..... moves to amend H.F. No. 773 as follows:

Delete everything after the enacting clause and insert:

"Section 1. **TITLE.**

This act may be cited as the Solar Energy Jobs Act of 2013.

Sec. 2. Minnesota Statutes 2012, section 216B.03, is amended to read:

216B.03 REASONABLE RATE.

Every rate made, demanded, or received by any public utility, or by any two or more public utilities jointly, shall be just and reasonable. Rates shall not be unreasonably preferential, unreasonably prejudicial, or discriminatory, but shall be sufficient, equitable, and consistent in application to a class of consumers. To the maximum reasonable extent, the commission shall set rates to encourage energy conservation and renewable energy use and to further the goals of sections 216B.164, 216B.241, 216B.411, and 216C.05. Any doubt as to reasonableness should be resolved in favor of the consumer. For rate-making purposes a public utility may treat two or more municipalities served by it as a single class wherever the populations are comparable in size or the conditions of service are similar.

Sec. 3. Minnesota Statutes 2012, section 216B.16, is amended by adding a subdivision to read:

Subd. 6e. **Solar energy production incentive.** (a) Except as otherwise provided in this subdivision, all assessments authorized by section 216B.411 incurred in connection with the solar energy production incentive shall be recognized and included by the commission in the determination of just and reasonable rates as if the expenses were directly made or incurred by the utility in furnishing utility service.

(b) The commission shall not include expenses for the solar energy production incentive in determining just and reasonable electric rates for retail electric service

provided to customers eligible for the low-income electric rate discount authorized by subdivision 14.

Sec. 4. **[216B.1641] VALUE OF SOLAR RATE.**

Subdivision 1. **Definition.** For the purposes of this section, "solar photovoltaic device" has the meaning given in section 216C.06, subdivision 16, and must meet the requirements of section 216C.25.

Subd. 2. **Applicability.** (a) This section, as well as any rules adopted by the commission or the Department of Commerce to implement this section, shall apply:

(1) beginning with the effective date of this section, to the two public utilities with the highest Minnesota retail electricity sales and the generation and transmission cooperative with the highest Minnesota wholesale electricity sales; and

(2) beginning July 1, 2015, to all Minnesota electric utilities, including cooperative electric associations and municipal electric utilities.

(b) Notwithstanding section 216B.164, an owner of a solar photovoltaic device may, with respect to the purchase price paid by a utility to an owner of a solar photovoltaic device, elect to be governed under this section or section 216B.164. All other provisions of section 216B.164, except those in subdivision 3 and subdivision 4, paragraphs (a) to (c), shall apply to an owner of a solar photovoltaic device electing to be governed under this section.

Subd. 3. **Interconnection.** Utilities shall be required to interconnect with a solar photovoltaic device whose owner offers to provide available energy or capacity and elects to be governed under this section.

Subd. 4. **Standard contract.** The commission shall establish a statewide uniform form of contract that must be used by a purchasing utility an owner of a solar photovoltaic device who elects to be governed under this section. The term of a power purchase agreement entered into under this section must be no less than 20 years and must provide for payments of the value of solar rate as approved by the commission under this section.

Subd. 5. **Purchases.** The utility to which an owner of a solar photovoltaic device electing to be governed under this section is interconnected shall purchase, throughout the term of the power purchase agreement, all energy and capacity made available by the owner of the solar photovoltaic device. All purchases must be made at the value of solar rate approved by the commission under this section that is current as of the date the power purchase agreement is effective.

