

**STATE
FISCAL IMPACT**

This fiscal note is prepared pursuant to Joint Rule 22. (b) (2)

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Prime Sponsor(s): Rep. Tyler

Bill Status: House Transportation and Energy

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TITLE: CONCERNING INCENTIVES FOR THE INSTALLATION OF NEW DISTRIBUTED RENEWABLE ENERGY GENERATION FACILITIES IN COLORADO, AND, IN CONNECTION THEREWITH, INCREASING THE TARGET PERCENTAGES UNDER THE ELECTRIC UTILITY PORTFOLIO STANDARD TO ENCOURAGE COLORADO UTILITIES TO GENERATE FIVE PERCENT OF THEIR RETAIL ELECTRICITY SALES FROM DISTRIBUTED RENEWABLE SOURCES BY THE YEAR 2020, AND ADOPTING STANDARDS FOR THE INSTALLATION OF DISTRIBUTED SOLAR ELECTRIC GENERATION EQUIPMENT.

Fiscal Impact Summary	FY 2010-2011	FY 2011-2012
State Revenue		
State Expenditures Cash Funds Fixed Utilities Fund	See State Expenditure section	
FTE Position Change		
Effective Date: The bill is effective August 11, 2010, assuming the General Assembly adjourns May 12, 2010, as scheduled and no referendum petition is filed.		
Appropriation Summary for FY 2010-2011: See State Appropriations section.		
Local Government Impact: None		

Summary of Legislation

Current law establishes a renewable portfolio standard (RPS) under which investor-owned utilities (IOUs) and certain other utilities are required to generate an increasing percentage of their electricity from renewable sources. **With Amendment HB1001_L.002**, this bill modifies and expands the existing RPS statutes as follows:

Increases Total RPS Requirements for IOU's. The bill boosts the required RPS percentages for IOUs in order to achieve 30 % renewable generation by 2020, according to the following schedule:

<u>Years</u>	<u>IOUs (current)</u>	<u>IOUs (proposed)</u>
2011 - 2014	10%	12%
2015 - 2019	15%	20%
2020 and beyond	20%	30%

Distributed Generation Requirements. The bill repeals the existing 4 % requirement for solar energy, and requires a portion of the RPS be met through distributed generation (DG), including retail (RDG) and wholesale (WDG) distributed generation. RDG is defined as an on-site renewable energy resource, interconnected to the grid and designed to provide electricity to serve the customer's load. RDG must be sized to supply no more than 120 percent of the average annual electricity consumption at that site. WDG is defined as a Colorado renewable energy resource with a nameplate rating of 30 megawatts or less that is not RDG. DG facilities with generating capacity greater than 1 megawatt are required to register with a renewable energy generation tracking system established by the Colorado Public Utilities Commission (PUC).

The bill specifies that RDG is not eligible for the 1.25 multiplier for in-state, renewable generation, and requires the percent of total retail electricity sales derived from DG to increase according to the following schedule: 1 % from 2011-2014, 1.75 % from 2015 through 2019, and 3 % in 2020 and thereafter. These percentages are required to be maintained within each market segment, including the residential retail, nonresidential retail, and wholesale segments. The PUC is directed to encourage utility compliance with the DG requirements within market segments through the issuance of a new series of renewable energy credits (RECs). Existing RECs that have already been earned may be re-designated DG RECs if appropriate.

Rebate Offers. The PUC is authorized to incrementally reduce, if market conditions allow based on a review of a utility's resource plan, the existing rebates that utilities are required to offer for customer-sited renewable generation facilities. The rebate offer for DG systems is required to decline at a rate determined by the PUC based on market conditions, but the PUC is authorized to adopt performance-based incentives for DG systems.

Retail Rate Impact. Upon receiving PUC approval, the bill allows qualifying utilities to augment the money collected from retail customers through the renewable energy standard adjustment (RESA) with money advanced by the utility for the acquisition of more renewable energy resources. Such funds will be repaid from future retail rate collections, with interest calculated at the utility's after-tax weighted average cost of capital.

