Recovered Amount	Date of Recovery	Comments
Criminal Mischief	Poughkeepsie	Office	3,500.00	04/09/2011			Vehicle drove through front gate
Criminal Mischief	N. Chelsea	Substation	175.00	06/13/2011			Foreman reports fence cut. Mended, nothing taken. Loss materials/labor.
Larceny	N. Chelsea	Substation	4,374.00	04/11/2011			Larceny of copper wire from Thirau Inc. trucks and substation
Larceny	Newburgh	Office	5,090.00	04/19/2011			Larceny of tools from Newburgh Office
Larceny	Newburgh	Office	200.00	06/08/2011			From line foreman 4 Dewalt power tool batteries missing from dock.
Larceny	Coldenham	Substation	200.00	07/09/2011			Jeanne Kropp rpts larceny @ Coldenham Sub
Larceny	Manchester	Substation	1,788.00	07/14/2011			Michael Muscat rpts larceny @ Manchester Sub
Larceny	Newburgh	Office	2,500.00	07/20/2011			Line Foreman rpts larceny of phasing stick
Larceny	Coldenham	Substation	2,500.00	08/18/2011	2,500.00	08/18/2011	Foreman reports police arrest subjects w/stolen CH wire.
Larceny	South Cairo	Substation	2,000.00	08/16/2011			Supv. Mike Hogan reports larceny from storage shed at substation
Larceny	Hurley Ave	Substation	682.50	09/19/2011			D Cobb reports a larceny of copper wire from Hurley Substation NYSP
Larceny	Marlboro	Substation	440.00	12/10/2011			G. Dudar rpts larceny aluminum wire from Marlboro sub. Marlboro PD notified

**LOSS \$20,949.50****2012 Incidents**

Type of Case	Last Name	First Name	Loss Amount	Date of Loss	Recovered Amount	Date of Recovery	Comments
Criminal Mischief	N. Chelsea	Substation	50.00	01/18/2012			S. Connelly rpts crim mischief @ N Chelsea substation. NYSP advised.
Criminal Mischief	Milan	Substation	200.00	02/24/2012			Foreman Mike Lennon reports fence cut, nothing missing.SP Pough. Inv
Criminal Mischief	Manchester	Substation	100.00	03/14/2012			B. Pelton rpts crim mischief to fence. Poughkeepsie PD advised.
Criminal Mischief	Newburgh	Office	7,000.00	03/19/2012			Control reports gate damaged Newburgh Office.T/New Windsor PD
Larceny	Reynolds Hill	Substation	1,200.00	06/26/2012			G. Casal rpts larceny @ Reynolds Hill Sub. Poughkeepsie PD advised
Larceny	Modena	Substation	400.00	07/09/2012			G. Dudar rpts larceny @ Modena Sub. Plattekill PD advised.
Larceny	New Baltimore	Substation	3,470.00	09/11/2012			M. Lennon rpts larceny of copper wire from New Baltimore sub yard

**LOSS \$ 12,420.00**

**2013 Incidents**

Type of Case	Last Name	First Name	Loss Amount	Date of Loss	Recovered Amount	Date of Recovery	Comments
Criminal Mischief	South Cairo	Substation	1,500.00	05/06/2013			Sub Foreman F. Halion rpts door vent S. Cairo Sub damaged. NYSP inv.
Criminal Mischief	Eltings Corners	Office	800.00	05/28/2013			Brian Rider reported Eltings perimeter fence cut & storage bldgs burg.
Criminal Mischief	Eltings Corners	Office	600.00	05/30/2013			Brian Rider reported Eltings perimeter fence damaged.
Larceny	Modena	Substation	1,545.97	01/22/2013			G. Dudar rpts larceny ground wire Modena Sub. Plattekill PD invest.
Larceny	East Walden	Substation	2,578.00	01/25/2013			G. Dudar rpts larceny ground wire E.Walden Sub. Montg PD invest.
Larceny	Reynolds Hill	Substation	1,200.00	02/06/2013			K. Fell rpts larceny ground wire Reynolds Hill Sub. C/Poughkeepsie PD
Larceny	Eltings Corners	Office	310.00	02/19/2013			G. Dudar rpts poss larceny of tools from elect veh
Larceny	Inwood Avenue	Substation	8,500.00	03/05/2013			B. Pelton rpts larceny copper & tools Inwood Ave sub Pok PD invest.
Larceny	East Walden	Substation	5,093.40	04/05/2013			G. Dudar rpts larceny ground wires E. Walden Sub. Mont PD invest.
Larceny	Poughkeepsie	Office	720.00	04/15/2013			W. Melvin rpts larceny of copper wire S. Rd. C/Poughkeepsie PD invest
Larceny	Inwood Avenue	Substation	646.00	04/18/2013			B. Pelton rpts cut fence line Inwood Ave. sub. Pok PD invest.
Larceny	Coldenham	Substation	225.00	06/27/2013			M. James rpts larceny of copper wire from line truck,. Mont PD Invest.
Larceny	West Balmville	Substation	8,149.00	07/01/2013			D. Dudar reports larceny groud wire W.Balmville Sub T/Newb PD inv
Larceny	Marlboro	Substation	6,034.59	07/02/2013			B. Rider rpts larceny tools and ground wire Marlboro sub. SP High inv
Larceny	Eltings Corners	Office	13,975.00	07/08/2013			P. Harpolis reports Criminal Mischief/Larceny. SP Highland invest.
Larceny	Roseton	Substation	5,606.14	08/01/2013			G. Dudar rpts larceny 12 copper grounds. T/Newburgh PD Invest.

**LOSS \$ 57,483.1**

**2014 Incidents**

Type of Case	Last Name	First Name	Loss Amount	Date of Loss	Recovered Amount	Date of Recovery	Comments
Criminal Mischief	Newburgh	Office	850.00	01/28/2014			T/New Windsor PD
Criminal Mischief	Maybrook	Substation	500.00	03/27/2014			Substation supervisor George Dudar reports fence cut Maybrook Sub. SP Montgomery investigating.
Criminal Mischief	Rock Tavern	Substation	200.00	07/21/2014			Bottom wire of fencing cut. Property accessed to steal D&D power equipment.
Larceny	Marlboro	Substation	3,337.00	01/23/2014			Larceny of 4 aught and 1 aught covered copper wire and damage to security fence. SP Highland case.
Larceny	Rock Tavern	Substation	60.00	05/19/2014			Larceny from D&D Power truck on prop outside of gate. Partial reel of #6 ground CHGE material taken.
Larceny	Inwood Avenue	Substation	500.00	07/07/2014			Supv B. Pelton reports larceny of wire from vehicles in yard.
Larceny	Inwood Avenue	Substation	500.00	07/08/2014			Supv B. Pelton reports larceny of wire from vehicles in yard.
Larceny	Reynolds Hill	Substation	3,000.00	08/01/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	Tood Hill	Substation	3,000.00	08/05/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	Manchester	Substation	3,000.00	08/05/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	North Chelsea	Substation	3,000.00	08/06/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	Spackenkill	Substation	3,000.00	08/06/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	Fishkill Plains	Substation	3,000.00	08/07/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	Highland	Substation	3,000.00	08/13/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	Todd Hill	Substation	3,000.00	08/12/2014			Foreman reports larceny of ground wires and cut fence at substation.
Larceny	Sand Dock	Substation	3,000.00	08/15/2014			Foreman reports larceny of ground wires at substation.
Larceny	Sand Dock	Substation	3,000.00	08/19/2014			Foreman reports larceny of ground wires at substation.
Larceny	Fishkill Plains	Substation	3,000.00	08/19/2014			Foreman reports larceny of ground wires at substation.
Larceny	Myers Corners	Substation	3,000.00	08/20/2014			Foreman reports larceny of ground wires at substation.
Larceny	Inwood Avenue	Substation	1,000.00	08/23/2014			Alert Security reports cut fence/barbed wire at electric substation. Value property and fence repairs.
Larceny	East Park	Substation	2,500.00	08/29/2014			Foreman reports larceny/crim mischief./crim trespass ground wires cut.
Larceny	VanWagner	Substation	2,500.00	09/02/2014			Foreman reports larceny/crim mischief./crim trespass ground wires cut.
Larceny	Pendell Road	Connex Box	1,000.00	09/02/2014			Foreman reports larceny of CHGE property from D&D Power Connex trailer. Lock pried off, truck hot-wired.
Larceny	Pleasant Valley	Substation	14,000.00	09/02/2014			Foreman reports larceny of copper from connex trailer on site. Lock pried off, fence cut.
Larceny	Inwood Avenue	Substation	500.00	07/10/2014			Supv B. Pelton reports larceny of wire from vehicles in yard.
Larceny	Inwood Avenue	Substation	500.00	07/14/2014			Supv B. Pelton reports larceny of wire from vehicles in yard.
Larceny	Inwood Avenue	Substation	1,000.00	07/24/2014			Supv B. Pelton reports larceny of wire from vehicles in yard.

**Loss \$64,947.00**



# Copper thefts at substations

## a growing problem within territory

Copper ground wire thefts and damage of substations have spiked this month, so Corporate Security is urging employees to remain aware of suspicious activity throughout the territory.

Since Aug. 1, 10 substations, primarily on the east side of the Hudson River, have become targets for thieves who cut through the chain-linked fence to steal copper ground wire. While the problem isn't new, the frequency of the thefts this month is alarming. The larcenies have accounted for about \$30,000 in repairs for Central Hudson, but more importantly it creates potential safety hazards for employees who enter substations, according to Director of Security Tony Paul.