Subd. 6. **Value of solar rate; calculation.** By October 1, 2013, the Department of Commerce shall calculate the value of solar rate for each utility subject to the provisions

of this section. The value of solar rate is expressed on a per kilowatt-hour basis and is equal to the sum of the following components:

(1) line loss savings equal to the value of the average amount of electricity lost through transmission and distribution when electricity is generated by the utility's nonsolar photovoltaic generators;

(2) transmission and distribution capacity savings equal to the value of delaying the need for capital investment in a utility's transmission and distribution system by contracting to purchase energy from solar photovoltaic devices;

(3) energy savings equal to the reduction in a utility's wholesale energy costs realized as a result of energy purchases from solar photovoltaic devices;

(4) generation capacity savings equal to the value of the benefit of the capacity added to the utility's system by solar photovoltaic devices;

(5) fuel price hedge value equal to the value of eliminating price uncertainty associated with the utility's purchases of fuel for electricity generation;

(6) environmental benefits equal to the premium retail customers are willing to pay to consume energy produced from renewable resources; and

(7) economic development benefits equal to the net increase in local employment and taxes generated from the manufacture, operation, and maintenance of solar photovoltaic devices compared with the same measures associated with nonsolar photovoltaic devices.

Subd. 7. **Value of solar rate; information.** The Department of Commerce shall solicit information from each utility subject to the provisions of this section to assist it in calculating the value of solar rate. A utility shall provide the information requested by the department in a timely fashion.

Subd. 8. **Value of solar rate; process.** The Department of Commerce shall solicit comments and recommendations from utilities, ratepayers, and other interested parties regarding the calculation of the value of solar rate.

Subd. 9. **Value of solar rate; adjustments.** By January 1, 2015, and every January 1 thereafter through 2049, the commissioner shall make a determination as to whether the value of solar rate needs to be adjusted in order to reflect current conditions in energy markets or changes in the value of the components calculated in subdivision 6. In making that determination, the commissioner shall solicit comments and recommendations from interested parties in the same manner as required under subdivision 8. After considering the comments and recommendations, the commissioner may adjust the value of solar rate.

Subd. 10. **Value of solar rate; billing.** Notwithstanding section 216B.164, an owner of a solar photovoltaic device who elects to receive the value of solar rate for electricity generated by the system that is sold to a utility must be:

(1) charged by the utility the applicable rate schedule for sales to that class of customer for all electricity consumed by the customer;

(2) paid the value of solar rate by the utility for all electricity generated by the solar photovoltaic device;

(3) provided by the utility with a monthly bill that contains, in addition to the amounts in clauses (1) and (2), the net amount owed to the utility or net credit realized by the owner for that month and on a year-to-date basis; and

(4) provided by the utility with a meter that allows for the separate calculation of the amount of electricity consumed and generated at the property.

Subd. 11. **Commission review; approval.** (a) The commissioner shall submit the value of solar rate calculated under subdivision 6 and the comments and recommendations received under subdivisions 7 and 8 to the commission for its review and approval. The commission shall review the rate and the comments and recommendations and may, at its discretion, solicit additional comments and recommendations from utilities, ratepayers, and other interested parties regarding the calculation of the value of solar rate.

(b) By January 1 of 2014, and each January 1 thereafter through 2049, the commission shall approve or modify the value of solar rate submitted to it by the commissioner. The commission shall, by order, direct all electric utilities subject to this section to begin paying the value of solar rate most recently approved by the commission to owners of solar photovoltaic devices who sign a new standard contract under this section on or after the first day of the first month following the effective date of the order.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 5. Minnesota Statutes 2012, section 216B.1691, subdivision 1, is amended to read:

Subdivision 1. **Definitions.** (a) Unless otherwise specified in law, "eligible energy technology" means an energy technology that generates electricity from the following renewable energy sources:

(1) solar;

(2) wind;

(3) hydroelectric with a capacity of less than 100 megawatts;

(4) hydrogen, provided that after January 1, 2010, the hydrogen must be generated from the resources listed in this paragraph; or

(5) biomass, which includes, without limitation, landfill gas; an anaerobic digester system; the predominantly organic components of wastewater effluent, sludge, or related by-products from publicly owned treatment works, but not including incineration of wastewater sludge to produce electricity; and an energy recovery facility used to capture

the heat value of mixed municipal solid waste or refuse-derived fuel from mixed municipal solid waste as a primary fuel.

(b) "Electric utility" means a public utility providing electric service, a generation and transmission cooperative electric association, a municipal power agency, or a power district.

