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Legislative Document

No. 1504

S.P. 529

In Senate, April 25, 2017

An Act Regarding Solar Power for Farms and Businesses

Reference to the Committee on Energy, Utilities and Technology suggested and ordered printed.

A handwritten signature in cursive script that reads "Heather J.R. Priest".

HEATHER J.R. PRIEST
Secretary of the Senate

Presented by Senator SAVIELLO of Franklin.
Cosponsored by Representative GROHMAN of Biddeford and
Senators: DILL of Penobscot, WOODSOME of York, Representatives: BLACK of Wilton,
FOLEY of Wells, HARVELL of Farmington, HIGGINS of Dover-Foxcroft, POULIOT of
Augusta, SANBORN of Portland.

1 **Be it enacted by the People of the State of Maine as follows:**

2 **Sec. 1. 35-A MRSA §3209-A**, as enacted by PL 2011, c. 262, §1, is repealed and
3 the following enacted in its place:

4 **§3209-A. Net energy billing**

5 **1. Shared ownership or community net energy billing projects.** The commission
6 may not limit the number of customers that may participate in any shared ownership or
7 community net energy billing project.

8 **2. Rules.** The commission may adopt or amend rules governing net energy billing.
9 Rules adopted or amended pursuant to this subsection are major substantive rules as
10 defined in Title 5, chapter 375, subchapter 2-A.

11 For the purposes of this section, "net energy billing" means a billing and metering
12 practice under which a customer is billed on the basis of net energy over the billing
13 period taking into account accumulated bill credits for unused kilowatt-hours from the
14 previous billing period.

15 **Sec. 2. 35-A MRSA §3471-A** is enacted to read:

16 **§3471-A. Definitions**

17 As used in this chapter, unless the context otherwise indicates, the following terms
18 have the following meanings.

19 **1. Affordable multifamily housing.** "Affordable multifamily housing" means any
20 building with at least 5 residential units that meet the standards for housing that is
21 affordable to persons of low income as determined by the Maine State Housing Authority
22 under Title 30-A, chapter 201.

23 **2. Agricultural or forest products business.** "Agricultural or forest products
24 business" means a person or business located in this State and engaged in the commercial
25 growing or harvesting of plants; raising of animals; growing or obtaining plant or animal
26 by-products; aquaculture, as defined in Title 12, section 6001, subsection 1; or
27 processing, storing, packaging or marketing of a raw product derived from plants,
28 animals, plant or animal by-products or aquaculture, with the intent that the product be
29 sold or otherwise disposed of to generate income. "Agricultural or forest products
30 business" includes a business or activity that attracts visitors to a farm for the purpose of
31 supplementing income from the primary crop or livestock operation.

32 **3. Distributed generation resource.** "Distributed generation resource" means an
33 electric generating facility that begins operation after January 1, 2018 and is located in
34 the service territory of a transmission and distribution utility and that uses fuel cells; tidal
35 power; solar arrays and installations; geothermal installations; hydroelectric generators
36 that meet all state and federal fish passage requirements applicable to the generator;
37 biomass generators that are fueled by wood, wood waste or landfill gas; anaerobic

1 digestion of by-products of waste from animals or agricultural crops, food or vegetative
2 material, algae or organic refuse; or that relies on wind power installations.

3 **4. Eligible small business.** "Eligible small business" means a business that meets
4 the requirements of section 3477, subsection 1.

5 **5. Kilowatt.** "Kilowatt" means 1,000 watts, measured in alternating current.

6 **6. Large-scale commercial solar distributed generation resource.** "Large-scale
7 commercial solar distributed generation resource" or "solar project" means a solar
8 distributed generation resource with a nameplate capacity of up to 2 megawatts, or other
9 nameplate capacity limit determined by the commission by rule under section 3476,
10 subsection 9, that is selected in a procurement in accordance with section 3476 and that
11 relies on solar photovoltaic technology for which compensating bill credits pursuant to
12 section 3476, subsection 7 are provided to a nonresidential customer, including but not
13 limited to commercial, industrial or municipal account holders.

14 **7. Megawatt.** "Megawatt" means 1,000,000 watts, measured in alternating current.

15 **8. Output.** "Output" means energy, capacity, renewable energy certificates and all
16 other environmental attributes and market products that are available or may become
17 available from a distributed generation resource.

