File No. EW-2009-0324 Comments of AmerenUE

4 CSR 240-20.XXX Electric Utility Renewable Energy Standard Requirements

PURPOSE: This rule sets the definitions, structure, operation, and procedures relevant to compliance with the Renewable Energy Standard.

(1) Definitions. As used in this rule, the following terms mean as follows:

(A) Co-fire means simultaneously using multiple fuels in a single generating unit for the production of electricity;

(B) Commission is the Missouri Public Service Commission;

(C) Compliance year or calendar year means a period of 365 days(or 366 days for leap years) that includes January 1 of the yearand all subsequent days through and including December 31 of the same year;

(D) Department is the department of natural resources;

(E) Electric utility means an electrical corporation as defined in section 386.020, RSMo, subject to the jurisdiction [Gaw:where did subject to jurisdiction come from?] of the commission pursuant to Chapters 386 and 393, RSMo;

(F) Eligible customer-generated renewable energy is electricity generated by a customer-generator as defined in section 386.890.2(3), RSMo. The customer-owned generating equipment must qualify as an eligible renewable energy resource in accordance with this rule. The customer-generator must be a Missouri retail customer of the electric utility;[problem between F and G – customer generators may want to keep RECs.]*

AmerenUE 3/20/09 comment – This should not be a concern as the statute does not require customer generators to sell their RECs to anyone, including the utility.

(G) Eligible renewable energy resource(s) or renewable energy resource(s) is electricity generated from eligible renewable energy technologies. [Rienkemyer: Clarification: anything in Missouri or in the MISO and SPP footprint][Heisinger: statute requires deliverability in Missouri. Put language back in. Can include RECs generated in Missouri.][Wind Coalition: add language back in. Deliverability in Missouri is key] [UE: where does the statute refer to delivery in MO]

AmerenUE 3/20/08 comment – AmerenUE disagrees with a requirement that RECs must come from a source that can deliver its energy into Missouri/MISO/SPP. The industry accepted basis for allowing RECs as a compliance mechanism is to provide an affordable compliance option without encumbering the RECs to transmission requirements. Additionally, this requirement is not in the language of the statute and could materially increase the cost of RECs by creating a smaller supply pool.

[MEI 3/23/09 comment – REC's should come from this state and keep the jobs and revenue to the benefit of the State of Missouri, not to the benefit of RECs purchased from a wind farm in Central Illinois. The whole purpose of Prop C is to create a system of AFFORDABLE renewable energy.]

[May need to split energy generated from RECs]

Electrical energy purchased by the electric utility is eligible only if the source is an eligible renewable energy resource and only if the utility purchases both the energy and the related green attributes.[Colin: replace related green attributes to REC]

AmerenUE 3/20/09 comment – AmerenUE agrees that all references throughout the rule should be to RECs rather than to "related green attributes."

The amount of electrical energy considered for this definition is the net output of the applicable generating facility. The generation facility must comply with all applicable federal and state statutes and rules; [Heisinger: in DNR rulemaking?]

(H) Eligible renewable energy technologies are sources of electrical energy that shall be considered renewable for purposes of this section and shall include:[Wind Coalition: stick to what is in statute]

AmerenUE 3/20/09 comment – AmerenUE agrees it is appropriate to initially list all of the sources that qualify at this time. The timing of DNR's rulemaking is unknown and it would be counterproductive to prevent the development of a renewable source merely because DNR's rulemaking hadn't yet commenced. This list should at least include all of the methodologies specified in the statute.

1. Wind;

2. Solar, including solar thermal sources utilized to generate electricity, photovoltaic cells and panels; [Colin: replace photovoltaic cells and panels with solar technologies.]
3. Dedicated crops grown for energy production;
4. Cellulosic agricultural residues;[Henry Robertson: May include algae]
5. Plant residues;
6. Methane from landfills or wastewater treatment;
7. Clean and untreated wood, such as pallets;[UE: clarify to include pellets][COLIN: include tree trimmings][KCPL comments]
8. Hydropower (not including pumped storage) that does not require a new diversion or impoundment of water and that has generator nameplate capacity rating(s) of ten (10) megawatts or less;
9. Fuel cells using hydrogen produced by one of the eligible renewable energy technologies in paragraphs 1 through 8 of this subsection; and
10. Other technologies that become available after November 4, 2008 [UE: further definition of what date means. Possibly be certified by DNR after 11/4/08?] and have been certified as eligible renewable energy technologies by rule by the department.[Heisinger: exclude nuclear]

AmerenUE 3/20/09 comment – AmerenUE is concerned about the phrase "that become available." It could be read to mean that a renewable energy technology that exists today but isn't listed cannot be added because it was "available" before November 4, 2008. AmerenUE proposes removing "become available after November 4, 2008 and" so that it reads "Other technologies that have been certified as eligible renewable energy technologies by rule by the department."

(I) General rate proceeding means a general rate increase proceeding or complaint proceeding before the commission in which all relevant factors that may affect the costs, or rates and charges of the electric utility are considered by the commission; (
J) Green attributes are the characteristics which differentiate a unit of electrical energy supplied by a renewable energy technology from a unit of electrical energy supplied by a non-renewable technology. The green attributes may be represented by RECs, SO-RECs, or S-RECs;[Combine with K][Wind Coalition: is this definition needed?]

AmerenUE 3/20/09 comments – AmerenUE believes this section (J) may be eliminated in its entirety if REC is used as suggested above. AmerenUE also believes all references to SO-RECs and SRECs should be deleted throughout the rule. The type of REC is determined by its source – if it is created by a solar generation, then it is a solar REC.

(K) REC, Renewable Energy Credit, or Renewable Energy Certificate is a tradable certificate of proof that one megawatt-hour of electricity has been generated from eligible renewable energy resources. RECs include, but are not limited to, solar on-site renewable energy credits and solar renewable energy credits;[DNR: renewable energy resources vs renewable energy sources.]

AmerenUE 3/20/09 comments – AmerenUE would eliminate the last sentence in this section and add the following language, "If RECs are used to cover the solar requirements of this rule, those RECs must be associated with a solar generator."

[MEI 3/23/09 comment: We agree with AmerenUE]

(L) RES or Renewable Energy Standard means sections 393.1025 and 393.1030, RSMo;
(M) RES requirements are the numeric values established by section 393.1030.1, RSMo and this rule;
(N) Combine with definition (O) Solar on-site renewable energy credit or SO-REC means a REC created by a solar renewable energy system located on the premises of an end-use consumer located within the service territory of an electric utility;
(O) Solar renewable energy credit or S-REC means a REC created by a solar renewable energy system. S-RECs include, but are not limited to, SO-RECs;

AmerenUE 3/20/09 comment – AmerenUE proposes to eliminate both sections (N) and (O), based upon changes made to the REC definition.

