

**Retail Rate Impact**  
**Chapter 20 Rule, Revision 11, Section 5**

(5) Retail Rate Impact.

(A) A maximum average annual retail rate increase of one percent (1%) shall be allowed for prudent costs directly attributable to RES compliance. The average annual rate increase shall be calculated based on the averaging periods established by subsection (D) of this section. The limit of this section is applicable to cost recovery in accordance with section (6) of this rule or through a rate proceeding outside or in a general rate case.

(B) The retail rate impact shall be determined by subtracting the estimated prudently incurred cost of generation to serve retail customers entirely from nonrenewable energy resources in a particular calendar year from the actual prudently incurred cost of generation to serve retail customers from the existing combination of renewable and nonrenewable energy resources in that same calendar year. The estimation of the prudently incurred cost of generation to serve retail customers entirely from nonrenewable energy resources in a particular calendar year shall be determined based on the assumed prudent utilization of least cost nonrenewable energy generation resources available to the electric utility. Rebates paid during the particular calendar year in accordance with section (4) of this rule shall be included in the cost of generation from renewable energy resources. Costs as used in this section means revenue requirements.

(C) If the retail rate impact is positive, the impact may be recovered in accordance with section (6) of this rule or in general rate proceeding. If the retail rate impact is negative, the full benefit shall be passed through to retail customers in accordance with section (6) of this rule.

(D) The averaging periods for this section shall be defined as the following years, inclusive:

1. Period 1: 2010 through 2013;
2. Period 2: 2014 through 2017;
3. Period 3: 2018 through 2020; and
4. Period 5: For years including 2021 and beyond, three (3) year intervals, beginning with 2021 through 2023.

## **SunEdison (Rick Gilliam) comments**

### *Renewable Energy Standard Rate Adjustment Mechanism (RESRAM) and cost cap issues*

The retail rate impact component of Colorado's renewable energy standard has been among the most complex and resource intensive elements of the policy. While it is tempting to use a simplified approach to determining the effect on rates of the RES, it is difficult to come up with such an approach that makes sense and is fair. Conversely, the full and detailed modeling required to accurately portray incremental costs and savings to the utility system is daunting and results in complex regulatory proceedings. As always, the regulator must strike an appropriate balance in this important topic area. Based on experience in other states, we here identify suggested guidelines for cost cap implementation.

The eligible resources used for compliance purposes should be the same resources used for the cost cap. All costs and all benefits need to be incorporated (see discussion of APS study below). Some of these resources will have a positive rate impact, i.e. increasing costs, and some will generate savings for customers, i.e. a net reduction in costs;

The method of calculation should be transparent and all assumptions and data inputs should be consistent with the utility's most recent resource plan;

To the extent that utilities own eligible resources, the full utility cost of service associated with such resources should be reflected;

Eligible resources may be acquired by a QRU prior to the time needed for compliance for a number of reasons. The QRU should not be penalized for acquisition strategies that are in the best long-term interests of its customers;

Since the RESRAM cannot exceed 1%, there may need to be another mechanism to account for the non-incremental costs of eligible resources. In Colorado the ECA (fuel clause) is utilized;

To the extent that the cost cap is reached, there should be proportionality maintained among the requirements. For example, utilities should not be allowed to stop acquiring eligible solar resources because they have expended the full incremental 1% on non-solar

RESRAM undercollections and overcollections should be given the same treatment.

## **Decent Energy, Inc. (Barry Dicker) comments**

(5) Retail Rate Impact.

(A) A maximum average annual retail rate increase of one percent (1%) shall be allowed for prudent costs directly attributable to RES compliance. The average annual rate increase shall be calculated based on the averaging periods established by subsection (D) of this section. The limit of this section is applicable to cost recovery in accordance with section (6) of this rule or

through a rate proceeding outside or in a general rate case.

