

# PROPOSED RULEMAKING

## ENVIRONMENTAL QUALITY BOARD

[ 25 PA. CODE CH. 23 ]

### Acceptance of Rulemaking Petition for Study

On March 16, 2010, the Environmental Quality Board (Board) accepted a rulemaking petition for study under 25 Pa. Code Chapter 23 (relating to Environmental Quality Board Policy for processing petitions—statement of policy). The petition, submitted by the Stephenson Group Natural Gas Company, requests the amendment of 25 Pa. Code §§ 78.51 and 78.52 (relating to protection of water supplies; and predrilling or prealteration survey) to clarify procedures a well operator must adhere to in order to rebut the presumption of liability for contamination of a water supply within 1,000 feet of a proposed well. Under the Oil and Gas Act (58 P.S. §§ 601.101—601.605), a well operator is presumed to have contaminated a water supply if a well is drilled within 1,000 feet of a water supply and the supply becomes contaminated within 6 months. An operator can rebut the presumption of liability if the operator took a sample from the water supply prior to drilling and the test results show that the condition preexisted drilling, or the owner of the water supply refused to grant the operator access to test the supply. The petitioner claims that it is problematic if not difficult to ascertain the ownership or the right of a purveyor of a water supply, thus making it difficult to notify these parties. The petitioner proposes to amend 25 Pa. Code Chapter 78 (relating to oil and gas wells) to add a provision that would “deem” the well operator to have been refused access to test the supply if the operator sends two separate certified letters to the water supply owner and the owner either refuses to accept the letters or the letters are unclaimed or are undeliverable.

In lieu of proceeding with § 23.6 (relating to notice of acceptance and Department report) of the Board’s Policy for Processing Petitions, which requires the Department of Environmental Protection (Department) to prepare a report evaluating the petition within 60 days, the Department will review the petitioner’s suggested amendments as it proceeds with a proposed rulemaking to amend Chapter 78. At 40 Pa.B. 623 (January 30, 2010), the Department requested comments on proposed changes to regulations it is developing for Chapter 78 regarding the construction of oil and gas wells. As the Department proceeds with amendments to Chapter 78, it will address the petitioner’s recommendations within the proposed rulemaking package.

The previously-referenced petition is available to the public by contacting the Environmental Quality Board, P. O. Box 8477, Harrisburg, PA 17105-8477, (717) 787-4526 and is accessible on the Department’s web site [www.depweb.state.pa.us](http://www.depweb.state.pa.us) (select “Public Participation;” “Public Participation Center;” “Environmental Quality Board;” “Meeting/Agendas Handouts/Minutes;” “March 16, 2010”).

JOHN HANGER,  
Chairperson

[Pa.B. Doc. No. 10-552. Filed for public inspection March 26, 2010, 9:00 a.m.]

# PENNSYLVANIA PUBLIC UTILITY COMMISSION

### Withdrawal of Advance Notice of Proposed Rulemaking Order

Public Meeting held  
February 25, 2010

*Commissioners Present:* James H. Cawley, Chairperson; Tyrone J. Christy, Vice Chairperson, Statement; Kim Pizzigrilli; Wayne E. Gardner; Robert F. Powelson

*Advance Notice of Proposed Rulemaking for Revision of 52 Pa. Code Chapter 57 pertaining to adding Neutral Connection Inspection and Maintenance Standards for the Electric Distribution Companies; Doc. No. L-2008-2044821*

### Order

*By the Commission:*

On May 22, 2008, the Commission entered a Final Rulemaking Order at L-00040167 which promulgated regulations in 52 Pa. Code § 57.198, establishing inspection, maintenance, repair and replacement standards for electric distribution companies (EDCs). See 38 Pa.B. 4393 (August 9, 2008). The Final Rulemaking Order improved the Commission’s ability to monitor EDC service reliability and safety. Specifically, the Commission now receives biennial inspection, maintenance, repair, and replacement plans that should conform to minimum standard intervals set forth in § 57.198(n).

Concurrently, based upon two consumer complaints involving the failure of neutral connectors,<sup>1</sup> this Commission determined that the issue of whether EDCs should be subject to specific inspection and maintenance standards regarding neutral connections should be evaluated. Specifically, the Commission approved Commissioner Tyrone J. Christy’s Motion to consider additional standards for the inspection, maintenance and repair of neutral connections by opening a new rulemaking proceeding. An Advance Notice of Proposed Rulemaking was entered on July 21, 2008, soliciting comments on the EDCs’ current practices regarding the inspection, maintenance, repair and replacement of neutral connections and on whether the Commission should establish standards governing neutral connections within 52 Pa. Code Chapter 57. It was published for comments in the *Pennsylvania Bulletin* on August 9, 2008. Comments were filed by the Office of Consumer Advocate (OCA), the Energy Association of Pennsylvania (EAP), PPL Electric Utilities Corporation (PPL), PECO Energy Company (PECO), Duquesne Light Company (Duquesne Light), West Penn Power Company, d/b/a Allegheny Power (Allegheny Power), Wellsboro Electric Company (Wellsboro), Citizens’ Electric Company (Citizens’), and Metropolitan Edison Company (Met-Ed), Pennsylvania Electric Company (Penelec), and Pennsylvania Power Company (Penn Power) (collectively “The FirstEnergy Companies”).