[MEI 3/23/09 comment: We feel this should be left in place]

(P) Staff means the staff of the Missouri Public Service Commission;
(Q) Total jurisdictional revenue requirement is the total cost to the utility of providing retail

electric service to its Missouri customers;[Wind Coalition: may not need. Statute refers to rate impact to consumers.]

AmerenUE 3/20/09 comment – the need for this definition will depend on how the rule defines the 1% cap. Since this issue is the topic of the next roundtable, AmerenUE is not proposing any specific language at this time.

(R) Total retail electric sales, or total retail electric energy usage, is the megawatt-hours of electricity delivered in a specified time period by an electric utility to its Missouri retail customers as measured at the customers' meters; and (S) Utility renewable energy resources are those eligible renewable energy resources that are owned, controlled or purchased by the electric utility.

(2) Requirements. Pursuant to the provisions of this rule and 393.1025 and 393.1030, RSMo, all electric utilities must generate or purchase electricity from eligible renewable energy resources in sufficient quantity to meet the RES requirements on a compliance year basis. Electric utility renewable energy resources utilized for compliance with this rule must include the RECs associated with the generation. The RES requirements and the RES solar energy requirements are based on total retail electric sales for each electric utility. If an electric utility does not achieve compliance with the RES requirements through generation or purchase of electricity from an eligible renewable energy technology, compliance may also be achieved through the purchase and retirement of RECs.

(A) The RES requirements are:

1. No less than two (2) percent for calendar years 2011 through 2013;
2. No less than five (5) percent for calendar years 2014 through 2017;
3. No less than ten (10) percent for calendar years 2018 through 2020; and
4. No less than fifteen (15) percent in each calendar year beginning in 2021.

(B) At least two (2) percent of each RES requirement listed in subsection (A) of this section shall be derived from solar energy. The RES solar energy requirements are:

1. No less than four-hundredths (0.04) percent for calendar years 2011 through 2013;
2. No less than one-tenth (0.1) percent for calendar years 2014 through 2017;
3. No less than two-tenths (0.2) percent for calendar years 2018 through 2020; and
4. No less than three-tenths (0.3) percent in each calendar year beginning in 2021.

(C) For compliance years in which the utility does not meet the requirements of subsection (A) of this section, but is limited by the maximum retail rate impact specified in section (5) of this rule, the two (2) percent solar energy requirement will be applicable on a proportional basis.[UE: clarification - statute requires solar first][Heisinger: should be flexibility in cap. Voters wanted solar.][COLIN – may not be able to come to consensus.]

AmerenUE 3/20/09 comment - The Company believes the rules need to prioritize how the dollars related to compliance are spent. AmerenUE believe the rules should clearly state that the dollars, up to the 1% cap (based upon base rate revenues rather than jurisdictional revenues which include off-system sales), should be spent in the following order until either the cap or the requirements have been reached:

1. Solar set aside at 2% (2% of 2%, then 2% of 5%, then 2% of 10%, then 2% of 15%) AmerenUE believes the statute clearly states this occurs first. AmerenUE believes the statute is less clear about the remaining order. A possible order is:
2. Compliance with renewable generation requirement (2%, then 5%, then 10%, then 15%)
3. Solar rebates.

Or, as an alternative, AmerenUE believes the utility could comply with the solar set aside first, then reserve a pool of money based on the amount it expects pay out on solar rebates and the rest of the money is used to comply with the renewable generation standards. Attached to these comments is a spreadsheet which demonstrates how the different preference order would impact a fictional utility's RES spend. (Attachment 1)

[KCPL: should be understanding in rules RECs should be independent of whether or not it has been certified by someone such as Green-e][Wind Coalition: Tie to deliverability.]

AmerenUE 3/20/09 comment – as stated above, AmerenUE disagrees with requiring a tie to deliverability.

[MEI 3/23/09 comment: This should be tied to deliverability. It is not appropriate to try and get RECs from any other sources besides IPPs in Missouri]

(3) Renewable Energy Credits. RECs, S-RECs, and SO-RECs will be utilized to satisfy the RES requirements of this rule. RECs must be created by eligible renewable energy technologies as defined in this rule and certified by the department. RECs, SRECs or SO-RECs that are not associated with electric utility generated or purchased electrical energy, may be utilized to comply with any portion of the RES requirements, up to and including one hundred (100) percent of the RES requirements. RECs, S-RECs or SO-RECs acquired by contracts or through a system of tradable RECs, exchanges or brokers may be utilized to comply with the RES requirements. Only S-RECs or SO-RECs may be utilized to comply with the RES solar energy requirements.

AmerenUE 3/20/09 comment – AmerenUE disagrees with the last sentence. RECs from a solar generator should count towards either the solar requirement or the base non-solar requirement. If, in the future, RECs from solar generators become more economical, utilities should be allowed to use solar RECs for overall RES compliance. AmerenUE is not proposing that any REC be counted more than once.

[MEI 3/23/09 comments: RECs should not be counted more than once, but should be met thru a system of tradeable RECs within the State of Missouri. Solar RECs should come from solar sources.]

(A) RECs may be retained and are valid for a maximum period of three (3) years from the month and year of the REC creation. [COLIN: REC has vintage that goes back to the date. Push it back to day so tracking system programs wouldn't have to be changed.][KCPL: tie to hour?]

AmerenUE 3/20/09 comment – Tracking RECs to the day or hour of creation seems to overly complicate the process without providing any real benefit. AmerenUE proposes tracking on an annual basis. That said, it would be informative to know how MRETs tracks RECs currently.

The REC, S-REC or SO-REC creation is linked to the associated electrical generation from an eligible renewable energy technology. For purposes of retaining RECs, S-RECs or SO-RECs, the utility, person, or entity responsible for creation of the REC, S-REC, or SO-REC must maintain verifiable records that prove the creation month and year.

(B) A REC may only be used once to comply with this rule. RECs, S-RECs or SO-RECs used to comply with this rule may not also be used to satisfy any similar nonfederal requirement. Electric utilities may not use RECs, S-RECs or SO-RECs derived from a green pricing program to comply with this rule.[UE: utilities may use S-RECs that were purchased in voluntary programs but not retired][COLIN: agree with UE]

AmerenUE 3/20/09 comment – To be clear, AmerenUE's position is that a utility may use RECs that it purchased for a voluntary program as long as those RECs have not been retired in compliance with that program.

