

Lower Makefield Township
Electric Reliability Committee (ERC)
March 12, 2015
Meeting Minutes

Present: Kristin Tyler
William Bogdan
James Ferraro
Bernard Griga
John Kingham
James Kirlin

Apologies: Richard Gorelick

The March 12, 2015 meeting of the Lower Makefield Township Electric Reliability Committee (ERC) was called to order at 7:06 PM in the Township Offices by Chairman Kingham.

Approval of past minutes: The minutes of the meeting of February 12, 2015 were approved and are [posted](#).

Agenda: The meeting agenda is appended to these minutes. ([Attachment 1](#)).

Old Business:

-- Website & TV Channel Information on ERC Activities:

The committee noted with satisfaction the upgraded links to the ERC ([Information page](#)) and the [Electric Power News](#) on the Township website and the PECO update on the TV channel ([see attachment 2](#)).

-- PECO Vegetation Management:

The Chairman advised the committee that the advice given by Mr. Dorand of PECO in his email of February 11, 2015, concerning vegetation management, has been adapted for posting on the website (See [Attachment 3](#) & [Attachment 4](#)). From a discussion on the most effective way to post the information on the LMT Website, the committee agreed with Supervisor Tyler's recommendation for a simple TV Channel slide directing residents to the website page.

It was also agreed that Supervisor Tyler will contact Mr. Dorand with a view to having the PECO Vegetation Manager give a presentation to the committee on PECO's vegetation management program. Additionally, Supervisor Tyler will contact the Township Arborist and seek his counsel relative to ANSI tree management standards.

New Business:

-- ERC Liaison to LMT EMAC (Electronic Media Advisory Committee):

Mr. Bernard Griga reported on his participation in the LMT Communications Forum on February 17, 2015 and the EMAC meeting on February 26, 2015. Moreover, in order to enhance

viewer access to Township information, Mr. Griga now plans to discuss possible website changes with the EMAC.

-- PECO Outage Questionnaire:

After due consideration by the committee, it was decided that Mr. James Ferraro would explore alternative questionnaire scripts that could be more amenable to acquiring outage information from Township homeowners.

Power Utility Outage Reporting & Outage Management Systems:

Mr. Bogdan drew attention to outage reporting and management systems used by other electric power distribution utilities such as Baltimore Gas & Electric (BG&E) which, in common with PECO, is an Exelon Company. Mr. Bogdan illustrated his remarks with the information shown in attachment no. 5 to these minutes. Unlike the system presently in use by PECO, the BG&E system shows online the system trouble locations down to the street level with detailed restoration information and progress. (See [Attachment 5](#).)

It was recognized that PECO has stated in past meetings that it is working towards implementing a similar system with possible completion by the end of 2015. PECO has also previously stated that full implementation will only take place when it has completed the installation of all of the devices required to provide remote feedback to its data acquisition system. To this end the committee understood that this includes completion of the smart meter installation and other remote telemetry devices designed to provide feedback on the "health" of the distribution circuits.

-- Goals – Means Planning for LMT to gain First Quartile Reliability

Following on from the discussions at the February meeting regarding the establishment of Goals and Means, Mr. Kirlin and Mr. Bogdan presented their thoughts on the ways and means to elevate the power reliability status of LMT to the first quartile. It was agreed that the committee will pursue each of the identified means together with any others that the committee may identify for subsequent action. (See [Attachment 6](#) & [Attachment 7](#))

Next ERC Meeting:

It was confirmed that next meeting will be on April 9, 2015 at 7:00pm following the agreed 2015 schedule for meetings.

