SECTION 1. Chapter 21A of the General Laws is hereby amended by inserting after section 28 the following section:-

Section 29. (a) The office, in coordination with the department of energy resources, shall establish a program to encourage the construction and operation of solar power generating canopies over large parking lots. The program shall be designed to contribute to the state's greenhouse gas emission reduction requirements and increase overall renewable energy generation, as well as provide shade and weather protection to both the vehicles under the canopies and people moving from their cars into the buildings served by the parking lot.

(b) The program shall include:

(i) incentives to encourage the construction and operation of solar power generating canopies and co-located energy storage facilities, which may include construction requirements, incentive payments, tax reductions or deferrals, expedited interconnection requirements, zoning or other regulatory preferences, which may include increasing the amount of the incentive through the state's current or future solar incentive program for solar panels mounted on parking lot canopies; or other financial or regulatory incentives;

(ii) a definition of qualifying parking lots, which may be phased in over time;

(iii) minimum electric generation capacity requirements; and

(iv) such other criteria and conditions necessary for an efficient and effective solar power generating canopies over large commercial parking lots program that significantly increases the use of solar-generated power in the commonwealth.

(c) In designing the program, the department shall:

(i) consult with an advisory working group to make recommendations concerning the design and operation of the program. The members of the advisory working group shall be appointed by the

secretary and shall include a representative of the division of energy resources, who shall chair the working group, and a representative of the commercial real estate industry; a representative of organized labor, a representative of the solar energy industry, a representative of an environmental group concerned with energy, a representative of the construction industry, a representative of an electric utility or organization representing electric utilities, a representative of local government, a person with expertise in energy siting, and a person with expertise in solar energy and energy efficiency; ;

(ii) review the design and operation of parking lot solar energy incentive programs proposed or in operation in other jurisdictions, including in the state of Washington, Hawaii, California, and France; and

(iii) hold not fewer than 3 public hearings in different regions of the commonwealth to receive public testimony and input on the program.

(d) The department shall promulgate regulations as necessary to implement the program.

(e) If statutory changes are necessary to implement the program, the department shall make specific recommendations to the general court for required changes in statutes.

SECTION 2. Chapter 23J of the General Laws is hereby amended by adding the following section:-

Section 16. The center shall issue guidance to businesses, nonprofit organizations, a municipality or group of municipalities with an approved municipal load aggregation plan pursuant to section 134 of chapter 164 or other government entities directly or through an aggregation pursuant to section 137 of said chapter 164, on how to enter into long-term contracts to purchase offshore wind energy. The guidance shall be posted on the center's website not later than December 31, 2024.

SECTION 3. Chapter 23J of the General Laws is hereby amended by adding the following section:

"Section 17. Based on the Boston Area and South Coast and North Shore offshore wind ports and infrastructure assessments completed by the center in 2017 and 2022 respectively, the center shall create a strategic coastal report that outlines when and how the state should repurpose each port to support the state's offshore wind industry. The report should include a strategic vision for a comprehensive port infrastructure offshore wind network in Massachusetts.

The center shall submit its report to the department of public utilities, the joint committee on telecommunications, utilities and energy, the senate and house committees on global warming and climate change and the clerks of the senate and house of representatives no later than July 31, 2024."

SECTION 4. Chapter 25 of the General Laws is hereby amended by inserting after Section 23 the following section:

Section 24. (a) The department of public utilities shall require electric distribution and transmission companies to prepare and file a climate vulnerability and resilience plan by December 31, 2024, and at least once every five years thereafter based on best available data. The department shall levy a penalty not to exceed \$2000 per day for failure to file such a plan. Fines levied by the department shall be returned to ratepayers through distribution rates. Climate vulnerability and resilience plans shall include, at a minimum:

a. an evaluation of the climate science and projected sea level rise, extreme temperature, precipitation, humidity and storms, and other climate-related risks for the service territory ;

b. an evaluation and risk assessment of potential impacts of climate change on existing operation, planning, and physical assets

c. identification, prioritization, and cost-benefit analysis of adaptation options to increase asset and system-wide resilience over time,

d. community engagement plan with targeted engagement for environmental justice populations in the service territory; and

e. an implementation timeline for making changes in line with the findings of the study such as modifying design and construction standards, modifying operations and planning processes, and relocating or upgrading existing infrastructure to ensure reliability and resilience of the grid.

(b) In adjudicating ratemaking proceedings pursuant to sections 76. 93, and 94 of chapter 164, the department of public utilities shall conclude in writing and take into consideration whether the applicant's costs proposed or incurred for capital investment projects consider and minimize climate risks for the useful life of the proposed investment or thirty years, whichever is greater, and whether proposed cost and actions are consistent with the applicant's climate vulnerability and resilience plan.