(B) The retail rate impact shall be determined by subtracting the estimated prudently incurred cost of generation to serve retail customers entirely from nonrenewable energy resources in a particular calendar year from the actual prudently incurred cost of generation to serve retail customers from the existing combination of renewable and nonrenewable energy resources in that same calendar year. The estimation of the prudently incurred cost of generation to serve retail customers entirely from nonrenewable energy resources in a particular calendar year shall be determined based on the assumed prudent utilization of least cost nonrenewable energy generation resources available to the electric utility. *[Comment: The statute specifically requires that this be done under the rules "taking into proper account future environmental regulatory risk including the risk of greenhouse gas regulation". We think that the accounting for greenhouse gases associated with non-renewable production ought to be consistent with the rule developed by the EPA, the proposed version of which is set out at 16606 Federal Register Vol 74, No. 68, April 10, 2009. A link to a downloadable copy of the proposed rule can be found at <http://www.epa.gov/climatechange/emissions/ghgrulemaking.html> Although we are not providing an accompanying mark up for 4 CSR 240-3, we believe that accounting for environmental costs and contingent liabilities ought to be reflected there as well.]* Rebates paid during the particular calendar year in accordance with section (4) of this rule shall be included in the cost of generation from renewable energy resources. Costs as used in this section means revenue requirements.

(C) If the retail rate impact is positive, the impact may be recovered in accordance with section (6) of this rule or in general rate proceeding. If the retail rate impact is negative, the full benefit shall be passed through to retail customers in accordance with section (6) of this rule.

(D) The averaging periods for this section shall be defined as the following years, inclusive:

1. Period 1: 2010 through 2013;
2. Period 2: 2014 through 2017;
3. Period 3: 2018 through 2020; and
4. Period 5: For years including 2021 and beyond, three (3) year intervals, beginning with 2021 through 2023.

**Renew Missouri, Missouri Coalition for the  
Environment, Great Rivers Environmental Law Center  
(Henry Robertson) comments**

(5) Retail Rate Impact.

(A) A maximum average annual retail rate increase of one percent (1%) shall be allowed for prudent costs directly attributable to RES compliance. The average annual retail rate increase shall be calculated based upon an averaging period of at least ten years projected forward from the current calendar year. This calculation is intended to be consistent with integrated resource planning under 4 CSR 240-22.

(B) Within 90 days of the enactment of this rule and thereafter with its annual RES Compliance Plan, each utility shall submit a filing consistent with the requirements of this section. The utility shall fully disclose to interested parties all aspects and assumptions included in its calculations pursuant to this section, including the range of inputs used in its modeling runs. The utility shall provide sufficient access to its modeling program and software used to make its calculations and estimates of hypothetical rate impacts in order to allow interested parties the opportunity to analyze alternative modeling runs. All calculations, modeling, and assumptions shall be subject to the review and approval of the Commission.

(C) Each utility shall estimate its least cost renewable generation as follows:

1. The utility shall identify all eligible renewable energy resource alternatives commercially available to it through ownership, power purchase agreements, or purchase of RECs.

2. The utility shall screen these resource alternatives based upon annualized costs. Installed capacity costs and fixed and variable O&M costs shall be levelized over the useful life of a resource. Capital costs will be given less anticipated depreciation. The utility shall indicate which resource alternatives are considered candidates for its RES compliance portfolio and, if it has eliminated any alternatives, provide a detailed explanation for elimination.

3. The utility shall assemble various combinations of eligible renewable resources for the purpose of determining the lowest cost RES compliance portfolio that will meet but not exceed the RES targets. The utility shall use load projections in its calculations that are reasonably

anticipated based upon its most recently accepted Integrated Resource Plan, unless a more accurate assessment has since been found. The utility shall exclude from its calculation nonrenewable generation that is not needed to meet anticipated load requirements for each of the years after taking into account the required increment of renewable generation.

