

**STATE and LOCAL  
FISCAL IMPACT**

**Drafting Number:** LLS 15-0440  
**Prime Sponsor(s):** Sen. Scott  
 Rep. Thurlow

**Date:** January 27, 2015  
**Bill Status:** Senate Agriculture  
**Fiscal Analyst:** Marc Carey (303-866-4102)

**BILL TOPIC:** ELECTRIC RENEWABLE ENERGY STANDARD REDUCTION

Fiscal Impact Summary*	FY 2015-2016	FY 2016-2017
State Revenue		
State Expenditures	Minimal Impact. See State Expenditure Section	
FTE Position Change		
<b>Appropriation Required:</b> None		

\* This summary shows changes from current law under the bill for each fiscal year.

**Summary of Legislation**

This bill modifies the statute governing Colorado's renewable energy standard (RES), administered by the Colorado Public Utilities Commission (PUC).

**Overall generation requirements.** Current law contains a RES that applies to investor-owned utilities (IOUs), cooperative electric associations (CEAs) and municipally-owned utilities (MOUs). Specifically, IOUs are required to generate the following percentages of retail electricity sales from eligible, renewable energy resources:

- 20 percent for the years 2015 through 2019; and
- 30 percent for the years 2020 and after.

Similarly, CEA's are required to generate the following percentages of retail electricity sales from eligible, renewable energy resources:

- 6 percent for the years 2015 through 2019; and
- 10 percent for the years 2020 and after.

In addition, most CEAs (those serving more than 100,000 meters and generation and transmission CEA's providing wholesale electricity to other CEAs) must meet a 20 percent standard for the years 2020 and after. MOUs serving more than 40,000 customers are required to generate 6 percent from eligible, renewable resources from 2015 through 2019 and 10 percent in 2020 and thereafter.

Beginning in 2015, this bill reduces the standard for IOUs to 15 percent. The 20 percent standard for most CEA's is also reduced to 15 percent, beginning in 2020. The standard for MOUs is unaffected.

**Distributed generation requirements.** Current law also contains distributed generation (DG) requirements for all both IOUs and CEAs. These requirements are unaffected by this bill.

## **Background**

To comply with the RES, utilities have three options. First, they could build their own eligible generation facilities. Second, they could enter into power purchase agreements (PPAs) with the owner of a renewable energy generation facility. Finally, they could purchase existing renewable energy credits (RECs). These last two options are typically achieved through a bid process.

RECs are tradeable certificates that represent proof that 1 megawatt-hour (MWh) of electricity was generated from an eligible, renewable energy resource. These certificates can be bought and sold and the owner of the REC can claim to have purchased renewable energy. RECs represent the environmental attributes of the power produced from renewable energy projects. RECs are retired once they are counted against RES requirements, and each REC may only be used once. Under current PUC rules, RECs may either be used in the year the electricity was generated, or may be carried forward for use in any one of the succeeding 5 years. Currently, RECs are bought and sold only through bi-lateral agreements between parties, as there is no national market clearinghouse. In Colorado and most other western states, the majority of RECs are registered and tracked by the Western Renewable Energy Generation Information System.

## **State Expenditures**

**Department of Regulatory Agencies, Public Utilities Commission (PUC).** The bill requires minor conforming changes to the PUC RES rules to reduce the overall RES requirement for IOUs this year and for most CEAs in 2020. As such, the impact is minimal and no additional appropriation is required.

**State Agency Impact.** *In most service areas in the state, this bill is not anticipated to impact retail electricity rates, and thus electricity rates paid by state facilities. The potential exception is the service area of Black Hills Energy, which could see a gradual decline of rates beginning in 2017.*

This bill reduces the current RES for Colorado's two IOU's - Xcel Energy and Black Hills Energy - from 20 to 15 percent. Currently, Xcel Energy is significantly above the compliance threshold. According to its 2013 compliance report, after meeting 2013 compliance requirements of roughly 3.5 million RECs, Xcel will have an additional 14.7 million RECs to carry forward. Additionally, according to a report filed by Xcel Energy with the PUC summarizing the costs associated with its anticipated resource acquisition, the bids received for wind energy and solar energy PPAs were competitive with the bids received for natural gas generation. In particular, Xcel's preferred resource acquisition portfolio, which included both wind and solar resources, was estimated to achieve reduced costs to customers compared to any of the gas-only portfolios considered.

The state's other IOU, Black Hills Energy, is much closer to the compliance threshold. While it has recently solicited bids for 60 MW of renewable resources as part of its resource acquisition process, it is also currently planning to purchase 350,000 RECs to achieve compliance in 2015, 2016, and 2017. Although reduction of the RES to 15 percent would eliminate the need for purchasing these RECs and create savings for the company, this savings is unlikely to translate into reduced rates for at least two years until Black Hills repays its current deficit in RES compliance funding. After that, rates could decline, although any rate change would need to be approved by the PUC.

The bill also reduces the 2020 RES for most of Colorado's CEAs from 20 to 15 percent. Four CEAs currently obtain wholesale generation, and receive a corresponding pro-rata share of RECs from Xcel Energy. As such, they are well over the required number of RECs for RES compliance. The remaining 18 CEAs obtain wholesale power from Tri-State Generation and Transmission Association, and are thus largely dependent upon its RES compliance position. Using data from the most recent annual report filed with the PUC by Tri-State, and assuming historical growth rates in retail sales, it appears that Tri-State's current portfolio of renewable generation facilities, supplemented with a 25-year PPA for 150 MW of wind energy that will become operational in 2016 is sufficient for Tri-State to comply with the RES through 2020, both under current law and under the provisions of this bill. Beyond that, Tri-State will have to acquire additional renewable resources to remain in compliance. This bill reduces the amount of additional renewable resources required, which could impact future rates.

### **Local Government Impact**

This bill relaxes the overall RES for IOUs to 15 percent this year and for most CEAs in 2020. For the reasons outlined in the State Agency Impact section above, the bill is not anticipated to impact electricity rates for local governments. The potential exception could be within the Black Hills Energy service area, beginning in 2017.

### **Effective Date**

The bill takes effect August 5, 2015, if the General Assembly adjourns on May 6, 2015, as scheduled, and no referendum petition is filed.

### **State and Local Government Contacts**

Regulatory Agencies