(C) RECs, S-RECs or SO-RECs created by the operation of netmetered sources from eligible customer-generated renewable energy shall initially be owned by the customer-generator. All contracts between electric utilities and the owners of netmetered sources entered into after the effective date of these rules shall clearly specify the entity or person who shall own the RECs, S-RECs or SO-RECs associated with the energy generated by the facility. Electric metering associated with net metered sources shall meet the meter accuracy and testing requirements of 4 CSR 240-10.030, Standards of Quality.

(D) RECs, S-RECs or SO-RECs that are created after November 4, 2008 [Maurice: why 1/4/08? May be better to remove this section and let it default to beginning of 2008] may be utilized for compliance with the RES

AmerenUE 3/20/09 comment – As stated above, tracking RECs down to the day of creation seems to overly complicate the process without providing any real benefit. AmerenUE proposes tracking on an annual basis. That said, it would be informative to know how MRETs tracks RECs currently.

(E) RECs that are generated with fuel cell energy using hydrogen derived from an eligiblerenewable energy resource are eligible for compliance purposes only to the extent that the energy used to generate the hydrogen did not create RECs.

(F) If an electrical generator co-fires an eligible renewable energy fuel source with an

ineligible fuel source, only the proportion of the electrical energy output associated with the eligible renewable energy fuel source shall be permitted to count toward compliance with the RES.

(G) Electric utilities shall record REC information in a database and format or other similar tracking mechanism and format. The tracking mechanism and format shall include, but not be limited to, a list of eligible renewable energy resources the electric utility utilizes for compliance with the RES, including type, location, owner, operator, commencement of operations, and actual REC generation. For RECs used for compliance, but not linked to electrical generation used by the electric utility to serve its total retail electric energy usage, the tracking mechanism and format shall include type, location, original owner, transfer information, and retirement information.

(H) The Commission shall order all electric utilities to use a common central third-party registry or other equivalent tracking mechanism for REC accounting for RES requirements.[COLIN: specify electronic system]

(I) RECs that are created by the generation of electricity by an eligible renewable energy resource physically located in the state of Missouri will count as one and twenty-five hundredths(1.25) RECs for purposes of compliance with this rule. This additional credit will not be tracked in the tracking systemsspecified in subsections (G) or (H) of this section. This additional credit of twenty-five hundredths (0.25) shall be recognized when the electric utility files its annual compliance report in accordance with section (7) of this rule.

(J) RECs that are purchased by an electric utility from a facility that subsequently fails to meet the requirements for eligible renewable energy resources will remain valid through the date of facility decertification. These valid RECs may be retained for a period of thirty six (36) months from the date of the facility decertification in accordance with subsection (A) of this section.[COLIN: Tie decertification to facility not REC]

AmerenUE 3/20/09 comment – AmerenUE is very concerned about the overall monitoring and policing requirements that could be placed upon the utility. As long as the customer has followed the appropriate safety interconnection requirements and has demonstrated the system is operation, then the utility will issue a rebate and will be done. AmerenUE appreciates the language allowing the utility to be repaid should the system be disconnected, but it may not be easy to collect that money. First of all, the utility may not know the system has been disconnected (and does not want the obligation to seek that information out) and if the customer does not voluntarily pay back the money, it is highly unlikely that the utility will be successful in recouping that rebate.

(K)All supporting documents for RECs utilized for compliance shall be available for review by the Staff.

[UE: Utility is being asked to police this section. If rebates are given before 1/11, utility recovery? 1% cap doesn't start until 2011.][COLIN: rebates should start 1/10 and so should recovery][Colin: Colorado has Commission police requirements.]

AmerenUE 3/20/09 comment – this comment was made at the hearing in reference to (J) above rather than in reference to (K).

(4) Solar Rebate. Pursuant to section 393.1030, RSMo, and this rule all electric utilities shall include in their tariffs a provision regarding retail customer rebates for solar electric systems. These rebates will be available to Missouri retail customers who install new or expanded solar electric systems that become operational after December 31, 2009. The minimum amount of the rebate will be two (2) dollars per installed watt up to a maximum of twenty-five (25) kilowatts per retail customer system.

(A) The retail customer must be an active account of the electric utility's system. [KCPL – customer in good standing]

AmerenUE 3/20/09 comment – AmerenUE agrees with KCPL's suggested addition.

(B) The solar electric system must be permanently installed on the customer's premises. Any indication of portability will render the solar electric system ineligible for the solar rebate.

(C) The installed solar electric system must remain in place on the customer's premises for the duration of its useful life. [Colin: useful life? Instead tied to warrantee?][KCPL: different life for different equipment] If the customer fails to maintain the system in an operational configuration or removes the system from the original customer premises, the

customer shall reimburse the entire solar rebate to the applicable electric utility. [Colin: don't tie to customer – tie to premise. Should prorate rebate return.][KCPL: change in customer may be problematic.] The solar electric system, with the exception of any associated batteries, shall be covered by a minimum five year original equipment manufacturer's warranty. [Colin: can get 20 year warrantee for panel and 10 years for inverter.]

(D) Solar electric systems installed by retail customers must consist of equipment that is commercially available and factory new when installed on the original customer's premises. Rebuilt, used or refurbished equipment is not eligible to receive the rebate. For any applicable solar electric system, only one rebate will be paid for the lifetime of the solar electric system.

(E) The solar electric system shall meet all requirements of 4 CSR 240-20.065, Net Metering.

(F) The electric utility may inspect customer-owned solar electric systems for which it has paid a solar rebate pursuant to this section, at any reasonable time, with prior notice of at least three (3) business days provided to the customerowner.[UE: Net metering allows other than 3 business days – safety issue. Customers need to abide by net metering rules for safety reasons.][COLIN: refer to net metering rule.]

AmerenUE 3/20/09 comment – AmerenUE proposes the addition of the following language at the end of (F): "Advance notice is not required if there is reason to believe the unit poses a safety risk to the utility's electrical system or personnel."

(G) For the purpose of determining the amount of solar rebate, the solar electric system wattage rating will be established as the direct current wattage rating provided by the original equipment manufacturer.[Tim Michaels: use NREL standards. Then could strike (H).][Colin: move wattage under standard technical tools.]

