

# *Coffeyville Municipal Light & Power*

## *2001-*

### *The Second 100 Years*



2001 – 2012

Recent years have brought many changes and improvements to the Electric Utility.

2007

#### **The City of Coffeyville and the Grand River Dam Authority entered into a Capacity Purchase Agreement**

The City of Coffeyville retains ownership of the local generating assets, but these units are now dispatched by GRDA. Should GRDA require additional generation, GRDA will call upon these units to generate. The City of Coffeyville receives revenue in the form of monthly capacity payments based upon the rated capacity of our generating assets.

#### **Addition of two (2) – two (2) MW Diesel Generators and the Diesel Generator Complex**

These diesels generators are used for local emergency power, should Coffeyville lose the 138 kV incoming supply. These units will provide power to bring local steam units on-line.



*Coffeyville's Diesel Generators  
2 – 2 Megawatt Generators*

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2008

#### **Complete re-build of the Power Plant Substation**

Removal of all Oil Filled Circuit Breakers (OCB) and installation of new modern SF6 Circuit Breakers and Relays, including new control building.



*Power Plant 69 kV – 12.47kV  
Substation*

2010

#### **Substation A Transformer Upgrade**

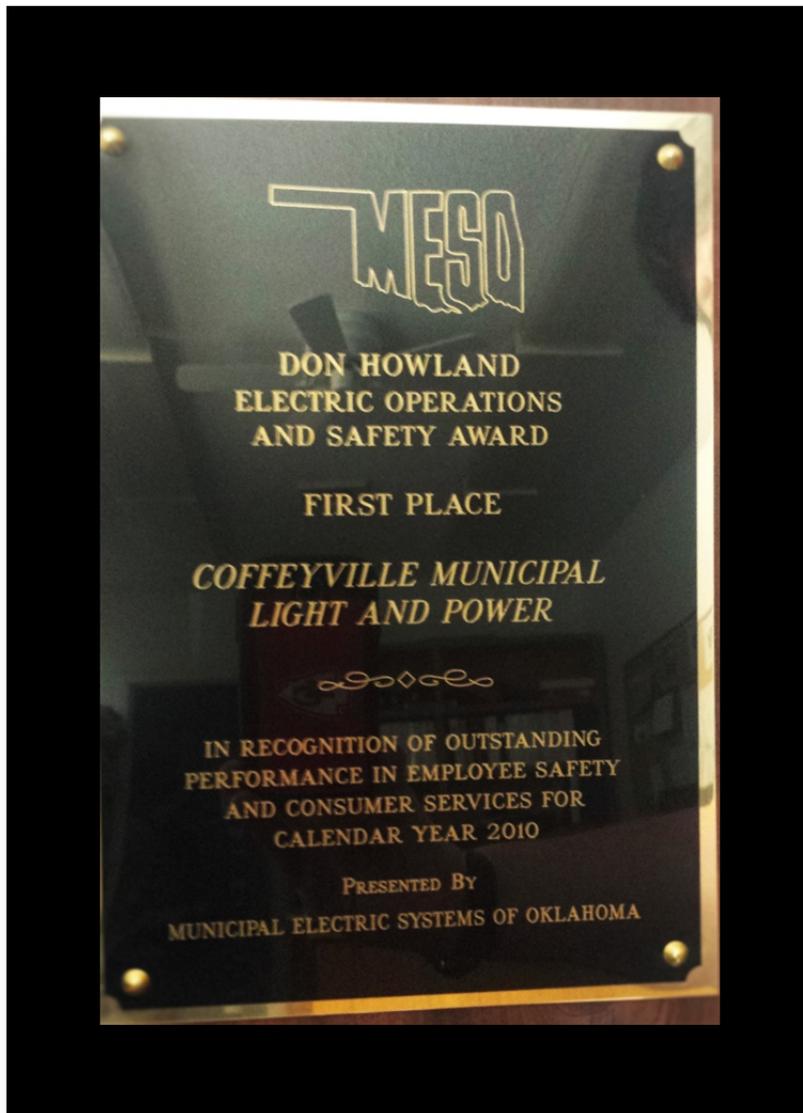
A 10 MVA transformer was replaced with a new 22.4 MVA transformer, increasing the overall capacity of this substation.