Copper ground wire is used as a path for the electric current to return to the ground. Without it, employees who touch the equipment run the risk of being electrocuted. The absence of copper ground wire also diminishes the reliability of the electric

system, said Pete Harpolis.

If an employee sees an unknown person or vehicle at a substation, they are asked to call local police immediately then the Security Operations Center at ext. 5753. If possible, employees should get a license plate number or other identifiable information of suspicious vehicles, people or activities.

"We need help from all employees that travel throughout our territory during off hours," Paul said. "This is extremely frustrating because it can cause a serious health and service problems."

When entering and leaving a substation, all employees must notify the System Operator at ext. 5600. This helps to ensure safety within the substation. Extra precaution must be taken to check for missing grounds, cut or damaged fences or strangers near the facilities. Any damage should be reported to the System Operator.

The Company is taking steps to deter thieves. Corporate Security is in



*Copper ground wire thefts at substations have spiked since Aug. 1, especially on the east side of the Hudson River. The thefts create potential safety hazards for employees who enter substations.*

the process of adding field and battery-operated cameras, conducting nightly substation patrols with the help of a security guard service, and installing theft-deterrent wire that does not look like copper.

Company representatives have been in contact with state police. Troop K in Poughkeepsie has developed a task force to investigate the growing problem of copper and HVAC thefts. The task force is an opportunity for various parties, including Central Hudson, to share their experience and information to hopefully curb the problem. ■

Request No.: DPS-3, IR-371  
Requested by: DPS  
Date of Request August 28, 2014  
Witness:  
Subject: Security of Infrastructure

**Question:**

On the first page of company work papers entitled "Security of Infrastructure and Office Buildings," the amount listed for the TME March 2014 "Current Security" is \$200,609. Is the entire amount related to outside contractual services or is part of the amount for Central Hudson employee(s)?

**Response:**

The entire amount is related to outside contractual services.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory Planning  
Analyst  
Date of Response: September 15, 2014

Request No.: DPS-3, IR-372  
Requested by: DPS  
Date of Request: August 28, 2014  
Witness:  
Subject: Security of Infrastructure

**Question:**

A portion of company work papers entitled "Security of Infrastructure and Office Buildings," contains correspondence and an estimate from Alert Security and Investigations, Inc. for additional security personnel. Did the company seek any estimates from other contractors? If so, provide any correspondence and/or estimates.

**Response:**

No.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory Planning  
Analyst  
Date of Response: September 8, 2014

Request No:        DPS-3, IR-373  
From:                DPS  
Date of Request:    August 28, 2014  
Witness:  
Subject:

**Question:**

Provide a breakdown, by primary work site location (e.g. "Poughkeepsie office," "Newburgh office"), of all Central Hudson employees as of March 31, 2014.

**Response:**

A breakdown, by primary work site location of all Central Hudson employees as of March 31, 2014 is attached as IR-373 Attachment 1 and titled CHGE Response to DPS-373 Attachment. Below is a summary of the attachment by location:

<u>Work Site Location</u>	<u># of Employees</u>
Catskill	32
Ellenville	10
Eltings Corners	68
Fishkill	61
Greenville	5
Kingston	117
Newburgh	86
Poughkeepsie	516
Rhinebeck	1
Rifton	1
Stanfordville	16
Tannersville	<u>3</u>
Total @ March 31, 2014	<u>916</u>

Response by:        Thomas C. Brocks & Sharon A. McGinnis  
Title:                 Vice President – Human Resources, Health & Safety and  
                              Director Human Resources  
Date of Response:   September 8, 2014

<u>Job Title</u>	<u>Work Location</u>
Auto & Hydra Mech 1/C	Catskill
Chief Gas Mechanic	Catskill
Commercial Rep 1/C	Catskill
Commercial Rep Collector-Spec	Catskill
Commercial Rep Meter Reader	Catskill
Commercial Rep Special	Catskill
Commercial Rep Special	Catskill
District Rep Special	Catskill
Engineering Associate	Catskill
Estimator 1/C	Catskill
Estimator 2/C	Catskill
Estimator 2/C	Catskill
Field Clerk/Storekeeper	Catskill
Foreman Line	Catskill
Foreman Line	Catskill
Foreman Line Clearance	Catskill
Gas Mechanic 1/C	Catskill
Lineman/Linewoman 1/C - PC	Catskill
Lineman/Linewoman 1/C - PC	Catskill
Lineman/Linewoman 1/C - PC	Catskill
Lineman/Linewoman 2/C - PC	Catskill
Lineman/Linewoman 3/C	Catskill
Lineman/Linewoman 3/C - PC	Catskill
Service Worker A	Catskill
Service Worker A	Catskill
Service Worker A	Catskill
Service Worker A	Catskill
Service Worker A	Catskill
Supv Operating (CUSV)	Catskill
Tester 1/C	Catskill
Work Foreman/Woman1/C LES&T-PC	Catskill
Work Foreman/Woman1/C LES&T-PC	Catskill
Commercial Rep 1/C	Ellenville
Commercial Rep Meter Reader	Ellenville
Field Clerk/Storekeeper	Ellenville
Foreman Line	Ellenville
Lineman/Linewoman 1/C	Ellenville
Lineman/Linewoman 1/C	Ellenville
Lineman/Linewoman 1/C	Ellenville
Lineman/Linewoman 3/C	Ellenville
Work Foreman/Woman 2/C LES&T	Ellenville
Work Foreman/Woman 2/C LES&T	Ellenville
Auto & Hydra Mech 1/C	Eltings Corners
Buyer	Eltings Corners
Chief Constr Maint Man/Woman	Eltings Corners
Chief Mechanic	Eltings Corners
Chief Storekeeper	Eltings Corners
Clerical Assistant	Eltings Corners
Construct Maint Man/Woman 1/C	Eltings Corners
Construct Maint Man/Woman 1/C	Eltings Corners
Construct Maint Man/Woman 1/C	Eltings Corners
Dir Adv Meter Svc & Spec Test	Eltings Corners
Electrician 1/C	Eltings Corners
Electrician 1/C	Eltings Corners
Electrician 1/C	Eltings Corners
Electrician 1/C	Eltings Corners
Electrician 1/C	Eltings Corners
Electrician 2/C	Eltings Corners
Equipment Operator-Special	Eltings Corners
Equipment Operator-Special	Eltings Corners
Field Clerk/Storekeeper	Eltings Corners
Field Clerk/Storekeeper	Eltings Corners

<u>Job Title</u>	<u>Work Location</u>
Field Clerk/Storekeeper	Eltings Corners
Foreman Constr Maint & Rigging	Eltings Corners
Foreman Line	Eltings Corners
Foreman Production Operations	Eltings Corners
Foreman Substation	Eltings Corners
Foreman Substation Tech	Eltings Corners
Jr Engineer	Eltings Corners
Jr Engineering Tech	Eltings Corners
Lineman/Linewoman 1/C	Eltings Corners
Lineman/Linewoman 1/C	Eltings Corners
Lineman/Linewoman 2/C	Eltings Corners
Lineman/Linewoman 3/C	Eltings Corners
Lineman/Linewoman 3/C	Eltings Corners
Maintenance Worker 1/C	Eltings Corners
Mechanic 1/C	Eltings Corners
Mechanic 1/C	Eltings Corners
Mechanic 2/C	Eltings Corners
Mgr Elec Engr Servs	Eltings Corners
Mgr Operations Services	Eltings Corners
Roving Chief Mechanic-Operator	Eltings Corners
Roving Mechanic Operator 1/C	Eltings Corners
Roving Mechanic Operator 1/C	Eltings Corners
Roving Mechanic Operator 1/C	Eltings Corners
Roving Mechanic Operator 1/C	Eltings Corners
Roving Mechanic Operator 3/C	Eltings Corners
Splicer 1/C	Eltings Corners
Splicer 3/C	Eltings Corners
Sr Engineer	Eltings Corners
Stock Handler	Eltings Corners
Stock Handler	Eltings Corners
Substation Operator 1/C	Eltings Corners
Substation Technician 1/C	Eltings Corners
Substation Technician 1/C	Eltings Corners
Substation Technician 1/C	Eltings Corners
Substation Technician 1/C	Eltings Corners
Substation Technician 2/C	Eltings Corners
Substation Technician 2/C	Eltings Corners
Substation Technician 2/C	Eltings Corners
Substation Technician 2/C	Eltings Corners
Substation Technician 2/C	Eltings Corners
Substation Technician 3/C	Eltings Corners
Supt Production Operations	Eltings Corners
Supv Operations	Eltings Corners
T&D Maintenance Planner	Eltings Corners
Utility Worker	Eltings Corners
Work Foreman/Woman 2/C LES&T	Eltings Corners
Work Foreman/Woman 2/C LES&T	Eltings Corners
Work Foreman/Woman 2/C LES&T	Eltings Corners
Work Foreman/Woman 2/C LES&T	Eltings Corners
Assoc Engineer	Fishkill
Assoc Line Foreman	Fishkill
Asst Engineer	Fishkill
Auto & Hydra Mech 1/C	Fishkill
Chief Gas Mechanic	Fishkill
Chief Gas Mechanic	Fishkill
Clerical Assistant	Fishkill
Commercial New Bus Counselor	Fishkill
Commercial Rep 1/C	Fishkill
Commercial Rep 1/C	Fishkill
Commercial Rep 2/C	Fishkill
Commercial Rep Collector	Fishkill
Commercial Rep Meter Reader	Fishkill
Commercial Rep Meter Reader	Fishkill