(H) At the time of the rebate payment or anytime thereafter, the electric utility may negotiate a one-time lump sum payment or annual payments for any SO-RECs created by the installed solar electric system. This provision does not require the customer to sell any or all SO-RECs to the electric utility that supplies the retail customer. For purposes of this subsection, the energy that will be generated by a solar photovoltaic system with a nameplate capacity of ten (10) kW or less may [KCPL: change may to shall] be estimated using generally accepted analytical tools. The selection and use of these analytical tools shall be conducted in consultation with the staff of the commission.[minimum of 1 watt][Colin: need to be connected to system]

(I) Electric utilities that have purchased SO-RECs in accordance with subsection (H) of this section may continue to account for any RECs purchased in the event the owner of the solar electric system ceases to operate the system or the system is decertified as an eligible renewable energy resource.

(J) In the event the solar rebate program for an electric utility causes the utility to meet or exceed the retail rate impact limits of section (5) of this rule, the solar rebates will be paid on a first-come, first served basis, as determined by the solar rebate application date. [In event of addition of Solar thermal – how would rebate be calculated? Perhaps flat rebate.]

AmerenUE 3/20/09 comment – The statute specifically addresses solar thermal for electric generation only, not for other uses such as water heaters, etc. Given that restriction, there is no need to develop an alternative rebate method. The utility pays $2.00 per installed watt.

[PJ Wilson: try to prevent all rebates being given out early in year. Didn't have recommended language.]

AmerenUE 3/20/09 comment – AmerenUE disagrees with this suggestion. It increases the difficulty of administration and may work against early adopters.

[UE: rider – up to 1% of total bill based on what is spent. Jurisdictional revenues include off-system sales.] [Wind coalition: have to deal with differences between initiative petition and statute change in 2008 legislative session. Last pass applies? Conflicting provisions? Petition is forward looking – greenhouse gas regulation. Draft rule isn't forward looking. 1045 looks at impact to customer not revenue requirement. 1030.2(1) refers to resource planning. Rule should deal with resource planning. Utility has to demonstrate in RP process how it will meet RES.

Average over 3 years – later years should overcome deficiency in early years. Chapter 22 and this rule need rewrite. Needs to be a way that cost attributed to renewables shouldn't be one sided. Needs to include carbon costs. How does off-system sales fit in this? Plan around range – not specific requirement.] [Colin: Classic resource plan process. Should deal with the amount that will be recovered in resource plan rules. Can wait until utility petitions for relief. Calculation of penalties should be considered. Market to be compared to should be the market for Missouri RES requirement compliance. APX will do this. Average market value should be public information – instantaneous and estimated future value.] [KCPL: Agree with wind coalition and Colin. Resource plan may be able to determine resources but not the final cost. Need to go to market to determine costs. 10% administrative may not be enough. Revenue requirement may work because it includes off system sales, fuel adjustment clause, etc.] [OPC: Don't see Resource Planning rules needing a lot of work in this area. 10% admin may not be enough but there needs to be limit. Future environmental costs are included in resource plan rules. Other considerations in resource planning objectives rule (4 CSR 240-010). Changes should be made to 4 CSR 240-22.060(3). Suggest a "quick limited" change to resource planning rules.] [Colin: current language doesn't include future environmental risk.]

AmerenUE 3/20/09 comment – see comments above.

(5) Retail Rate Impact. The RES compliance retail rate impact will be limited to no more than a maximum average retail rate increase of one (1) percent per year pursuant to 393.1030 and 393.1045, RSMo.< UE: The average retail rate increase should be calculated based on the MPSC established base rate revenues requirements in the utility's most recently completed rate case. Base rate revenues shall be defined as revenue derived from the application of the Company's retail charges for electric service and shall exclude all taxes and other miscellaneous charges (e.g., Insufficient Funds, Late Pay, Disconnect/Reconnect, etc.)

(A) The portion of an electric utility's total jurisdictional revenue requirement deemed attributable to the RES shall include all prudently incurred direct costs associated with RES compliance, including, but not limited to, program administration, rebates, payments made under eligible renewable energy resource supply contracts, payments for RECs, and computer modeling and analysis time. These costs shall also include depreciation, income taxes, and a return on eligible renewable energy net investment that is fully operational and used for service. The administrative costs of an electric utility to implement this rule are capped at ten (10) percent of the total annual cost.

(B) The retail rate impact will be analyzed by determining the revenue requirement necessitated by RES compliance as follows:

1. The electric utility will determine [OPC: change determine to calculate. Determination should be made by Commission.]the actual total jurisdictional revenue requirement for the compliance year being reviewed.
2. The electric utility will determine [OPC: change determine to calculate. Determination should be made by Commission.]the portion of the actual total jurisdictional revenue requirement that can be specifically attributed to actions taken to meet the RES requirements for the compliance year being reviewed.
3. The electric utility will determine [OPC: change determine to calculate. Determination should be made by Commission.]the estimated alternative total jurisdictional revenue requirement if the eligible renewable energy resources, specifically attributed to actions taken to meet the RES requirements, had not been utilized for the compliance year being reviewed.

A. The estimated alternative total jurisdictional revenue requirement will be determined [OPC: change determine to calculate. Determination should be made by Commission.]by utilizing the utility's most recent electric utility resource plan [OPC: Alternative plan that is part of acquisition strategy approved by Commission.] filed at the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning, unless an exception to this methodology is approved by the commission.

B. Input data for the estimated alternative total jurisdictional revenue requirement will be actual data for the compliance year being considered.

4. The electric utility will determine [OPC: change determine to calculate. Determination should be made by Commission.] the difference between the actual total jurisdictional revenue requirement as determined by paragraph 1 of this subsection and the estimated alternative total jurisdictional revenue requirement as determined by paragraph 3 of this subsection.

5. The electric utility will compare the difference determined by paragraph 4 of this subsection with the amount determined by paragraph 2 of this subsection. The number with the least monetary value will be designated as the RES cost or benefit of compliance for the compliance year being reviewed.

6. The electric utility will divide the RES cost or benefit of compliance, as determined by paragraph 5 of this subsection, by <UE: "the MPSC established base rate revenues requirements in the utility's most recently completed rate case as prescribed in (5) above. Comment: The use of "total jurisdictional revenue requirement" could result in an increase exceeding 1% due to the impact of off-system sales and other revenue (i.e., Late pay, Insufficient Funds, etc.)> This amount, expressed as a positive (cost) or negative percentage (benefit) will be designated as the RES compliance retail rate impact.

