

# **ANALYSIS OF THE RATE IMPACTS OF COLORADO'S RENEWABLE ENERGY STANDARD**



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**Prospective Extension to Rural Electric  
Associations in Senate Bill 13-252 for the  
Colorado Rural Electric Association**

**PREPARED BY:**

**RICHARD P. MIGNOGNA, PH.D., P.E.**

**RENEWABLE & ALTERNATIVE ENERGY MANAGEMENT, LLC  
RM GROUP, LLC**

# Analysis of the Rate Impacts of Colorado's Renewable Energy Standard

## PROSPECTIVE EXTENSION TO RURAL ELECTRIC ASSOCIATIONS IN SENATE BILL 13-252 FOR THE COLORADO RURAL ELECTRIC ASSOCIATION

### 1.0 INTRODUCTION

In April 2013, Senate Bill 13-252 was introduced in the Colorado General Assembly. Among the important provisions of this bill is the imposition of a 25-percent by 2020 renewable standard on cooperative wholesale generation and transmission (G&T) suppliers. In this case, that means specifically Tri-State G&T which is the wholesale supplier to 18 of the rural electric cooperatives serving Colorado. The bill would also impose the same 25-percent RES standard on cooperative rural electric associations that serve 100,000 or more meters. Only one co-op, one not served by Tri-State, meets this threshold – Intermountain Rural Electric Association (IREA). The remaining co-ops continue under the existing standard of 10-percent by 2020 although the rate impact limitation for all cooperative utilities would increase to 2 percent.

Additional provisions in the bill include:

1. The addition of captured coal mine methane as an eligible energy resource under the RES;
2. The addition of synthetic gas produced by pyrolysis of municipal solid waste as an eligible energy resource under the RES;
3. Imposition of a distributed generation (DG) requirement of one percent of retail sales on all cooperative electric associations beginning in 2020 with one-half of that amount coming from retail DG;
4. Removes the 1.25 in-state REC multiplier for Colorado projects that go online on or after 01 January 2015 while extending the multiplier to all projects regardless of location until that date;<sup>1</sup>
5. Extends a compliance multiplier of 3 to solar electric generation technologies for all cooperative electric associations (including Tri-State).

One of the most controversial provisions of Colorado's RES since its inception has been the interpretation and calculation of the rate impact limitation (aka rate cap). SB13-252 not

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<sup>1</sup> This is felt to be an acknowledgement that the in-state multiplier is likely to be found in violation of the dormant commerce clause of the Interstate Commerce Act.

only does nothing to remedy that dilemma, it extends it to the new obligations imposed on rural electric cooperatives. Hence, the bulk of the discussion that follows will focus on an analysis of Colorado's rate cap.

## 2.0 HISTORY OF RATE IMPACT LIMITATION IN THE COLORADO RES

In 2004, the Colorado RES became the first renewable energy standard in the country to be passed by a ballot initiative. The initiative, known as Amendment 37, passed by a margin of approximately 53 percent to 47 percent but actually failed in more counties than it passed. To mitigate the concerns of the electorate about the cost of the initiative, proponents included a rate cap which purported to guarantee that compliance with the standard, which was initially set at 10 percent by 2015, would not raise retail electric bills by more than fifty cents (\$0.50) per month. In the legislation to enact Amendment 37, Senate Bill 05-143, it was recognized that fifty cents was essentially a meaningless value for commercial customers. Recognizing that fifty cents was, at the time, approximately 1 percent of the bill for an average residential customer, the rate cap was changed to 1 percent for all retail customers.

When the RES was doubled in 2007 by House Bill 07-1281 to 20 percent by 2020 for investor owned utilities (IOUs), the rate cap was also doubled to 2 percent. This author recalls seeing no analysis or justification for the new rate cap other than the obvious: if 1 percent is sufficient for a 10 percent renewable obligation, then 2 percent would suffice for a 20 percent obligation. Incredibly, when the RES obligation was increased again in 2010 by HB10-1001 to 30 percent for IOUs, the rate cap remained at 2 percent. Clearly, there has been no rigorous analysis relating the renewable energy obligation to the resulting rate impacts.

The principal source of controversy, however, has not been the value of the rate impact limitation but rather the language in the statute concerning how it is calculated and its subsequent interpretation by the IOUs and the Public Utilities Commission.