4. The utility shall assess the relative performance of its portfolios by calculating the value for each of the following performance measures: present worth of utility revenue requirements, including rebate costs and program administration costs, and levelized average rates. Administration costs shall be capped at five percent of total annual costs. The analysis shall cover a planning horizon of at least ten years. All present worth and levelization calculations shall use the utility discount rate and costs shall be expressed in nominal dollars.

5. The utility shall deduct from its rate impact calculations all additional costs associated with achieving any federal renewable energy standard.

6. The portfolio that achieves the lowest average rate will be used for the forward comparison of rate impacts.

(D) The cost of continuing to generate or purchase electricity from entirely nonrenewable sources shall be determined by adding:

1. The cost of service most recently approved by the commission for the utility, exclusive of the cost of service associated with RES compliance;
2. Cost of service changes since the approval of the utility's revenue requirement, exclusive of cost of service changes associated with RES compliance
3. The present value of the potential revenue requirement impact associated with the incremental addition of RES-ineligible generating resources, both owned and purchased, from the preferred plan adopted in the utility's most recent Chapter 22 integrated resource planning filing, that would correspond to the applicable RES requirements for each year in the RES planning horizon;
4. The quantified probable cost of compliance with future environmental regulations, derived from modeling a range of reasonably probable costs, averaged over the same RES planning horizon used in the calculations for subsection (C), including

greenhouse gas regulations, for each type of nonrenewable generation.

(E) The average retail rate impact as determined under (5)(C) should not exceed 1% of the average retail rate impact determined under (5)(D).

(F) If the calculation shows that the utility has a substantial risk of the hypothetical average rate impact to consumers under Scenario 1 being greater than one percent over the hypothetical rate impact to consumers under Scenario 2, then the utility may at the time of its compliance or IRP filing petition the Commission for a hearing to review the plan and the utility's calculations. The Commission shall determine if the utility's conclusions are accurate and the course of action that should be taken to meet the requirements of the RES. The Commission may order the utility to use different models, different modeling assumptions, revise its plan to implement the RES, use a course of action that implements the full compliance of the RES with lowest cost renewable resources regardless of source, and make such other orders as it deems appropriate to meet the requirements of the RES. The Commission shall take into account the ability of rates to be passed through and carried forward under the pass-through mechanism established in subsection (6).

(G) The calculation of retail rate impacts shall be filed with the utility's RES compliance plan as required by 4 CSR 240-20.XXX(10), and shall be updated and filed at least as often as the year preceding the effective date of a new RES requirement under section 393.1030.1(1)-(4).

### **AWEA (Hans Detweiler) comments**

#### **Rate Impact**

AWEA is very concerned about the lack of understanding and consensus on the rate impact language. AWEA recognizes the difficulty of writing language to address this issue. The complexity is compounded by language that was passed by the General Assembly in the 2008 Session that also appears to address rate impact of an RES in a prospective way. AWEA submits that the language in the Senate Bill (codified as

§ 393.1045) is inapplicable to Proposition C and should be ignored in this rulemaking.<sup>1</sup> In order to provide some clarity and limit the gaming that could occur around the rate impact language found in the Initiative itself, AWEA submits that the rules should include certain guideposts and restrictions on the modeling that will need to occur in projecting the forward-looking resource planning comparisons contemplated under it. An additional workshop that would begin crafting this portion of the rule is needed.

The Initiative language on rate impact is clearly a forward-looking comparison of two scenarios- one meeting the RES and one without any renewable resources. The scenarios are to be compared in a modeling of future forecasts of load, fuel, weather, fuel prices, transportation costs, capital costs, environmental costs including carbon and other matters that are required to be examined in an Integrated Resource Planning session. These scenarios will not produce exact numbers for comparison but rather a range of probable outcomes and costs. These possible outcomes may cause the future to look more or less cost effective in the RES versus the nonrenewable scenario. There will not be one number for one scenario and one for the other. The rationale for the rate impact language was thus not to suggest that the utilities may on their own motion choose to ignore the policy of the RES by claiming that a threshold had been met, but rather to allow utilities to come to the Commission in the event the probabilities of rate impact were of such a magnitude that some adjustments in the forward planning of the utility appropriately could be considered without incurring penalty under the Initiative.