In both the *Strickhouser* and *Kelley* cases, the EDCs argued that: neutral connection failure is a natural and foreseeable occurrence caused by corrosion; that 20 years is a reasonable amount of time for a neutral connection to

<sup>1</sup> *Strickhouser v. Metropolitan Edison Company*, Docket No. C-20077273, Order entered Dec. 20, 2007; *Luke Kelley v. Pennsylvania Electric Company*, Docket No. C-20066673, Order entered May 1, 2008.

last; that a bad neutral connection would not be discovered during the EDC's routine maintenance on a circuit because such connections are not visible to the naked eye; that the failure of a neutral connection is identified only after a trouble call is received from a customer; and that it is not practical or feasible for the company to inspect every neutral connection due to the large number of connections on each line. Instead of routinely inspecting and/or replacing neutral connections, the two EDCs relied on customer complaints to identify failed neutral connections.

We questioned whether these practices regarding neutral connection failures are adequate and reasonable.

The Public Utility Code in 66 Pa.C.S. § 2802(20) provides:

(20) Since continuing and ensuring the reliability of electric service depends on adequate generation and on conscientious inspection and maintenance of transmission and distribution systems, the independent system operator or its functional equivalent should set, and the Commission shall set through regulations, inspection, maintenance, repair and replacement standards and enforce those standards.

Additionally, the National Electrical and Safety Code at Section 214A<sup>2</sup> provides:

A. When in Service

1. Initial Compliance With Rules

Lines and equipment shall comply with these safety rules when placed in service.

2. Inspection

Lines and equipment shall be inspected at such intervals as experience has shown to be necessary.

*NOTE:* It is recognized that inspections may be performed in a separate operation or while performing other duties, as desired.

3. Tests

When considered necessary, lines and equipment shall be subjected to practical tests to determine required maintenance.

4. Record of Defects

Any defects affecting compliance with this Code revealed by inspection or tests, if not promptly corrected, shall be recorded; such records shall be maintained until the defects are corrected.

5. Remedying Defects

Lines and equipment with recorded defects that could reasonably be expected to endanger life or property shall be promptly repaired, disconnected, or isolated.

In view of Section 2802(20) and the two recent cases addressed by the Commission regarding neutral connections, and since the National Electrical Safety Code stresses the importance of the inspection and maintenance of lines and equipment, this rulemaking proceeding was initiated to consider whether to add inspection and maintenance of neutral connections standards in 52 Pa. Code Chapter 57, relating to electric distribution reliability.

<sup>2</sup> 66 Pa.C.S. § 2804(1)(ii) requires EDCs to comply with the National Electrical and Safety Code regarding the installation and maintenance of transmission and distribution facilities.

Multiple parties provided comments and reply comments to the following specific topics in the ANOPR Order:

1. Whether standards should be established by the Commission for inspection, maintenance, repair, and replacement of neutral connections so as to avoid unreasonable appliance and other household or business damage to consumers and to assure reasonably continuous electric service. Comments are requested on what, if any, those standards should be.
2. What electric distribution companies' internal inspection and maintenance procedures were in 1995, 2000, and 2007 regarding monitoring the failure rates of their neutral connections, inspecting, maintaining, replacing and repairing those neutral connections.
3. What were the EDCs' internal practices in 1995, 2000, and 2007 regarding the systematic replacement of neutral connections before they failed?
4. Whether a bad neutral connection is visible to the naked eye from the ground as part of a visual inspection. If not, what steps would the EDC have to take to properly inspect a neutral connection?
5. Are there limitations to the physical inspection of a neutral connection? If so, what are they?
6. How lengthy and complicated is a proper neutral connection inspection?
7. What incremental costs would the EDCs incur if required to comply with a neutral connection inspection and maintenance program interval of no less than once every five years for every neutral connection in their service territory?
8. What additional costs would be incurred?
9. What costs would the EDCs incur if required to systematically replace a portion of their neutral connections every year, such that all neutral connections would be replaced on a rolling basis (perhaps every 20 years)?
10. If a systematic replacement program were required, what would be the optimal replacement schedule and why?
11. How many neutral connection failures have the EDCs had per year in their service territories since 1995? What percentage of their overall customer base does this represent?
12. What have the EDCs paid over the past five years annually in compensatory and/or punitive damages to customers who have had property damage and/or personal injury due to failed neutral connections?
13. Whether standards should be placed in the regulations which are specific to each individual EDC, or whether all EDCs should be held to the same standard, and how this would be monitored and regulated.
14. Whether there should be automatic civil penalties written into the regulations for failure to meet standards.
15. Can smart metering/AMI systems provide a means of identifying potential bad or failing neutral connections? If so, what capabilities, specifications and communication channels would be needed to incorporate such diagnostic systems and at what incremental cost, if available?

In general, the commenting parties were opposed to the Commission adopting specific inspection and maintenance standards for neutral connections. Summaries of the comments and reply comments follow.

#### *OCA's Comments*

OCA commented on October 8, 2008, that the Commission should establish standards for the inspection, maintenance, repair and replacement of neutral connections if the data provided in response to the ANOPR warrants such an action. OCA stated, "Without knowing the extent of neutral connection failures or the extent that such failures present a safety and reliability risk to customers, it is not possible for the OCA to determine whether standards should be established at this time." OCA Comments, p. 2.

OCA further commented that the Commission must analyze the data concerning each EDC's current maintenance and inspection program, as well as the failure rate data, with regard to neutral connections to determine if standards are necessary and, if so, the proper standard. Cost effectiveness should also be analyzed. OCA is in favor of automatic civil penalties should the Commission adopt standards.