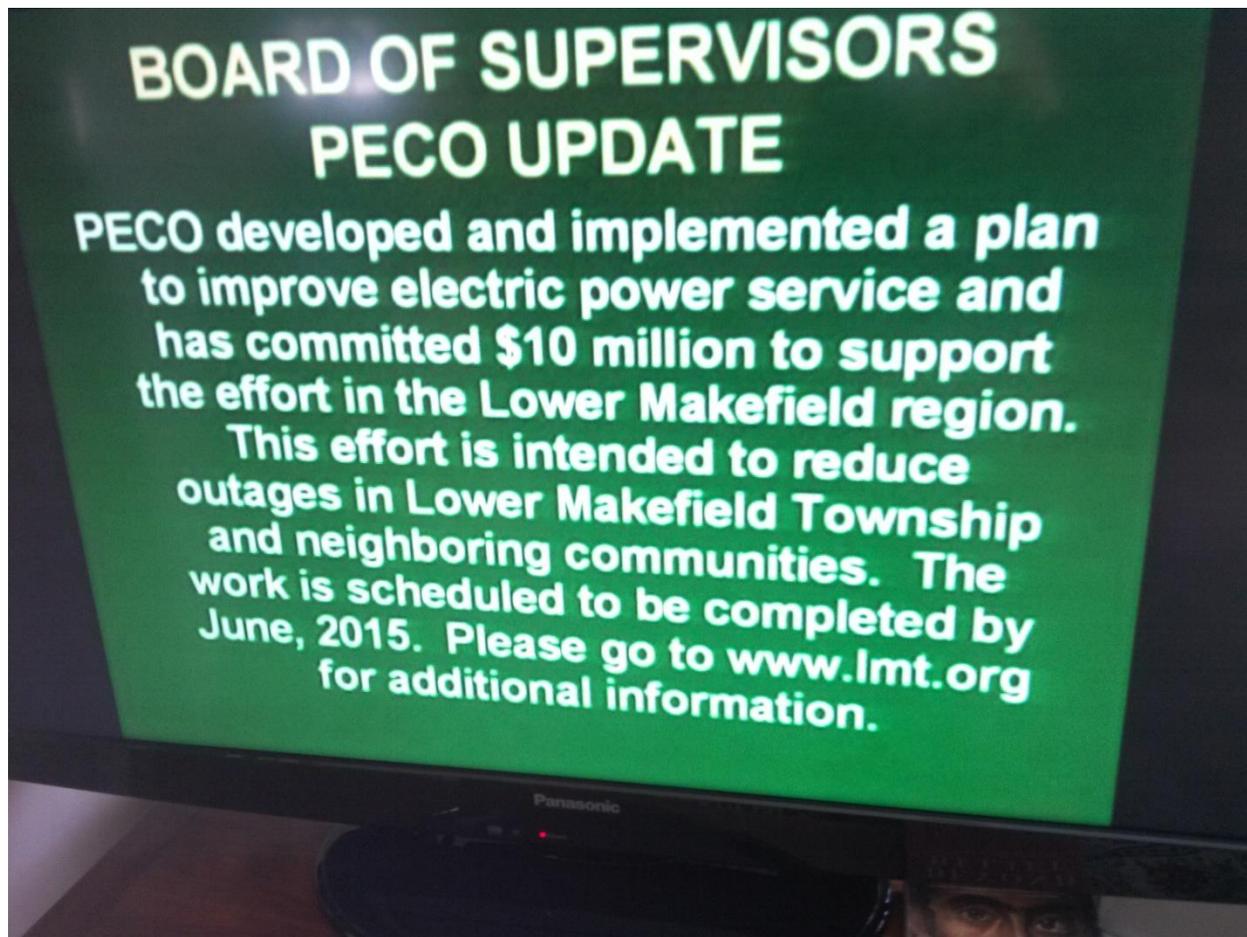
The meeting was adjourned at 8:46 pm.

ERC Agenda March 12, 2015 Meeting:

1. Approval of minutes of February 12, 2014 meeting
2. Old Business:
 - a. Electric Power News; ERC Who We Are; PECO Vegetation Control:
 - i. "Electric Power News" on LMT website and TV Channel -- Kingham
 - ii. ERC Listed Under Website "Boards and Commissions" -- Kingham
 - iii. Email of Feb 11, 2015 from Mr. Dorand (Vegetation) -- Kingham
3. New Business:
 - a. ERC Liaison to EMAC – Griga
 - b. PECO Feb 23 Outage Questionnaire; ERC Proposed Revisions;
Need for WebMaster -- Bogdan
 - c. Outage Reporting and Outage Management Systems – Bogdan
 - d. Introduction to G-M First Quartile Electric Performance – Bogdan, Kirlin
4. Set date, time, place for next ERC meeting
5. Motion for adjournment

Note: Due to the anticipated absence of Mr. Gorelick on business, the item discussed at the Feb 12, 2015 meeting regarding approaches to the PUC is tabled until the meeting of April 9, 2015

LMT TV Channel Photo March 8, 2015



From: [Kristin Tyler](#)
To: [WILLIAM BOGDAN](#); kingham.home@verizon.net
Subject: FW: PECO Resource Information Regarding Vegetation Management
Date: Thursday, February 19, 2015 1:36:02 PM

Dear John and Bill,

Below is an email received from Ted Dorand at PECO regarding tree maintenance. I would appreciate your review of the materials and suggestions concerning distribution of the information to our residents. I consider it a partial response to our prior letter.