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*The Second 100 Years*

**2010**

The City of Coffeyville Electric Utility received the MESO Electric Operations and Safety Award, placing 1<sup>st</sup> within the participating municipalities of MESO (Municipal Electric Systems of Oklahoma). The award was based on performance, employee safety, and consumer services provided.



# *Coffeyville Municipal Light & Power* *2001-* *The Second 100 Years*



2011

## **Southwest Power Pool Membership (SPP)**

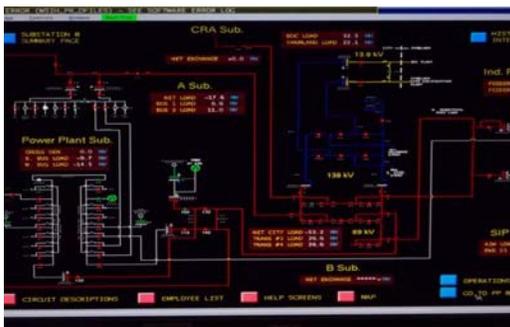
City of Coffeyville registered for membership with SPP as a Transmission Owner, Distribution Provider and Load Serving Entity. By becoming members of the Southwest Power Pool, the City of Coffeyville placed the Transmission assets (138 kV) under the functional control of SPP.

SPP is a Regional Transmission Organization, mandated by the Federal Energy Regulatory Commission to ensure reliable supplies of power, adequate transmission infrastructure, and competitive wholesale prices of electricity. As a North American Electric Reliability Corporation Regional Entity, SPP oversees enforcement and development of reliability standards. SPP has members in nine states.

As part of the SPP Membership, the Electric Utility is subject to the requirements of the North American Electric Reliability Corporation regulations. Part of the requirements of NERC is system security. The City of Coffeyville has implemented and installed a comprehensive security system that monitors all assets by video surveillance and restrictive badge ID access.

## **Supervisory Control and Data Acquisition (SCADA) Master Upgrade**

The Electric Utility controls all six remote substations through our SCADA System, located in the System Operations Control Room. This system was upgraded including new servers, security features, and real-time load management.