#### *Energy Association of Pennsylvania's Comments*

On October 8, 2008, EAP<sup>3</sup> commented that a visual inspection of a neutral connection is difficult, costly, and does not necessarily assist in curtailing future failure. First, in order to complete an inspection, electric service must be turned off to the residential or commercial building. Second, some neutral connections are below ground, others are 30–40 feet above ground, and others are on the customer's premise. Therefore, not all neutral connectors are in the same physical location. Third, neutral connections rarely fail. The number of service outages attributed to neutral connection failure is minimal when compared with other causes of outages.<sup>4</sup> Fourth, visual inspections of above ground neutral connections have little value as an inspected neutral connection can fail two months or even one hour after being inspected. EAP contends the inspection is of little use because it is not necessarily a predictor of when the connection will fail. In fact, EAP contends the actual testing of the connection could lead to failure of the device and would possibly do more harm than good.

Regarding cost, EAP contends the cost of regular inspections of neutral connections equals \$87.5 million per year in aggregate. This figure is based upon service connection tests for single-phase self-contained meters every 5 years and includes initial start-up costs. Other assumptions used in this figure are unknown.

EAP further claims that during the installation and removal of meters, a small number of meter bases fail. It is likely that during the installation and removal of meters and test equipment required during a neutral test, a number of meter bases will fail. Meter bases are customer-owned equipment and any repair or replacement would be the responsibility of the customer. These unplanned failures will result in significant inconvenience and expense to customers who must unexpectedly secure an electrician to make repairs.

EAP contends that no additional standards are necessary for periodic inspection, maintenance, repair and

replacement of neutral connections because there have only been two formal complaints received regarding neutral connection failure as compared to the fact that there are over 5 million neutral connections in Pennsylvania. There is a high cost involved to the EDC and there is no demonstrable benefit to improving reliability for the customers. Further, the Commission already has authority to regulate voltage standards. Neutral connections fail at a very low rate and in an unpredictable manner. Modern connectors have proven themselves to be highly reliable with extended service lives. Scheduling routine replacement of connections would be extremely labor-intensive and costly, resulting in the replacement of good connections with no improvement in reliability.

EAP contends that the neutral connection to be tested or replaced is not detailed in the proposed rulemaking language. Due to available technology, there are electrical limitations on neutral connection testing. EDCs would only be able to perform a practical test on single-phase, self-contained meters, which would include primarily residential customers and small commercial customers. Large and complex industrial and commercial services bring additional physical limitations and test methods cannot be reasonably employed.

According to EAP, the EDCs' policies in the years 1995 through 2007, were to repair or replace a neutral connection when a service investigation determined that a problem with a neutral connection existed. The EDCs would investigate customer complaints and then repair and replace as necessary. EAP claims the EDCs take customer complaints about voltage issues (blinking or dimming lights) seriously. Service crews perform a checklist of items including either testing connections with a load device or replacement of the connections altogether. According to EAP, electrical conduction occurs inside the enclosed connector. When a failure occurs, it often is due to a deterioration of the contact surface between the wire and the connector. Since contact surface is not visible, it is not generally possible to assess the condition of the connection through a visual inspection unless it is broken. Neutral connectors beneath the ground are not visible.

Even if the EDCs were to be required to replace neutral connections every 20 years, the EAP claims this would burden the industry with an annual estimated cost of \$49.3 million per year without a corresponding increase in reliability as some of the replaced neutral connections would have a significant remaining service life and their replacement would not improve overall reliability. Further, EAP claims customers would also incur costs associated with neutral connection inspection and maintenance including: meter base replacement, service entrance cable replacement, service panel replacement, rerouting of service lines, relocation of electric service, and the costs involved with trenching and installing conduit to receive new underground service wire from the company. EAP states that smart metering/AMI systems cannot determine a faulty neutral connection.

Finally, EAP argues that the Commission is without authority and it would be unfair to impose automatic civil penalties upon EDCs that are in violation of any regulatory standards. See *County Place Waste Treatment Company, Inc. v. Pennsylvania Public Utility Commission*, 654 A.2d 72 (Pa. Cmwlth. 1995).

#### *PPL Electric Utilities Corporation's Comments*

PPL estimated additional costs of a 5-year inspection and maintenance program for neutral connections would cost the company \$8.9–\$10.0 million annually for labor,

<sup>3</sup> Electric distribution companies supporting the EAP's comments include: Allegheny Power, Citizens' Electric Company, Duquesne Light Company, Metropolitan Edison Company, PECO Energy Company, Pennsylvania Electric Company, Pennsylvania Power Company, Pike County Light and Power Company, PPL Electric Utilities, UGI Utilities, Inc.—Electric Division, and Wellsboro Electric Company.

<sup>4</sup> EAP claims that only two formal complaints have been received [by the Commission] compared to the vast number of customer/neutral connections.

vehicles, test equipment, and the like. PPL estimated additional costs of a 20-year program are \$15 million for labor, vehicles, and materials. PPL claims its depreciation life for underground and overhead services is currently 34 years. If a systematic replacement program were required, it should include replacement of the entire service, not just connectors, and should be on a 40-year or longer cycle. However, PPL claims it does not have data on life before wear out for connectors, but it does currently have neutral connections that have been in service in excess of 50 years.

