Colorado Legislative Council Staff

FISCAL IMPACT STATEMENT

Date: September 7, 2004 Fiscal Analyst: Marc Carey, (303-866-4102)

BALLOT TITLE: AN AMENDMENT TO THE COLORADO REVISED STATUTES CONCERNING RENEWABLE ENERGY STANDARDS FOR LARGE PROVIDERS OF RETAIL ELECTRIC SERVICE, AND, IN CONNECTION THEREWITH, DEFINING ELIGIBLE RENEWABLE ENERGY RESOURCES TO INCLUDE SOLAR, WIND, GEOTHERMAL, BIOMASS, SMALL HYDROELECTRICITY, AND HYDROGEN FUEL CELLS; REQUIRING THAT A PERCENTAGE OF RETAIL ELECTRICITY SALES BE DERIVED FROM RENEWABLE RESOURCES, BEGINNING WITH 3% IN THE YEAR 2007 AND INCREASING TO 10% BY 2015; REQUIRING UTILITIES TO OFFER CUSTOMERS A REBATE OF $2.00 PER WATT AND OTHER INCENTIVES FOR UTILITIES TO INVEST IN RENEWABLE ENERGY RESOURCES THAT PROVIDE NET ECONOMIC BENEFITS TO CUSTOMERS; LIMITING THE RETAIL RATE IMPACT OF RENEWABLE ENERGY RESOURCES TO 50 CENTS PER MONTH FOR RESIDENTIAL CUSTOMERS; REQUIRING PUBLIC UTILITIES COMMISSION RULES TO ESTABLISH MAJOR ASPECTS OF THE MEASURE; PROHIBITING UTILITIES FROM USING CONDEMNATION OR EMINENT DOMAIN TO ACQUIRE LAND FOR GENERATING FACILITIES USED TO MEET THE STANDARDS; REQUIRING UTILITIES WITH REQUIREMENTS CONTRACTS TO ADDRESS SHORTFALLS FROM THE STANDARDS; AND SPECIFYING ELECTION PROCEDURES BY WHICH CUSTOMERS OF A UTILITY MAY OPT OUT OF THE REQUIREMENTS OF THIS AMENDMENT.

Fiscal Impact Summary	FY 2005/2006	FY 2006/2007	FY 2007/2008
State Revenues			
General Fund	$2,061	$1,254	$2,314
Cash Fund - Fixed Utility Fund	68,689	41,798	77,130
State Expenditures			
General Fund*			
Cash Fund - Fixed Utility Fund**	$66,628	$40,544	$74,816
FTE Position Change	0.8 FTE	0.6 FTE	0.8 FTE
Other State Impact: TABOR Revenue Impact.			
Effective Date: Upon voter approval.			
Appropriation Summary for FY 2004/2005: None.			
Local Government Impact: Local Governments may see changes in electricity rates, depending on which utility they receive their electricity from.			

* *As discussed on page 5, state agencies may incur changes in utility bills, depending on their electric utility.*

Summary of Measure

The proposal requires Colorado utilities with 40,000 or more customers to generate or purchase a percentage of their electricity from renewable sources according to the following schedule:

- 3 percent from 2007 through 2010;
- 6 percent from 2011 through 2014; and
- 10 percent beginning in 2015.

Of the electricity generated each year from renewable sources, at least 4 percent must come from solar technologies. Initially, eight Colorado utilities serving about 82 percent of the state's electric customers will be required to comply with this proposal. The Colorado Public Utilities Commission must adopt rules to implement this proposal. The commission will monitor and enforce the compliance of those utilities required to meet the new renewable energy requirements. The following paragraphs outline key provisions.

Eligible sources of renewable energy. Utilities may use a variety of renewable energy sources to satisfy the new requirement. These are: wind; solar; geothermal heat, such as underground reservoirs of steam or hot water; biomass facilities that burn nontoxic plants, methane from landfills, or animal waste; hydroelectric power stations with nameplate capacity of less than a 10 megawatts; and hydrogen fuel cells.

