Senator Hopgood #6 offered the following amendments to Senate Bill No. 438 (S-2):

1. Amend page 2, line 2, after "to" by striking out "**AUTHORIZE**" and inserting "require".

2. Amend page 2, line 3, after "to" by striking out "**RECOVER COSTS FOR**" and inserting "establish".

3. Amend page 3, line 25, after "**UNDER**" by striking out "**FORMER**".

4. Amend page 4, line 6, by inserting:

"(a) "Advanced cleaner energy" means electricity generated using an advanced cleaner energy system.

(b) "Advanced cleaner energy credit" means a credit certified under section 43 that represents generated advanced cleaner energy.

(c) "Advanced cleaner energy system" means any of the following:

(*i*) A gasification facility.

(*ii*) ~~An industrial~~ **A** cogeneration facility.

(*iii*) A coal-fired electric generating facility if 85% or more of the carbon dioxide emissions are captured and permanently geologically sequestered **OR USED FOR OTHER COMMERCIAL OR INDUSTRIAL PURPOSES THAT DO NOT RESULT IN RELEASE OF CARBON DIOXIDE TO THE ATMOSPHERE.**

(*iv*) A HYDROELECTRIC PUMPED STORAGE FACILITY.

(*v*) ~~(*iv*)~~ An electric generating facility or system that uses technologies not in commercial operation on ~~the effective date of this act.~~**OCTOBER 6, 2008 AND THAT THE COMMISSION DETERMINES HAS CARBON DIOXIDE EMISSIONS BENEFITS OR WILL SIGNIFICANTLY REDUCE OTHER REGULATED AIR EMISSIONS.**

(d) "Affiliated transmission company" means that term as defined in **SECTION 2 OF** the electric transmission line certification act, 1995 PA 30, MCL 460.562." and relettering the remaining subdivisions.

5. Amend page 6, line 20, after "provider"" by inserting a comma and "subject to sections 21(1), 23(1), and 25(1),".

6. Amend page 10, line 20, after "comply" by striking out the balance of the line through "**FORMER**" on line 22 and inserting "with the".

7. Amend page 13, line 8, by inserting:

"**(F)** ~~(e)~~ "Qualifying small power production facility" means

that term as defined in 16 USC 824a-3.".

8. Amend page 13, line 24, after "under" by striking out **"FORMER"**.

9. Amend page 14, line 8, by inserting:

"(f) "Renewable energy credit standard" means a minimum renewable energy portfolio required under section 27.

(g) "Renewable energy generator" means a person that, together with its affiliates, has constructed or has owned and operated 1 or more renewable energy systems with combined gross generating capacity of at least 10 megawatts." and relettering the remaining subdivisions.

10. Amend page 14, line 15, after "under" by striking out the balance of the line through **"FORMER"** on line 16 and inserting "section 21 or 23 or found to comply with this act under".

11. Amend page 15, line 21, after "portfolio" by striking out the balance of the line through **"FORMER"** on line 22 and inserting "required to be achieved under".

12. Amend page 16, line 24, by striking out **"FORMER"**.

13. Amend page 18, line 6, by striking out all of sections 41, 47, and 49 and inserting:

"Sec. 21. (1) This section applies only to electric providers whose rates are regulated by the commission.

(2) Each electric provider shall file a proposed renewable energy plan with the commission within 90 days after the commission issues a temporary order under section ~~171.~~ **191**. The proposed plan shall meet all of the following requirements:

(a) Describe how the electric provider will meet the renewable energy standards.

(b) Specify whether the number of megawatt hours of electricity used in the calculation of the renewable energy credit portfolio will be weather-normalized or based on the average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state. Once the plan is approved by the commission, this option shall not be changed.

(c) Include the expected incremental cost of compliance with the renewable energy standards for a 20-year period beginning when the plan is approved by the commission.

(d) For an electric provider that had 1,000,000 or more retail customers in this state on January 1, 2008, describe the bidding process to be used by the electric provider under section 33. The

description shall include measures to be employed in the preparation of requests for proposals and the handling and evaluation of proposals received to ensure that any bidder that is an affiliate of the electric utility is not afforded a competitive advantage over any other bidder and that each bidder, including any bidder that is an affiliate of the electric provider, is treated in a fair and nondiscriminatory manner.