Kristin

Date: Thu, 19 Feb 2015 09:24:07 -0800
Subject: Re: Fwd: PECO Resource Information Regarding Vegetation Management
From: kristinkeontyler@gmail.com
To: kbtlaw2001@hotmail.com

Thank you very much for this information.

Kristin Tyler

On Feb 19, 2015 10:09 AM, "Kristin Tyler" <kristinkeontyler@gmail.com> wrote:

----- Forwarded message -----

From: "Dorand, Theodore D:(PECO)" <theodore.dorand@peco-energy.com>

Date: Feb 18, 2015 3:03 PM

Subject: PECO Resource Information Regarding Vegetation Management

To: <ktyler@lmt.org>

Cc:

Kristin,

I wanted to take this opportunity to call your attention to some useful information that is located on the PECO website regarding the planting of trees near power lines (safe planting distances, compatible tree and shrub species etc.). There is also useful information that describes our vegetation management preventative maintenance programs, frequently asked questions and information regarding how to request service for tree trimming. Here is the link (below) to the location on the [peco.com](http://www.peco.com) website where the information can be found.

<https://www.peco.com/CustomerService/ServiceRequest/TreesPowerlines/Pages/PlantingTrees.aspx>

A few points to remember. In non-storm situations, if customers believe that trees, limbs or branches are conflicting with power lines **and it is not an emergency**, they are encouraged to call PECO's Customer Care Center at 1-800-494-4000. Customers can report their vegetation issue and a PECO representative or approved contractor will visit the location within several days and assess the situation. **During storms or emergencies**, when a customer observes trees, limbs or branches that have fallen on power lines and they have

no power, partial power or the electric equipment is sparking, customers are encouraged to call **PECO's Emergency number at 1-800-841-4141**. PECO will dispatch resources to the location as soon as possible to assess and correct the issue.

As I have previously indicated, some customers have aerial lines that provide service to their individual home or business. The line "taps off" the PECO line that runs parallel to their property at the front or rear, and connects to the house or business. PECO does not trim any trees along those service lines. The customer is responsible for that trimming. That said, PECO will perform a "make safe" on that service line so that the property owner or their contractor can safely trim the trees or branches near the service line. For "Make Safes" customers can contact PECO at 215-956-3270 and request a "Make Safe" for tree trimming. PECO will come to the property and perform the "Make Safe" and then return to the property after the work is completed, and restore the line. Customer's should request the "Make Safe" appointment at least two weeks in advance of the date they or their contractor is scheduled to perform the tree trimming. We will do our best to accommodate them on their schedule.

I hope you find this information useful.

Ted Dorand

Theodore D. Dorand
External Affairs Manager, Bucks County
PECO
400 Park Ave.
Warminster, PA. 18974
Phone: (215)956-3082

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PECO, LMT and Power Friendly Vegetation

As part of its reliability improvement plan, PECO has been working to further trim and clear trees which are a threat to its power lines. Mindful of the fact that none of us wishes to see our canopies of green disappear, PECO has developed the following advice on “power-friendly” vegetation and tips on what to do if you perceive a problem:

- For information on PECO’s vegetation management preventative maintenance programs, frequently asked questions and how to request service for tree trimming go to:
<https://www.peco.com/CustomerService/ServiceRequest/TreesPowerlines/Pages/PlantingTrees.aspx>
- **In non-storm situations**, if customers believe that trees, limbs or branches are conflicting with power lines and it is not an emergency, call PECO’s Customer Care Center at **1-800-494-4000**.
- During storms or emergencies, if a resident observes trees, limbs or branches that have fallen on power lines and they have no power, partial power or the electric equipment is sparking, call **PECO’s Emergency number at 1-800-841-4141**.
- If your home or business is not fed by underground power it will have an **aerial service line** that “taps off” the PECO line that runs parallel to the property at the front or rear. **PECO does not trim any trees along those service lines** but, in the interests of safety, it does stand ready to work with customers as follows:
 - If needed, PECO will perform a “make safe” on that service line so that the property owner or their contractor can safely trim the trees or branches near the service line.
 - For “Make Safes” customers can contact PECO at **215-956-3270**
 - PECO will come to the property and perform the “Make Safe” and then return to the property after the work is completed, and restore the line.
 - A request for a “Make Safe” appointment should be made at least two weeks in advance of the date they or their contractor is scheduled to perform the tree trimming.