### 2.1 Statutory Language in §40-2-124, C.R.S.

The retail rate impact rule in the RES statute can be found at §40-2-124(g), C.R.S. which reads:

(l)(A) Except as otherwise provided in subparagraph (IV) of this paragraph (g), for each qualifying utility, the commission shall establish a maximum retail rate impact for this section of two percent of the total electric bill annually for each customer. The retail rate shall be determined net of new alternative sources of electricity supply from noneligible energy resources that are reasonably available at the time of the determination.  
[emphasis added]

The language in the second sentence of this paragraph has since been the subject of more litigation and discussion in PUC proceedings than all other aspects of the RES put together. The clear intent of this language would appear to restrict the impact to 2 percent over the costs that a consumer would pay if there were no renewable standard. One source of controversy is that the paragraph speaks both to a *retail rate* impact and a limit on the annual electric bill of a consumer. But, these are not the same thing.

A second problem that is ripe for manipulation is the definition of “new alternative sources of electricity supply... that are reasonably available at the time of the determination.” Who selects the “new alternative sources” of supply and what are their costs, what does “reasonably available” mean, and what is the “time of the determination?” Unfortunately, the subsequent PUC rule making did nothing to clarify these issues and we have suffered through six years of controversy as a result.

In the first RES compliance plan proceeding in 2007, Staff expressed concern that Public Service Company of Colorado (PSCo) was seeking to acquire too much renewable energy, too soon, at too high a cost and that it would be unlikely to comply with what was then a 1 percent rate cap. In rebuttal testimony, one of PSCo's witnesses in fact admitted that, if the company was not granted a waiver for 775 MW of new wind from the rate impact calculation, it would not be able to meet the rate cap. The Commission granted the waiver.

In response to Staff concerns about the level and cost of PSCo's renewable energy acquisitions, PSCo and renewable energy proponents were successful in inserting a clause in HB07-1281 that restricted the Commission's ability to limit utility acquisitions or the amount that it spent. Hence, the second paragraph of the retail rate impact rule §40-2-124(g), C.R.S. which reads:

(B) If the retail rate impact does not exceed the maximum impact permitted by this paragraph (g), the qualifying utility may acquire more than the minimum amount of eligible energy resources and renewable energy credits required by this section. At the request of the qualifying retail utility and upon the commission's approval, the qualifying retail utility may advance funds from year to year to augment the amounts collected from retail customers under this paragraph (g) for the acquisition of more eligible energy resources. Such funds shall be repaid from future retail rate collections, with interest calculated at the qualifying retail utility's after-tax weighted average cost of capital, so long as the retail rate impact does not exceed two percent of the total annual electric bill for each customer.

The result of this paragraph was that utilities were freed from any reasonable definition of the rate cap and were essentially given *carte blanche* to overspend and acquire more renewables than needed for compliance with the RES. Utilities, sensing new profit-making opportunities based on the sale of excess RECs and the interest earned from advancing funds, soon drove their Renewable Energy Standard Adjustment (RESA) rider accounts deep into the red, a situation which remains today.

## 2.2 Public Utilities Commission Rate Impact Rules

The PUC's retail rate impact rules have only exacerbated the problems with the ill-conceived rate impact language in the statute. Initially, the Commission created three different rate impact calculation rules – one for large IOUs, one for smaller IOUs, and one for co-ops.

### 2.2.1 Rate Impact Rules for Large Investor Owned Utilities

The rate impact calculation for large IOUs (of which PSCo is the only one) can be found in PUC Rule 3661(h):

“(h) The basic method for investor owned QRUs for performing the estimate of the retail rate impact cap is as follows:

(I) The QRU shall determine all commercially available resources to the QRU, either through ownership or by contract, for the RES planning period. The projected costs of these available resources shall be reflected in both of the scenarios analyzed under this paragraph.

(II) The QRU shall determine the QRU’s capacity and energy requirements over the RES planning period. The QRU shall develop two scenarios to estimate the resource composition of the QRU’s future electric system and the cost and benefits of that system over the RES planning period. The first scenario, a renewable energy standard plan or “RES plan” should reflect the QRU’s plans and actions to acquire new eligible energy resources necessary to meet the renewable energy standard. The second scenario, a “No RES plan” should reflect the QRU’s resource plan that replaces the new eligible energy resources in the RES plan with new nonrenewable resources reasonably available.”

