THE OKLAHOMA CORPORATION COMMISSION’S
2016 REPORT ON THE OKLAHOMA ENERGY SECURITY ACT

Key Elements of the Act
The Oklahoma Energy Security (OES) Act, effective November 1, 2010 was codified in the Oklahoma Statute Title 17 §§801.1-7. The OES Act establishes a goal that 15 percent of all installed electric generation capacity within the state of Oklahoma be generated from renewable energy sources such as wind, solar, photovoltaic, hydropower, hydrogen, geothermal, and biomass by the year 2015. The OES Act also allows all electricity generation producers to use energy efficiency and demand side management programs to meet this goal as well as steam export capacity* at qualified renewable energy resources. Distributed generation from eligible renewable energy resources where the generating facility has installed capacity not more than five megawatts may also be used.

The OES Act establishes a natural gas energy standard to supplement the increased volume of renewable energy as the preferred choice for any new fossil fuel based electric generation capacity beginning January 1, 2011, through January 1, 2020. Any electricity generation entity in the state choosing a fossil fuel source other than natural gas may provide evidence to the Oklahoma Corporation Commission (“Commission”) as to why it is in the best interest of the state’s electric consumers.

Commission Action
Accordingly, the OES Act directs the Commission to notify the legislature annually of the progress made to reach the goal of 15 percent of electricity to be generated from renewable energy sources. In 2011, the first reporting year, the Commission issued several public notifications to all electrical energy generation producers and all renewable energy producers. Also, the Commission held a technical conference to discuss the reporting requirements and established an on-line reporting system to facilitate and compile the data to calculate the State’s renewable energy percentage goal.

Reporting Results for 2015
The responders for this year’s data were a mixture of electricity generation producers (large and medium utilities) and renewable energy producers (wind, biomass, and hydro).

*Steam Export Capacity: 2015 SB 351 amends 17 O.S. 801.4 allowing steam export capacity at a qualified renewable energy resource to count toward the goal established in the OES Act.
In this report, 46 electricity generation entities provided information, which includes 31 wind facilities, three biomass facilities, and three entities reported hydro as part of their generation mix. The Commission will continue to publicize the need for other renewable electric generation entities to submit their generation capabilities.

As directed by the OES Act, the Commission determined the annual renewable energy percentage by dividing all installed capacity* of renewable electricity generation in Oklahoma by the total installed capacity of all electricity generation in Oklahoma. Additionally, the Commission recognized energy efficiency and demand side management measures towards the overall goal, which did not exceed 25 percent of the established 15 percent renewable energy goal.

**FORMULA – Reported in Mega Watts (MW)**

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\text{Oklahoma’s Percentage of Annual Renewable Energy} = \frac{\text{Total installed capacity of renewable electricity + Demand side measures}}{\text{Total installed capacity of all electricity generation}}
\]

As shown in the table below, the Commission calculated the total capacity of electricity in Oklahoma from renewable energy for 2015** as 25.90 percent***, which is a 5.05 percent increase from last year’s results of 20.85 percent. This increase in renewable energy generation is due to eight new wind facilities coming online in 2015 for a total of 1401 MW and a 30.02 percent increase in demand side measures.

**Table: Oklahoma’s Percentage of Annual Renewable Energy Goal - 2015**

<table>
<thead>
<tr>
<th>Installed Renewable Capacity (MW)</th>
<th>Demand Side Measures (MW)</th>
<th>Total Installed Renewable Capacity (MW)</th>
<th>Total Installed Capacity (MW)</th>
<th>Oklahoma’s % of Renewable Energy</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>B</td>
<td>C= (A+B)</td>
<td>D</td>
<td>F= C/D</td>
</tr>
<tr>
<td>5,789</td>
<td>628</td>
<td>6,417</td>
<td>24,775</td>
<td>25.90</td>
</tr>
</tbody>
</table>

* Generator installed capacity (nameplate): The maximum rated output of a generator, prime mover, or other electric power production equipment under specific conditions designated by the manufacturer. Installed generator nameplate capacity is commonly expressed in megawatts (MW) and is usually indicated on a nameplate physically attached to the generator.

** The goal reflected for this year was based on the Commission’s best effort to reach every electrical generation producer within the state of Oklahoma.

*** Renewable Energy is comprised of the following sources by percentage: Wind (20.42%); Hydro (2.71%); DSM (2.53%); Biomass (0.13%); Other (0.11%)