(3) The proposed plan shall establish a nonvolumetric mechanism for the recovery of the incremental costs of compliance within the electric provider's customer rates. The revenue recovery mechanism shall not result in rate impacts that exceed the monthly maximum retail rate impacts specified under section 45. The revenue recovery mechanism is subject to adjustment under sections 47(4) and 49. A customer participating in a commission-approved voluntary renewable energy program under an agreement in effect on ~~the effective date of this act~~ **OCTOBER 6, 2008**, shall not incur charges under the revenue recovery mechanism unless the charges under the revenue recovery mechanism exceed the charges the customer is incurring for the voluntary renewable energy program. In that case, the customer shall only incur the difference between the charge assessed under the revenue recovery mechanism and the charges the customer is incurring for the voluntary renewable energy program. The limitation on charges applies only during the term of the agreement, not including automatic agreement renewals. ~~, or until 1 year after the effective date of this act, whichever is later.~~ Before entering an agreement with a customer to participate in a commission-approved voluntary renewable energy program, ~~and before the last automatic monthly renewal of such an agreement that will occur less than 1 year after the effective date of this act,~~ an electric provider shall notify the customer that the customer will be responsible for the full applicable charges under the revenue recovery mechanism and under the voluntary renewable energy program as provided under this subsection.

(4) If proposed by the electric provider in its proposed plan, the revenue recovery mechanism shall result in an accumulation of reserve funds in advance of expenditure and the creation of a regulatory liability that accrues interest at the average short-term borrowing rate available to the electric provider during the appropriate period. If proposed by the electric provider in its proposed plan, the commission shall establish a minimum balance of accumulated reserve funds for the purposes of section 47(4).

(5) The commission shall conduct a contested case hearing on the proposed plan filed under subsection (2), pursuant to the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328. If a renewable energy generator files a petition to intervene in the contested case in the manner prescribed by the commission's rules for interventions generally, the commission

shall grant the petition. Subject to subsections (6) and (10), after the hearing and within 90 days after the proposed plan is filed with the commission, the commission shall approve, with any changes consented to by the electric provider, or reject the plan.

(6) The commission shall not approve an electric provider's plan unless the commission determines both of the following:

(a) That the plan is reasonable and prudent. In making this determination, the commission shall take into consideration projected costs and whether or not projected costs included in prior plans were exceeded.

(b) That the life-cycle cost of renewable energy acquired or generated under the plan less the projected life-cycle net savings associated with the provider's energy optimization plan does not exceed the expected life-cycle cost of electricity generated by a new conventional coal-fired facility. In determining the expected life-cycle cost of electricity generated by a new conventional coal-fired facility, the commission shall consider data from this state and the states of Ohio, Indiana, Illinois, Wisconsin, and Minnesota, including, if applicable, the life-cycle costs of the renewable energy system and new conventional coal-fired facilities. When determining the life-cycle costs of the renewable energy system and new conventional coal-fired facilities, the commission shall use a methodology that includes, but is not limited to, consideration of the value of energy, capacity, and ancillary services. The commission shall also consider other costs such as transmission, economic benefits, and environmental costs, including, but not limited to, greenhouse gas constraints or taxes. In performing its assessment, the commission may utilize other available data, including national or regional reports and data published by federal or state governmental agencies, industry associations, and consumer groups.

(7) An electric provider shall not begin recovery of the incremental costs of compliance within its rates until the commission has approved its proposed plan.

(8) Every 2 years after initial approval of a plan under subsection (5), the commission shall review the plan. The commission shall conduct a contested case hearing on the plan pursuant to the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328. The annual renewable cost reconciliation under section 49 for that year may be joined with the overall plan review in the same contested case hearing. Subject to subsections (6) and (10), after the hearing, the commission shall approve, with any changes consented to by the electric provider, or reject the plan and any proposed amendments to the plan.