Where power lines run across private property PECO needs the owner’s permission before any tree trimming can take place. To this end and for the benefit of all, Lower Makefield Township is willing to work with residents and PECO to remove or trim any impinging vegetation on private land. If you have any questions please call the **Township Public Works Dept on 267-274-1130**.

March 7, 2015

ERC Notes on Outage Reporting and Outage Management Systems (OMS)

Major real-time, rapid functions usually found in an OMS include:

- Prediction of location of fuse or breaker that opened upon failure.
- Prioritizing restoration efforts and managing resources based upon criteria such as locations of emergency facilities, size of outages, and duration of outages.
- Providing information on extent of outages and number of customers impacted to EDC management, media and regulators, and public
- Calculation of estimation of restoration times.
- Management of crews assisting in restoration.
- Calculation of crews required for restoration

Characteristics of an OMS Reporting System to Customers:

- 1) the OMS utilizes a US Map that the viewer can zoom-in to see a colored triangle symbol on the customer street near which the fault has occurred. The color of the triangle denotes the number of customers effected
- 2) the OMS provides to the viewer a dynamic text-box in the Map which displays a variety of details including: time and date reported, arrival of repair crew, cause of failure, estimated date and time of restoration. This text-box is updated every 15 minutes during the EDC fault analysis and repair process.

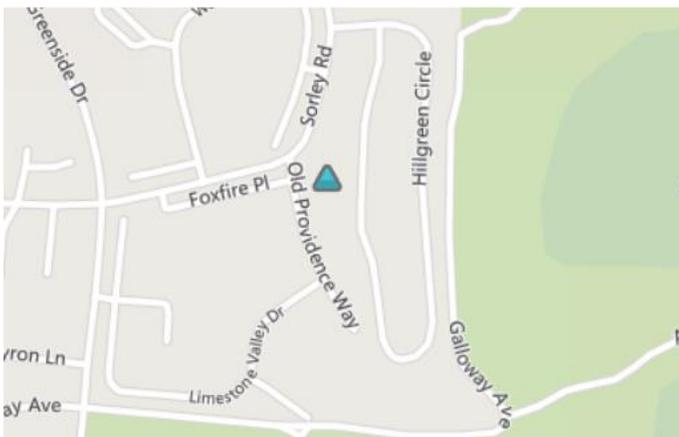
Example from Internet: BG&E Outage Status: Towson (Above Baltimore)

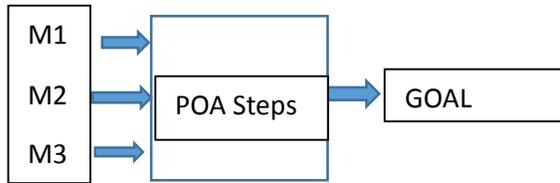
Customers Effected: 13

Reported: Feb 25, 9:21pm

Repair Crew On Site--Cause: Vehicle accident

Assessing Condition: Feb 26. 1:16am





ERC Draft March 2, 2015

Goal: First Quartile Electric Grid Performance*

***all LMT circuits have an average reliability performance of less than 50 min per year**

Means:

M1 negotiate & convince PECO on the need for a weather-hardened electric grid infrastructure

Rationale for this goal: (1) safety of 34,000 residents & (2) PECO Outage Repair Policy: hi-density regions with large customer outages are given highest priority. LMT outages do not satisfy these conditions. Moreover in a major storm, it takes PECO two days to muster sufficient lineman-resources just to begin to address outage restoration for medium and low density pockets such as found in LMT.

M2 develop tree & vegetation ordinances that reduce hazards to overhead power lines

M3 expand PECO Right of Way

M4 develop pamphlet to popularize Goal

M5 conduct Township petition to acquire and demonstrate citizen support

M6 enlist support of local state legislators

M7 convince PUC and request their support

M8 maintain mutually supportive relationship with PECO

- Whether customers are entitled to payments when a distributor performs poorly in terms of, for example, responding to queries or providing information about outages;
- The extent to which reliability standards are perceived to be driving investment in the electric distribution system (or, conversely, the extent to which lack of investment in the past is perceived to have resulted in poor performance);
- How transparent the approach to distribution system management is since this affects the extent to which the regulator and other stakeholders can easily review a distributor's performance, which can be important in assessing a distributor's performance during a major outage.