<u>Job Title</u>	<u>Work Location</u>
Auto & Hydra Mech 1/C	Kingston
Auto & Hydra Mech 1/C	Kingston
Auto & Hydra Mech 1/C	Kingston
Auto & Hydra Mech 1/C	Kingston
Auto & Hydra Mech 1/C	Kingston
Auto & Hydra Mech 3/C	Kingston
Auto & Hydra Mech 3/C	Kingston
Auto & Hydra Partskeeper	Kingston
Chief Gas Mechanic	Kingston
Chief Gas Mechanic	Kingston
Chief Gas Mechanic Welder	Kingston
Chief Line Clearance - PC	Kingston
Chief Tester	Kingston
Chief Working Mechanic	Kingston
Clerical Assistant	Kingston
Clerical Assistant	Kingston
Commercial Rep 2/C	Kingston
Commercial Rep Collector	Kingston
Commercial Rep Collector	Kingston
Commercial Rep Collector-Spec	Kingston
Commercial Rep Meter Reader	Kingston
Commercial Rep Meter Reader	Kingston
Commercial Rep Meter Reader	Kingston
Commercial Rep Meter Reader	Kingston
Commercial Rep Meter Reader	Kingston
Commercial Rep Meter Reader	Kingston
Commercial Rep Meter Reader	Kingston
Commercial Rep Special	Kingston
Commercial Rep Special	Kingston
Commercial Rep Special	Kingston
Commercial Rep Special	Kingston
Commercial Specialist	Kingston
Dir Transportation	Kingston
Director Meter Services	Kingston
Electrician 1/C	Kingston
Electrician 1/C	Kingston
Electrician 1/C	Kingston
Electrician 1/C	Kingston
Electrician 1/C	Kingston
Electrician 3/C	Kingston
Engineer - Section Leader	Kingston
Engineer - Section Leader	Kingston
Estimator 1/C	Kingston
Estimator 2/C	Kingston
Field Clerk/Storekeeper	Kingston
Field Clerk/Storekeeper	Kingston
Foreman Line	Kingston
Foreman Line	Kingston
Foreman Substation	Kingston
Foreman Transmission Line	Kingston
Foreman Transportation	Kingston
Foreman Transportation	Kingston
Foreman/Forewoman Gas	Kingston
Foreman/Forewoman Gas	Kingston
Foreman/Forewoman Meter	Kingston
Garage Helper	Kingston
Gas Mechanic 1/C	Kingston
Gas Mechanic 1/C	Kingston
Gas Mechanic 1/C	Kingston
Gas Mechanic 3/C	Kingston
Gas Mechanic Welder 2/C	Kingston
Gas Mechanic Welder 3/C	Kingston
Jr Engineering Tech	Kingston



<u>Job Title</u>	<u>Work Location</u>
Lineman/Linewoman 1/C	Kingston
Lineman/Linewoman 1/C	Kingston
Lineman/Linewoman 1/C - PC	Kingston
Lineman/Linewoman 1/C - PC	Kingston
Lineman/Linewoman 3/C	Kingston
Maintenance Worker 1/C	Kingston
Mgr Safety & Corp Compliance	Kingston
MV90 Coordinator	Kingston
Order Dispatcher 1/C	Kingston
Service Worker A	Kingston
Service Worker A	Kingston
Service Worker A	Kingston
Service Worker A	Kingston
Service Worker A	Kingston
Service Worker A	Kingston
Splicer 1/C	Kingston
Splicer 2/C	Kingston
Splicer 3/C	Kingston
Stock Handler	Kingston
Substation Technician 1/C	Kingston
Superintendent Gas T&D	Kingston
Superintendent T&D	Kingston
Supv Meter Read & Rev Protect	Kingston
Supv New Bus & Comm Acct Svcs	Kingston
Supv Service	Kingston
T&D Maintenance Planner	Kingston
Tester 1/C	Kingston
Tester 1/C	Kingston
Tester 1/C	Kingston
Tester 1/C	Kingston
Tester 1/C	Kingston
Tester 1/C	Kingston
Tester 1/C	Kingston
Tester 1/C	Kingston
Tester 2/C	Kingston
Tester 2/C	Kingston
Tester 3/C	Kingston
Work Foreman/Woman 2/C LES&T	Kingston
Work Foreman/Woman 2/C LES&T	Kingston
Work Foreman/Woman 2/C LES&T	Kingston
Work Foreman/Woman 2/C LES&T	Kingston
Work Foreman/Woman 2/C LES&T	Kingston
Work Foreman/Woman 2/C LES&T	Kingston
Work Foreman/Woman1/C LES&T-PC	Kingston
Work Foreman/Woman2/C LES&T-PC	Kingston
Assoc Engineer Gas Operations	Newburgh
Asst Engineer	Newburgh
Chief Gas Mechanic	Newburgh
Chief Gas Mechanic	Newburgh
Chief Gas Mechanic	Newburgh
Chief Gas Mechanic Welder	Newburgh
Chief Line Clearance Man/Woman	Newburgh
Clerical Assistant	Newburgh
Commercial New Bus Counselor	Newburgh
Commercial New Bus Counselor	Newburgh
Commercial Rep 1/C	Newburgh
Commercial Rep 1/C	Newburgh
Commercial Rep 1/C	Newburgh
Commercial Rep 2/C	Newburgh
Commercial Rep Collector	Newburgh
Commercial Rep Collector	Newburgh
Commercial Rep Collector	Newburgh

<u>Job Title</u>	<u>Work Location</u>
Commercial Rep Collector-Spec	Newburgh
Commercial Rep Meter Reader	Newburgh
Commercial Rep Meter Reader	Newburgh
Commercial Rep Meter Reader	Newburgh
Commercial Rep Special	Newburgh
Commercial Rep Special	Newburgh
Commercial Rep Special	Newburgh
Commercial Rep Special	Newburgh
Commercial Rep Special	Newburgh
Dir T&D Operations	Newburgh
District Representative	Newburgh
Electrician 1/C	Newburgh
Estimator 1/C	Newburgh
Estimator 1/C	Newburgh
Estimator 1/C	Newburgh
Field Clerk/Storekeeper	Newburgh
Field Clerk/Storekeeper	Newburgh
Foreman Line	Newburgh
Foreman Line	Newburgh
Foreman Line	Newburgh
Foreman/Forewoman Gas	Newburgh
Foreman/Forewoman Gas	Newburgh
Foreman/Forewoman Gas	Newburgh
Gas Mechanic 1/C	Newburgh
Gas Mechanic 1/C	Newburgh
Gas Mechanic 1/C	Newburgh
Gas Mechanic 1/C	Newburgh
Gas Mechanic 1/C	Newburgh
Gas Mechanic 2/C	Newburgh
Gas Mechanic 2/C	Newburgh
Gas Mechanic 2/C	Newburgh
Gas Mechanic 2/C	Newburgh
Gas Mechanic 3/C	Newburgh
Gas Mechanic 3/C	Newburgh
Gas Mechanic Welder 3/C	Newburgh
Lineman/Linewoman 1/C	Newburgh
Lineman/Linewoman 1/C	Newburgh
Lineman/Linewoman 1/C - PC	Newburgh
Lineman/Linewoman 1/C - PC	Newburgh
Lineman/Linewoman 2/C - PC	Newburgh
Lineman/Linewoman 2/C - PC	Newburgh
Lineman/Linewoman 3/C	Newburgh
Lineman/Linewoman 3/C	Newburgh
Lineman/Linewoman 3/C - PC	Newburgh
Maintenance Worker 1/C	Newburgh
Order Dispatcher 1/C	Newburgh
Real Property Services Rep	Newburgh
Residential New Business Spec	Newburgh
Service Worker A	Newburgh
Service Worker A	Newburgh
Service Worker A	Newburgh
Service Worker A	Newburgh
Service Worker A	Newburgh
Splicer 1/C	Newburgh
Splicer 2/C	Newburgh
Substation Technician 1/C	Newburgh
Superintendent Gas T&D	Newburgh
Superintendent T&D	Newburgh
Supv Service	Newburgh
Tester 1/C	Newburgh
Utility Worker	Newburgh
Work Foreman/Woman 2/C LES&T	Newburgh