Financial incentives. Utility customers may earn a rebate for installing solar electric generation equipment on their property. Any electricity generated from the solar equipment in excess of the customer's annual use may be sold to the utility. In addition, if investment in renewable energy technologies reduces the retail cost of electricity, for-profit utilities may share those savings with their customers.

Retail rate impact rule. The proposal caps the amount that an average residential bill can increase at $0.50 per month as a result of this requirement. Rate increases are measured net of new non-renewable alternative electricity sources. The proposal is unclear on allowable increases for other customer classes.

Tradeable renewable energy credit system. The commission is required to establish a system of tradeable renewable energy credits so that utilities that do not generate or acquire the required amount of electricity from renewable energy sources may purchase "credits" from those utilities that exceed the requirement. The commission is also required to assess the use of any regional system of renewable energy credits that exists at the time of its rulemaking process.

Procedure for exemption and inclusion. Affected utilities may hold elections to exempt themselves from the renewable energy requirement. Similarly, utilities not subject to the requirement may hold elections to be included. At least 25 percent of the utility's customers must vote on the issue of exemption or inclusion, with a majority vote required for passage.

Self certification option. A municipal utility or a rural electric cooperative may self-certify in order to exempt itself from the requirements of this proposal. To self-certify, a utility must implement a renewable energy requirement that: 1) uses one or more of the eligible renewable energy sources, 2) follows the same schedule for electricity generation (i.e. 3 percent in 2007, etc.) from renewable sources, and 3) offers an optional pricing program allowing customers to support emerging renewable technologies through rates. Utilities that self-certify are not required to generate any electricity from solar sources.

State Revenue

Fees-General Fund and Cash Fund. The additional administrative costs incurred by the commission would be paid from the Fixed Utility Fund (FUF). The FUF receives its revenues from an annual fee assessment (done on or before June 15 of the preceding year) based on a statutory formula (Sec. 40-2-112, C.R.S.) that is based on the utility's "gross operating revenues derived from intrastate utility business."

Whenever additional expenses are incurred against the FUF, this assessment must be raised to increase revenues to recover these costs, plus pay an additional 3 percent to the General Fund. Thus, cash fee revenues would have to be increased sufficiently to cover direct expenses detailed in Table 1, indirect costs described below, plus credit 3 percent to the General Fund. Additional revenue would be counted as state revenue for purposes of TABOR.

State Expenditures

This proposal potentially has two distinct state expenditure impacts resulting from the costs associated with:

- the promulgation of rules to implement the renewable energy standard for utilities that will be mandated to meet the initiative's provisions beginning in 2007; and
- changes in electric rates for state agencies.

Department of Regulatory Agencies, Public Utilities Commission: Assuming that the proposal is approved by voters in the November 2004 election, the commission will incur salary and employee benefit costs, operating costs and potential contractor costs starting in FY 2005-06. Specifically, the commission will be required to establish:

- definitions of renewable energy sources used to meet the standards;
- standards for the design, placement and management of electric generation technologies that use renewable energy resources to minimize the environmental impact;
- electric resource standards for renewable energy resources;
- a system of tradeable renewable energy credits while giving due consideration to any regional renewable energy credit trading system in existence at the time of the commission's rulemaking;
- a standard rebate offer program for consumers opting to install distributed solar electric generation facilities on their premises;
- policies for the recovery of costs resulting from the requirements of this proposal for the two investor-owned utilities subject to the rate regulation by the commission;
- a rule for ensuring that the costs of the program do not exceed $0.50 per month for the average residential customer;
- administer required filings and reports; and
- determine enforcement mechanisms to ensure compliance with the renewable energy standard.

Most of the above requirements can be accomplished by the commission within existing resources. One notable exception may be the establishment of a system of renewable energy credits. A key determinant of additional costs incurred by the commission in establishing such a system will be the existence of a regional credit trading system. Currently, a joint effort by the Western Governor's Association, the California Energy Commission and the Western Regional Air Partnership is underway to implement an independent, voluntary, computerized registry and tracking system for renewable energy certificates throughout the western interconnection. Known as the Western Renewable Energy Generation Information System (WREGIS), this system is scheduled for implementation in January 2006.