The manner in which this calculation is intended to work is illustrated in figure 1.

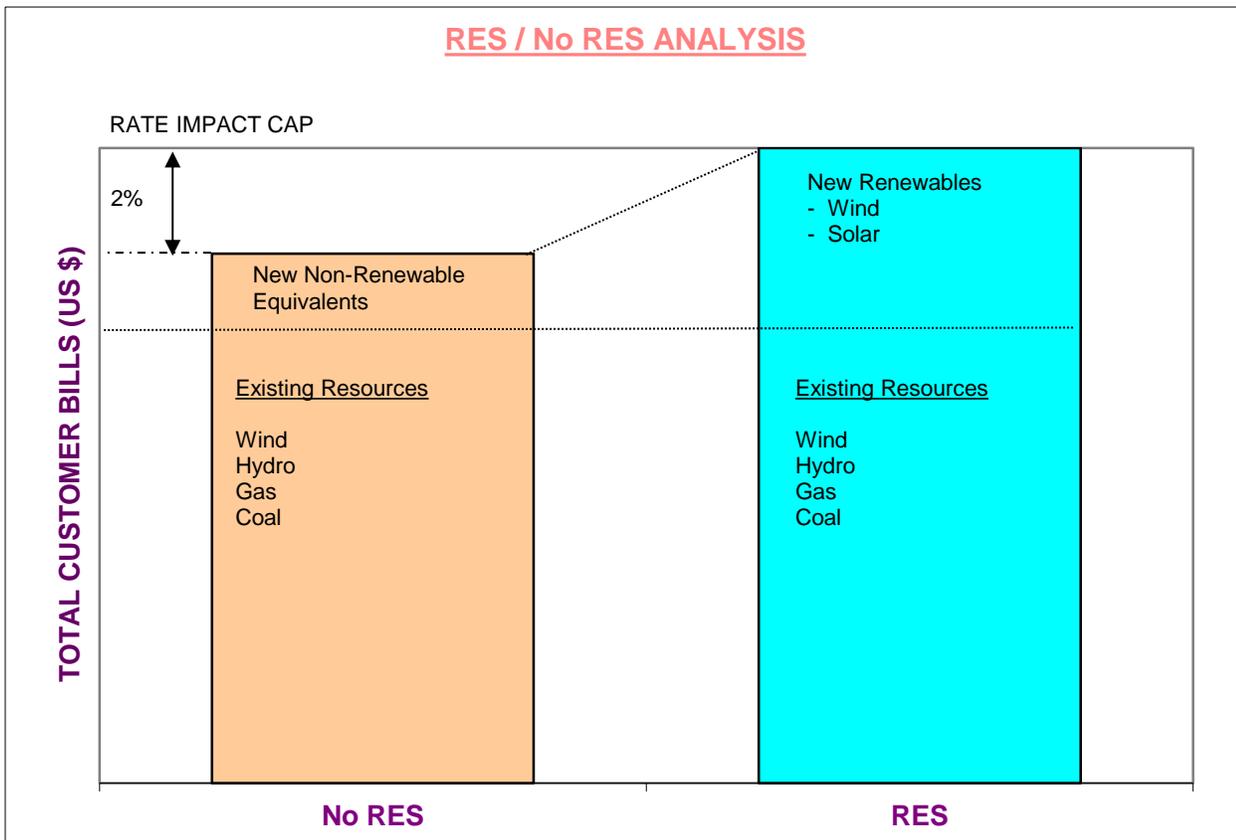


Figure 1 - Illustration showing retail rate calculation

Under this procedure, the No-RES portfolio includes existing nonrenewable resources as well as the “new alternative sources of energy supply” that would otherwise be added but for the renewables. It could also include commercially available, existing renewable resources. The RES portfolio is to contain the renewable resources that have been added in response to the RES requirement. But, as will be discussed further below, the manner in which this has been implemented in practice, along with the nonspecific language in the statute allows utilities to circumvent its clear meaning.