18 **9. Small business credit rate.** "Small business credit rate" means the per kilowatt-
19 hour rate used to calculate the monetary value to be credited to the customer bill pursuant
20 to section 3477.

21 **Sec. 3. 35-A MRSAs §§3475 to 3478** are enacted to read:

22 **§3475. Standard buyer**

23 The standard buyer designated pursuant to this section must aggregate the output of
24 the portfolio of distributed generation resources procured pursuant to this chapter and sell
25 or use the output of these resources in a manner that maximizes the value of the portfolio
26 of resources to all ratepayers.

27 **1. Designation of standard buyer.** Each investor-owned transmission and
28 distribution utility serves as the standard buyer in its service territory, except that the
29 commission may designate another entity to serve as standard buyer if the commission
30 determines that such a designation is in the best interest of ratepayers. The standard
31 buyer is subject to the jurisdiction of the commission.

32 **2. Obligations of the standard buyer.** The standard buyer designated pursuant to
33 subsection 1 shall:

34 A. Serve as counterparty to and enforce long-term contracts with customers pursuant
35 to section 3476;

36 B. Reimburse, when the standard buyer is not an investor-owned transmission and
37 distribution utility, the investor-owned transmission and distribution utility for any
38 bill credit or payment to a subscriber or project sponsor pursuant to section 3476;

- 1 C. Establish reasonable metering and measurement and verification requirements for
2 distributed generation resources;
- 3 D. Provide information needed to allocate eligible costs and benefits pursuant to
4 subsection 3; and
- 5 E. Provide to the commission aggregate data regarding the output of distributed
6 generation resources.

7 **3. Standard buyer cost allocation.** The commission and each standard buyer
8 designated pursuant to subsection 1 shall implement a transparent mechanism to track and
9 recover or distribute the eligible costs and benefits from procuring the output of
10 distributed generation resources pursuant to this chapter. These eligible costs and
11 benefits must be reviewed by the commission annually and allocated to and recovered
12 from customers through a process established by the commission by rule. The process
13 developed by the commission must be similar to the allocation of costs and benefits of
14 long-term energy contracts in section 3210-F. Eligible costs and benefits include:

- 15 A. Incremental costs of serving as the standard buyer;
- 16 B. All payments to customers, subscribers and project sponsors under each
17 procurement pursuant to section 3476; and
- 18 C. All revenue from sale of the output of distributed generation resources procured
19 pursuant to this chapter.

20 **4. Rules.** The commission shall adopt rules to implement this section. The
21 commission shall ensure that the rules provide opportunities for entities other than the
22 standard buyer to aggregate and sell the output of distributed generation resources in the
23 applicable markets. Rules adopted pursuant to this subsection are routine technical rules
24 as defined in Title 5, chapter 375, subchapter 2-A.

25 **§3476. Large-scale commercial, municipal, industrial solar procurement**

26 **1. Procurement.** The commission shall conduct competitive solicitations twice per
27 year for long-term contracts for the output of a total of 50 megawatts of large-scale
28 commercial solar distributed generation resources by December 31, 2022, referred to in
29 this section as the "procurement target." In each calendar year, the commission shall seek
30 to procure approximately 10 megawatts of output through 2 separate solicitations, except
31 that the commission may modify this annual procurement if it concludes that doing so
32 would be in the best interests of all ratepayers. Prior to a solicitation, the commission
33 shall develop, in consultation with the standard buyer, a standard contract that commits
34 all parties to commercially reasonable behavior and includes provisions to ensure that
35 projects proceed to commercial operation on a reasonable timeline.

36 **2. Bidder eligibility.** The commission may establish minimum requirements for
37 bidders in a solicitation under subsection 1, including but not limited to site control,
38 development experience, completion of an interconnection application and provision of
39 system details. The commission may by rule require bidders to pay an application fee to
40 defray administrative costs.

1 **3. Ensuring competition.** Prior to each solicitation under subsection 1, the
2 commission shall establish standards to determine whether the solicitation has a sufficient
3 number of unique bidders and quantity of offered capacity to be competitive. If the
4 commission concludes based on the standards that a solicitation is not competitive, no
5 bidders may be selected and the capacity available in that solicitation must be deferred to
6 a subsequent solicitation. The commission may by rule adjust the maximum size of a
7 large-scale commercial solar distributed generation resource eligible for a solicitation to
8 ensure that there is more than one bid selected.