(c) "Total retail electric sales" means the kilowatt-hours of electricity sold in a year by an electric utility to retail customers of the electric utility or to a distribution utility for distribution to the retail customers of the distribution utility. "Total retail electric sales" does not include the sale of hydroelectricity supplied by a federal power marketing administration or other federal agency, regardless of whether the sales are directly to a distribution utility or are made to a generation and transmission utility and pooled for further allocation to a distribution utility.

(d) "Renewable energy credit" means a certificate of proof, issued through the accounting system approved by the commission under subdivision 4, attesting that one unit of electricity was generated and delivered by an eligible energy technology, and including all renewable and environmental attributes associated with the production of electricity from the eligible energy technology.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 6. Minnesota Statutes 2012, section 216B.1691, is amended by adding a subdivision to read:

Subd. 2f. **Solar energy standard.** (a) In addition to the requirements of subdivision 2a, each electric utility shall generate or procure sufficient electricity generated by solar energy to serve its retail customers in Minnesota or the retail customers of a distribution utility to which the electric utility provides wholesale electric service, so that at least the following standard percentages of the electric utility's total retail electric sales to retail customers in Minnesota are generated by solar energy by the end of the year indicated:

(1)	2016	0.52 percent
(2)	2020	1.56 percent
(3)	2025	4.02 percent
(4)	2030	10.06 percent

(b) The solar energy standard established in this subdivision is subject to all the provisions of this section governing a utility's standard obligation under subdivision 2a.

(c) Electricity generated by a solar energy project may apply towards a utility's solar energy standard.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 7. Minnesota Statutes 2012, section 216B.1691, subdivision 4, is amended to read:

Subd. 4. **Renewable energy credits.** (a) To facilitate compliance with this section, the commission, by rule or order, shall establish by January 1, 2008, a program for tradable renewable energy credits for electricity generated by eligible energy technology. The credits must represent energy produced by an eligible energy technology, as defined in subdivision 1. Each kilowatt-hour of renewable energy credits must be treated the same as a kilowatt-hour of eligible energy technology generated or procured by an electric utility if it is produced by an eligible energy technology. The program must permit a credit to be used only once. The program must treat all eligible energy technology equally and shall not give more or less credit to energy based on the state where the energy was generated or the technology with which the energy was generated. The commission must determine the period in which the credits may be used for purposes of the program.

(b) A renewable energy credit associated with electricity generated in Minnesota by an eligible energy technology is owned by the owner of the eligible energy technology facility that generated the electricity unless:

(1) the renewable energy credit is assigned to another entity by law;

(2) the renewable energy credit was transferred to another entity by contract executed prior to July 1, 2013; or

(3) the renewable energy credit was assigned to another entity by order of the commission prior to July 1, 2013.

(c) A renewable energy credit may be transferred only through a contract. A utility may not require transfer of a renewable energy credit as a condition for executing a contract required under sections 216B.1611 or 216B.164.

(d) In lieu of generating or procuring energy directly to satisfy the eligible energy technology objective or standard of this section, an electric utility may utilize renewable energy credits allowed under the program to satisfy the objective or standard.

~~(c)~~ (e) The commission shall facilitate the trading of renewable energy credits between states.

~~(d)~~ (f) The commission shall require all electric utilities to participate in a commission-approved credit-tracking system or systems. Once a credit-tracking system is in operation, the commission shall issue an order establishing protocols for trading credits.

~~(e)~~ (g) An electric utility subject to subdivision 2a, paragraph (b), may not sell renewable energy credits to an electric utility subject to subdivision 2a, paragraph (a), until 2021.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 8. Minnesota Statutes 2012, section 216B.23, subdivision 1a, is amended to read:

Subd. 1a. **Authority to issue refund.** (a) On determining that a public utility has charged a rate in violation of this chapter, a commission rule, or a commission order, the commission, after conducting a proceeding, may require the public utility to refund to its customers, in a manner approved by the commission, any revenues the commission finds were collected as a result of the unlawful conduct. Any refund authorized by this section is permitted in addition to any remedies authorized by section 216B.16 or any other law governing rates. Exercising authority under this section does not preclude the commission from pursuing penalties under sections 216B.57 to 216B.61 for the same conduct.