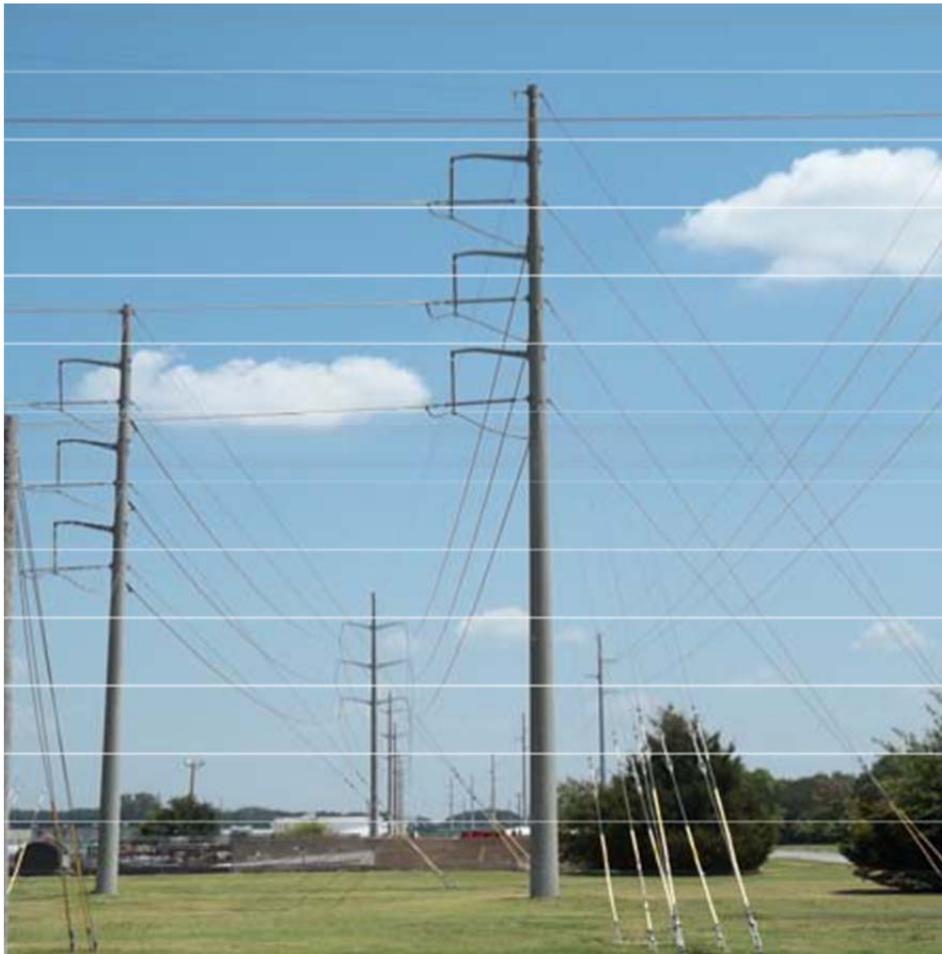
*CML&P SCADA Screen*

# *Coffeyville Municipal Light & Power 2001- The Second 100 Years*

## **138 kV Line Upgrade**

The City of Coffeyville has begun the process of upgrading one of the two incoming 138 kV Transmission Lines serving the City. Due to increases in demand, and to improve system reliability, SPP is requiring an upgrade to this line. This will include re-conductoring of the line, and substation improvements to Substation B.

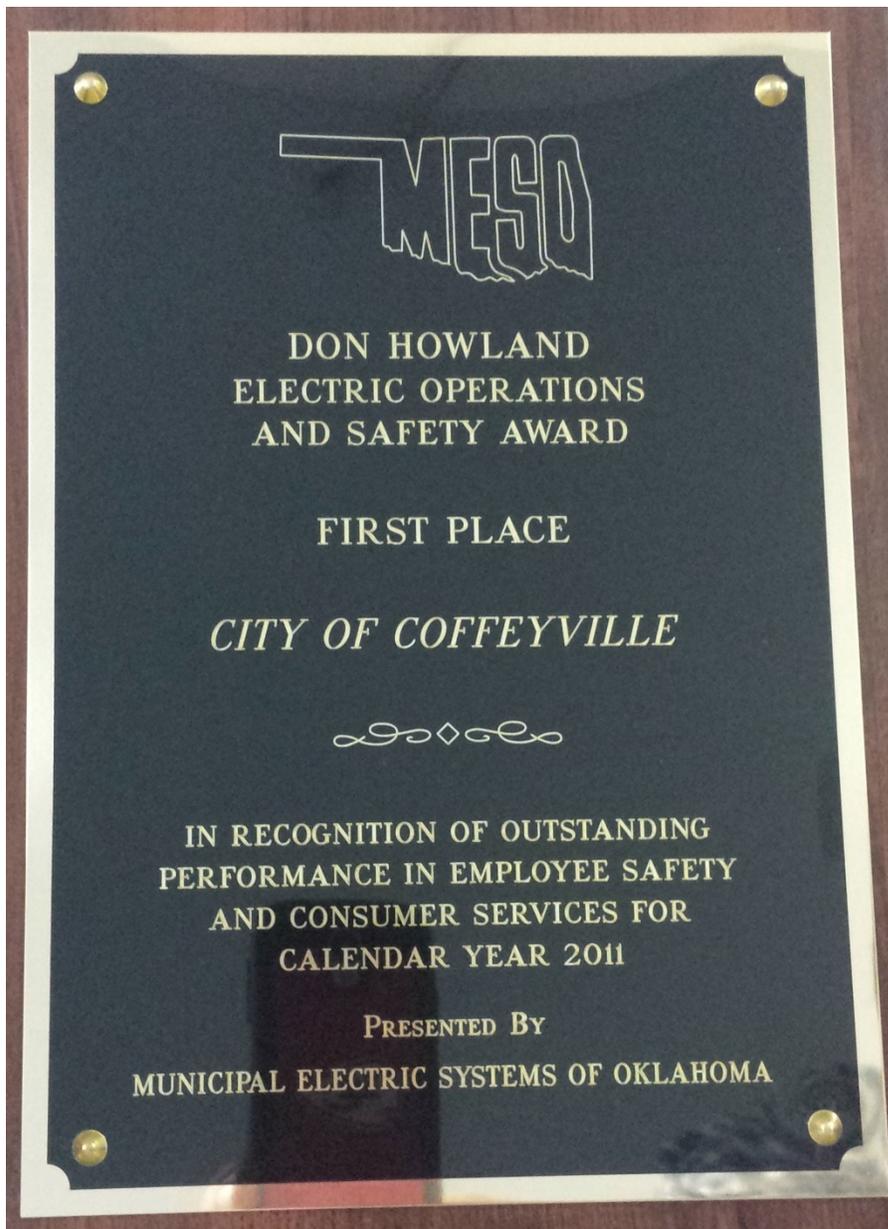
*Coffeyville's 138 kV Incoming Transmission Lines*