(9) If an electric provider proposes to amend its plan at a time other than during the biennial review process under subsection (8), the electric provider shall file the proposed amendment with

the commission. If the proposed amendment would modify the revenue recovery mechanism, the commission shall conduct a contested case hearing on the amendment pursuant to the administrative procedures act of 1969, 1969 PA 306, MCL 24.201 to 24.328. The annual renewable cost reconciliation under section 49 may be joined with the plan amendment in the same contested case proceeding. Subject to subsections (6) and (10), after the hearing and within 90 days after the amendment is filed, the commission shall approve, with any changes consented to by the electric provider, or reject the plan and the proposed amendment or amendments to the plan.

(10) If the commission rejects a proposed plan or amendment under this section, the commission shall explain in writing the reasons for its determination.

(11) NOT LATER THAN 1 YEAR AFTER THE EFFECTIVE DATE OF THE 2016 AMENDATORY ACT THAT AMENDED SECTION 27, EACH ELECTRIC PROVIDER SHALL FILE WITH THE COMMISSION A PLAN AMENDMENT TO COMPLY WITH THE INCREASED RENEWABLE ENERGY CREDIT PORTFOLIO REQUIREMENTS OF SECTION 27.

Sec. 23. (1) This section applies only to alternative electric suppliers and cooperative electric utilities that have elected to become member-regulated under the electric cooperative member-regulation act, 2008 PA 167, MCL 460.31 to 460.39.

(2) Each alternative electric supplier or cooperative electric utility shall file a proposed renewable energy plan with the commission within 90 days or 120 days, respectively, after the commission issues a temporary order under section ~~171.~~ **191**. The proposed plan shall meet all of the following requirements:

(a) Describe how the electric provider will meet the renewable energy standards.

(b) Specify whether the number of megawatt hours of electricity used in the calculation of the renewable energy portfolio will be weather-normalized or based on the average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state. Once the plan is approved by the commission, this option shall not be changed.

(3) The commission shall provide an opportunity for public comment on the proposed plan filed under subsection (2). After the opportunity for public comment and within 90 days after the proposed plan is filed with the commission, the commission shall approve, with any changes consented to by the electric provider, or reject the plan.

(4) Every 2 years after initial approval of a plan under subsection (3), the commission shall review the plan. The commission shall provide an opportunity for public comment on the plan. After the opportunity for public comment, the commission

shall approve, with any changes consented to by the electric provider, or reject any proposed amendments to the plan.

(5) If an electric provider proposes to amend its plan at a time other than during the biennial review process under subsection (4), the electric provider shall file the proposed amendment with the commission. The commission shall provide an opportunity for public comment on the amendment. After the opportunity for public comment and within 90 days after the amendment is filed, the commission shall approve, with any changes consented to by the electric provider, or reject the amendment.

(6) If the commission rejects a proposed plan or amendment under this section, the commission shall explain in writing the reasons for its determination.

(7) NOT LATER THAN 1 YEAR AFTER THE EFFECTIVE DATE OF THE 2016 AMENDATORY ACT THAT AMENDED SECTION 27, EACH ELECTRIC PROVIDER SHALL FILE WITH THE COMMISSION A PLAN AMENDMENT TO COMPLY WITH THE INCREASED RENEWABLE ENERGY CREDIT PORTFOLIO REQUIREMENTS OF SECTION 27.

Sec. 25. (1) This section applies only to municipally-owned electric utilities.

(2) Each electric provider shall file a proposed renewable energy plan with the commission within 120 days after the commission issues a temporary order under section ~~171.~~ **191**. Two or more electric providers that each serve fewer than 15,000 customers may file jointly. The proposed plan shall meet all of the following requirements:

(a) Describe how the provider will meet the renewable energy standards.

(b) Specify whether the number of megawatt hours of electricity used in the calculation of the renewable energy credit portfolio will be weather-normalized or based on the average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state. Once the commission determines that the proposed plan complies with this act, this option shall not be changed.

(c) Include the expected incremental cost of compliance with the renewable energy standards.

(d) Describe the manner in which the provider will allocate costs.

(3) Subject to subsection (6), the commission shall provide an opportunity for public comment on the proposed plan filed under subsection (2). After the applicable opportunity for public comment and within 90 days after the proposed plan is filed with the commission, the commission shall determine whether the proposed plan complies with this act.

(4) Every 2 years after the commission initially determines under subsection (3) that a renewable energy plan complies with

this act, the commission shall review the plan. Subject to subsection (6), the commission shall provide an opportunity for public comment on the plan. After the applicable opportunity for public comment, the commission shall determine whether any amendment to the plan proposed by the provider complies with this act. The proposed amendment is adopted if the commission determines that it complies with this act.