(b) This section must not be construed as allowing:

(1) retroactive ratemaking;

(2) refunds based on claims that prior or current approved rates have been unjust, unreasonable, unreasonably preferential, discriminatory, insufficient, inequitable, or inconsistent in application to a class of customers; or

(3) refunds based on claims that approved rates have not encouraged energy conservation or renewable energy use, or have not furthered the goals of section 216B.164, 216B.241, 216B.411, or 216C.05.

(c) A refund under this subdivision does not apply to revenues collected more than six years before the date of the notice of the commission proceeding required under this subdivision.

Sec. 9. Minnesota Statutes 2012, section 216B.241, subdivision 5c, is amended to read:

Subd. 5c. **Large solar electric generating plant.** (a) For the purpose of this subdivision:

(1) "project" means a solar electric generation project consisting of arrays of solar photovoltaic cells with a capacity of up to two megawatts located on the site of a closed landfill in Olmsted County owned by the Minnesota Pollution Control Agency; and

(2) "cooperative electric association" means a generation and transmission cooperative electric association that has a member distribution cooperative association to which it provides wholesale electric service in whose service territory a project is located.

(b) A cooperative electric association may elect to count all of its purchases of electric energy from a project toward only one of the following:

(1) its energy-savings goal under subdivision 1c; or

(2) its ~~energy objective or~~ solar energy standard under section 216B.1691.

(c) A cooperative electric association may include in its conservation plan purchases of electric energy from a project. The cost-effectiveness of project purchases may be determined by a different standard than for other energy conservation improvements under this section if the commissioner determines that doing so is in the public interest in order to encourage solar energy. The kilowatt hours of solar energy purchased by a cooperative electric association from a project may count for up to 33 percent of its one percent savings goal under subdivision 1c or up to 22 percent of its 1.5 percent savings goal under that subdivision. Expenditures made by a cooperative association for the purchase of energy from a project may not be used to meet the revenue expenditure requirements of subdivisions 1a and 1b.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 10. Minnesota Statutes 2012, section 216B.2411, subdivision 3, is amended to read:

Subd. 3. **Other provisions.** (a) Electricity generated by a facility constructed with funds provided under this section and using an eligible renewable energy source may be counted toward the ~~renewable energy objectives~~ solar energy standard, as applicable, in section 216B.1691, subject to the provisions of that section.

(b) Two or more entities may pool resources under this section to provide assistance jointly to proposed eligible renewable energy projects. The entities shall negotiate and agree among themselves for allocation of benefits associated with a project, such as the ability to count energy generated by a project toward a utility's ~~renewable energy objectives~~ solar energy standard, as applicable, under section 216B.1691. The entities shall provide a summary of the allocation of benefits to the commissioner. A utility may spend funds under this section for projects in Minnesota that are outside the service territory of the utility.

Sec. 11. **[216B.2413] SOLAR ENERGY PRODUCTION INCENTIVE ACCOUNT.**

Subdivision 1. **Definitions.** For the purposes of this section, the terms defined in this subdivision have the meanings given them.

(a) "Commission" means the Public Utilities Commission.

(b) "Commissioner" means the commissioner of commerce.

(c) "Department" means the Department of Commerce.

(d) "Gross annual retail electricity sales" means annual electric sales to all retail customers in a public utility's Minnesota service territory.

(e) "Public utility" has the same meaning as provided in section 216B.02, subdivision 4.

Subd. 2. **Account established; account management.** A solar energy production incentive account is established as a separate account in the special revenue fund in the state treasury. The commissioner of management and budget shall credit to the account the amounts authorized under this section and appropriations and transfers to the account. Earnings, such as interest, dividends, and any other earnings arising from account assets, must be credited to the account. Funds remaining in the account at the end of a fiscal year are not canceled to the general fund but remain in the account. The commissioner shall manage the account.