[Maurice: compliance time is short. Doesn't leave time for customer comment. Implemented in rate case? If not how do you keep from double counting? Would prefer that it be initiated in rate case.]
[OPC: Need to be part of on-going dialogue. Similar concerns with Maurice. Similarities between this rule and ECRM rules to prevent double counting. Prefer initiate in rate case – some protection for ratepayers.]
AmerenUE 3/20/09 comment – unlike some previous legislation that required, for example, the FAC to be initiated in a rate case, there is no such requirement. Additionally, regardless of when the rider is initiated, Staff's review (and others) during a rate case will ensure costs are not double collected.

(6) Cost Recovery and Pass-through of Benefits. Pursuant to this rule and sections 393.1030 and 393.1045, RSMo, an electric utility may file proposed rate <UE; "tariff" as opposed to rates, in that, recovery will likely be via a rider) schedules with the commission in an RES Cost Recovery Surcharge (RESCRS) or RES benefit pass-through (RESBPT) application that will allow for the adjustment of its rates and charges to provide for recovery of costs incurred [OPC: prudently incurred costs] or pass-through of benefits received as a result of compliance with RES requirements; provided that the RES compliance retail rate impact does not exceed an average of more than one (1) percent increase in any year. The pass-through of benefits has no single-year cap or limit. Recovery of costs associated with solar rebates as provided for in section (4) of this rule shall be included in the one (1) percent limit.

(A) If the electric utility incurs costs in complying with the RES requirements that exceed the one (1) percent limit for any year, those excess costs may be carried forward to future years for cost recovery under this rule. <UE: Costs carried forward should include an interest component> These carried forward costs [OPC: no provisions in petition. Is it appropriate to include?] plus additional annual costs remain subject to the one (1) percent limit for any subsequent years. In any calendar year that costs from a previous compliance year are carried forward, the carried forward costs will be considered for cost recovery prior to any new costs for the current calendar year.

(B) For ownership investments in eligible renewable energy technologies in an RESCRS or RESBPT application, the electric utility shall be entitled to a rate of return equal to the electric utility's most recent authorized rate of return on rate base. Recovery of the rate of return for investment in renewable energy technologies in an RESCRS application is subject to the one (1) percent limit specified in section (5) of this rule.

(C) Upon the filing of proposed rate <UE: "tariff"> schedules with the commission seeking to recover costs or pass-through benefits of RES compliance, the commission will provide general notice of the filing.

(D) The electric utility shall provide the following notices to its customers, with such notices to be approved by the commission in accordance with subsection (E) of this section before the notices are sent to customers:

1. An initial, one (1) time notice to all potentially affected customers, such notice being sent to customers no later than when customers will receive their first bill that includes a RESCRS or RESBPT, explaining the utility's RES compliance and

identifying the statutory authority under which it is implementing a RESCRS or RESBPT;

2. An annual notice to affected customers each year that a RESCRS or RESBPT is in effect explaining the continuation of its RES compliance; and

3. A RESCRS or RESBPT line item on all customer bills, which informs the customers of the presence and amount of the RESCRS or RESBPT.

(E) Along with the electric utility's filing of proposed rate schedules to establish a RESCRS or RESBPT, the utility shall file the following items with the commission and the office of the public counsel:

1. An example of the notice required by paragraph (D)1. Of this section;

2. An example of the notice required by paragraph (D)2. Of this section; and

3. An example customer bill showing how the RESCRS or RESBPT will be described on affected customers' bills in accordance with paragraph (D)3. of this section.

(F) When an electric utility files proposed rate schedules pursuant to sections 393.1020 and 393.1030, RSMo, and the provisions of this rule the commission staff shall conduct an examination of the proposed RESCRS or RESBPT.

(G) The staff of the commission shall examine the information of the electric utility to confirm the underlying costs [OPC: confirm the prudency and amount of underlying costs] and calculations for the proposed RESCRS or RESBPT, and shall submit a report regarding its examination to the commission not later than forty five (45) days after the electric utility files its proposed rate schedules.

(H) The commission may hold a hearing the proposed rate schedules and shall issue an order to become effective not later than sixty (60) days after the electric utility files the proposed rate schedules.

(I) If the commission finds that the proposed rate schedules or substitute filed rate schedules comply with the applicable requirements, the commission shall enter an order authorizing the electric utility to utilize said RESCRS or RESBPT rate schedules with an appropriate effective date, as determined by the commission.

(J) The RESCRS or RESBPT will be calculated as a percentage of the customer's (UE: "total bill for electric service". Comment This approach ensures the all customers experience the same % changes, regardless of bill mix among customer, demand, and energy chargesd) for the applicable billing period.

(K) Commission approval of proposed rate schedules, to establish or modify a RESCRS shall in no way be binding upon the commission in determining the ratemaking treatment to be applied to RES compliance costs during a subsequent general rate proceeding when the commission may undertake to review the prudence of such costs. In the event the commission disallows, during a subsequent general rate proceeding, recovery of RES compliance costs previously in a RESCRS, or pass-through of benefits previously in a RESBPT, the electric utility shall offset its RESCRS or RESBPT in the future as necessary to recognize and account for any such costs or benefits. The offset amount shall include a calculation of interest at the electric utility's short-term borrowing rate. The RESCRS or RESBPT offset will be designed to reconcile such disallowed costs or benefits within the six (6) month period immediately subsequent to any commission order regarding such disallowance.

(L) An electric utility may effectuate a change in RESCRS or RESBPT no more often than one (1) time during any calendar year, not including changes as a result of subsection (K) of this section.

(M) At the end of each twelve (12) month period that a RESCRS or RESBPT is in effect, the electric utility shall reconcile the differences between the revenues resulting from the RESCRS or RESBPT and the pretax revenues as found by the commission for that period and shall submit the reconciliation to the commission with its next sequential proposed rate schedules for RESCRS or RESBPT modification. <UE: Symmetrical interest on over/under recoveries…similar to FAC).

(N) An electric utility that has implemented a RESCRS or RESBPT shall file revised RESCRS or RESBPT rate schedules to reset the RESCRS or RESBPT to zero (0) when

new base rates and charges become effective following a commission report and order establishing customer rates in a general rate proceeding that incorporates RES compliance costs or benefits previously reflected in a RESCRS or RESBPT in the utility's base rates. If an over- or under-recovery of RESCRS revenues or over- or underpass-through of RESBPT benefits, exists after the RESCRS or RESBPT has been reset to zero (0), that amount of over- or under-recovery, or over- or under-pass-through shall be tracked in an account and considered in the next RESCRS or RESBPT filing of the electric utility.