(5) If a provider proposes to amend its renewable energy plan at a time other than during the biennial review process under subsection (4), the provider shall file the proposed amendment with the commission. Subject to subsection (6), the commission shall provide an opportunity for public comment on the amendment. After the applicable opportunity for public comment and within 90 days after the amendment is filed, the commission shall determine whether the proposed amendment to the plan complies with this act. The proposed amendment is adopted if the commission determines that it complies with this act.

(6) The commission need not provide an opportunity for public comment under subsection (3), (4), or (5) if the governing body of the provider has already provided an opportunity for public comment and filed the comments with the commission.

(7) If the commission determines that a proposed plan or amendment under this section does not comply with this act, the commission shall explain in writing the reasons for its determination.

(8) NOT LATER THAN 1 YEAR AFTER THE EFFECTIVE DATE OF THE 2016 AMENDATORY ACT THAT AMENDED SECTION 27, EACH ELECTRIC PROVIDER SHALL FILE WITH THE COMMISSION A PLAN AMENDMENT TO COMPLY WITH THE INCREASED RENEWABLE ENERGY CREDIT PORTFOLIO REQUIREMENTS OF SECTION 27.

Sec. 27. (1) Subject to ~~sections~~ **SECTION** 31, ~~and 45,~~ and in addition to the requirements of subsection (3), an electric provider that is an electric utility with 1,000,000 or more retail customers in this state as of January 1, 2008 shall achieve a renewable energy capacity portfolio of not less than the following:

(a) For an electric provider with more than 1,000,000 but less than 2,000,000 retail electric customers in this state on January 1, 2008, a renewable energy capacity portfolio of 200 megawatts by December 31, 2013 and 500 megawatts by December 31, 2015.

(b) For an electric provider with more than 2,000,000 retail electric customers in this state on January 1, 2008, a renewable energy capacity portfolio of 300 megawatts by December 31, 2013 and 600 megawatts by December 31, 2015.

(2) An electric provider's renewable energy capacity portfolio shall be calculated by adding the following:

(a) The nameplate capacity in megawatts of renewable energy systems owned by the electric provider that were not in commercial operation before ~~the effective date of this act~~ **OCTOBER 6, 2008.**

(b) The capacity in megawatts of renewable energy that the electric provider is entitled to purchase under contracts that were

not in effect before ~~the effective date of this act~~ **OCTOBER 6, 2008.**

(3) Subject to sections 31 and 45, an electric provider shall achieve a renewable energy credit portfolio as follows:

(a) In 2012, 2013, 2014, and 2015, a renewable energy credit portfolio based on the sum of the following:

(*i*) The number of renewable energy credits from electricity generated in the 1-year period preceding ~~the effective date of this act~~ **OCTOBER 6, 2008** that would have been transferred to the electric provider pursuant to section 35(1), if this act had been in effect during that 1-year period.

(*ii*) The number of renewable energy credits equal to the number of megawatt hours of electricity produced or obtained by the electric provider in the 1-year period preceding ~~the effective date of this act~~ **OCTOBER 6, 2008** from renewable energy systems for which recovery in electric rates was approved ~~on the effective date of this act~~ **AS OF OCTOBER 6, 2008.**

(*iii*) Renewable energy credits in an amount calculated as follows:

(A) Taking into account the number of renewable energy credits under subparagraphs (*i*) and (*ii*), determine the number of additional renewable energy credits that the electric provider would need to reach a ~~10%~~ renewable energy **CREDIT** portfolio in that year **EQUAL TO 10% OF THE NUMBER OF MEGAWATT HOURS PROVIDED BY THE ELECTRIC PROVIDER AS DETERMINED FOR THAT YEAR SUBJECT TO SECTION 21(2)(B).**

(B) Multiply the number under sub-subparagraph (A) by 20% for 2012, 33% for 2013, 50% for 2014, and 100% for 2015.

(b) In 2016 and each year thereafter **THROUGH 2021,** ~~maintain~~ a renewable energy credit portfolio that consists of at least the same number of renewable energy credits as were required in 2015 under subdivision (a).