### 2.2.2 Rate Impact Rules for Small Investor Owned Utilities

Initially, Qualifying Retail Utilities (QRU) with retail sales of fewer than 5 million MWh per year and for whom solar compliance would be the principal rate impact were permitted to use an alternative method of calculating the rate impact. At that time, Rule 3661(g) read:

“Any QRU with annual retail sales of less than five million megawatt-hours can use an alternate method to determine the estimate of the retail rate impact. The alternative method can be used for those RES Planning Period years when the only remaining portion of the Renewable Energy Standard with which the QRU needs to comply is the Eligible Renewable Energy that must be acquired from Solar Electric Generating Technologies.

- (I) The retail rate impact will be determined by using the estimated costs of the proposed Solar Electric Generating Technologies less the estimated annual average costs of energy of existing resources that would be replaced with energy generated by the proposed Solar Electric Generating Technologies. The QRU shall also incorporate into this retail rate impact analysis other cost savings created by the deployment of the Solar Electric Generating Technologies and any other cost savings from the deployment of other non-solar renewable energy resources used to meet the Standard. These cost savings include, but are not limited to, the avoided or deferred costs of generation, transmission and distribution facilities.
- (II) The QRU will then convert this net cost figure into a percent of total electric bill annually for each customer. In no event shall the percent of total electric bill annually exceed one percent for each customer. To the extent that the net cost figure results in the QRU exceeding the one percent for each customer threshold, the QRU shall modify its acquisition of Solar Electric Generating Technologies in order to not exceed the maximum retail rate impact.”

This provision, which in practice applied only to Black Hills Colorado Electric (then Aquila), was deleted in rule making docket 08R-424E (Decision C09-0990, Sep2009).

### 2.2.3 Rate Impact Rules for Rural Electric Associations

Although the co-ops are required to abide by a 1 percent rate cap, the statute and PUC rules have provided little guidance about they should calculate the retail rate impact. Rule 3661(b) states only that co-ops are held to a 1 percent rate impact limitation while Rule 3663 (XV), which lists information to be

included in a QRU Compliance Report, requires only "A description of the method used to develop the retail rate impact calculation." For the first two years of co-op compliance with the RES (2008 and 2009), the compliance reports submitted by the co-ops indicated no rate impact as most of their compliance obligation was achieved via the transfer of a load ratio share of RECs obtained on their behalf by their wholesale providers. We have not had an opportunity to review co-op RES compliance reports for 2010 and later during which their obligation increased to 3 percent of retail sales.

### 2.3 Deficiencies in Colorado's Rate Impact Limitation Approach

Closer inspection of the rate impact limitation methodology reveals a number of ways to circumvent the clear intent of the 2 percent rate cap. As noted above, one of the first successful attempts at circumventing the rate cap procedure occurred in the 2007 RES Compliance Plan docket in which PSCo appealed for a waiver of 775 MW of new wind from the rate impact calculation. Essentially, they argued that these resources should be deemed to be existing. Returning to figure 1, you can see that this has the effect of inflating the NoRes portfolio which affects the calculation in two ways. First, it raises the level of the NoRES portfolio so that the RES portfolio can be that much higher. Second, 2 percent of the greater base amount is, in itself, a larger differential which when added to the base results in an even larger amount. Thus, the selection of which resources to place in each bucket is a very important consideration.

Related to this is the concern with what are known as Section 123 resources per §40-2-123, C.R.S. In PSCo's 2007 Electric Resource Plan (Docket 07A-447E), the Commission ruled that Section 123 resources would be exempt from the rate impact calculation even though they may be used for RES compliance. To date the one significant Section 123 renewable resource that is not counting against the rate cap is the \$140 million, 30MW Cogentrix concentrating photovoltaic facility in the San Luis Valley. Importantly, although the costs of resources for which a waiver has been granted and the cost of Section 123 resources are not going against the 2 percent rate cap, that doesn't mean they are free. Their costs are being fully paid by ratepayers in the Electric Commodity Adjustment (ECA) rider.

Another deficiency in the RES/NoRES modeling methodology is that the NoRES portfolio is to include the cost of the nonrenewable alternative sources of energy supply that the more expensive renewables displace. But, as pointed out by Staff in the first RES Compliance Plan docket in 2007, frequently the capacity of the RES resources is so small that they are not actually displacing any conventional resources.<sup>2</sup> To our knowledge, there are no known examples of a conventional generator that was not acquired as a result of the acquisition of a renewable generator. In such cases, the entire cost of the renewable generator should be considered incremental. At best, the renewable energy displaces only an equivalent amount of gas-fired generation.