9 **4. Bid enhancement.** In reviewing bids, the commission shall give preference to
10 solar projects associated with affordable multifamily housing. Bids for a solar project
11 associated with affordable multifamily housing must be reviewed by the commission at a
12 rate that is 1¢ per kilowatt-hour less than the actual bid submitted. For the purpose of
13 calculating that contract rate, a solar project associated with affordable multifamily
14 housing that is awarded a contract must be paid at the actual bid rate and not the bid rate
15 used for review.

16 **5. Bid selection.** Following review of bids in a solicitation under subsection 1, if the
17 commission determines that the solicitation is competitive, the commission shall select
18 one or more winning bidders and direct the standard buyer to negotiate and enter into a
19 contract with the winning bidder or bidders for a term of 20 years at a specified contract
20 rate. The commission shall select bids that maximize benefits or minimize costs to all
21 ratepayers.

22 **6. Agricultural or forest products business target.** The commission shall seek to
23 procure 8 megawatts of the 50-megawatt procurement target under subsection 1 from
24 solar projects associated with an agricultural or forest products business. The
25 commission shall monitor winning bids to determine progress toward this target. If, by
26 December 31, 2019, the commission determines that the solicitations under this section
27 are not likely to result in the procurement of 8 megawatts of solar projects associated with
28 an agricultural or forest products business by 2022, the commission shall review bids for
29 a solar project associated with an agricultural or forest products business at a rate that is
30 1¢ per kilowatt-hour less than the actual bid submitted. For the purpose of calculating
31 that contract rate, a solar project associated with an agricultural or forest products
32 business that is awarded a contract must be paid at the actual bid rate and not the bid rate
33 used for review.

34 **7. Determination of bill credit.** The bill credit to be allocated to a customer must
35 be based on the total kilowatt-hours of energy production of the solar distributed
36 generation resource for the previous month. Each billing month, the value of the credits
37 must be calculated by multiplying the number of kilowatt-hours by the contract rate.
38 Payments to subscribers must be credited against the subscriber's monthly electricity bill
39 in accordance with section 3478.

40 The monthly production must be determined by a revenue-grade meter installed and paid
41 for by the participating large-scale commercial solar distributed generation resource
42 customer account holder.

1 **8. Exemption.** A customer is not considered a public utility or competitive
2 electricity supplier solely as a result of entering into a contract with the standard buyer
3 under this section.

4 **9. Rules.** The commission shall adopt rules to implement this section. Rules
5 adopted pursuant to this subsection are routine technical rules as defined in Title 5,
6 chapter 375, subchapter 2-A.

7 **§3477. Small business distributed generation credit rate program**

8 The small business distributed generation credit rate program, referred to in this
9 section as "the program," is established as an alternative to net energy billing.

10 **1. Eligibility.** Nonresidential customers are eligible for a small business distributed
11 generation credit rate as an alternative to net energy billing pursuant to section 3209-A.

12 **2. Long-term contracts.** The standard buyer shall enter into a contract with eligible
13 small business customers for the energy and capacity of a distributed generation resource
14 with a capacity of between 25 and 250 kilowatts for a term of 20 years. The rate paid for
15 the energy and capacity must be set by the commission in accordance with subsection 3.
16 Payments to customers under a contract under this section must be credited against the
17 customer's monthly electricity bill in accordance with section 3478.

18 **3. Rates.** The commission shall establish a small business credit rate to be paid for
19 the energy and capacity of a distributed generation resource. By December 1st of each
20 year the program is in effect, the commission shall set the small business credit rate for
21 new program participants in the following calendar year equal to the average over the
22 past 12 months of total volumetric rates, including, but not limited to, the rate for
23 standard offer service paid by the nonresidential rate class with the lowest annual peak
24 demand. The commission shall establish a separate small business credit rate for each
25 investor-owned transmission and distribution utility service territory in the State. New
26 program participants receive the fixed small business credit rate in effect at the time they
27 begin participation in the program for the term of the contract in subsection 2.

28 **4. Self-consumption.** Notwithstanding subsection 2, an eligible small business
29 customer may offset that customer's own consumption using that customer's distributed
30 generation resource.