(C) IN 2022, A 15% RENEWABLE ENERGY CREDIT PORTFOLIO.

(D) IN 2023 AND EACH YEAR THEREAFTER, A RENEWABLE ENERGY CREDIT PORTFOLIO THAT CONSISTS OF AT LEAST THE SAME NUMBER OF RENEWABLE ENERGY CREDITS AS WERE REQUIRED IN 2022 UNDER SUBDIVISION (C).

(4) An electric provider's renewable energy credit portfolio shall be calculated as follows:

(a) Determine the number of renewable energy credits used to comply with this subpart during the applicable year.

(b) Divide by 1 of the following at the option of the electric provider as specified in its renewable energy plan:

(*i*) The number of weather-normalized megawatt hours of electricity sold by the electric provider during the previous year to retail customers in this state.

(*ii*) The average number of megawatt hours of electricity sold by the electric provider annually during the previous 3 years to retail customers in this state.

(c) Multiply the quotient under subdivision (b) by 100.

(5) Subject to subsection (6), each electric provider shall meet the renewable energy credit standards with renewable energy credits obtained by 1 or more of the following means:

(a) Generating electricity from renewable energy systems for sale to retail customers.

(b) Purchasing or otherwise acquiring renewable energy credits with or without the associated renewable energy.

(6) An electric provider may substitute energy ~~optimization~~ **WASTE REDUCTION** credits, advanced cleaner energy credits with or without the associated advanced cleaner energy, or a combination thereof for renewable energy credits otherwise required to meet the renewable energy credit standards if the substitution is approved by the commission. However, commission approval is not required to substitute advanced cleaner energy from ~~industrial~~ cogeneration for renewable energy credits. The commission shall not approve a substitution unless the commission determines that the substitution is cost-effective compared to other sources of renewable energy credits and, if the substitution involves advanced cleaner energy credits, that the advanced cleaner energy system provides carbon dioxide emissions benefits. In determining whether the substitution of advanced cleaner energy credits is cost-effective, the commission shall include as part of the costs of the system the environmental costs attributed to the advanced cleaner energy system, including the costs of environmental control equipment or greenhouse gas constraints or taxes. The commission's determinations shall be made after a contested case hearing that includes consultation with the department of environmental quality on the issue of carbon dioxide emissions benefits, if relevant, and environmental costs.

(7) Under subsection (6), energy ~~optimization~~ **WASTE REDUCTION** credits, advanced cleaner energy credits, or a combination thereof shall not be used by a provider to meet more than 10% of the renewable energy credit standards. Advanced cleaner energy from advanced cleaner energy systems in existence on January 1, 2008 shall not be used by a provider to meet more than 70% of this 10% limit. This 10% limit does not apply to advanced cleaner energy credits from plasma arc gasification.

(8) Substitutions under subsection (6) shall be made at the following rates per renewable energy credit:

(a) One energy ~~optimization~~ **WASTE REDUCTION** credit.

(b) One advanced cleaner energy credit from plasma arc gasification or ~~industrial~~ cogeneration.

(c) Ten advanced cleaner energy credits other than from plasma arc gasification or ~~industrial~~ cogeneration.

Sec. 31. (1) Upon petition by an electric provider, the commission may for good cause grant 2 extensions of the 2015 **AND 2 EXTENSIONS OF THE 2022** renewable energy standard deadline under section 27. Each extension shall be for up to 1 year.

(2) If 2 extensions of the 2015 **OR 2 EXTENSIONS OF THE 2022** renewable energy standard deadline have been granted to an electric provider under subsection (1), upon subsequent petition by the electric provider at least 3 months before the expiration of the second ~~extended~~ **EXTENSION OF THAT** deadline, the commission shall, after consideration of prior extension requests under this section and for good cause, establish a revised renewable energy standard attainable by the electric provider. If the electric provider achieves the revised renewable energy standard, the provider is considered to be in compliance with **THE RENEWABLE ENERGY STANDARD OTHERWISE REQUIRED TO BE ACHIEVED UNDER** this subpart **BY THAT DEADLINE.**

(3) An electric provider that makes a good faith effort to spend the full amount of incremental costs of compliance as outlined in its approved renewable energy plan and that complies

with its approved plan, subject to any approved extensions or revisions, shall be considered to be in compliance with this subpart.