<u>Job Title</u>	<u>Work Location</u>
Work Foreman/Woman 2/C LES&T	Newburgh
Work Foreman/Woman 2/C LES&T	Newburgh
Work Foreman/Woman 2/C LES&T	Newburgh
Work Foreman/Woman 2/C LES&T	Newburgh
Work Foreman/Woman1/C LES&T-PC	Newburgh
Work Foreman/Woman1/C LES&T-PC	Newburgh
Work Foreman/Woman2/C LES&T-PC	Newburgh
Accountant	Poughkeepsie
Accountant	Poughkeepsie
Accountant	Poughkeepsie
Accountant	Poughkeepsie
Accountant	Poughkeepsie
Accounting Clerk	Poughkeepsie
Accounting Clerk	Poughkeepsie
Accounting Clerk	Poughkeepsie
Accounting Clerk	Poughkeepsie
Accounting Specialist 1/C	Poughkeepsie
Accounting Specialist 1/C	Poughkeepsie
Accounting Specialist 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 1/C	Poughkeepsie
Accounting Technician 2/C	Poughkeepsie
Accounting Technician 3/C	Poughkeepsie
Accounting Technician 3/C	Poughkeepsie
Assoc Auditor	Poughkeepsie
Assoc Cost & Rate Analyst	Poughkeepsie
Assoc Cost & Rate Analyst	Poughkeepsie
Assoc Dir Elec Dist & Standard	Poughkeepsie
Assoc Dir Operational Excel	Poughkeepsie
Assoc Dir Real Property Svcs	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer	Poughkeepsie
Assoc Engineer-Section Leader	Poughkeepsie
Assoc Financial Analyst	Poughkeepsie
Assoc Financial Analyst	Poughkeepsie
Assoc General Counsel-Reg Aff	Poughkeepsie
Assoc Payroll Analyst	Poughkeepsie
Assoc Sys Analyst	Poughkeepsie
Assoc Sys Analyst	Poughkeepsie
Assoc Sys Analyst	Poughkeepsie
Assoc Sys Analyst	Poughkeepsie
Assoc Sys Analyst	Poughkeepsie
Assoc Sys Analyst	Poughkeepsie
Assoc Sys Analyst	Poughkeepsie
Associate GIS Analyst	Poughkeepsie
Associate Project Director	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie

<u>Job Title</u>	<u>Work Location</u>
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer	Poughkeepsie
Asst Engineer Gas Operations	Poughkeepsie
Asst Engineer Gas Operations	Poughkeepsie
Asst Mgr Credit Union	Poughkeepsie
Asst Mgr General Accounting	Poughkeepsie
Asst Program Analyst	Poughkeepsie
Asst System Analyst	Poughkeepsie
Asst System Analyst	Poughkeepsie
Asst System Analyst	Poughkeepsie
Asst System Analyst	Poughkeepsie
Asst System Analyst	Poughkeepsie
Asst System Oper - Non Shift	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst System Operator	Poughkeepsie
Asst Utility Forester	Poughkeepsie
Auditor	Poughkeepsie
Auditor	Poughkeepsie
Auditor	Poughkeepsie
Auto & Hydra Mech 1/C	Poughkeepsie
Benefits Administrator	Poughkeepsie
Benefits Analyst	Poughkeepsie
Building & Grounds Mech 1/C	Poughkeepsie
Building & Grounds Mech 1/C	Poughkeepsie
Building & Grounds Mech 3/C	Poughkeepsie
Buyer	Poughkeepsie
Cafeteria Attendant	Poughkeepsie
CEO & Mgr Credit Union	Poughkeepsie
CEO & President CH Energy Grp	Poughkeepsie
Chief Gas Mechanic	Poughkeepsie
Chief Gas Mechanic	Poughkeepsie
Chief Gas Mechanic	Poughkeepsie
Claims Adjuster	Poughkeepsie
Claims Adjuster	Poughkeepsie
Claims Adjuster	Poughkeepsie
Cleaning Worker PT	Poughkeepsie
Cleaning Worker PT	Poughkeepsie
Cleaning Worker PT	Poughkeepsie
Cleaning Worker PT	Poughkeepsie
Cleaning Worker PT	Poughkeepsie
Cleaning Worker PT	Poughkeepsie
Clerical Assistant	Poughkeepsie
Clerical Assistant	Poughkeepsie
Clerical Assistant	Poughkeepsie
Clerical Assistant	Poughkeepsie





<u>Job Title</u>	<u>Work Location</u>
Dir Dispatch Operations	Poughkeepsie
Dir Elect Outage Services	Poughkeepsie
Dir Electric System Design	Poughkeepsie
Dir Environmental Affairs	Poughkeepsie
Dir Gas Distribution Eng	Poughkeepsie
Dir Gas Transmission Eng	Poughkeepsie
Dir Info Sys Develop	Poughkeepsie
Dir Labor Relations	Poughkeepsie
Dir Media Relations	Poughkeepsie
Dir Meter Reading & Rev Prot	Poughkeepsie
Dir New Bus & Comm Acct Svcs	Poughkeepsie
Dir Project Const & Splicing	Poughkeepsie
Dir Project Management	Poughkeepsie
Dir Rest Logist & Material Pln	Poughkeepsie
Dir Security	Poughkeepsie
Dir Shrhldr Rels & Recds Mgmt	Poughkeepsie
Dir Strategic Planning	Poughkeepsie
Dir T&D Operations	Poughkeepsie
Dir Tech Support	Poughkeepsie
Dir Treasury Services	Poughkeepsie
Director - Line Clearance	Poughkeepsie
Director Human Resources	Poughkeepsie
Director Real Property Svcs	Poughkeepsie
Electrician 1/C	Poughkeepsie
Electrician 1/C	Poughkeepsie
Electrician 1/C	Poughkeepsie
Electrician 2/C	Poughkeepsie
Electrician 2/C	Poughkeepsie
Electrician 2/C	Poughkeepsie
Employee Communications Editor	Poughkeepsie
Energy Buyer	Poughkeepsie
Energy Buyer	Poughkeepsie
Energy Buyer	Poughkeepsie
Energy Buyer	Poughkeepsie
Energy Control Specialist	Poughkeepsie
Energy Resources Analyst	Poughkeepsie
Energy Resources Analyst	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer	Poughkeepsie
Engineer - Section Leader	Poughkeepsie
Engineer Drafter 1/C Special	Poughkeepsie
Engineer Drafter 1/C Special	Poughkeepsie
Engineer Drafter 1/C Special	Poughkeepsie
Engineer Drafter 1/C Special	Poughkeepsie
Engineering Associate	Poughkeepsie
Engineering Drafter 1/C	Poughkeepsie
Engineering Drafter 3/C	Poughkeepsie
Engineering Drafter 3/C	Poughkeepsie
Engineering Drafter 3/C	Poughkeepsie
Engineering Tech	Poughkeepsie
Environ & MGP Project Mgr	Poughkeepsie
Environmental Coordinator	Poughkeepsie
Environmental Specialist	Poughkeepsie
Estimator 3/C	Poughkeepsie
Estimator 1/C	Poughkeepsie

<u>Job Title</u>	<u>Work Location</u>
Estimator 1/C	Poughkeepsie
Estimator 1/C	Poughkeepsie
Estimator 2/C	Poughkeepsie
Executive Assistant	Poughkeepsie
Executive Assistant	Poughkeepsie
Executive Assistant	Poughkeepsie
Executive Assistant	Poughkeepsie
Executive VP & CFO	Poughkeepsie
Facilities Superintendent	Poughkeepsie
Field Clerk/Storekeeper	Poughkeepsie
Field Clerk/Storekeeper	Poughkeepsie
Financial Analyst	Poughkeepsie
Financial Analyst	Poughkeepsie
Financial Analyst	Poughkeepsie
Foreman Line	Poughkeepsie
Foreman Line	Poughkeepsie
Foreman Line	Poughkeepsie
Foreman Line	Poughkeepsie
Foreman Line	Poughkeepsie
Foreman Line	Poughkeepsie
Foreman Substation	Poughkeepsie
Foreman/Forewoman Gas	Poughkeepsie
Foreman/Forewoman Gas	Poughkeepsie
Gas Mechanic 2/C	Poughkeepsie
Gas Mechanic 2/C	Poughkeepsie
Gas Mechanic 2/C	Poughkeepsie
Gas Mechanic 2/C	Poughkeepsie
Gas Mechanic 2/C	Poughkeepsie
Gas Mechanic 2/C	Poughkeepsie
Gas Mechanic Welder 1/C	Poughkeepsie
Head Cleaning Worker	Poughkeepsie
Hum Res Adm Emp EEO & Emp Act	Poughkeepsie
Jr Accountant	Poughkeepsie
Jr Engineer	Poughkeepsie
Jr Engineer	Poughkeepsie
Jr Engineer	Poughkeepsie
Jr Engineer	Poughkeepsie
Jr Engineer	Poughkeepsie
Jr Engineer	Poughkeepsie
Jr Engineering Tech	Poughkeepsie
Jr Financial Analyst	Poughkeepsie
Jr System Operator	Poughkeepsie
Jr System Operator	Poughkeepsie
Jr System Operator	Poughkeepsie
Legal Secretary	Poughkeepsie
Lineman/Linewoman 1/C	Poughkeepsie
Lineman/Linewoman 1/C - PC	Poughkeepsie
Lineman/Linewoman 1/C - PC	Poughkeepsie
Lineman/Linewoman 1/C - PC	Poughkeepsie
Lineman/Linewoman 1/C - PC	Poughkeepsie
Lineman/Linewoman 2/C	Poughkeepsie
Lineman/Linewoman 3/C	Poughkeepsie
Lineman/Linewoman 3/C	Poughkeepsie
Lineman/Linewoman 3/C - PC	Poughkeepsie
Maintenance Worker 1/C	Poughkeepsie
Maintenance Worker 1/C	Poughkeepsie
Maintenance Worker 2/C	Poughkeepsie
Manager of Gas Operations	Poughkeepsie
Manager Supply Chain	Poughkeepsie
Member Service Representative	Poughkeepsie
Member Service Representative	Poughkeepsie
Mgr Customer Account Services	Poughkeepsie
Mgr Elec Trans & Dist	Poughkeepsie
Mgr Energy Eff Svc & Gas Mktg	Poughkeepsie
Mgr Energy Resources	Poughkeepsie