All of these machinations conspire to make it appear as though the incremental cost of compliance with the RES is less than it really is. But perhaps none of these manipulations of the RES/NoRES modeling is as egregious as allowing the utility to redefine the plain meaning of a 2-percent impact. PSCo has been allowed to maintain that, because its RESA surcharge is a flat 2 percent of each customer's monthly bill,

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<sup>2</sup> For example, PSCo gives wind a capacity credit of only 12.5 percent in its electric resource planning.

that 2 percent is the *de facto* rate impact. Thus, if they collect \$50 million via the 2-percent RESA but spend \$70 million, they argue that the impact is still 2 percent. Never mind that the \$20 million excess is placed in a deferred account for which ratepayers are still liable, and never mind that they charge ratepayers interest at the firm's weighted average cost of capital which is added to the deficit, PSCo incredibly still maintains that they are honoring the 2-percent rate cap.

A simple analogy can be made to your credit card, except that someone else is making purchases for which you must pay. And, although the credit card company may only require a minimum monthly payment (coincidentally usually 2 percent of the balance), you are still liable for the full amount... plus accrued interest! The bottom line is that the utility is allowed to overspend, using other people's money, then charge them interest, and profit handsomely from the transaction.

#### 2.4 Public Service Company of Colorado's Actual RES Rate Impacts

As discussed above, PSCo has taken advantage of several loopholes to circumvent the 2 percent retail rate impact while increasing its own profit. Unfortunately, the Commission has been complicit in allowing this to happen. Some of these activities include:

- Inflating the NoRES bucket in the RES/NoRES modeling by including renewable resources (via waiver or Section 123) that more properly belong in the RES bucket;
- Inflating the actual cost of the nonrenewable resources that do properly belong in the NoRES bucket;
- Acquiring resources well beyond those needed for compliance and placing the excess costs in a deferred account;
- Charging consumers millions of dollars in interest on the deficit in the RESA deferred account; and
- Profiting from the sale of the excess RECs acquired with the ratepayer share of these proceeds used to buy down the RESA deficit when these proceeds should have been returned to ratepayers.

The important point to remember is that the 2 percent RESA covers only the incremental costs of renewable generation and, in the case of the RESA deferred account, not even those. The bulk of the total cost of renewable generation is paid for by ratepayers through the ECA. In spite of Staff's repeated warnings, only recently has the Commission required PSCo to divulge the full cost of its renewable acquisitions. Still, the actual amount is difficult to discern and varies widely from year to year. Nonetheless, an estimate of the magnitude of these costs can be obtained from inspection of PSCo's annual compliance reports and Staff's review.

Table 7-3 from PSCo's 2012 RES Compliance Plan (Docket 11A-418E) will help put some of these numbers in perspective (See Attachment A). Note column P, Total Renewable Energy Costs, which range from more than \$135 million in 2011 to an estimated \$225 million by 2021. In comparison, note that the annual RESA Rider Revenue (2 percent) ranges from \$52 million to \$62 million during the same time period. Note further that the Rolling RESA Deferred Balance (Column Y) bottoms out at a deficit of more

than \$78 million in 2013 before finally going into the black in 2017.<sup>3</sup> Data submitted by PSCo in its 2010 RES Compliance Report shows 2010 total renewable energy costs of \$97.7 million, RESA revenue of \$55.8 million (including Windsorce premiums), and incremental renewable costs of \$73.8 million resulting in a RESA deferred account deficit of \$46.8 million (which is where Table 7-3 picks up). We caution, however, that these are PSCo's estimates which have not previously been found to be particularly reliable.

As stated in the answer testimony of Staff witness William Dalton (p. 5, l. 1-3) "The Company's RES Compliance plan will result in the Company continuing to exceed existing compliance requirements at a cost that exceeds the statutory retail rate impact." Later on (p. 11, l. 18 – p. 12, l. 3), with respect to the Company's sales of surplus RECs paid for by ratepayers, Mr. Dalton states:

"Ratepayers' share of margins are not being returned to them. Instead, they have been used to pay back the Company for its past overspending or, worse still, used by the company to acquire even more resources that will generate additional RECs for [the] Company to sell at a profit. Staff has previously warned of this perverse incentive being taken advantage of by the Company."