Subd. 3. **Purpose.** The purpose of the account is to pay the solar energy production incentive to owners of qualified solar photovoltaic devices, including related administrative costs, under section 216C.411.

Subd. 4. **Assessment.** Beginning January 1, 2014, and each January 1 thereafter through January 1, 2049, the department shall assess each public utility an amount, not to exceed 1.33 percent of its gross annual retail electricity sales within the state during the preceding calendar year, as required to carry out the purpose of section 216C.411. Such assessments are not subject to the cap on assessments provided by section 216B.62, or any other law.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 12. **[216C.411] SOLAR ENERGY PRODUCTION INCENTIVE.**

Subdivision 1. **Incentive payment; appropriation.** (a) Incentive payments may be made under this section only to an owner of a solar photovoltaic device who has:

(1) submitted to the commissioner, on a form prescribed by the commissioner, an application to receive the incentive; and

(2) received from the commissioner in writing a determination that the solar photovoltaic device qualifies for the incentive.

(b) There is annually appropriated from the solar energy production incentive account established under section 216B.2413 to the commissioner of commerce sums sufficient to make the payments required under this section.

Subd. 2. **Eligibility window; payment duration.** (a) Payments may be made under this section only for electricity generated from a solar photovoltaic device that is operational and generating electricity from January 1, 2014, through December 31, 2049.

(b) Payment of the incentive begins and runs consecutively from the date the solar photovoltaic device begins generating electricity.

(c) A solar photovoltaic device may receive payments under this section for a period of 20 years. No payment may be made under this section for electricity generated after December 31, 2049.

Subd. 3. **Amount of payment.** (a) An incentive payment is based on the number of kilowatt hours of electricity generated. The per-kilowatt amount of the payment for each category of qualified solar photovoltaic device listed below is equal to the applicable reference price specified in this subdivision minus the value of solar rate determined by the commissioner of commerce under section 216B.1641.

Nameplate Capacity	Reference Price
Residential	..... cents
Non-residential:	
under 25 megawatts	..... cents
rooftop, 25 kilowatts to 2 megawatts	..... cents
ground-mounted, 25 kilowatts to 2 megawatts	..... cents

(b) By January 1, 2015, and every January 1 thereafter through 2049, the commissioner shall make a determination as to whether the reference price needs to be adjusted in order to reflect current conditions in energy markets. In making the determination, the commissioner shall solicit comments and recommendations from utilities, ratepayers, and other interested parties regarding the calculation of the reference price. After considering the comments and recommendations, the commissioner may adjust the reference price.

(c) For the purposes of this subdivision, "reference price" means the lowest per-kilowatt price for electricity generated by a qualified solar photovoltaic system the commissioner determines is sufficient to provide an economic incentive that will result in the development of aggregate capacity in this state to meet the solar energy standard established in section 216B.1691, subdivision 2f.

Subd. 4. **Additional payment; Made in Minnesota.** (a) The commissioner of commerce shall determine an additional incentive amount to be paid to owners of solar photovoltaic devices that are "Made in Minnesota."

(b) For the purposes of this subdivision:

(1) "Made in Minnesota" means the manufacture in this state of solar photovoltaic modules:

(i) at a manufacturing facility located in Minnesota that is registered and authorized to manufacture and apply the UL 1703 certification mark to those solar photovoltaic modules by Underwriters Laboratory, CSA International, Intertek, or an equivalent UL-approved independent certification agency;

(ii) that bear UL 1703 certification marks from Underwriters Laboratory (UL), CSA International, Intertek, or an equivalent UL-approved independent certification agency, which marks must be physically applied to the modules at a manufacturing facility described in clause (1); and

(iii) that are manufactured in Minnesota via manufacturing processes that must include tabbing, stringing, and lamination; or

(iv) by interconnecting low-voltage DC photovoltaic elements that produce the final useful photovoltaic output of the modules.