(O) Upon the inclusion of RES compliance cost or benefit pass through previously reflected in a RESCRS or RESBPT into an electric utility's base rates, the utility shall immediately thereafter reconcile any previously unreconciled RESCRS revenues or RESBPT benefits and track them as necessary to ensure that revenues or pass-through benefits resulting from the RESCRS or RESBPT match, as closely as possible, the appropriate pretax revenues or pass-through benefits as found by the commission for that period.

(P) At the time an electric utility files proposed rate schedules with the commission seeking to establish, modify, reconcile a RESCRS or RESBPT, it shall submit its supporting documentation regarding the calculation of the proposed RESCRS or RESBPT, and shall serve the Office of the Public Counsel with a copy of its proposed rate schedules and its supporting documentation. The utility's supporting documentation shall include workpapers showing the calculation of the proposed RESCRS or RESBPT, and shall include, at a minimum, the following information:

1. The state, federal, and local income or excise tax rates used in calculating the proposed RESCRS or RESBPT, and an explanation of the source of and the basis for using those tax rates;
2. The regulatory capital structure used in calculating the proposed RESCRS or RESBPT, and an explanation of the source of and the basis for using the capital structure;
3. The cost rates for debt and preferred stock used in calculating the proposed RESCRS or RESBPT, and an explanation of the source of and the basis for using those rates;
4. The cost of common equity used in calculating the proposed RESCRS or RESBPT, and an explanation of the source of and the basis for that equity cost;
5. The depreciation rates used in calculating the proposed RESCRS or RESBPT, and an explanation of the source of and the basis for using those depreciation rates;
6. The applicable customer class billing methodology used in calculating the proposed RESCRS or RESBPT, and an explanation of the source of and basis for using that methodology;
7. An explanation of how the proposed RESCRS or RESBPT is allocated among affected customer classes, if applicable; and 8. For purchase of electrical energy from eligible renewable energy resources bundled with the associated RECs or for the purchase of unbundled RECs, the cost of the purchases, and an explanation of the source of the energy or RECs and the basis for making that specific purchase, including an explanation of the request for proposal (RFP) process, or the reason(s) for not using an RFP process, used to establish which entity provided the energy or RECs associated with the RESCRS or RESBPT.

(Q) In addition to the information required by subsection (P) of this section, the electric utility shall also provide the following information when it files proposed rate schedules with the commission seeking to establish, modify, or reconcile a RESCRS or RESBPT:

1. A description of all information posted on the utility's website regarding the RESCRS or RESBPT; and
2. A description of all instructions provided to personnel at the utility's call center regarding how those personnel should respond to calls pertaining to the RESCRS or RESBPT

(7) Annual Compliance Report. Each electric utility shall file an annual RES compliance report no

later than March 1 to report on the status of the utility's compliance with the renewable energy standard for the most recently completed compliance year.

(A) The annual RES compliance report shall provide the following information for the most recently completed compliance year for the electric utility:

1. Total retail electric sales for the utility, as defined by this rule;
2. Total jurisdictional revenue from the total retail electric sales to Missouri customers as measured at the customers' meters;
3. Total retail electric sales supplied by eligible renewable energy resources, section 393.1025.(5), RSMo, including the source of the energy;
4. The number of RECs acquired, sold, transferred, or retired by the utility during the compliance year;
5. The source of all RECs acquired during the compliance year;
6. The identification, by source and serial number, of any RECs that have been carried forward to a future compliance year;
7. An explanation of how any gains or losses from sale or purchase of RECs for the compliance year have been accounted for in any rate adjustment mechanism that was in effect for the electric utility;
8. For acquisition of electrical energy and/or RECs from an eligible renewable energy resource that is not owned by the electric utility, the following information for each resource:[KCPL: should not apply for sources less than 10 kW.]

AmerenUE 3/20/09 comment – AmerenUE agrees with KCPL's suggested change.

A. Name, address, and owner of the facility;
B. An affidavit from the owner of the facility certifying that the energy was derived from an eligible renewable energy technology and that the renewable attributes of the energy have not been used to meet the requirements of any other local, state, or federal mandate;
C. The eligible renewable energy technology utilized at the facility;
D. The dates and amounts of all payments from the electric utility to the owner of the facility; and
E. All meter readings used for calculation of the payments referenced in paragraph D. of this subsection.

9. The total number of customers that applied and received a solar rebate in accordance with section (4) of this rule.
10. The total number of customers that were denied a solar rebate and the reason(s) for denial.
11. The amount of funds expended by the electric utility for solar rebates. [Colin: include the price and terms of future REC contracts]
12. An analysis showing whether the electric utility achieved compliance with the RES during the compliance year.
13. If compliance was not achieved, an explanation why the electric utility failed to meet the RES. [Colin: include provision for calculation of REC for utility owned generation.]

AmerenUE 3/20/09 comment – AmerenUE is not sure this clarification is necessary. Utilities meter their own generation, so for each MWh from its own renewable generation, there will be one REC created.

(B) On the same date that the electric utility files its annual RES compliance report, the utility shall post an electronic copy of its annual RES compliance report, excluding highly confidential material, on its website to facilitate public access and review.

(C) On the same date that the electric utility files its annual RES compliance report, the utility shall provide the commission with an electronic copy of its annual RES compliance report excluding highly confidential material. The commission may place the redacted electronic copy of each electric utility's annual RES compliance report on the commission's website in order to facilitate public viewing.

(D) Upon receipt of the electric utility's annual RES compliance report, the commission will establish a docket for the purpose of receiving the report. The commission will issue a general notice of the filing.

(E) The staff of the commission shall examine each electric utility's annual RES

compliance report and file a report of its review of each electric utility's annual RES compliance report with the commission within forty-five (45) days of the filing of the compliance report with the commission. The staff's report will identify any deficiencies in the electric utility's compliance with the RES.

(F) The Office of the Public Counsel and any interested persons or entities may file comments based on their review of the electric utility's annual RES compliance report within forty-five (45) days of the electric utility's filing of its compliance report with the commission.

(G) The commission shall issue an order which establishes a procedural schedule, if necessary.

(8) Penalties. An electric utility shall be subject to penalties of at least twice the average market value of RECs for the compliance period for failure to meet the targets of section 393.1030.1, RSMo and section 2 of this rule.