PPL estimates that 330 cases in 2006 involved neutral connections being replaced. So approximately 350 out of 1,358,429 customers were affected by neutral connections in 2006. Additionally, damages paid out from 2003 to 2007 total less than \$1 million. PPL is opposed to automatic civil penalties.

#### *PECO Energy Company's Comments*

On October 8, 2008, PECO submitted comments. PECO states there are adequate building and housing industry codes which provide adequate grounding protections as well as adequate Commission standards and regulations at 66 Pa.C.S. § 1501 and 52 Pa. Code § 57.198 which cover these issues. PECO believes the adoption of neutral connections standards is premature. At minimum, the Commission should conduct a cost-benefit analysis to ascertain the benefits of inspection and replacement standards for neutral connectors and whether they outweigh the cost of the inspections and inconvenience to the customers. Beginning in 2009, PECO claims it will begin annually inspecting its circuits. The promulgation of neutral connections standards is not needed. PECO claims that when a service trouble inquiry reveals a neutral connection problem, the connection is either repaired or replaced. In 1999, PECO implemented aerial circuit patrol/thermography. Aerial circuits are patrolled every 2 years for discernable defects or "hot spots" identified by thermography camera. However, a bad neutral connection is generally not visible to the naked eye.

PECO estimated incremental costs to comply with a 5-year interval basis for PECO's service territory of 1.4 million residential customers to be \$39,210,000 not including travel costs. The estimated start up costs are \$5,580,000 not including travel costs. Further, customer service interruptions would be necessary.

Excluding travel and set up time, PECO estimated costs to replace neutral connections on a rolling 20-year basis are \$9,803,000. The start-up costs including travel for replacements on the same 20-year basis would be approximately \$9,803,000 per year. PECO believes most neutral connections are operable substantially longer than 20 years.

PECO claims that in 2008, it addressed only 242 service issues related to aerial neutral connections issues. Of the 1.4 million residential customers in PECO's service territory, these neutral connections issues represent only 0.02% of the company's customer base. PECO's Comments, p. 15. PECO claims that in 2007 it paid out \$23,035 related to 66 connection cases. In 2008, PECO reports 33 cases with damages paid totaling \$8,526 as of October, 2008. PECO is not in favor of automatic civil penalties.

#### *FirstEnergy Companies' Comments*

On October 8, 2009, the FirstEnergy Companies<sup>5</sup> filed Comments. FirstEnergy acknowledged that the two for-

mal complaints cited by the Commission as a catalyst for this rulemaking proceeding were against FirstEnergy Companies. However, these two formal complaints represent 0.00017% of its 1.2 million customer base in Pennsylvania. FirstEnergy claims this statistic does not indicate a systemic problem meriting industry-wide regulations regarding inspection and maintenance standards for neutral connectors.

Not only would such standards cost the ratepayers millions of dollars in aggregate, such regulations would not guarantee any meaningful results or improvement in reliability. FirstEnergy Comments, pp. 1 and 2. The FirstEnergy Companies have not engaged in any systematic replacement of neutral connections before failure. However, they are inspected visually as part of the current 5-year line and transformer inspection programs, and observed problems are addressed appropriately.

FirstEnergy Companies claim that they would incur substantial costs to comply with a neutral connection inspection and maintenance program interval of no less than once every 5 years for every neutral connection in their service territories. For visual inspections, this would cost \$6,503,806 per year for 5-year cycles, and \$1,578,117 annually for 20-year cycles. For inspections involving the "beast of burden" voltage reader, it would cost \$10,712,117 annually for a 5-year period and \$2,630,194 annually for a 20-year period. Inspections involving destructive examination and replacement would cost \$28,212,690 per year for a 5-year cycle and \$7,053,173 per year for a 20-year cycle plan.

FirstEnergy Companies claim that there is no optimal replacement schedule. A systematic replacement schedule would not be prudent. There is no evidence that connections such as those used in the FirstEnergy's neutral systems are subject to "wearing out" at some statistical level. FirstEnergy Comments, p. 12.

Metropolitan Edison began tracking neutral connection failures in January 1, 2008. For the period of January 1, 2008 through June 30, 2008, Metropolitan Edison addressed 19 failures for an annual rate of .000028. Penn Power and Penelec do not track neutral failures. From 2003-2008, Penelec has paid claims on 71 events totaling \$53,268. Penn Power paid claims on nine events from 2002-2008 totaling \$7,370. Met-Ed paid claims on 24 events in 2008 between 1/1/08 and 8/22/08 totaling \$15,433. FirstEnergy Companies believe utilities should be held to the manufacturer's recommendations of the products used, including neutral connections. FirstEnergy Companies oppose automatic civil penalties.

#### *Duquesne Light Company's Comments*

On October 8, 2008, Duquesne Light filed comments. Duquesne Light does not currently map or track the installation or size of its service lines, but it estimates the incremental cost increase to complying with a 5-year I&M plan would be approximately \$3 million annually, with initial start-up costs of \$26 million the first year. Customer additional costs would include costs for problems found with customer equipment, electricians, obtaining wiring approvals and loss of service. If Duquesne Light was on a 20-year cycle, its start-up costs are estimated to be approximately \$25.6 million assuming no inspection requirement. Estimated annual costs after start-up costs would be in excess of \$1.5 million.

Duquesne Light believes the optimal replacement schedule for neutral connections is to replace at failure and this is based on Section 21-214 of the National Electrical Safety Code, "Inspection of lines and equipment."