A solar photovoltaic module that is manufactured by attaching microinverters, DC optimizers, or other power electronics to a laminate or solar photovoltaic module that has received UL 1703 certification marks outside Minnesota from Underwriters Laboratory (UL), CSA International, Intertek, or an equivalent UL-approved independent certification agency is not "Made in Minnesota" under this subdivision.

(2) "Solar photovoltaic module" has the meaning given in section 116C.7791, subdivision 1.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 13. **STUDY OF POTENTIAL FOR SOLAR ENERGY INSTALLATIONS ON PUBLIC BUILDINGS.**

(a) The commissioner of commerce shall contract with an independent consultant selected through a request for proposal process to produce a report analyzing the potential for electricity generation resulting from the installation of solar photovoltaic devices on and adjacent to public buildings in this state. The study must:

(1) determine, for buildings identified under the process initiated in Laws 2001, chapter 212, article 1, section 3, commonly referred to as the B3 program, the amount of space available for the installation of solar photovoltaic devices and the maximum solar electricity generation potential; and

(2) utilize existing data on energy efficiency potential developed under the B3 program and determine how investments in energy efficiency for these buildings could be combined with solar photovoltaic systems to enhance a building's overall energy efficiency. The analysis must include a schedule for installing solar photovoltaic systems on public buildings at a rate of four percent of available space per year and must prioritize installations that result in the largest benefits with the shortest payback periods.

(b) By January 1, 2014, the commissioner of commerce shall submit a copy of the report to the chairs and ranking minority members of the legislative committees with primary jurisdiction over energy policy and state government finance.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 14. **SOLAR INTERCONNECTION STUDY.**

Each public utility, cooperative association, and municipal utility selling electricity shall, by November 1, 2013, provide to the commissioner of commerce an assessment of the capacity available on its electric distribution system for interconnecting solar photovoltaic devices installed on or adjacent to nonresidential buildings in the utility's service area. For each such potential interconnection point, the utility must calculate the maximum capacity of solar photovoltaic devices that could be installed on or adjacent to nearby nonresidential buildings, the amount of available capacity that could be installed without upgrading the utility's distribution system, and the cost of the upgrade necessary to accommodate the installation of the maximum capacity and lesser amounts.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 15. **VALUE OF ON-SITE ENERGY STORAGE STUDY.**

The commissioner of commerce shall contract with an independent consultant selected through a request for proposal process to produce a report analyzing the potential costs and benefits of installing utility-managed energy storage devices in residential and commercial buildings in this state. The study must:

(1) estimate the potential value of on-site energy storage devices as a load-management tool to reduce costs for individual customers and for the utility, including, but not limited to, reductions in energy, particularly peaking, costs, and capacity costs;

(2) examine the interaction of energy storage devices with on-site solar photovoltaic devices; and

(3) analyze existing barriers to the installation of on-site energy storage devices by utilities, and examine strategies and design potential economic incentives to overcome those barriers.

By January 1, 2014, the commissioner of commerce shall submit the study to the chairs and ranking minority members of the legislative committees with jurisdiction over energy policy and finance.

Sec. 16. **VALUE OF SOLAR THERMAL STUDY.**

The commissioner of commerce shall contract with an independent consultant selected through a request for proposal process to produce a report analyzing the potential costs and benefits of expanding the installation of solar thermal projects, as defined in

Minnesota Statutes, section 216B.2411, subdivision 2, in residential and commercial buildings in this state. The study must examine the potential for solar thermal projects to reduce heating and cooling costs for individual customers and to reduce costs at the utility level as well. The study must also analyze existing barriers to the installation of on-site energy storage devices by utilities, and examine strategies and design potential economic incentives to overcome those barriers. By January 1, 2014, the commissioner of commerce shall submit the study to the chairs and ranking minority members of the legislative committees with jurisdiction over energy policy and finance.

EFFECTIVE DATE. This section is effective the day following final enactment.

Sec. 17. **SEVERABILITY.**

If any provision of this act is found to be unconstitutional and void, the remaining provisions of this act are valid.

EFFECTIVE DATE. This section is effective the day following final enactment."

Amend the title accordingly