Mr. Dalton further describes how, for the years 2007 through 2010, the Company has consistently understated the renewable costs recovered in the ECA. On page 18 he notes that in 2010 alone, the net ECA cost of renewable resources to ratepayers is estimated at over \$169 million. The important point, as stated by Mr. Dalton (p. 19, l. 15-17) is that "...during 2010, the RESA revenue by itself was insufficient to cover the annual total net costs of the Company's renewable energy resource portfolio, which was \$239,511,092 during 2010."

At the risk of belaboring the point, we offer a few additional quotes from Mr. Dalton's 11A-418E testimony:

"This could be a point of confusion to ratepayers and other interested parties; while the Company is exceeding the RES, it is not doing so within the two percent retail rate impact limit as required by §40-2-124, C.R.S. or the two percent rider on customers' bills. It is very likely that ratepayers believe that they are paying exactly 2% more for renewables than would have otherwise been the case for conventional resources, but in actuality that is incorrect. The RESA reflects only the projected incremental costs; the difference with respect to actual costs is masked through recovery of renewable energy costs in the ECA." [p. 19, l. 19 – p. 20, l. 6]

"Staff estimates the total annual costs of renewable acquisitions is \$317,689,851 and \$343,087,872 for 2011 and 2012, respectively. Further, Staff believes the Company's application under-estimates the annual costs of renewables borne by ratepayers by at least \$182,050,000." [p. 20, l. 15-19]

"The Company is manipulating assumptions to avoid the obvious, i.e. that the Company's acquisitions are resulting in ratepayer costs above the statutory two percent limit." [p. 32, l. 3-6]

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<sup>3</sup> We also note that, prior to the Settlement in the solar incentives docket, Docket 11A-135E, the 2011 RESA deficit was projected to be approximately \$97 million.

And finally, Mr. Dalton reiterates an argument that this author made as far back as the first 2007 RES Compliance Plan:

“Staff points out that had the Company shown restraint in resource acquisition, a larger portion of the portfolio could have resulted in lower total costs to ratepayers. A new 200 MW wind contract will not compensate for the 1,800 MW of higher priced wind contracts that include price escalators. Ratepayers have been harmed by over-paying for resources not needed for compliance.” [p. 34, l. 16 – p. 35, l. 2]

We could go on, but there seems little benefit in belaboring the point: **The two percent rate cap has been an inconvenience to be circumvented at every opportunity and has been proven to be insufficient to fund Public Service Company's present level of renewable acquisitions.**

### 3.0 ANALYSIS OF RATE IMPACT PROTECTIONS IN SB13-252

As noted earlier, SB13-252 retains most of the existing provisions of the Renewable Energy Standard for cooperative rural electric associations serving fewer than 100,000 meters, except for increasing the retail rate impact to 2 percent. That leaves only Intermountain Rural Electric Association as the lone retail REA subject to the new compliance obligation of 25 percent by 2020. Unfortunately, the same retail rate methodology that has been so problematic in the case of the IOUs has been retained. Furthermore, there is once again the same logical inconsistency: the rate cap for the single co-op with a 25-percent compliance obligation is set at 2 percent while the rate cap for the remaining co-ops with a 10-percent compliance obligation is also 2 percent. Clearly, this needs further study.

The bill imposes a new RES compliance obligation of 25 percent by 2020 on wholesale cooperative electric associations. The obvious target of this provision is Tri-State G&T. However, there are three foreign (based out of state) co-ops that serve Colorado customers: Moon Lake Electric Association, High West Energy, and Wheatland Electric Cooperative. These co-ops, at least one of which is supplied by a different wholesale supplier, also have a Colorado RES compliance obligation and one wonders if Section (8) of the SB13-252 would apply to their wholesale providers as well.<sup>4</sup>

Section (8)(f) of SB13-252 contains language requiring that the qualifying wholesale utility employ cost allocation methods to assure that its costs of compliance are recovered only from its Colorado members and do not impact customers outside of Colorado. This in itself should not be terribly difficult. However, the Reengrossed version of the bill passed out of the Senate added the following language to paragraph (8)(b):