<u>Job Title</u>	<u>Work Location</u>
Mgr Enterprise Supp Services	Poughkeepsie
Mgr Finance & Planning	Poughkeepsie
Mgr Gas & Mech Engineering	Poughkeepsie
Mgr General Accounting	Poughkeepsie
Mgr Internal Auditing	Poughkeepsie
Mgr Nat Gas Exp & NYS Gov Aff	Poughkeepsie
Mgr Planning Sys Budg & Frcsts	Poughkeepsie
Mgr System Operations	Poughkeepsie
Mgr T&D Operations & Emer Rsp	Poughkeepsie
Mgr Trans Ops & Reliab Compl	Poughkeepsie
Mgr. - Risk Management	Poughkeepsie
OMS Data Coordinator	Poughkeepsie
OMS Data Coordinator	Poughkeepsie
Operations Assistant (CUSV)	Poughkeepsie
Operations Shift Supervisor	Poughkeepsie
Operations Shift Supervisor	Poughkeepsie
Operations Shift Supervisor	Poughkeepsie
Operations Shift Supervisor	Poughkeepsie
Operations Shift Supervisor	Poughkeepsie
Operations Shift Supervisor	Poughkeepsie
Operations Shift Supervisor	Poughkeepsie
Order Dispatcher 1/C	Poughkeepsie
President	Poughkeepsie
Program Coordinator	Poughkeepsie
Project Director	Poughkeepsie
Project Manager	Poughkeepsie
Project Manager- Bus. Devlpmnt	Poughkeepsie
Real Property Services Rep	Poughkeepsie
Real Property Services Rep	Poughkeepsie
Record Control Clerk	Poughkeepsie
Regulatory Planning Analyst	Poughkeepsie
Section Engineer Elec Sys Dsn	Poughkeepsie
Security Investigator	Poughkeepsie
Senior Operations Asst (CUSV)	Poughkeepsie
Service Worker A	Poughkeepsie
Service Worker A	Poughkeepsie
Service Worker A	Poughkeepsie
Service Worker A	Poughkeepsie
Service Worker A	Poughkeepsie
Service Worker A	Poughkeepsie
Service Worker A	Poughkeepsie
Splicer 1/C	Poughkeepsie
Splicer 1/C	Poughkeepsie
Splicer 2/C	Poughkeepsie
Splicer 2/C	Poughkeepsie
Sr Accountant	Poughkeepsie
Sr Dir Cost, Rates & Forecasts	Poughkeepsie
Sr Dir Energy Pol & Trans Dev	Poughkeepsie
Sr Dir Regulatory Planning	Poughkeepsie
Sr Dir Reliability Compliance	Poughkeepsie
Sr Director Info Tech	Poughkeepsie
Sr Director Regulatory Affairs	Poughkeepsie
Sr Engineer	Poughkeepsie
Sr Engineer	Poughkeepsie
Sr Engineer	Poughkeepsie
Sr Financial Analyst	Poughkeepsie
Sr Regulatory & Fin Analyst	Poughkeepsie
Sr Regulatory Planning Analyst	Poughkeepsie
Sr Risk Mgmt Administrator	Poughkeepsie
Sr System Operator	Poughkeepsie
Sr Systems Analyst	Poughkeepsie
Sr Systems Analyst	Poughkeepsie
Sr Systems Analyst	Poughkeepsie

<u>Job Title</u>	<u>Work Location</u>
Sr Systems Analyst	Poughkeepsie
Sr Systems Analyst	Poughkeepsie
Sr Tax Analyst	Poughkeepsie
Sr Vice Pres Customer Services	Poughkeepsie
Substation Operator 2/C	Poughkeepsie
Superintendent Estimating	Poughkeepsie
Superintendent T&D	Poughkeepsie
Supv - CAS Consumer Outreach	Poughkeepsie
Supv - CAS Consumer Outreach	Poughkeepsie
Supv Customer Accounting	Poughkeepsie
Supv Accts Payable & Fin Rec	Poughkeepsie
Supv Cash Processing	Poughkeepsie
Supv Computer Operations	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Customer Account Services	Poughkeepsie
Supv Drafting	Poughkeepsie
Supv Energy Efficiency	Poughkeepsie
Supv Estimating	Poughkeepsie
Supv Estimating	Poughkeepsie
Supv Estimating	Poughkeepsie
Supv Facilities Mgmt	Poughkeepsie
Supv Meter Read & System Sup	Poughkeepsie
Supv Office/Cred & Collection	Poughkeepsie
Supv Operating (Call Center)	Poughkeepsie
Supv Operating(Cust Acct Svcs)	Poughkeepsie
Supv Oper-Com Rels & Cons Outr	Poughkeepsie
Supv Payroll	Poughkeepsie
Supv Plant Accounting	Poughkeepsie
Supv Process Impr & Supv Dev	Poughkeepsie
Supv Service	Poughkeepsie
Supv Tax Accounting	Poughkeepsie
Sys Spec Proj Leader	Poughkeepsie
Sys Spec Proj Leader	Poughkeepsie
Sys Spec Proj Leader	Poughkeepsie
Sys Spec Proj Leader	Poughkeepsie
Sys Spec Proj Leader	Poughkeepsie
Sys Spec Proj Leader	Poughkeepsie
Sys Spec Proj Leader	Poughkeepsie
System Analyst	Poughkeepsie
System Analyst	Poughkeepsie
System Analyst	Poughkeepsie
System Analyst	Poughkeepsie
System Analyst	Poughkeepsie
System Analyst	Poughkeepsie
System Analyst	Poughkeepsie
System Analyst	Poughkeepsie
System Dispatch Ctr Supv	Poughkeepsie
System Operations Coord	Poughkeepsie
System Operator	Poughkeepsie
System Operator	Poughkeepsie
T&D Maintenance Planner	Poughkeepsie
T&D Maintenance Planner	Poughkeepsie
Tax Analyst	Poughkeepsie
Telephone Representative	Poughkeepsie
Telephone Representative	Poughkeepsie
Telephone Representative	Poughkeepsie
Telephone Representative	Poughkeepsie

<u>Job Title</u>	<u>Work Location</u>
Telephone Representative	Poughkeepsie
Telephone Representative	Poughkeepsie
Telephone Representative	Poughkeepsie
Tester 1/C	Poughkeepsie
Training Coordinator	Poughkeepsie
Training Coordinator	Poughkeepsie
Treasurer	Poughkeepsie
Treasury Analyst	Poughkeepsie
Utility Forester	Poughkeepsie
Vice Pres of Acctg & Cntrlr	Poughkeepsie
VP - Regulatory Affairs	Poughkeepsie
VP Bus Dev & Gov't Affairs	Poughkeepsie
VP Engineering & System Ops	Poughkeepsie
VP Public Relations	Poughkeepsie
VP-Human Res, Health & Safety	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman 2/C LES&T	Poughkeepsie
Work Foreman/Woman1/C LES&T-PC	Poughkeepsie
Work Foreman/Woman1/C LES&T-PC	Poughkeepsie
Work Foreman/Woman1/C LES&T-PC	Poughkeepsie
District Rep Special	Rhinebeck
Supv District Facilities	Rifton
District Rep Special	Stanfordville
Field Clerk/Storekeeper	Stanfordville
Foreman Line	Stanfordville
Lineman/Linewoman 1/C	Stanfordville
Lineman/Linewoman 1/C - PC	Stanfordville
Lineman/Linewoman 1/C - PC	Stanfordville
Lineman/Linewoman 2/C	Stanfordville
Lineman/Linewoman 3/C	Stanfordville
Lineman/Linewoman 3/C - PC	Stanfordville
Work Foreman/Woman 2/C LES&T	Stanfordville
Work Foreman/Woman 2/C LES&T	Stanfordville
Work Foreman/Woman 2/C LES&T	Stanfordville
Work Foreman/Woman 2/C LES&T	Stanfordville
Work Foreman/Woman 2/C LES&T	Stanfordville
Work Foreman/Woman1/C LES&T-PC	Stanfordville
Work Foreman/Woman1/C LES&T-PC	Stanfordville
Lineman/Linewoman 2/C	Tannersville
Service Worker A	Tannersville
Work Foreman/Woman 2/C LES&T	Tannersville

Request No.: DPS-3, IR-374  
Requested by: DPS  
Date of Request: August 28, 2014  
Witness:  
Subject: Security of Infrastructure

**Question:**

What factor(s) caused Central Hudson to choose July 2015 as the implementation date to ramp up the number of security personnel?

**Response:**

Please refer to the Company's response to DPS-3, IR-369 and IR-370.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory Planning  
Analyst  
Date of Response: September 8, 2014

Request No.: DPS-10, IR-723  
Requested by: DPS  
Date of Request: October 7, 2014  
Witness:  
Subject: Security

**Question:**

Concerning the response to DPS-370, provide a risk assessment or methodology used in order to substantiate the course of action demonstrating that the hiring of additional contract guard forces will substantially mitigate the identified risks as a best cost solution. If such an assessment was not done, please so indicate.