(A) An electric utility will be excused if it proves to the commission that failure was due to events beyond its reasonable control that could not have been reasonably mitigated, or that the maximum average retail rate impact increase has been reached. [Wind Coalition: will depend on section (5)]

(B) Penalty payments will be remitted to the department. These payments will be utilized by the department for the following purposes:

1. Purchase RECs in sufficient quantity to offset the shortfall of the utility to meet the RES requirements; and
2. Payments in excess of those required in paragraph 1 of this subsection will be utilized to provide funding for renewable energy and energy efficiency projects. These projects will be selected by the department's energy center in consultation with the staff.

(C) Penalty amounts will be calculated by determining the electric utility's shortfall relative to RES total requirements and RES solar energy requirements for the compliance year. The penalty amount will be based on twice the average market value during the compliance year for RECs or S-RECs in sufficient quantity to make up the utility's shortfall for RES total requirements or RES solar energy requirements. The average market value for RECs or S-RECs for the compliance year will be determined by the staff, subject to approval by the commission. [KCPL: opportunity for hearing to resolve differences]

AmerenUE 3/20/09 comment – AmerenUE objects to Staff setting the average market value for RECs. REC pricing is extremely geographic in nature and varies tremendously. There is no central location to which Staff can go to determine market value. There is already a least-cost requirement, which will require the utility to demonstrate it paid an appropriate price for the RECs – perhaps showing the RECs were obtained by bid, RFP process or showing comparable pricing. AmerenUE's last rate case demonstrated that Staff and the Company can have huge differences of opinion on this subject and AmerenUE cannot agree that Staff gets to set the average market value. Additionally, AmerenUE agrees with KCPL, there must be an opportunity for hearing to resolve differences on this issue.

[MEI 3/23/09 comment: If RECs are produced within the State of Missouri by IPPs, then wholesale rates can be applied and transparency of funding by the IPP is reportable to the PSC and the utility. These two steps alone will make RECs easy to set a market rate.]

(D) Any electric utility that is subject to penalties as prescribed by this section shall not seek recovery of the penalties through section (6) of this rule or any other ratemaking activity. [GRLF: repealed by Proposition C][PJ Wilson: agrees] [Colin: If RECs have been sold, does this apply? Capacity vs.energy issue. Double counting capacity.] [EDE: Should not delete per 1050.]

AmerenUE 3/20/09 comment – AmerenUE agrees with Empire District Electric that Proposition C did not void sections 393.1045 and 393.1050.

(9) Solar Energy Exemptions. Pursuant to 393.1050, RSMo, and this rule electric utilities may be exempt from certain requirements of the RES.

(A) Any electric utility which, by January 20, 2009, achieved an amount of eligible renewable energy technology aggregate nameplate capacity equal to or greater than fifteen (15) percent of the electric utility's total owned fossil-fired generating capacity,

shall be exempt from the following requirements ofthis rule:

1. The requirement to provide a solar rebate to the electric utility's retail customers in accordance with section 393.1030, RSMo and section (4) of this rule; and 2. The requirement to provide a certain percentage of its total retail electric sales from solar energy in accordance with section 393.1030, RSMo and section (3) of this rule. [Wind Coalition: Language should work together with resource plan filings. Should this filing be in the resource planning rules? Should be integrated and work together. Don't create additional filings. Acknowledge in resource planning rules.]

AmerenUE 3/20/09 comment – Although the IRP rules do not specifically mention this statute, the IRP rules require the utility to develop its filing in compliance with current Missouri law. As such, the IRP will be developed so that it complies with the requirements of this statute.

(10) RES Compliance Plan. Each electric utility will file an annual RES Compliance Plan with the commission, commencing in 2010. The plan shall be filed by April 1 of each year. The plan shall cover the current year and immediately following two (2) calendar years. The RES Compliance Plan shall include, at a minimum:

(A) A specific description of the electric utility's planned actions to comply with the RES;
(B) A list of executed contracts to purchase RECs (whether or not bundled with energy), including type of eligible renewable energy resource, expected amount of energy to be delivered, and contract duration;
(C) The projected total retail electric sales for each year; and
(D) Any differences, as a result of RES compliance, from the utility's most recent electric utility resource plan [OPC: electric utilities preferred resource plan defined elsewhere. May not be necessary since there is a requirement in resource planning rules. May instead require compilation of 60 day notices filed.] filed with the commission in accordance with 4 CSR 240-22, Electric Utility Resource Planning. [Colin: add filing of future contract pricing]

AmerenUE 3/20/09 comment – AmerenUE objects to adding a requirement to file future contract pricing terms. This information is not required by statute.

(11) Waivers and Variances. Upon written application, and after notice and an opportunity for hearing, the commission may waive or grant a variance from a provision of this rule for good cause shown.

(A) The granting of a variance to one (1) electric utility which waives or otherwise affects the required compliance with a provision of this rule does not constitute a waiver respecting, or otherwise affect, the required compliance of any other electric utility.
(B) The commission may not waive or grant a variance from this rule in total.
(C) The commission may not waive or grant a variance from any section of this rule that implements the specific requirements of sections 393.1025, 303.1030, 393.1035, 393.1040, or 393.1045, RSMo. AUTHORITY: section 393.1030, RSMo, sections 386.040, 386.610 and393.140, RSMo 1986 and 386.250, RSMo Supp. 1991.

Proposition C Spending Scenarios

The purpose of this attachment is to provide some examples of how spending sequences could conceivably occur based on interpretations of the statute. All scenarios are based on meeting the 2011 overall target of 2%.

Scenario #1

This scenario assumes the solar target is met first. A company just determines the MWhs required and will buy the necessary RECs. The next requirement is the overall target of 2% while keeping under the 1% cap. In this case the company cannot satisfy both meeting the overall target and the 1% cap. Therefore the company spends the difference of the 1% and the solar monies on non-solar RECs. In this scenario the solar target is satisfied and the spending is under the 1% cap. However there is no money for solar rebates and the overall target of 2% is not achieved. Another nuance of this particular case is the solar portion of the portfolio is 2.34% but 2% of the overall target.

Scenario #2

This scenario is setup the same as scenario #1 but gives the ability to reduce the spending on solar proportionally to stay under the 1% cap. So the company determines how much it needs to spend to meet the solar target and the overall target and, in this case, is over the 1% cap. Therefore the company reduces spending for both solar and non-solar proportionally to meet the 1% cap. In this scenario the solar portion of the portfolio is 2% but only 1.8% of the overall target. Plus there is no money available for solar rebates.