2.2 Panel of Jurisdictions

34. The AEMC specified that our analysis should include a review of distribution reliability standards and outcomes in Australia, New Zealand and Great Britain, and should also include other jurisdictions in Europe and in the United States.

35. We considered two factors in determining which jurisdictions to include in this study, beyond those initially specified by the AEMC. First, we took into account which jurisdictions have consistently reliable distribution systems or have experienced improvements in reliability over time. Second, we sought out jurisdictions which have well-developed regulatory mechanisms in place, including but not limited to financial incentive mechanisms, or which have adopted a unique or, in our view, interesting approach to regulating electric distribution reliability.

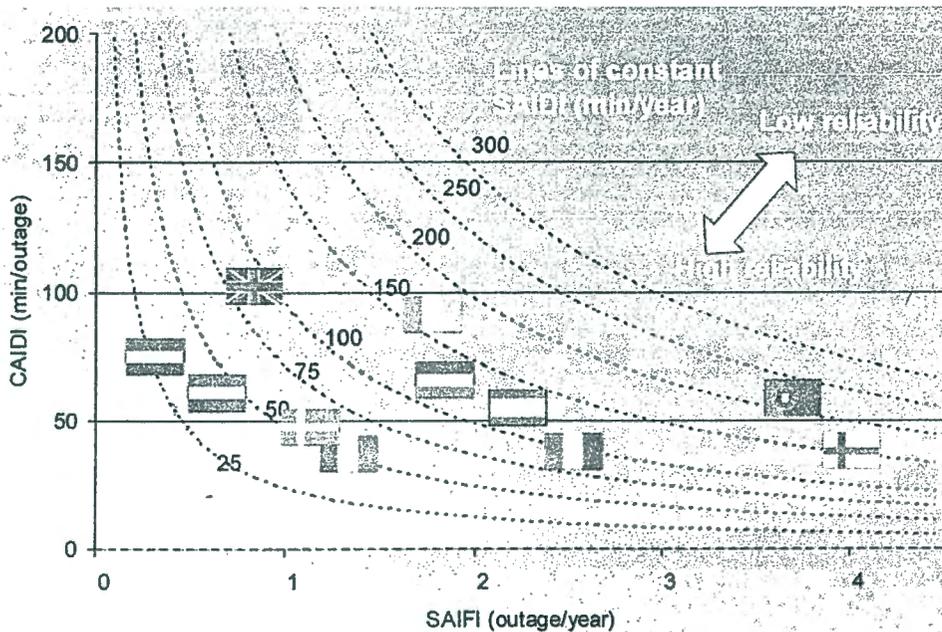
36. European Jurisdictions. We considered historical levels of system reliability combined with regulatory approach in selecting the European jurisdictions to include in our study. From Figure 3 below, it can be seen that in 2004 the four most reliable distribution systems in Europe were Austria, France, the Netherlands and Sweden. Studies sponsored by the Council of European Energy Regulators (CEER) confirmed that Austria, France and the Netherlands continued to have reliable systems through to 2007. However, the studies

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Electric Distribution Reliability
Standards and Outcomes

that reliability in Sweden deteriorated during that time³ and, for this reason, we did not include it in this study. Of the three consistently reliable systems, we chose only to include the Netherlands, because Austria and France do not have explicit reliability components within their regulatory frameworks. We then added Italy, which achieved a 46% decrease in customer minutes lost in the four years after it introduced a reliability incentive component in its regulatory framework.

Figure 3: Comparison of Reliability of European systems in 2004⁴



37. U.S. Jurisdictions. In the United States, the reliability of the bulk power system (i.e., power generation and transmission) is regulated at the federal level (through the U.S. Federal Energy Regulatory Commission, or FERC), while electric distribution is regulated at the individual state level. At least 35 jurisdictions in the U.S. out of a total of 51

³ According to Figure 2.5 of the CEER 4th benchmarking report on quality of electricity supply. However, this figure relate to unplanned interruptions at all voltage levels.

⁴ "Quality of supply and market regulation; survey within Europe", Kema, December 2006.