**Response:**

The course of action decided upon was based on the law enforcement knowledge and experience of the Company's Director of Security, who served the Division of the New York State Police for over twenty-two years. As a retired experienced law enforcement officer and investigator, the Director of Security assessed the losses experienced by the Company since 2010. Those incidents and losses were provided in response to DPS-3, IR-370 and identified as "IR-370 Attachment 1," which occurred at both Central Hudson District Offices and substation facilities. The presence of uniformed security guard personnel at Central Hudson District Offices is the best solution in order to mitigate the vulnerabilities experienced at Central Hudson District Offices. Roving uniformed security guard personnel is the best solution in order to mitigate the vulnerabilities experienced at remote Central Hudson substation facilities. As an example, on March 19<sup>th</sup>, 2012 in the early morning hours an unknown individual used a vehicle during a theft of copper scrap wire at the Central Hudson Newburgh Office. The individual responsible fled in an unknown vehicle by driving through a chain link fence and then drove through a motorized gate in order to flee the office property. Fortunately, no Central Hudson employees were injured when this individual used the vehicle as a means to escape from the property. The presence of a uniformed security guard performing security rounds and stationed in a security guard shack at District Offices is the best means to remedy future incidents.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory  
Planning Analyst  
Date of Response: October 17, 2014

Request No.: DPS-10, IR-724  
Requested by: DPS  
Date of Request: October 7, 2014  
Witness:  
Subject: Security

**Question:**

Concerning page 40 of the Revenue Requirement Panel testimony, clarify the sentence "The Company anticipates a continued increase in this area to address these concerns."

**Response:**

In hindsight, the Revenue Requirements Panel would have structured this sentence differently to make the intent of the statement clearer to the reader.

The meaning of "this area" refers to the recognition that a physical security presence, i.e., the hiring of uniformed security guard personnel, is required to address the occurrences of violence in the workplace and physical attacks on utility infrastructure. Please refer to the Company's response to DPS-2, IR-370 and DPS-10, IRs 723; 725; and 728 to substantiate this statement.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory  
Planning Analyst  
Date of Response: October 17, 2014

Request No.: DPS-10, IR-725  
Requested by: DPS  
Date of Request: October 7, 2014  
Witness:  
Subject: Security

**Question:**

The response submitted to DPS-370 shows most security incidents were at substations, not district offices. There has been no reporting provided to Staff that showed workplace violence at a district office. There were however, instances of larceny at substations.

Explain the rationale as to why no significant camera installations are programmed to address these current documented sub-station threats until 2017.

a. Will the security guards at the District Offices be armed?

**Response:**

Initially, it should be noted that the Company's proposal to increase security measures to monitor its infrastructure and district offices are proactive and based on experience since 2010 and the increase in workplace violence reported in the mass media at the local, state and national levels. That said, there was a reported incident of workplace violence that was documented by the Company's Director of Security. The following is a summary of the incident:

Workplace Violence Incident at Fishkill District Office 06/18/09

- o Account 7648-0812-02
- o On 06/12/09 Central Hudson spoke with a customer and agreed on a date and time for a scheduled gas meter time test. Central Hudson did not want to cause disruption of service at the customer's restaurant business so an appointment was agreed upon and set for 06/18/09 at 8:45am. A field representative changed the gas meter and advised a customer service representative who noted in account that customer did not make appointment. The customer was unaware that a field representative already changed out the gas meter and drove to the Fishkill District Office. The customer was angry because he believed that the scheduled appointment was not kept by Central Hudson and confronted the Fishkill storekeeper at the Fishkill Office storeroom loading dock. The customer was angry and irate and the storekeeper felt threatened which prompted her to call the police to report an irate customer at the Fishkill District Office property. The Company's Service Supervisor heard screaming outside of the building near the Fishkill Office storeroom loading dock area so he exited his office to investigate. The Service Supervisor was unaware at this time that the storekeeper had called the police to report an irate and angry customer at the Fishkill District Office property. The Service

Supervisor came out of the building on the Fishkill Office loading dock area and witnessed an unknown male angrily shouting at the storekeeper about "losing business". The Service Supervisor explained to the customer that a field representative had been to the customer's business and had already made the necessary gas meter change. The irate customer then lunged at the Service Supervisor on the loading dock physically striking the employee with his head and body. The Service Supervisor was able to fend off the customer's attack at which time a State Trooper and an Officer from the Town of Fishkill Police Department arrived at the scene. The customer later admitted to the responding Trooper that he attempted to push the Service Supervisor off the loading dock.

The substation facilities that have experienced security incidents are remote substations that have no means of communication for camera network connectivity for real time camera monitoring. The Company is in the process of installing six portable battery operated camera units, which are scheduled to be in service by January 2015 to assist with the security monitoring at these remote substation facilities. The presence of roving uniformed security guard personnel would dramatically decrease the likelihood of an incident and help deter security related incidents at Central Hudson substation facilities.

In addition, the Company's 2014-2017 capital expenditure plan includes the following security installations:

- 2014 – 1) Camera installations/upgrades at Eltings Corners Office; 2) Hurley Avenue substation "SMART" camera upgrade; 3) Rifton Training Center camera installations; and 4) Enhanced card reader access system and camera addition at Poughkeepsie South Road mail center location.
- 2015 – Installation of additional battery operated cameras at substation facilities.
- 2016 – Installation of security guard booths and license plate cameras at district offices.
- 2017 – Installation of "SMART" cameras at Rock Tavern substation.

a. Uniform security guard personnel at Central Hudson District Offices will not be armed.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory  
Planning Analyst  
Date of Response: October 17, 2014



Request No.: DPS-10, IR-726  
Requested by: DPS  
Date of Request October 7, 2014  
Witness:  
Subject: Security

**Question:**

What analysis will be conducted to determine when the security supervisor should schedule visits to critical infrastructure in order to have the greatest effect on protecting facilities?

**Response:**

The Company's Director of Security will provide a listing of gas and electric infrastructure that requires monitoring. Critical facilities that do not have camera monitoring will be scheduled for uniform security guard roving patrol checks. The Corporate Security department will manage the frequency and schedule of security guard roving patrol checks which may be based on security related incidents in the service territory reported to the Corporate Security department.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory  
Planning Analyst  
Date of Response: October 17, 2014

Request No.: DPS-10, IR-727  
Requested by: DPS  
Date of Request: October 7, 2014  
Witness:  
Subject: Security

**Question:**

Define the terms “minor” and “significant discrepancies” as referenced in the Alert Security & Investigations proposal regarding reporting requirements.

**Response:**

An example of a “minor” discrepancy would be a malfunctioning area light. An example of a “significant discrepancy” would be cuts discovered at a substation perimeter fence.

Response by: Revenue Requirements Panel (David P. Brideau;  
Christopher D. Thomas & Jodi L. Harris)  
Title(s): Senior Director of Regulatory Planning; Senior  
Regulatory Planning Analyst; and Regulatory  
Planning Analyst  
Date of Response: October 17, 2014

**CONFIDENTIAL**

Request No.: DPS-10, IR-728  
Requested by: DPS  
Date of Request: October 7, 2014  
Witness:  
Subject: Security

**Question:**

Define the exact meaning of “critical infrastructure” on pg. 40 of the Revenue Requirements Panel testimony. Provide a list of assets that are considered critical with regard to this sentence

**Response:**

Critical infrastructure means existing and proposed systems and assets, whether physical or virtual, of which the incapacity or destruction would negatively affect security, economic security, public health or safety, or any combination thereof. Moreover, critical energy infrastructure means specific engineering, vulnerability, or detailed design information about proposed or existing critical infrastructure that relates to details about production, generation, transportation, transmission or distribution of energy.

In December 2010, the Department of Public Service (“PSC”) requested of Central Hudson Gas & Electric Corporation a Comprehensive Physical Security Plan for Critical Infrastructure Protection. The Director of Security for Central Hudson provided the requested plan along with a listing of facilities designated as Critical for review by the PSC’s Director of Utility Security. It is important to note that a decision not to designate any particular utility facility as Critical for purposes associated with the list requested by the PSC’s Director of Utility Security does not mean that the facility is not critical infrastructure. It simply means that there is a normal level, rather than a heightened level of security associated with such facilities. Since the creation of this listing, the Company’s Director of Security has periodically updated the critical facility listing. There are remote critical substation facilities in the Central Hudson service territory that currently do not have the ability to be “live” monitored by cameras due to the lack of means to bring the live camera communication back to a centralized camera monitoring station located at the Company’s South Road headquarters.

The Company’s Director of Security periodically requests its Information Technology department and external security vendors investigate the possibilities for communication capabilities from remote substation facilities. Uniformed security guard patrols are necessary for assisting with the protection of remote critical substation facilities. The uniformed security guard patrols would assist

with averting a possible security incident at a critical substation facility.

Please refer to the attached confidential document marked as IR-728 Attachment 1 captioned "CHGE Response to DPS-728 Attachment 1" for a listing of critical infrastructure facilities.