Resource planning is never an exact science. It is instead an attempt to make decisions around likely future events. The conclusions result in decisions about the resources that will be necessary to meet load over time. The current IRP process in Missouri provides for forward planning under certain guidelines. The law now requires that the IRP process include the requirements of the RES. Further, it makes sense for the Res versus non-RES comparisons to take place in the 20 year planning time frame used in Integrated Resource Planning.

AWEA submits that more must be done to ensure that the rate impact provision of the Initiative is not being gamed to avoid RES compliance. AWEA submits that the rules at a minimum contain certain requirements on the calculation of the scenarios and that they be projected over a 20 year time period as used in IRP. AWEA further suggests that the Commission, not the utility, determine, after appropriate review of evidence, the validity of a utility's assertion that it is unable to meet the RES percentages due to the rate impact and then determine whether to grant a utility's request that penalties be diminished based on the same.

---

<sup>1</sup> The requirement to write rule language that is contained in the Initiative does not require the Commission to write a rule involving § 393.1045, RSMo. AWEA believes that the language passed in the 2008 Senate Bill attempting to amend the Initiative prior to its approval by the Missouri voters is unconstitutional. While the Commission may not have the authority to determine the constitutionality of a law it is not required here to write a rule on § 393.1045, RSMo. In light of the Constitutional question that surrounds it should decline to do so.

## **KCP&L comments**

(5) Retail Rate Impact.

(A) A maximum average annual retail rate increase of one percent (1%) as calculated in this section 5 of the rules shall be allowed for prudent costs directly attributable to RES compliance.

(B) The maximum allowable retail rate impact shall be determined by calculating the cost for the base plan as reflected by the electric utility's commission approved jurisdictional revenue requirement for the test year used as the basis for the utility's most recent general rate proceeding trued up for appropriate adjustments prior to the development of the RES Compliance Plan detailed in section (10) of this rule. This base plan shall reflect the cost of continuing to purchase or generate energy supplies from entirely nonrenewable sources. Entirely nonrenewable sources for the purpose of use in these rules shall be deemed to have the meaning: no incremental renewable sources beyond what is imbedded in the electric utility's base plan. For its base plan, the utility shall use the alternative plan defined in IRP Rule 4 CSR 22.060 (3) (A) 2 as amended. This base amount shall be adjusted by the impact of future environmental regulatory risk including the risk of greenhouse gas legislation to determine the maximum allowable retail rate impact.

1. For the first year after a completed general rate proceeding, the base allowable rate impact shall be 1% of the test year revenue requirement adjusted for the impacts of future environmental regulatory risk plus any test year value attributed to a pre-existing RESRAM.

2. For subsequent years, the base allowable rate impact shall be 101% of the previous year's maximum allowable rate impact.

3. To account for future environmental regulatory risk including greenhouse gas regulation, the utility shall be required to estimate the present value of future compliance with greenhouse gas regulation per megawatt-hour of non-renewable energy generated by its system. This compliance cost shall be reflected in the form of a cost per ton of carbon dioxide emitted.

4. The base allowable rate impact shall be adjusted by the cost of the carbon dioxide emitted by the electric utility's base plan annual non-renewable based generation above the RES requirement for that year, assuming the utility's average carbon emission rate for its non-renewable portfolio.



5. The base allowable rate impact for a particular year plus the cost of carbon dioxide emissions over the target for that year is the maximum allowable rate impact that year and the utility's compliance requirements for that year will be reduced to that amount of the requirements that keep rates within the maximum allowed 1% as defined above.

6. The maximum allowable rate impact for a previous year shall be the value calculated for that calendar year when it was the current year of a compliance plan as defined in section (10), and shall not change over time.