(4) As used in this section, "good cause" includes, but is not limited to, the electric provider's inability, as determined by the commission, to meet a renewable energy standard because of a renewable energy system feasibility limitation including, but not limited to, any of the following:

(a) Renewable energy system site requirements, zoning, siting, land use issues, permits, including environmental permits, any certificate of ~~need~~ **NECESSITY** process under section 6s of 1939 PA 3, MCL 460.6s, or any other necessary governmental approvals that effectively limit availability of renewable energy systems, if the electric provider exercised reasonable diligence in attempting to secure the necessary governmental approvals. For purposes of this subdivision, "reasonable diligence" includes, but is not limited to, submitting timely applications for the necessary governmental approvals and making good faith efforts to ensure that the applications are administratively complete and technically sufficient.

(b) ~~Equipment cost or availability issues including electrical equipment or renewable energy system component shortages or high costs that~~ **HIGH COSTS OF OR SHORTAGES OF RENEWABLE ENERGY SYSTEM COMPONENTS OR ELECTRICAL EQUIPMENT IF THE HIGH COSTS OR SHORTAGES** effectively limit availability of renewable energy systems.

(c) Cost, availability, or time requirements for electric transmission and interconnection.

(d) Projected or actual unfavorable electric system reliability or operational impacts.

(e) Labor shortages that effectively limit availability of renewable energy systems.

(f) An order of a court of competent jurisdiction that effectively limits the availability of renewable energy systems.".

14. Amend page 43, line 8, by inserting:

"(6) For any year, ~~after 2012,~~ an electric provider may substitute renewable energy credits associated with renewable energy generated that year from a renewable energy system constructed after ~~the effective date of this act,~~ **OCTOBER 6, 2008,** advanced cleaner energy credits other than credits from ~~industrial~~ cogeneration using ~~industrial~~ waste energy, load management that reduces overall energy usage, or a combination thereof for energy ~~optimization~~ **WASTE REDUCTION** credits otherwise required to meet the energy ~~optimization~~ **WASTE REDUCTION** performance standard, if the substitution is approved by the commission. The commission shall not approve a substitution unless the commission determines that the substitution is cost-effective and, if the substitution involves advanced cleaner energy credits, that the advanced cleaner energy system provides carbon dioxide emissions benefits. In determining whether the substitution of advanced cleaner energy credits is cost-effective compared to other available energy ~~optimization~~ **WASTE REDUCTION** measures, the commission shall

consider the environmental costs related to the advanced cleaner energy system, including the costs of environmental control equipment or greenhouse gas constraints or taxes. The commission's determinations shall be made after a contested case hearing that includes consultation with the department of environmental quality on the issue of carbon dioxide emissions benefits, if relevant, and environmental costs.

(7) Renewable energy credits, advanced cleaner energy credits, load management that reduces overall energy usage, or a combination thereof shall not be used by a provider to meet more than 10% of the energy ~~optimization~~ **WASTE REDUCTION** standard. Substitutions for energy ~~optimization~~ **WASTE REDUCTION** credits shall be made at the following rates per energy ~~optimization~~ **WASTE REDUCTION** credit:

(a) 1 renewable energy credit.

(b) 1 advanced cleaner energy credit from plasma arc gasification.

(c) 4 advanced cleaner energy credits other than from plasma arc gasification." and renumbering the remaining subsection.

15. Amend page 47, line 14, by inserting:

"(b) When substituted for a renewable energy credit under section 27." and relettering the remaining subdivision.

16. Amend page 48, line 1, after "achieved" by striking out the period and inserting a comma and "unless substituted, by an electric provider, for renewable energy credits under section 27.".

17. Amend page 48, line 9, after "achieved" by striking out the period and inserting a comma and "unless substituted, by an electric provider, for renewable energy credits under section 27.".

18. Amend page 48, line 26, by inserting:

"(b) A method for ensuring that each energy optimization credit substituted for a renewable energy credit under section 27 or carried forward under section 83 is properly accounted for." and relettering the remaining subdivision.

19. Amend page 85, line 7, by striking out all of enacting section 1 and renumbering the remaining enacting sections.