“If and to the extent that, the purchase of energy generated from eligible energy resources by a Colorado member from a qualifying wholesale utility would cause an increase in rates for the Colorado member that exceeds the retail rate impact limitation in sub-subparagraph [sic] (A) of subparagraph (IV) of paragraph (g) of subsection (1) of this section, the obligation imposed on the qualifying wholesale utility is reduced by the

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<sup>4</sup> Wheatland is served by Sunflower Electric Power Corporation and High West is a Tri-State co-op. We are uncertain of the affiliation of Moon Lake.

amount of such energy necessary to enable the Colorado member to comply with the rate impact limitation." [emphasis added]

Given that the wholesale supplier is subject to a 25-percent obligation, and the individual co-ops are subject to only a 10-percent obligation, this rate cap provision is even more convoluted than the one imposed on Colorado IOUs. If each of 19 individual members reported that their purchase of renewable energy must be curtailed by a different amount for them to meet the rate cap, the result would be an accounting nightmare. Moreover, how does a wholesale supplier subject to a 25-percent RES obligation pass along costs to members that each have only a 10-percent compliance obligation? Who pays for the remaining 15 percent? This is an unworkable approach.

The rate impact calculation aside, we are left with one other question concerning a possible unintended consequence of the language in paragraph (8)(c) of the bill:

"A qualifying wholesale utility may count the energy generated or caused to be generated from eligible energy resources by its Colorado members or by the qualifying wholesale utility on behalf of its Colorado members pursuant to subparagraph (V) of paragraph (c) of subsection (1) of this section toward compliance with the energy resource standard established in this subsection."

It is not clear whether this provision could lead to double counting of RECs as it appears that the language may allow both the wholesale provider and the individual member to claim credit for RECs generated by the individual member.

#### 4.0 CONCLUSION

Regardless of how one views the goal of placing Colorado's rural electric associations, and their wholesale supplier, under a more stringent renewable energy obligation, it does not appear that the provisions of SB13-252 have been well thought out. The obligation on the wholesale provider and one large co-op may be more aggressive than can reasonably be attained in the next 7 years within the confines of the rate cap. The rate impact calculation in particular – a remnant from the grossly manipulated rate impact limitation in the RES for investor owned utilities – is even more convoluted and unworkable. A simpler and more transparent mechanism for funding renewable energy and for protecting ratepayers from unreasonable cost escalation must be found.

## ATTACHMENT A

Table 7-3 from Public Service Company of Colorado's 2012 RES Compliance Plan  
Colorado Public Utilities Commission Docket 11A-418E

**Table 7-3**  
**Public Service Company of Colorado**  
**Renewable Energy Standard Adjustment Estimate**  
**For the Years 2011-2021**

RESA Revenue %	
0.600%	2007
1.460%	2008
2.000%	2009
2.000%	2010

RESA Revenue %	
2.000%	2009
2.000%	2013
2.000%	2016

**2012 Renewable Compliance Plan**  
**NO CARBON CASE**

A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
Total RES Renewable Energy Costs					RESA Related Revenues			RESA Related Expenditures						
	On-Site Solar Costs	NEW Central Solar Costs	NEW Wind Energy Costs	NEW Other Renewables Costs	Total RES Renewable Energy Costs (B thru E)	RESA Rider Revenue	Premium Windsource Credits	REC Margins		Modeled Incremental Costs	Ongoing Incremental Costs	Purchased RECs	RESA Program & Admin Costs	Windsource Program & Admin Costs
2011	71,592,992	10,052,689	49,539,500	0	131,185,181	52,114,460	4,640,326	52,700,000		95,904,841	4,450,093		1,423,714	322,544
2012	24,144,998	21,190,886	102,897,709	0	148,233,593	53,042,098	4,686,729	2,800,000		84,918,257	5,154,124		1,673,276	325,769
2013	23,861,998	21,169,349	125,963,262	0	170,994,609	53,986,247	4,733,596			61,897,509	4,767,584		959,004	329,027
2014	27,291,998	21,222,402	127,722,965	0	176,237,365	54,947,202	4,780,932			49,720,173	2,527,502		977,024	332,317
2015	29,709,002	21,242,346	129,693,851	0	180,645,199	55,925,262	4,828,742			28,723,736	1,024,587		1,255,624	335,640
2016	31,118,000	21,336,557	129,998,952	0	182,453,508	56,920,732	4,877,029			29,454,859	940,447		1,025,196	338,996
2017	32,114,000	21,358,220	156,257,220	0	209,729,440	57,933,921	4,925,799			26,327,396	3,669,000		1,034,315	342,386
2018	32,534,000	21,382,186	158,823,023	0	212,739,210	58,965,145	4,975,057			(34,497)	3,529,000		1,305,267	345,810
2019	32,898,002	21,404,489	161,443,400	0	215,745,891	60,014,724	5,024,808			(10,863,320)	3,434,000		1,053,881	349,268
2020	33,260,000	21,582,208	164,570,463	0	219,412,670	61,082,987	5,075,056			(26,685,280)	3,077,000		1,092,129	352,761
2021	33,621,000	21,534,581	166,908,529	0	222,064,110	62,170,264	5,125,807			(36,041,647)	2,932,544		1,047,728	356,289