<sup>5</sup> The FirstEnergy Companies consist of Metropolitan Edison Company, Pennsylvania Electric Company and Pennsylvania Power Company.

Duquesne Light stated it does not track the number of failures for this type of connection, but based on consultations with its field personnel, it estimates 200 cases annually are in response to customer voltage complaints, which represents .03% of its total customer base, based on 580,000 customers. Duquesne Light receives approximately 12 claims for property damage annually out of 200 failing or faulty neutral connections found each year. The company pays out approximately \$9,000 per year in damages for failing neutral connectors. Duquesne Light opposes automatic civil penalties.

*West Penn Power Company, d/b/a Allegheny Power's Comments*

On October 7, 2008, Allegheny Power commented that inspection and maintenance standards for neutral connections are unnecessary because neutral connections are highly reliable and have a very long life resulting in very few customer service issues. Allegheny Power claims that approximately 0.045% of its customer base reports a potential neutral connection problem annually (319 bright/dim calls per year), of which a smaller amount is an actual neutral connection deterioration problem. Allegheny Power claims that it investigates neutral connection problems promptly and makes necessary repairs to restore service. Allegheny Power's Comments, p. 1.

Allegheny Power claims that given the small number of neutral connection problems coupled with the improbability of finding the problems on inspection before the customers report them, the proposed program would have little if any benefit to the customers. Allegheny Power estimates annual cost increases of over \$10,000,000 to implement a routine 5-year inspection and maintenance program for approximately 635,000 neutral connections in its territory.

Allegheny Power has paid, on average, \$84,500 per year for claims and \$0 punitive damages to customers over the past 5 years for claims related to deteriorated neutral connections. Allegheny Power is against automatic civil penalties.

*Wellsboro Electric Company's Comments*

Wellsboro's maintenance procedure is driven by trouble reports from customers which it claims are very rare. Once a complaint about a voltage issue is received, a service crew is dispatched and performs a checklist of items including either inspecting and testing connections with a load device or replacement of connections. There is no program in place to replace neutral connections before failure.

Wellsboro has approximately 5,700 customers served by single phase self-contained meters. Its estimated cost to replace 1/5 of these annually is \$225,000. Additionally, other expenses would total approximately \$100,000 annually. Even on a 20-year routine, Wellsboro estimates an annual cost to replace the connections at \$154,000 plus a one-time estimated cost for database development at \$15,000—\$20,000. Wellsboro claims only 3 incidents since 1995 have been related to neutral connections. Wellsboro has paid out \$710 for a 2007 claim involving loose connectors. Wellsboro is opposed to automatic civil penalties and there is no technology in the AMR/AMI systems to provide voltage variation information to the EDC.

*Citizens' Electric Company*

On October 10, 2009, Citizens' filed comments claiming that during the 14 year period of 1995—2008 requested, Citizens' has had just 7 customers affected by failures of neutral connectors on Citizens' system. Citizens' has

approximately 6,400 customers served by single phase self-contained meters. This represents an average annual failure rate of 0.0077% of their customers. Five of the incidents were associated with a specific group of atypically defective transformers which failed after a short time in service.

Performing a 5-year cycle inspection and maintenance program on its system would cost the company an estimated \$253,000 annually. Additionally, Citizens' would have to increase its outside workforce by approximately 20%. Thus, it estimates an additional \$50,000 in costs for training, equipment and administrative expenses associated with inspection and maintenance standards. Citizens' believes it has approximately 35,000 connections in its system. Using a 20-year cycle, 1,675 connections would need to be replaced each year. A database would have to be created costing the company \$20,000 to track the cycles. Also, Citizens' estimates materials, labor, equipment and administrative costs of the replacements would total an estimated \$147,000 annually.

Citizens' has paid \$1,522.50 in damages to one customer related to a failed connector within the past 5 years. Citizens' opposes automatic civil penalties.

*Work site visit at Met-Ed Lebanon Customer Operations Center*

On December 8, 2008, Commission staff met with Metropolitan Edison staff at the Met-Ed Lebanon Customer Operations Center, 600 South Fifth Avenue, Lebanon, PA. Met-Ed staff provided Commission staff with an overview of neutral connections, including types of connections, installation tools and inspection techniques. They then visited two work sites where a Met-Ed line crew identified and inspected the neutral connections at two residential customer homes. One home was served by overhead electric service and the other home was served by an underground electric service. Each inspection took more than 30 minutes and more than one lineman was involved. Service had to be shut down to the residences to complete the inspection. Regarding the overhead service inspection, a section of wire leading into the home was removed. Met-Ed's lineman stated this was because it is impossible to know whether the wire has rusted through the outside to the inner part otherwise.

*Discussion*

Based upon the foregoing comments and reply comments we received in addition to the work site visit Commission staff took to witness neutral connections inspection procedures on an overhead and underground line, we find that standards regarding neutral connections maintenance, inspection, repair, and replacement are unnecessary, cost prohibitive, and of minimal value in comparison to a potentially significant cost of over \$85 million per year in aggregate for compliance to the EDCs and ultimately, perhaps, their ratepayers. Given the average number of customer outages each year compared with the customer base, neutral connection failures appear to be a relatively insignificant cause of outages, and this Commission believes that it is not a cost effective use of inspection and maintenance funds to inspect and/or track neutral connection issues.