31 **5. Net energy billing option.** After the effective date of rules adopted under
32 subsection 7, an eligible customer may elect to either participate in net energy billing
33 pursuant to section 3209-A or enter into a contract under subsection 2. If a customer
34 elects to enter into a contract, that customer may not subsequently participate in net
35 energy billing during the time period covered by the contract. If a customer elects to
36 participate in net energy billing, the customer may change the customer's bill credit to a
37 contract under subsection 2 within 12 months of the execution of a net energy billing
38 agreement with a transmission and distribution utility.

39 **6. Consumer-owned utility exemption.** This section does not apply to a consumer-
40 owned transmission and distribution utility or its customers.

1 **7. Rules.** The commission shall adopt rules to implement this section. Rules
2 adopted pursuant to this subsection are routine technical rules as defined in Title 5,
3 chapter 375, subchapter 2-A.

4 **8. Program review.** The commission shall evaluate how effective the program is at
5 increasing installations of distributed generation resources and the program's expected
6 short-term and long-term effect on ratepayers. After completing its final evaluation, the
7 commission shall determine whether or not to continue the program for new participants
8 until such time it determines the program is no longer effective or it does not result in
9 benefits to ratepayers. The commission shall submit a report by December 31, 2020 or
10 when contracts under the program total 20 megawatts, whichever comes first, and by
11 December 31, 2021 or when contracts under the program total 30 megawatts, whichever
12 comes first, to the joint standing committee of the Legislature having jurisdiction over
13 utilities and energy matters. The report must include the commission's findings along
14 with any recommendations for program modification. The joint standing committee of
15 the Legislature having jurisdiction over utilities and energy matters may report out a bill
16 relating to the program to the First Regular Session of the 130th Legislature and may also
17 report out a bill relating to the program to the Second Regular Session of the 130th
18 Legislature.

19 **§3478. Bill credits**

20 This section applies to any credits assigned to a customer's bill under this chapter.

21 If the value of the credit to be applied to a customer's bill is less than the amount
22 owed by the customer at the end of the applicable billing period, the customer must be
23 billed for the difference between the amount shown on the bill and the value of the
24 available credits.

25 If the value of the credits to be applied to a customer's bill is greater than the amount
26 owed by the customer at the end of the applicable billing period, the remaining value of
27 the credit must carry over from month to month until a specified date each year. The
28 commission shall establish a minimum of 2 standard credit expiration dates that provide
29 customers the opportunity to use bill credits to the maximum extent practicable in a given
30 12-month period. Any remaining credits as of that date must be credited to the standard
31 buyer and may not be applied against any future customer bill.

32 **Sec. 4. Rules.** The Public Utilities Commission shall adopt rules by January 1,
33 2018 to implement the Maine Revised Statutes, Title 35-A, sections 3475 to 3478.

34 **Sec. 5. Net energy billing rules.** The commission shall amend its net energy
35 billing rules adopted pursuant to the Maine Revised Statutes, Title 35-A, section 3209-A
36 to be substantively equivalent to the rules in effect on January 1, 2017, except the rules
37 must be consistent with Title 35-A, section 3209-A, subsection 1. Notwithstanding Title
38 35-A, section 3209-A, subsection 2, rules adopted for this purpose are routine technical
39 rules, as defined in Title 5, chapter 375, subchapter 2-A.

40 **Sec. 6. Net energy billing analysis.** The Public Utilities Commission shall
41 conduct an analysis of the costs and benefits to ratepayers from net energy billing. The

1 analysis must include all identifiable costs and benefits for net energy billing participants
2 and nonparticipants, including but not limited to the costs and benefits described in Public
3 Law 2013, chapter 562, section 2. The analysis must at a minimum look at costs and
4 benefits over a 10-year period and a 25-year period. Where uncertainty exists with regard
5 to a future cost or benefit, the commission shall use assumptions for what it considers the
6 most likely higher and lower value scenarios. The commission shall submit a report by
7 December 31, 2019 and another report by December 31, 2020 to the joint standing
8 committee of the Legislature having jurisdiction over utilities and energy matters. The
9 commission shall submit with the December 31, 2019 report information regarding any
10 programs the commission is conducting and recommendations regarding alternatives to
11 net energy billing that would encourage distributed energy resource projects. The
12 commission shall submit with the December 31, 2020 report recommendations regarding
13 net energy billing based on the costs and benefits analysis including methods for
14 encouraging and integrating distributed energy resources to increase efficiency of the
15 electric grid while reducing costs. Methods may include, but are not limited to, rate
16 design and time of use rates, direct deployment of aggregated solar and storage systems,
17 distributed energy rates or changes to transmission and distribution system planning. In
18 developing these reports, the commission shall consult with stakeholders that include, but
19 are not limited to, transmission and distribution utilities, consumer advocates, distributed
20 energy installers or suppliers, conservation organizations and experts in rate design. At
21 least 60 days before submitting the December 31, 2019 report and the December 31, 2020
22 report to the joint standing committee of the Legislature having jurisdiction over utilities
23 and energy matters, the commission shall post the reports on its publicly accessible
24 website. Within that period of time, a member of the public may submit to the
25 commission written comments regarding the report. The commission shall submit all
26 comments received to the committee with the report. The joint standing committee of the
27 Legislature having jurisdiction over utilities and energy matters may report out a bill
28 relating to the December 31, 2020 report.