If implemented, Colorado utilities would be able to utilize WREGIS to track transfers of renewable energy credits, by energy source, to ensure compliance. In addition, WREGIS would include bulletin board capabilities to help potential credit buyers and sellers locate each other. Commission staff could access WREGIS through the Internet in order to ensure utility compliance. However, until WREGIS is up and running, it's implementation is not a certainty. Accordingly, commission costs have been assessed under two scenarios: with and without WREGIS implementation. Table 1 summarizes estimated additional commission expenses, assuming that WREGIS is implemented on schedule, and Colorado utilities are able to take advantage of system capabilities.

Table 1. PUC Administrative Expenditures with WREGIS Implementation

	FY 2005/06	FY 2006/07	FY 2007/08
Personal Services	$61,138	$39,336	$61,138
Operating Expenses	$1,448	$1,208	$0
Capital Outlay	$4,042	$0	$0
Legal Expenses	$0	$0	$13,678
Total Expenses	**0.8 FTE - $66,628**	**0.6 FTE - $40,544**	**0.8 FTE - $74,816**

In the event that the WREGIS system is not implemented as currently planned, the Commission will incur $50,000 to $80,000 in additional consulting fees for the design and implementation of a computerized renewable energy credit registry and tracking system. Estimates are based on the costs incurred by the State of Wisconsin to implement a similar renewable energy credit tracking system.

State Agencies: To the extent that a renewable energy standard changes the price of retail electricity, state agencies will see changes to their electric utility bills. Legislative Council Staff is unable to say with certainty in which direction these changes will occur under this proposal, as there are many issues that will need to be resolved. The various factors contributing to rate changes are discussed in the rate impact section below.

Rate Impacts

Changes in retail electricity rates as a result of this initiative will vary by utility. A September 2004 report, funded by the Energy Foundation, concluded that, under the most likely scenario, the renewable energy standard as set forth in this initiative would result in estimated changes in the electric bill of the average residential customer over 20 years ranging from a decrease of 48 cents per month to an increase of 22 cents per month, depending on that customer's utility. Table 3 summarizes the utilities that are projected to qualify under this proposal through the year 2015, the number of customers these utilities had in 2002, and their estimated year of qualification.

Table 3. Affected Utilities, Number of 2002 Customers and Estimated Year of Qualification

	Customers in 2002	Year of Qualification
Investor Owned Utilities		
Public Service Company of CO. (Xcel Energy)	1,258,101	2007
Aquila Inc.	86,954	2007
Municipally Owned Utilities		
City of Colorado Springs	189,437	2007
City of Fort Collins	56,604	2007
City of Longmont*	35,340	2007
Rural Electric Cooperatives		
Holy Cross Electric Association Inc.	48,003	2007
Intermountain Rural Electric Association Inc.	108,332	2007
United Power Inc.**	39,175	2007
La Plata Electric Association Inc.**	33,412	2007
Poudre Valley Rural Electric Association Inc.**	31,090	2009
Mountain View Electric Association Inc.***	33,740	2014

* *Qualification year based on annual growth rate estimated from the City of Longmont's website.*
** *Qualification year based on annual growth rates calculated from the utility's annual report.*
*** *Qualification year based on annual growth rate for Colorado Springs MSA.*

The rate impact for each utility's customers will depend on several factors, including the following:

- the amount of renewable generation the provider has installed versus the amount it must acquire or purchase from other providers in the form of renewable energy credits;
- the cost difference of generating electricity from renewable sources versus conventional fuel sources;
- the future price of natural gas and coal;
- whether federal tax credits for renewable energy facilities are available;
- the amount of solar generation that the provider currently has installed on its system;
- the number of customers choosing to install distributed solar generation facilities;
- the source of wholesale electricity for rural electric cooperatives;
- whether a municipal utility or rural electric cooperative chooses to hold an election to opt out of the requirement; and
- whether a municipal utility or rural electric cooperative chooses to implement a similar program in order to self-certify and exempt themselves from the solar requirement.