Even a testing program, as proposed by OCA, would cost approximately \$87.4 million of additional annual costs for the aggregate number of EDCs operating in the Commonwealth to comply with a neutral connection inspection and maintenance program on a 5-year interval basis. Costs to consumers for repair of EDC equipment would be in addition to the \$87.4 million, according to

EAP. Even OCA is concerned about additional costs to ratepayers in the form of not only rate hikes but customer outages from the testing program.

Each test takes 1 hour of field work per meter according to PPL. This may be inflated, but labor costs would be involved, and the customer may experience outage downtime while the inspection is taking place. A visual inspection is limited. It only shows the exterior of the components, not the points of contact between components where the electrical connection is made. Dismantling and reassembling components takes a long time (approximately 1 hour per connection) and will result in some percentage of reassembly errors leading to failures. Additionally, we are concerned about costs to consumers from replacing meter bases to trenching costs. Additionally, each detailed inspection using the "beast of burden" machine involves a service outage to the customer. Moreover, it is unclear at this time whether smart metering/AMI systems are a feasible means of identifying potentially bad or failing neutral connections. They are not designed to read voltage problems. All EDCs are opposed to automatic civil penalties, and it appears that the amounts the EDCs have paid out in damages to customers specifically involving neutral connections problems is unknown, but even those damages paid out to compensate customers for problems involving voltage issues (that is, dimming or flickering lights) is relatively small.

We are not persuaded by EAP's claim that there have only been two complaints received related to neutral connection problems, because the EDCs reported hundreds of outages related to voltage issues, and all of the EDCs reported paying some damages to customers regarding complaints involving voltage issues. Although the Commission does not have legal authority to award damages, we recognize the good business practices of a few of the responding EDCs who acknowledge providing damages to their customers who have sustained a loss as a result of damage caused by failed neutral connections. Because failed neutrals are a risk of doing business for companies who distribute electricity, we strongly encourage other EDCs who have not adopted such a practice to consider compensating their customers, for known and verifiable losses sustained as a result of failed neutral connections.

We believe the current inspection and maintenance standards at 52 Pa. Code § 57.198 are sufficient. Neutral connection failures are low in number and there are many more common causes of outages that need Commission tracking and oversight. Although visual and aerial inspections of lines and transformers will not always detect a failing neutral connection, the fact that the EDCs are now required by 52 Pa. Code § 57.198 to do cyclical inspections of these parts of their systems, may reveal some loose or rusted neutral connections also. The EDCs will note if there are visual problems such as loose or rusted connections and the EDCs have assured the Commission that they will take steps to repair or replace said neutral connection problems in a timely manner, a procedure consistent with the National Electric Safety Code. *Therefore,*

*It Is Ordered That:*

1. The rulemaking proceeding initiated at this docket to consider the revision of the regulations appearing in 52 Pa. Code Chapter 57, relating to neutral connection inspection and maintenance standards for electric distribution companies, is hereby withdrawn and discontinued.

2. A copy of this order shall be served upon all parties that filed comments to the Advance Notice of Proposed Rulemaking at L-2008-2044821 including: the Energy Association of Pennsylvania, Office of Consumer Advocate, and all EDCs operating in this Commonwealth.

3. A notice of withdrawal of the Advance Notice of Proposed Rulemaking be published in the *Pennsylvania Bulletin*.

4. This matter shall be marked closed.

JAMES J. McNULTY,  
*Secretary*

*Statement of Vice Chairperson Tyrone J. Christy*

Today the Commission is discontinuing the above-captioned rulemaking on the basis that standards for the maintenance, inspection, repair and replacement of neutral connections would be cost-prohibitive. I fully support this decision. Although I agree that an inspection or replacement program does not appear to be cost-effective, I want to reiterate the Commission's conclusion that electric distribution companies (EDCs) should voluntarily reimburse their customers for damages caused by failed neutral connections.

Instead of routinely inspecting and/or replacing neutral connections, it is the EDCs' practice to rely upon customer complaints of voltage fluctuations to identify failed neutral connections. The EDCs investigate these customer complaints, and repair and replace neutral connections as needed. Voltage fluctuations often result in the failure of customer-owned appliances and electronic equipment, which must be replaced at a cost that can be significant when borne by an individual customer. Since EDCs rely on customer complaints to identify failed neutral connections, the costs incurred by those customers should be reimbursed.

The damages incurred by customers due to failed neutral connections appear to be significant. The EDCs provided information indicating that there are a significant number of failed neutrals every year. PPL reported that it had approximately 350 instances of failed neutral connections in 2006. PECO reported that it had 242 instances of failed neutral connections in 2008. Met Ed reported 19 failures during the first six months of 2008. Duquesne estimated that it has 200 cases annually. West Penn reported that it has 319 "bright/dim" calls per year, of which a portion are due to neutral connection failures.<sup>1</sup> Based on the number of neutral connection failures reported by the EDCs, it appears there may be upwards of 1,000 instances of failed neutral connections annually in Pennsylvania.

Although the Commission does not have the authority to award damages, I strongly urge EDCs to voluntarily compensate their customers for known and verifiable damages that are caused by failed neutral connections. Given the EDCs' reliance on customer complaints to identify failed neutral connections, the EDCs should compensate their customers for the damages that they experience. I fully support the Commission's conclusion that reimbursing customers for damages caused by failed neutral connections is a sound business practice. We strongly urge EDCs that have not adopted such a practice to consider doing so.