29 SUMMARY

30 This bill amends the law regarding net energy billing and makes the adoption of net
31 energy billing rules major substantive instead of routine technical, except that rules
32 adopted to be consistent with the changes in the Maine Revised Statutes, Title 35-A,
33 section 3209-A, subsection 1, substantively equivalent to the rules in effect prior to
34 March 29, 2017 and that must be completed by December 1, 2017, are routine technical
35 rules.

36 The bill directs the Public Utilities Commission to enter into long-term contracts with
37 a duration of 20 years for the procurement of 50 megawatts of large-scale commercial
38 solar distributed generation resources by 2022. The bill requires that 8 megawatts of the
39 50-megawatt procurement target be from large commercial solar distributed generation
40 resources for projects associated with an agricultural or forest products business.

41 The bill creates a standard buyer, which the bill specifies is the investor-owned
42 transmission and distribution utility in its service territory. The bill allows the
43 commission to designate another entity as the standard buyer if it determines it is in the
44 best interest of ratepayers to do so. The purpose of the standard buyer is to purchase the

1 output of each category of distributed generation resource, aggregate the portfolio of
2 distributed generation resources procured and sell or use the output of these resources in a
3 manner that maximizes the value of this portfolio of resources to all ratepayers.

4 The bill directs the commission to conduct competitive solicitations for 20% of the 5-
5 year target procurement for long-term contracts for the output of large-scale commercial
6 solar distributed generation resources twice per year. The bill directs the commission and
7 standard buyer to develop a contract prior to a solicitation that will ensure that projects
8 proceed to commercial operation on a reasonable timeline and commits all parties to
9 commercially reasonable behavior.

10 The bill gives the commission authority to establish requirements for bidder
11 eligibility and standards to ensure competition in the bidding process. The bill also
12 specifies that if the solicitation is fully competitive, the commission must select one or
13 more winning bids and direct the standard buyer to negotiate and enter into a contract
14 with the winning bidder or bidders. If the commission concludes the solicitation is not
15 competitive, no bidders may be selected and the capacity available in that solicitation
16 must be deferred to a subsequent solicitation. The bill requires the commission to select
17 bids that maximize the benefits or minimize the costs to all ratepayers.

18 The bill directs the commission to give preference to projects associated with
19 affordable multifamily housing. The bill requires the commission to review bids for
20 projects associated with affordable multifamily housing at 1¢ less per kilowatt-hour than
21 the actual bid, but if such a project is awarded a contract, it is paid at the actual bid rate
22 and not the rate used for review. This same process is allowed in the bill after December
23 31, 2019 for projects associated with an agricultural or forest products business if the
24 commission determines that solicitations are not likely to result in the procurement of 8
25 megawatts of solar projects associated with an agricultural or forest products business by
26 2022.

27 The bill also includes a small business distributed generation credit rate program as
28 an alternative to net energy billing for nonresidential customers.

29 The bill includes language on how bill credits are to be determined for a customer.

30 The bill requires the Public Utilities Commission to adopt routine technical rules
31 regarding the procurement of large-scale commercial solar distributed generation
32 resources by January 1, 2018.

33 The bill also requires the commission to submit multiple reports on the effectiveness
34 of the bill credit program at increasing installations of distributed generation resources
35 and its expected short-term and long-term effect on ratepayers, as well as multiple reports
36 regarding net energy billing and alternatives to net energy billing.