	P	Q	R	S	T	U	V	W	X	Y
	Totals									
	Total Renewable Energy Costs (F + L)	Total Incremental Costs (J+K+L)	RES ECA Costs (P-Q)	Wholesale Jurisdictional Split	Total RESA Revenue (G+H+I)	Total RESA Costs (J+K+L+M+N+O)	Annual Excess/ (Deficiency) (S+T U)	Interest	Annual Excess/ (Deficiency) w/ Interest (V+W)	Rolling Balance (Deferred)
2010										(46,574,129)
2011	135,635,274	100,354,934	35,280,340	4,334,769	109,454,786	102,101,191	11,688,364	(2,654,458)	9,033,906	(37,540,224)
2012	153,387,717	90,072,381	63,315,336	5,817,193	60,528,827	92,071,426	(25,725,407)	(4,813,882)	(30,539,289)	(68,079,512)
2013	175,762,193	66,665,093	109,097,100	4,777,389	58,719,843	67,953,124	(4,455,892)	(5,519,219)	(9,975,111)	(78,054,623)
2014	178,764,866	52,247,674	126,517,192	3,690,159	59,728,134	53,557,016	9,861,277	(5,188,832)	4,672,446	(73,382,178)
2015	181,669,786	29,748,323	151,921,463	2,470,414	60,754,004	31,339,587	31,884,831	(3,157,533)	28,727,298	(44,654,880)
2016	183,393,955	30,395,306	152,998,649	2,538,955	61,797,761	31,759,498	32,577,218	(918,989)	31,658,229	(12,996,651)
2017	213,398,440	29,996,396	183,402,044	2,877,557	62,859,720	31,373,097	34,364,180	1,625,855	35,990,035	22,993,385
2018	216,268,210	3,494,503	212,773,707	1,256,477	63,940,202	5,145,581	60,051,098	6,318,855	66,369,953	89,363,338
2019	219,179,891	(7,429,320)	226,609,210	808,199	65,039,532	(6,026,170)	71,873,901	12,268,542	84,142,443	173,505,781
2020	222,489,670	(23,608,280)	246,097,950	95,997	66,158,043	(22,163,390)	88,417,429	19,929,737	108,347,167	281,852,947
2021	224,996,655	(33,109,102)	258,105,757	(58,736)	67,296,070	(31,705,085)	98,942,419	28,974,719	127,917,139	409,770,086

	Shut Off Rider Revenue	
	RESA Rider Revenue	Rolling Balance (Deferred)
2010		
2011	52,114,460	(37,540,224)
2012	53,042,098	(68,079,512)
2013	53,986,247	(78,054,623)
2014	54,947,202	(73,382,178)
2015	55,925,262	(44,654,880)
2016	56,920,732	(12,996,651)
2017	57,933,921	22,993,385
2018	0	25,911,535
2019	0	40,644,685
2020	0	73,151,660
2021	0	118,287,919

	Rolling Balance (\$M)	
	Rolling Balance (Deferred)	Rolling Balance if Rider Shut Off
2010		
2011	-38	-38
2012	-68	-68
2013	-78	-78
2014	-73	-73
2015	-45	-45
2016	-13	-13
2017	23	23
2018	89	26
2019	174	41
2020	282	73
2021	410	118