*Coffeyville Municipal Light & Power  
2001-  
The Second 100 Years*

**2011**

The City of Coffeyville Electric Utility received the MESO Electric Operations and Safety Award again in 2011, placing 1<sup>st</sup> within the participating municipalities of MESO (Municipal Electric Systems of Oklahoma). The award was based on performance, employee safety, and consumer services provided.



# *Coffeyville Municipal Light & Power 2001- The Second 100 Years*

## **2012**

In 2012 the City of Coffeyville Electric Utility again received a 1st Place award from MESO for their excellence in reliability and for customer service.



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## **2014**

For the third time in three years, Coffeyville Municipal Light and Power has received a reliability award from the Municipal Electric Systems of Oklahoma (MESO). Coffeyville was recognized in the category for cities over 10,000 population and cited for achieving one of the highest reported levels of service reliability for cities within the region.

MESO General Manager Tom Rider presented the award to the electric utility employees. “Coffeyville Municipal Light & Power (CMLP) had an average system availability index of 99.99982% in 2014,” stated Rider. “What this means for your customers is power was flowing all but 9.4 minutes the entire year,” he said. MESO is an electric utility trade association representing cities in Oklahoma, Missouri, Kansas and Arkansas.

Records of all power outages throughout the year are kept, and in 2014 there were 114 reported outages. Birds, animals and snakes caused 30% of the outages followed by overhead equipment failure at 29%. The weather caused 22% of the outages. Trees were the cause of only 7% of the outages which is a direct result of an active tree trimming program implemented by the City of Coffeyville.

Gene Ratzlaff, Electric Utility Director, received the award but was quick to point out the achievement is a direct result of the dedicated employees on both the generation and distribution side. “Our employees go through rigorous training, they know our system and are able to respond quickly to any outages,” stated Ratzlaff. “Having a 99.99% reliability is outstanding, and I am very proud of our employees.”