Effective July 1, 2010, the PUC must direct that, for the purpose of acquiring new distributed renewable electric generation, utilities shall spend 50% on RDG and 50% on WDG. For the residential and nonresidential retail market segments, expenditures must be proportionate to the utility's revenues received from each segment. The utility may retain up to 5% of its costs for administering DG programs.

The bill authorizes but doesn't require the PUC to ensure that customers with on-site DG systems continue to contribute, in a nondiscriminatory fashion, their fair share to their utility's renewable energy program fund, even if such a charge exceeds 2 % of their annual electric bill.

Solar Certification. Effective January 1, 2012, the bill requires that for all new DG systems funded through ratepayer funded incentives, the installation of photovoltaic systems must be supervised by practitioners certified by the North American Board of Certified Energy Practitioners. The bill also specifies required minimum ratios for certified practitioners and assistants and

minimum qualifications for workers involved with the installation of such systems. Effective July 1, 2011, the bill requires that all photovoltaic installations financed with state or federal grants or through the state's Clean Energy Finance Program are subject to the same certification and employment requirements as those funded through ratepayer incentives.

The bill specifies that the PUC is not responsible for monitoring or enforcing contractor compliance with certification, worker ratio, and worker qualification requirements. It is the responsibility of the contractor to obtain specified information, and the responsibility of the utility to obtain, and retain for at least 1 year after completion of the installation, copies of all documentation related to these requirements and connected with the installation.

Best Value Employment Metrics. The bill requires the PUC, when evaluating resource acquisitions for new energy technologies, to consider on a qualitative basis factors that affect long-term viability of communities. The commission is directed to require utilities to request information on a variety of employment metrics. When the utility proposes to construct new facilities, the utility is required to supply similar information.

Background

Since the passage of Amendment 37 in the 2004 general election, the General Assembly has passed several pieces of legislation related to clean energy development in Colorado. To provide context for this legislation, the following describes two sections of statute that relate to the provisions of HB 10-1001, and discusses 3 bills that have been enacted to amend these sections.

Renewable Energy Standard (40-2-124, C.R.S.) This section of statute was established by Amendment 37, created the original RPS for Colorado. **HB 07-1281** expanded the RPS to apply to Cooperative Electric Associations (CEAs) and Municipally-Owned Utilities (MOUs) with more than 40,000 customers. The bill raised the standard for electricity generation from renewable resources for IOUs and established a standard for CEAs and MOUs. The bill established bonuses for certain types of generation facilities, and raised the allowable retail rate impact from 1 to 2 percent of the customer's total annual electric bill. CEA's were required to submit RPS compliance reports similar to those IOUs, but these reports are not subject to the same review process.

New Energy Technologies (40-2-123, C.R.S.) This section of statute requires the PUC to consider the cost-effective implementation of clean energy and energy -efficiency technologies in it's consideration of generation acquisitions for electric utilities, bearing in mind factors such as energy security, economic prosperity, environmental protection and insulation from fuel price increases. **HB 06-1281** amended this section to require the PUC to consider the development of integrated gasification combined-cycle electric generation (IGCC) facilities upon a showing of feasibility, environmental benefits and cost-effectiveness. **HB 08-1164** further amended this section to allow the PUC to consider the likelihood of future regulation and the risk of higher future costs associated with greenhouse gas emissions. The bill also allowed the PUC to consider whether acquisition of utility-scale solar resources is in the public interest, given 5 specifies attributes of such generation.

State Expenditures

Department of Regulatory Agencies, Public Utilities Commission (PUC). This bill would require the PUC to revise or clarify the existing rules promulgated for implementation of Amendment 37, as amended by HB 07-1281. Specifically, the PUC would need to modify rules related to:

- the overall renewable energy standard for IOUs;
- the compliance bonus for electricity generated from in-state renewable energy resources;
- the standard rebate offer to allow for declining rebate levels as market conditions allow;
- the recovery of interest on funds advanced by the utility for the acquisition of more renewable energy resources at the utility's after-tax weighted average cost of capital; and
- the procedure for a utility to modify its compliance plan so as to avoid exceeding the retail rate impact.