Finally, I would like to thank all of the parties that filed comments in this proceeding. The information submitted by the electric distribution companies (EDCs) and

<sup>1</sup> Penelec and Penn Power do not track neutral connection failures.

the Energy Association of Pennsylvania (EAP) allowed us to explore this issue in depth and to reach an informed conclusion.

TYRONE J. CHRISTY,  
*Vice Chairperson*

[Pa.B. Doc. No. 10-553. Filed for public inspection March 26, 2010, 9:00 a.m.]

## STATE BOARD OF CHIROPRACTIC

[ 49 PA. CODE CH. 5 ]

### Review of Chiropractic Treatment

The State Board of Chiropractic (Board) proposes to amend its regulations to add §§ 5.55 and 5.56 (relating to independent chiropractic examination; and chiropractic peer review) to read as set forth in Annex A.

#### *Effective date*

The amendments will be effective upon publication of the final-form rulemaking in the *Pennsylvania Bulletin*.

#### *Statutory Authority*

Section 302(3) of the Chiropractic Practice Act (act) (63 P. S. § 625.302(3)) authorizes the Board to promulgate, adopt and enforce rules and regulations necessary to carry out the act.

#### *Background and Need for the Amendment*

Chiropractors often review the treatment of another chiropractor or independently examine a chiropractic patient, such as for workers' compensation or motor vehicle accident purposes. The proposed rulemaking will set forth standards for a licensed chiropractor to follow in those situations.

#### *Description of the Proposed Amendments*

##### *Proposed § 5.55—Independent chiropractic examination.*

The proposed rulemaking would first address independent chiropractic examinations. Proposed subsection (a) would set the basic qualifications by requiring that a chiropractor performing an independent chiropractic examination be currently licensed in this Commonwealth, actively practice at least 20 hours a week, and have professional liability insurance that covers independent chiropractic examinations. Proposed subsection (b) would provide that a chiropractor may not perform an independent chiropractic examination if the chiropractor has previous professional involvement with the patient or chiropractor under review, has performed or provided precertification or other professional services in the same matter, or the chiropractor's impartiality may reasonably be questioned.

Proposed subsection (c) would require a chiropractor performing an independent examination to obtain and review the patient record of the treating chiropractor. Proposed subsection (d) would require a chiropractor performing an independent examination to take a history and perform a clinical examination of the patient and to complete a patient record. Proposed subsection (e) would require a chiropractor performing an independent chiropractic examination to prepare, review and sign a report of the examination. This report would include a description of records reviewed, a recital of history and

examination findings, discussion of tests and the basis for conducting the test, review of the patient's response to prior care and treatment, and other facts supporting the opinion, and the clinical rationale for any opinion. Proposed subsection (f) would require a chiropractor performing an independent examination to provide a copy of the report to the treating chiropractor. Proposed subsection (g) would prohibit a chiropractor performing an independent examination from recommending to the patient any alteration in care or soliciting the patient for care.

Finally, proposed subsection (h) would define the term "independent chiropractic examination" to include a chiropractic examination of a workers' compensation claimant at the request of the employer and a chiropractic examination of a person injured in a motor vehicle accident upon court order.

##### *Proposed § 5.56—Chiropractic peer review.*

The proposed rulemaking would also address chiropractic peer review. Proposed subsection (a) would set the basic qualifications by requiring that a chiropractor performing a chiropractic peer review be currently licensed in this Commonwealth, actively practice at least 20 hours a week, hold an adjunctive procedures certificate if the review addresses adjunctive procedures, and have professional liability insurance that covers chiropractic peer review. Proposed subsection (b) would provide that a chiropractor may not perform a chiropractic peer review if the chiropractor had previous professional involvement with the patient or chiropractor under review, has performed or provided precertification or other professional services in the same matter, or the chiropractor's impartiality may reasonably be questioned.

Proposed subsection (c) would require a chiropractor performing a peer review to prepare, review and sign a report of the peer review. This report would include a description of records reviewed, a review of the patient's response to prior care and treatment, and other facts supporting the opinion, and the clinical rationale for any opinion. Proposed subsection (d) would require a chiropractor performing a peer review to provide a copy of the report to the treating chiropractor.

Finally, proposed subsection (e) would define the term "chiropractic peer review" to include a utilization review or peer review of chiropractic treatment of a workers' compensation claimant and a peer review of chiropractic treatment of a person injured in a motor vehicle accident.

##### *Fiscal Impact and Paperwork Requirements*

The proposed regulations will have no adverse fiscal impact on the Commonwealth or its political subdivisions. The regulations will impose no additional paperwork requirements upon the Commonwealth, political subdivisions or the private sector.

##### *Sunset Date*

The Board continuously monitors the effectiveness of its regulations. Therefore, no sunset date has been assigned.

##### *Regulatory Review*

Under section 5(a) of the Regulatory Review Act (71 P. S. § 745.5(a)), on March 11, 2010, the Board submitted a copy of this proposed rulemaking and a copy of a Regulatory Analysis Form to the Independent Regulatory Review Commission (IRRC) and to the Senate Consumer Protection and Professional Licensure Committee and the House Professional Licensure Committee. A copy of this material is available to the public upon request.

Under section 5(g) of the Regulatory Review Act, IRRC may convey comments, recommendations or objections to the proposed rulemaking within 30 days of the close of the public comment period. The comments, recommendations or objections shall specify the regulatory review criteria which have not been met. The Regulatory Review Act specifies detailed procedures for review, prior to final publication of the rulemaking, by the Board, the General Assembly and the Governor of comments, recommendations or objections raised.