***The Confidential attachment is provided to the requesting party only.***

Response by:	Revenue Requirements Panel (David P. Brideau; Christopher D. Thomas & Jodi L. Harris)
Title(s):	Senior Director of Regulatory Planning; Senior Regulatory Planning Analyst; and Regulatory Planning Analyst
Date of Response:	October 17, 2014

# **Best Practices for Physical Security for Critical Electric System Assets**

Utility Security Section  
Office of Electricity, Gas & Water  
New York Department of Public Service

October 5, 2005  
Revised May 6, 2008  
Revised January 10, 2011

## **Table of Contents**

<b>1. General Policy and Procedures</b>	<b>2</b>
<b>2. Information Sharing &amp; Mutual Assistance</b>	<b>4</b>
<b>3. Physical Access</b>	<b>5</b>
<b>4. Regular Security Inspection</b>	<b>9</b>
<b>5. Security Systems</b>	<b>10</b>
<b>6. Emergency Communications</b>	<b>11</b>
<b>7. Operations and Maintenance</b>	<b>12</b>
<b>8. Security Awareness</b>	<b>13</b>
<b>9. Training, Exercises &amp; Drills</b>	<b>14</b>
<b>10. Chemical and Biological</b>	<b>15</b>
<b>11. Physical Security of Critical Cyber Assets</b>	<b>16</b>

### **General Policy and Procedures**

1. Maintain and continually update a comprehensive security analysis and protective measures plan. This plan should be the basis for determining the types of physical security systems and resources employed.
2. Elements of the comprehensive security plan should be integrated in an effective way with the company Emergency Operations Plan (EOP). Likewise, the EOP should fully integrate security considerations and requirements, and specify the role of security personnel during an emergency. The security plan should be clear about organizational relationships and authority guidelines, and also describe how facility personnel will integrate and utilize equipment, personnel, resources and supplies during an event. It should establish authorities for particular functions during an emergency.
3. Security planning should prioritize each building/facility according to criticality and vulnerability. A specific response folder should be prepared for each critical building/facility. Define controlled areas requiring security, including buildings, control rooms, maintenance areas, receiving areas, shipping areas, substations, switch gear, pipelines and valves, processing plants, storage, compressors, city gate facilities, and other energy sector assets.
4. Ensure that business continuity plans are current and include a response to terrorist threats. Such plans should include procedures for establishing prompt communication, 24/7, with key executive and operational personnel. Plans should provide for evacuation and relocation and emergency response manuals. These procedures should be reviewed with personnel and tested periodically.

5. Identify and maintain a long-lead-time inventory of supplies and materials that may be required by security staff in responding to a protracted event.
6. As appropriate, review with facility employees the operations plans, personnel safety, security details and logistical requirements that pertain to implementing increased security levels.
7. Evaluate adequacy of security measures for the protection of senior executive management and establish procedures accordingly.
8. Confirm the availability of security resources that can assist with round-the-clock coverage of critical facilities. Regularly review and update this information.
9. Evaluate and identify the vulnerabilities of community and regional infrastructure that, if compromised, could adversely effect operations. Survey surrounding areas to determine those activities and facilities that might present an increase in security risk (e.g., airports, government buildings, industrial facilities, arenas and stadiums, etc).
10. Plan with the law enforcement, emergency response and the business community to better prepare for the disruption or loss of infrastructure or services on which company operations depend. Make contingency plans for obtaining essential services and supplies.
11. Ensure that a company security response can be mobilized as appropriate for an increased security threat level. Review communications procedures and backup plans with all concerned. Conduct drills on a regular basis to measure response effectiveness.
12. Review existing countermeasures and operational requirements to ensure adequate guard allocation.



13. Review all proposed and pending maintenance and construction work for issues that could affect facility security. Take steps to resolve security problems arising out of any construction or maintenance project. Seek to take advantage of construction or renovation as opportunities to enhance security.
14. Conduct pre-employment background screening to the extent allowed by law and union contracts.
15. Inspect all packages/equipment coming into facilities, taking care to not open suspicious packages. Review the US Postal Service "Suspicious Mail Alert" and "Bombs by Mail" publications with all personnel involved in receiving packages.

### **Information Sharing and Mutual Assistance**

1. Develop and maintain liaison with federal law enforcement and related agencies. Regularly update contact information with appropriate federal personnel. Encourage participation or observation by appropriate federal personnel at company drills and exercises.
2. Develop and maintain liaison with local and state law enforcement emergency response teams to enhance information exchange, clarify emergency response responsibilities, track threat conditions, and support investigations. Encourage participation or observation by appropriate local and state law enforcement personnel at company drills and exercises.
3. Implement a fail-safe means to contact law enforcement agencies. Consider an alarm hard wired to a local PD or security company "panic alarms" for employees in critical positions.

4. Develop and maintain liaison with government and industry information-sharing organizations, for current threat information.
5. Ensure coordination with supporting telecommunications utilities and other providers. Maintain liaison with telecom providers to ensure restoration priorities and plans are in place and well understood.

### **Physical Access**

1. Verify the identity of all employees and contractors with electronic ID scanning and/or guard verification procedures. Require visitors to check in at a central facility office, verifying their identification, being especially alert to repeat visitors or outsiders who have no apparent business at the facility and are asking questions about the facility or its personnel.
2. Require and reinforce that ID badges are to be displayed at all times. Periodically conduct random security spot checks of employees entering facilities.
3. For critical facilities, complete perimeter fencing and gates to restrict access to the facility should be the norm for both safety and security purposes. A perimeter barrier of chain-link steel fences (topped with barbed or razor wire) can be effective against both casual and determined intruders.
4. Vehicle parking should not be permitted in close proximity to a perimeter barrier fence. The disallowance of parking adjacent to a fence is particularly important during hours when a facility is unattended by company employees and not subject to guard service security. Where there is a compelling need to keep parked vehicles close to a fence, the fence height should be increased. Razor wire or barbed wire, and motion sensors integrated into the fence line, should also be considered.
5. Secure all buildings that form part of a critical facility perimeter. The ideal security situation for a building that is part of a

perimeter is a building without windows. However, bars, grates, heavy mesh screens or steel shutters over windows can offer protection.

6. Reduce to a practical minimum the number of access points for vehicles, watercraft, and personnel. Periodically spot check the contents of vehicles, watercraft at these access points.
7. Signage at the perimeter of critical facilities should prominently warn against trespassing and unauthorized access to restricted areas. Signage should be securely fastened to the fence and posted every 50' around the perimeter of the facility.
8. Limit vehicle access to protected areas to essential vehicles only. Restrict parking to a substantial distance (beyond 300 feet recommended) from either single buildings or any building in a complex. If restricted parking is not feasible, only properly identified employees or delivery vehicle operators should be allowed to park immediately next to the facility.
9. Heavy jersey barriers or staggered cement planters should be placed where it is practical to reduce vulnerability to vehicle borne improvised explosive devices (VBIED). Assess barrier delay time at critical facilities and enhance as needed during periods of heightened threat level.
10. Delivery vehicle drivers should be fully identified prior to entry to facility perimeter. Guards should confirm that a delivery is scheduled. Delivery truck cargo should be examined prior to entry.
11. Close and lock gates and barriers except those needed for immediate entry and egress at critical facilities. Inspect perimeter fences regularly. Ensure that other security systems are functioning and available for use.
12. Access should be limited to authorized persons through measures such as unique keying systems, smart locks and access card systems.

13. All operators should verify the identity of all employees and visitors and control access to critical facilities at all times. Visitors should not be allowed in critical facilities unless they are escorted and have a legitimate business purpose for the visit. The operator should be aware of any contractors working on a critical facility. Operators should use company-issued photo IDs or require government-issued photo IDs.
14. Preferred access control measures and systems are those that identify and process all personnel, visitors, vendors, and contractors, (i.e. photo IDs, visitors passes, contractor IDs to be displayed while on company property).
15. Smart cards/Proximity cards and readers are preferred that have the ability to record when an individual leaves and enters a facility without the removal of the card from a pocket.
16. Install entrance/exit doors with the hinges and hinge pins located in the interior, to prevent their removal.

### **Substations**

17. A substation incident response program should be established that at minimum would provide a rapid assessment of events in the substation in order to differentiate normal electromechanical failures from malicious acts. If malicious activity is evident, the priority should be to return the substation to normal functionality while preserving forensic evidence where possible.
18. Ensure that security policy and procedures are in place to manage and control access into and out of the substation. These policies should clearly state what practices are prohibited, which ones are allowed, and what is expected of all personnel with access to the substation. The substation security policies should clearly define roles, responsibilities, and procedures for access and should be part of an overall critical infrastructure protection policy.

19. Avoid dual use of critical substation confines and adjacent space for non-critical functions where possible. That is, eliminate or restrict the use of the substation secure area for non-critical activities such as construction equipment storage, non-critical asset storage, contractor staging, and personal vehicle parking. If dual use is unavoidable, the company should consider the establishment of another physical security perimeter that excludes the non-critical activities from the substation secure area.
20. The physical security perimeters at each substation should be clearly identified. All physical access points through each perimeter should be identified and documented.
21. Access into and out of any substation should be monitored with appropriate authorization procedures. Substation access may be authorized by the system or security operator if not performed by electronic means such as a card reader where authorization is predetermined. Even if card readers are in place, it is recommended that personnel entering the substation contact the system or security operator so that the station can be tagged as "attended" in the event of an incident.
22. A database that identifies all company, contractor, vendor and service personnel that have unescorted access privileges to substations should be developed and kept current.
23. Physical access controls should be implemented at each identified perimeter access point. All access into and out of the substation should be recorded and maintained for a reasonable time. At a minimum these records should indicate the name of the person(s) entering the substation, their business purpose, their company affiliation, time in, and time out.
24. All contractors and vendors with substation access privileges should be required to pass a background screening before being issued a company provided contractor ID badge. Only those contractors with company issued ID badges should be granted unescorted substation access. Even in these circumstances, a company employee with unescorted access

to the substation should confirm and monitor the contractor's activity while in the substation.