Scenario #3

This scenario is the same as scenario #1 but the company knows the amount of money required to payout all solar rebates. In this scenario the company sets aside the amount required for solar rebates then determines the amount required to meet the solar target. After both of those are satisfied the company determines the amount of non-solar needed and finds itself over the 1% cap. The company therefore reduces spending on only nonsolar to get below the cap. In this scenario the solar portion of the portfolio is 2.67% but 2% of the overall target. In this case all rebates are paid, but the total MWhs are further below the overall target.

Scenario #4

This scenario is the same as scenario #3 but gives the ability to reduce the spending on solar proportionally to stay under the 1% cap. In this scenario the company sets aside the amount required for solar rebates then determines the amount required to meet the overall target. So the company determines how much it needs to spend to meet the solar target and the overall target and is over the 1% cap. Therefore the company reduces spending for both solar and non-solar proportionally to meet the 1% cap. In this scenario the solar portion of the portfolio is 2% but only 1.67% of the overall target. In this case all rebates are paid and the total MWhs are higher than scenario #3.

Scenario #5

This scenario is the same as scenario #1 but assumes the company already has some existing resources that are applicable to Prop C. In this scenario the solar and non-solar target are satisfied under the 1% cap. However there is not enough money for all solar rebates.

Scenario #6

This scenario is the same as scenario #3 but assumes the company takes the amount allocated for solar rebates directly against the money for the solar target. In this scenario the company determines the monies required to meet the solar target then subtracts the monies reserved for solar rebates. The remainder is the money available to spend on meeting the solar target. Now the company uses the remainder, limited by the 1% cap, on nonsolar. In this scenario solar is 1.9% of the portfolio and 1.6% of the overall target. The amount of MWhs achieved for non-solar is the same as scenario #1. The distinction in this scenario is the same amount of money a company would have spent on complying with the 2% solar target is spent, but a portion of that money was reserved for rebates. In this scenario all rebates are paid but the solar target is not met.

Attachment 1
Page 1
Retail Sales: 4 0,000,000 MWh Solar REC 500 $/MWh
98% of 2% 784,000 MWh Other REC 18 $/MWh
2% of 2% 16,000 MWh
2.00% 800,000 MWh 2500 Average size (watts) of customer installed solar system
300 Number of customers expected to installed solar system
50 Average $/MWh retail rate
$ 2 ,000,000,000 Retail revenue requirement
$ 20,000,000 1% cap
Scenario #1 - Solar first, Non-solar second, Solar rebates last, Exceed 1% Rate Cap Scenario #1
Solar rebates $ - -Solar Compliant
98% of 2% 784,000 $ 14,112,000 666,667 $ 12,000,000 Rebate Shortfall $ (1,500,000) -1% Cap Compliant
2% of 2% 16,000 $ 8,000,000 16,000 $ 8 ,000,000 -Renewables Target Deficient
2% 800,000 $ 22,112,000 682,667 $ 20,000,000 -$0 Solar rebates
(117,333) MWh Shortfall
-14.7% % Shortfall
Scenario #2 - Solar Prorate, Solar rebates last, Exceed 1% Rate Cap Scenario #2
Solar rebates $ - -Solar Deficient
98% of 2% 784,000 $ 14,112,000 709,117 $ 12,764,110 Rebate Shortfall $ (1,500,000) -1% Cap Compliant
2% of 2% 16,000 $ 8,000,000 14,472 $ 7 ,235,890 -Renewables Target Deficient
2% 800,000 $ 22,112,000 723,589 $ 20,000,000 -$0 Solar rebates
(76,411) MWh Shortfall
-9.6% % Shortfall
Scenario #3 - Solar rebate first, Solar second, Non-solar last, Exceed 1% Rate Cap Scenario #3
Solar rebates $ 1,500,000 -Solar Compliant
98% of 2% 784,000 $ 14,112,000 583,333 $ 10,500,000 Rebate Shortfall $ - -1% Cap Compliant
2% of 2% 16,000 $ 8,000,000 16,000 $ 8 ,000,000 -Renewables Target Deficient
2% 800,000 $ 22,112,000 599,333 $ 18,500,000 -$1.5M Solar rebates
(200,667) MWh Shortfall
-25.1% % Shortfall
Scenario #4 - Solar rebate first, Solar Prorate, Exceed 1% Rate Cap Scenario #4
Solar rebates $ 1,500,000 -Solar Deficient
98% of 2% 784,000 $ 14,112,000 655,933 $ 11,806,802 Rebate Shortfall $ - -1% Cap Compliant
2% of 2% 16,000 $ 8,000,000 13,386 $ 6 ,693,198 -Renewables Target Deficient
2% 800,000 $ 22,112,000 669,320 $ 18,500,000 -$1.5M Solar rebates
(130,680) MWh Shortfall
-16.3% % Shortfall

Scenario #5 - Solar first, Non-solar second, Solar rebates last, Exceed 1% Rate Cap (with solar rebates)
Scenario #5
Solar rebates $ 1,063,200 -Solar Compliant
Existing Non-Solar
Renewables 1 76,400 $ - 1 76,400 $ - Rebate Shortfall $ (436,800) -1% Cap Compliant
98% of 2% 607,600 $ 10,936,800 607,600 $ 10,936,800 -Renewables Target Compliant
2% of 2% 16,000 $ 8,000,000 16,000 $ 8 ,000,000 -$1M Solar rebates
2% 800,000 $ 18,936,800 800,000 $ 18,936,800
- MWh Shortfall
0.0% % Shortfall
Scenario #6 - Solar rebate included in Solar Requirements, Non-solar last, Exceed 1% Rate Cap
Scenario #6
Solar rebates $ 1,500,000 -Solar Deficient
98% of 2% 784,000 $ 14,112,000 666,667 $ 12,000,000 Rebate Shortfall $ - -1% Cap Compliant
2% of 2% 16,000 $ 8,000,000 13,000 $ 6 ,500,000 -Renewables Target Deficient
2% 800,000 $ 22,112,000 679,667 $ 18,500,000 -$1.5M Solar rebates
(120,333) MWh Shortfall
-15.0% % Shortfall
% Renewables Compliance 1% Cap Compliance
% Renewables Compliance 1% Cap Compliance
% Renewables Compliance 1% Cap Compliance
% Renewables Compliance 1% Cap Compliance
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