*Public Comment*

Interested persons are invited to submit written comments, suggestions or objections regarding this proposed rulemaking to Regulatory Unit Counsel, Department of State, P. O. Box 2649, Harrisburg, PA 17105-2649, or by e-mail at [st-chiropractic@state.pa.us](mailto:st-chiropractic@state.pa.us), within 30 days following publication of this proposed rulemaking in the *Pennsylvania Bulletin*. Use reference No. 16A-4315 (review of chiropractic treatment), when submitting comments.

KATHLEEN G. McCONNELL, D. C.,  
Chairperson

**Fiscal Note:** 16A-4315. No fiscal impact; (8) recommends adoption.

**Annex A**

**TITLE 49. PROFESSIONAL AND VOCATIONAL STANDARDS**

**PART I. DEPARTMENT OF STATE**

**Subpart A. PROFESSIONAL AND OCCUPATIONAL AFFAIRS**

**CHAPTER 5. STATE BOARD OF CHIROPRACTIC**

**Subchapter E. MINIMUM STANDARDS OF PRACTICE**

**§ 5.55. Independent chiropractic examination.**

(a) A chiropractor performing an independent chiropractic examination in this Commonwealth shall:

(1) Hold a current valid license to practice chiropractic in this Commonwealth.

(2) Be currently engaged in the clinical practice of chiropractic in this Commonwealth at least 20 hours per week.

(3) Have professional liability insurance that covers independent chiropractic examinations.

(b) A chiropractor may not perform an independent chiropractic examination if:

(1) The chiropractor had previous professional involvement with the patient or provider under review.

(2) The chiropractor has performed or provided precertification, case management, vocational rehabilitation or any other services in the same matter.

(3) The chiropractor's impartiality may reasonably be questioned.

(c) A chiropractor performing an independent chiropractic examination shall obtain and review the patient record of the currently treating chiropractor.

(d) A chiropractor performing an independent chiropractic examination shall take the patient's history and perform a clinical examination and complete a patient record as required under § 5.51 (relating to patient records).

(e) A chiropractor performing an independent chiropractic examination shall prepare, review and sign a report, containing at a minimum the following:

(1) The nature and extent of the records reviewed, including other information presented, such as test results.

(2) A recital of the history, clinical examination and findings.

(3) The tests performed, including the basis for conducting each test and the results.

(4) A review of the patient's response to prior care and treatment.

(5) Other facts upon which any opinion is based, together with the source of those facts.

(6) The clinical rationale for any opinion expressed with respect to the patient's current condition.

(f) A chiropractor performing an independent chiropractic examination shall provide a copy of the signed report to the chiropractor currently providing chiropractic care to the patient.

(g) A chiropractor performing an independent chiropractic examination may not:

(1) Make recommendations directly to the patient for alterations in care.

(2) Solicit the patient for care.

(h) The following words and terms, when used in this section, have the following meanings, unless the context clearly indicates otherwise:

*Independent chiropractic examination*—A chiropractic examination and evaluation performed by a chiropractor other than a chiropractor currently providing the patient with chiropractic care and to be used for the purpose of determining the patient's current chiropractic condition and prognosis. The term "independent chiropractic examination" includes examination by a chiropractor under section 314 of the Workers' Compensation Act (77 P. S. § 651) or under 75 Pa.C.S. § 1796 (relating to mental or physical examination of person).

**§ 5.56. Chiropractic peer review.**

(a) A chiropractor performing a chiropractic peer review in this Commonwealth shall:

(1) Currently hold a valid license to practice chiropractic in this Commonwealth.

(2) Be currently engaged in the active practice of chiropractic, in the chiropractic specialty of the chiropractic treatment under review, if any, in this Commonwealth at least 20 hours per week.

(3) Currently hold a valid adjunctive procedures certificate issued by the Board, if the review addresses adjunctive procedures.

(4) Have professional liability insurance that covers chiropractic peer reviews.

(b) A chiropractor may not perform a chiropractic peer review if:

(1) The chiropractor had previous professional involvement with the patient or provider under review.

(2) The chiropractor has performed or provided precertification, case management, vocational rehabilitation or any other services in the same matter.

(3) The chiropractor's impartiality may reasonably be questioned.



(c) A chiropractor performing a chiropractic peer review shall prepare, review and sign a report, containing at a minimum the following:

(1) The nature and extent of the records reviewed, including other information presented, such as test results.

(2) A review of the patient's response to prior care and treatment.

(3) Other facts upon which any opinion is based, together with the source of those facts.

(4) The clinical rationale for any opinion expressed with respect to the patient's prognosis and need for chiropractic care.

(d) A chiropractor performing a chiropractic peer review shall provide a copy of the signed report to the chiropractor currently providing chiropractic care to the patient.

(e) The following words and terms, when used in this section, have the following meanings, unless the context clearly indicates otherwise:

*Chiropractic peer review*—A review and evaluation of chiropractic patient records performed by a chiropractor other than a chiropractor currently providing the patient with chiropractic care and to be used for the purpose of determining the appropriateness of continued chiropractic care. The term "chiropractic peer review" includes utilization review under section 306(f.1)(6) of the Workers' Compensation Act (77 P. S. § 531(6)) and includes peer review under section 420 of the Workers' Compensation Act (77 P. S. §§ 831 and 832) or under 75 Pa.C.S. § 1797(b) (relating to customary charges for treatment).

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