### **Regular Security Inspection**

1. In determining the nature and extent of security guard monitoring required for critical facilities, companies should consider both roving security patrols and fixed station security staffing.
2. Inspect, on a scheduled basis, the interior and exterior of all buildings, and areas around all above ground storage tanks, and other vulnerable areas in critical facilities. Preferably, conduct perimeter patrols of property on each shift. At least occasionally, conduct patrols of facilities using a random time schedule.
3. Require the practice of closing and locking gates and barriers except those needed for immediate entry and egress at critical facilities. Inspect perimeter fences regularly. Ensure that other security systems are functioning and available for use.
4. Secure all buildings and storage areas not in regular use. According to a set schedule, inspect and patrol within all facilities not in regular use, including the interior of buildings and along the facility perimeter.
5. Check critical unmanned sites and remote sites, according to a set schedule, for signs of unauthorized entry, suspicious packages, or unusual activities. Include right of way (ROW) surveillance in critical areas.
6. Under clearly stated company policy, direct that all personal, company and contractor vehicles at critical facility sites be secured. Random inspection of vehicles, including personally

owned vehicles parked on company property, should be conducted to ensure that parked vehicles are locked.

7. Guard personnel responsible for exterior perimeter security should be equipped with cameras. The ability to take a photograph of suspicious persons and vehicles can be a highly effective counter-surveillance measure and also provide crucial investigative value.
8. A full security inspection of each critical facility should be conducted by a company security officer on a regular schedule and no less than annually. Operations and maintenance personnel should share responsibility for being attentive to the condition of perimeter security and other security measures and equipment. Operations and maintenance personnel who find any evidence of unauthorized intrusion, or defective or malfunctioning security measures, should immediately submit a report of such. Company policy should require that any reports concerning security issues from operations and maintenance personnel be immediately directed to the senior security official of the company. A record should be maintained by the senior security official for a reasonable period (and not less than one year) of any affirmative reporting of a security related matter by operations or maintenance personnel.

### **Security Systems**

1. Electronic security measures should include a carefully selected mix of lighting, audible and inaudible alarms, loudspeakers, CCTV, and infrared and motion triggered sensors. Facility criticality, vulnerability assessments, and neighborhood considerations should all be considered in the selection of electronic security systems.
2. Electronic systems should be connected to a central monitoring station, where operators can carry out remote surveillance, be immediately alerted to possible intrusions, operate security

equipment remotely from the central facility, and direct a security or law enforcement response.

3. A well-maintained, lighted and patrolled perimeter fence can be the first line in a solid defense. Well-patrolled and monitored with CCTV, fencing can be very effective against attempts to breach and/or reconnoiter a facility.
4. Regularly check operation of CCTV systems and review policies with facility personnel. CCTV systems that provide a high resolution digital recording capability are preferred.
5. Provide adequate lighting in all parking and entry areas.
6. Use vision barriers (trees and scrubs and solid fencing) where appropriate. Vision barriers can prevent potential terrorist attacks, since they hinder surveillance activity.
7. Video cameras and signs in plain sight can indicate that an area is under surveillance by both motion and video surveillance. Motion sensors can be part of the macro view of exterior building air intake areas, and located within large diameter airshafts as well.

### **Emergency Communications**

1. Equip appropriate facilities/company officials with mobile radio, cell phone, and satellite telephone equipment.
2. Subscribe to Wireless Priority Service (WPS) for cell phone accounts for certain designated executive, emergency response and security officials.
3. According to a regular schedule, inventory and examine all mobile telephone, radio and satellite communication systems to ensure they are in place and operational. Regularly test mobile radio systems and satellite phones to ensure reliability. Review all data and voice communications channels to ensure user familiarity, and backup functions as designed.



4. Maintain a supply of fully charged mobile radio, cell phone and satellite phone battery packs.
5. Periodically test emergency communications for the ability to reliably contact law enforcement, including local FBI field offices, first responders, and county/city emergency management officials. Telephone, fax, cell phone and pager numbers for such officials should be regularly checked and updated as necessary.
6. Participate in local, regional, and system wide threat and warning dissemination processes.
7. Confirm the identity and availability of law enforcement / security resources that can assist with round-the-clock coverage of critical facilities. Regularly review and update this information.

### **Operations and Maintenance**

1. Regularly inspect perimeter fencing and promptly repair all fence breakdowns. Ensure that fencing does not have gaps near ground level due to washouts, erosion or poor installation. Ensure that fence gates do not leave significant gaps when closed.
2. Maintain clear buffer zones at fence lines. Require regular vegetation management on fences. Trim heavy shrubs and vines close to the ground to reduce their ability to conceal intruders or bombs.
3. Unless there is an absolute requirement for such ornamentation, remove window boxes and planters, as they are perfect receptacles for bombs. If they must remain, ensure that security patrols check such receptacles regularly.

4. Regularly examine security hardware on doors, locks, and windows. Regularly check emergency exit doors for functionality and operation.
5. Where practicable, erect and maintain barriers around utility supply points.
6. Periodically review energy/fuel source requirements. Provide backup for critical utility services (generators, batteries, fuel cells, on-site gasoline and diesel storage.)
7. Ensure that existing security measures such as fencing, locks, surveillance cameras, intruder alarms, and lighting are in place and functioning. Follow a regular schedule for examining and testing fixed mount security equipment and lighting.

### **Security Awareness**

1. Reinforce personal security awareness. Incorporate security awareness and information into employee education programs. Conduct employee security awareness training on a regular basis. Educate employees and specified contractor personnel on security standards and procedures.
2. Advise personnel of heightened threat notices, and provide fresh instruction on any measures required of employees by virtue of increased threat levels.
3. Advise all facility personnel to report the presence of unknown personnel; unidentified vehicles, or watercraft or aircraft; watercraft or aircraft operating out of the ordinary; abandoned parcels or packages; and other suspicious activities.
4. Instruct all personnel to be alert to vehicles parked for an unusual length of time in or near a facility.
5. Caution employees not to talk with outsiders concerning their facility or related topics.

6. Instruct personnel to not open suspicious packages. Inspect all mail and packages coming into a facility. Review the USPS Publication 166 "Mail Center Security Guidelines" with all personnel involved in receiving mail and packages.
7. Maintain awareness of any contractors working in a critical facility.
8. Maintain vigilance about changes in vendor personnel with site access.

### **Training, Exercise and Drills**

1. Periodically, conduct field drills and exercises involving various scenarios for both company and contract security force personnel.
2. With security and emergency response staff, conduct tabletop emergency response and security breach exercises. Table top exercises should be held on a regular basis to better prepare for response to various potential events, particularly with regard to confirming lines of authority, responsibility and communication.
3. Consider using third-party verification teams to improve the quality of certain forms of exercises and drills. Low intensity "red team" testing can be an effective and safe means to measure guard force response, as well as employee preparedness and vigilance.
4. With the participation of necessary operational personnel, conduct periodic drills to coordinate measures that would be needed to respond to a security breach and to shut down or stabilize utility systems.
5. Conduct combined planning sessions and tabletop drills with utility companies that have adjoining service territory.

6. Capture and document lessons learned after each incident or exercise. Utilize lessons learned to refine security policy and procedures.
7. Develop and rehearse procedures for shutting down and evacuating the facility. Facilities located near critical community assets should be especially vigilant.
8. Inventory and verify readiness of protective equipment available to security staff (eyewear and clothing, boots, respirators, gloves, etc.) Conduct training with staff in the use of protective equipment and clothing.

### **Chemical and Biological**

1. Place emphasis on protecting the potential Chemical/Biological (CB) release locations of HVAC/ventilation systems and other air intakes at critical buildings.
2. Preferably, air intakes should be limited to inaccessible building areas. Many air intakes are located at ground or below ground level. Protect these locations, since they are potential sites of attack. Not all portions of a ventilation system are likely to be the point of a CB agent release. Outside air intakes, return ductwork and the downstream side of the air supply system beyond the coils are all more likely points for the introduction of CB agents. Cost, location, aesthetics, building ordinances and practicality will determine the extent to which such measures are feasible.
3. Consider adapting technologies at critical buildings used to prevent the infiltration of toxic gases and particulates: HEPA filters, scrubbers, air handling systems to create positive indoor air pressure, etc.
4. Utility pipes may have valves or terminal points accessible at street or below street level. Relocate or protect such valves and points to the greatest degree possible.

5. Consider the installation of decontamination equipment in mail handling rooms to control microbial transmission, contamination and infection in building environments.

### **Physical Security of Bulk Electric Systems Critical Cyber Assets**

1. Create and maintain a physical security plan, approved by a senior manager or delegate that addresses the requirements in NERC Standard CIP-006-1, R1.
2. Document and implement the operational and procedural controls to manage physical access at all access points to the Physical Security Perimeter(s) twenty-four hours a day, seven days a week as required in NERC Standard CIP-006-1, R2.
3. Document and implement the technical and procedural controls for monitoring physical access at all access points to the Physical Security Perimeter(s) twenty-four hours a day, seven days a week as required in NERC Standard CIP-006-1, R3.
4. Record sufficient information to uniquely identify individuals and the time of access twenty-four hours a day, seven days a week as required in NERC Standard CIP-006-1, R4.
5. Retain physical access logs for at least ninety calendar days as required in NERC Standard CIP-006-1, R5.
6. Implement a maintenance and testing program to ensure that all physical security systems under requirements R2, R3, and R4 function properly.