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## **2014**

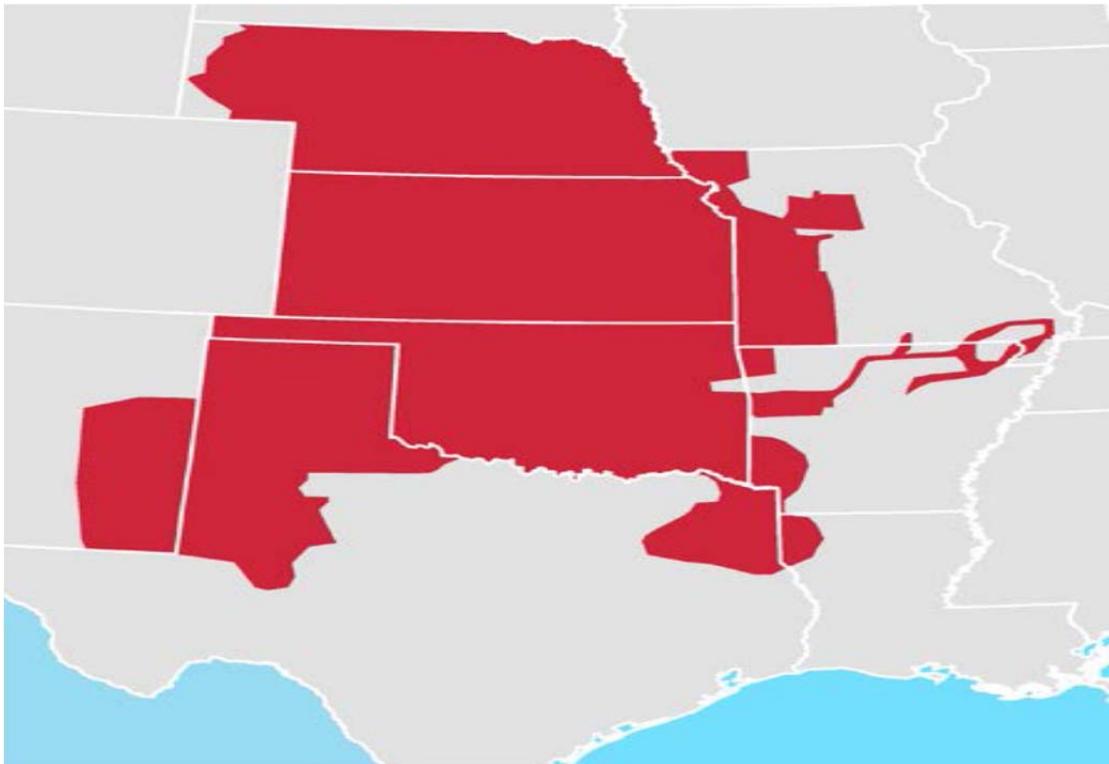
### **SPP Launches Day-Ahead Energy Market**

The SPP Integrated Marketplace was successfully launched on March 1, 2014. This market expansion is the latest and most complex incremental step in SPP's evolutionary approach to adding market functionality that will coordinate next-day generation across the region to maximize cost-effectiveness, provide participants with greater access to reserve energy, improve regional balancing of electricity supply and demand, and facilitate the integration of renewable resources, in which the Coffeyville electric utility, through its partnership with GRDA, participates in with its generating assets. The SPP foot print encompasses a 7 state area which the Coffeyville utility is a part of.

Prior to the launch of the Day-Ahead Market, utilities either served their respective customers through their own generating assets, or by power purchase agreements with generator owners.

The SPP Day-Ahead Market takes the participating members generating resources within the footprint, and dispatches these resources based on a variety of factors, which includes the lowest cost generators being dispatched first. Transmission congestion can also play a large role as to when certain generating resources are dispatched, including regional resources, to provide system reliability.

In this new era of the Energy Industry, CMLP is positioning itself to play a vital role in ensuring reliable, efficient and affordable energy to our customers and support the bulk electric system.



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**2015**

2015 has proven to be a significant year for the Electric Utility, as CMLP plans for the second 100 years, Coffeyville's electric utility is well on its way to expanding its generating capacity with the commission's approval to add a second generating facility, scheduled to break ground in the fall of 2015.

CMLP will be adding three 18.7 MW Wartsila reciprocating engine generators capable of zero to full load capabilities within 10 minutes. This new technology will enable CMLP to better serve our citizens as well as playing a more significant role in the new energy market.

**Ground breaking to begin in October of 2015 and completion of project to be completed by December 2016. Units are scheduled to hit the market, January 1, 2017.**