In addition, the PUC will need to establish new rules related to:

- the specified standard for IOUs regarding distributed generation, including RDG and WDG.
- the establishment, at the PUC's discretion, of a system of performance-based incentives;
- the requirement that DG rebates decline at a rate established by the PUC based on market conditions;
- establishing a system of DG RECs and a method for converting regular RECs to DG RECs as appropriate;
- the requirement that all DG facilities with generation capacity in excess of 1 megawatt be registered with a renewable energy generation information tracking system;
- the requirement that, as much as is practicable, IOU's acquire new DG capacity equally divided between RDG and WDG; and
- the development of a system, at the PUC's discretion, to ensure that customers that install DG continue to contribute their share to the utility's renewable energy program fund, even if this results in the exceedance of the 2 % rate impact.

Promulgation of these rules will add to the workload of PUC staff, but quantification of this impact is difficult. Rule promulgation is one of the primary responsibilities of PUC staff, and historically the PUC has maintained that rules can be promulgated within existing budgetary resources. This has changed to some extent in recent years due to the contentious process surrounding the promulgation of rules to implement Amendment 37. It is hard to know in advance how contentious the rulemaking process will be. In addition, over the last few years the PUC has gained a wealth of experience in promulgating rules related to the RPS. While the department indicated that some of the bill's provisions would involve complex rulemaking, they did not indicate specific costs associated with modifying the existing RPS rules. This fiscal note will be updated if new information becomes available.

Departmental Differences

The department indicated that the PUC will incur additional expenses of \$193,681 and 2.0 FTE in FY 2010-11 and \$127,541 and 1.5 FTE in FY 2011-12 and thereafter to comply with the provisions of the bill. The components of these costs are addressed in turn below.

Evaluating Electric Resource Acquisitions. The department stated that currently, the PUC does not evaluate electric resource acquisitions. Instead, it reviews and approves a utility's plan to acquire new resources, which includes a resource acquisition process. Thus, if the PUC is going to perform the new duty of evaluating new resource acquisitions, they request an additional 0.25 FTE Professional Engineer III and 0.25 FTE Rate Financial Analyst III. In addition this new duty would require a change to the PUCs resource planning rules to incorporate PUC evaluation of resource acquisitions. The rulemaking will require 0.25 FTE Professional Engineer III, 0.25 FTE Rate Financial Analyst III, 80 hours of Administrative Law Judge time and 20 hours of Court Reporter time, plus administrative overhead. This fiscal note assumes that the bill requires the PUC to evaluate proposed resource acquisitions in the context of reviewing and approving a utility's plan for compliance with the RPS, which is what they do now. Section 40-2-123 already requires the PUC to "consider ... new clean energy and energy efficient technologies in its ***consideration of generation acquisitions for electric utilities***". This fiscal note assumes that "consideration of generation acquisitions for electric utilities" is substantively equivalent to "evaluating electric resource acquisitions" as stated in the new Section 40-2-129, which requires the PUC, in the context of this evaluation, to qualitatively consider factors that affect employment and long-term economic viability for Colorado communities, and to base this consideration on information supplied by the utility. For this reason, these costs have not been included.

Verification of Contractor Compliance. The department assumed that the PUC would be responsible for verifying contractor compliance with the solar certification requirements for photovoltaic installation crews. They requested 1.0 FTE Professional Engineer I to inspect and verify compliance with the solar certification requirements for a sampling of the work crews involved with photovoltaic system installation. However, the amendment explicitly states that the PUC shall have no responsibility for monitoring or enforcing compliance with the solar certification standards. Further, it states that it is the utility's responsibility to obtain and retain documentation of such compliance. For this reason, these costs were not included.

State Appropriations

In the event that rulemaking costs are identified, the Public Utilities Commission would require a cash funds appropriation from the Fixed Utilities Fund.

Departments Contacted

Regulatory Agencies

Law