(c) The department of public utilities shall promulgate such rules and regulations as are necessary to promptly and effectively enforce the provisions of this section."
SECTION 5. Section 3 of Chapter 25A of the General Laws is hereby amended by adding the following definitions:

"long-duration energy storage," as defined in Section 60 of Chapter 179 of the Acts of 2022, an energy storage system, as defined in section 1 of chapter 164 of the General Laws, an energy storage system capable of dispatching electricity at its full rated capacity for greater than ten hours.

"Mid-duration energy storage system", as defined in Section 60 of Chapter 179 of the Acts of 2022, an energy storage system, as defined in section 1 of chapter 164 of the General Laws, that is capable of dispatching energy at its full rated capacity for a period greater than 4 hours and up to 10 hours.

"multi-day energy storage," as defined in Section 60 of Chapter 179 of the Acts of 2022, an energy storage system, as defined in section 1 of chapter 164 of the General Laws, an energy storage system capable of dispatching electricity at its full rated capacity for greater than twentyfour hours.

SECTION 6. Section 3 of Chapter 25A of the General Laws, as appearing in the 2020 Official Edition, is hereby amended by striking the definition of "Qualified RPS resource" and inserting in place thereof the following:-

"Qualified RPS resource", a renewable energy generating source, as defined in subsection (c) or in subsection (d) of section 11F that has: (i) installed a qualified energy storage system at its facility; or (ii) commenced operation on or after January 1, 2019, provided however, that a qualified RPS resource that commenced operation prior to January 1, 2019 shall be treated as having commenced operation on or after January 1, 2019 if it is coupled with an on-site energy storage system capable of storing four hours of the qualified RPS resource's installed capacity, or is coupled contractually with an off-site energy storage system capable of storing four hours of the qualified RPS resource's installed capacity. SECTION 6A. Section 11F of chapter 25A of the General Laws, as so appearing in the 2020 Official Edition, is hereby amended by striking out the words "or (9) geothermal energy" in line 44 and inserting in place thereof the following:- (9) geothermal energy; or (10) fusion energy

SECTION 6B. Said section 11F of chapter 25A, as so appearing, is hereby amended by striking out the words "or (9) geothermal energy" in line 86 and inserting in place thereof the following:-(9) geothermal energy; or (10) fusion energy

SECTION 7. Section 11F1/2 of Chapter 25A as appearing in the 2022 Official version, is hereby amended, in line 11, by striking the words "naturally occurring".

SECTION 8. Section 11F 1/2 of Chapter 25A of the general laws, as so appearing in the 2022 official edition, is hereby amended by adding the following to the end of Section 11F 1/2 (e):

The department shall provide that for facilities generating useful thermal energy by using eligible biomass technologies that also install an electrostatic precipitator or other emissions control device, an alternative energy credit shall be earned for 1,706,000 British thermal units of net useful thermal energy so as to improve air quality.

SECTION 9. Chapter 25A of the General Laws is hereby amended by adding the following section:-Section 21.

(a) The department of energy resources shall issue procurements totaling 4,500 megawatts of energy storage systems, of which 3,000 megawatts shall be mid-duration energy storage; 750 megawatts shall be long-duration energy storage; and 750 megawatts shall be multi-day energy storage. The procurement schedule for mid-duration energy storage shall be as follows: approximately 1,000 megawatts no later than December 31, 2024; approximately 1,000 megawatts no later than December 31, 2026.

(b) DOER shall seek industry and stakeholder input and comments on the structure and details of the initial procurement no later than June 30, 2024.

SECTION 10. Chapter 164 of the General Laws, as so appearing in the 2022 Official Edition, is hereby amended by inserting before the definition of "Aggregator" the following definition:

"Advanced Metering Infrastructure," means a meter and network communications technology that measures, records, and transmits electricity usage by the end user at a minimum of hourly intervals and is capable of providing data to the end user and authorized third parties in real time or near real time.

SECTION 11. Chapter 40 of the General Laws, as appearing in the 2022 Official Edition, is hereby amended by inserting at the end thereof the following sections:-

Section 70. Approval for Solar and Energy Storage Permit Applications

(a) The Permit Granting Authority shall allow for electronic submission of the permit application and associated documentation for the installation of a solar PV system, solar thermal system, building-integrated PV system, energy storage device, or a solar system combined with an energy storage device. All required permitting documentation and forms shall be published on the Permit Granting Authority's publicly accessible internet website. The Permit Granting Authority shall authorize an electronic signature for the permit application and other documentation in lieu of a wet signature by an applicant. Electronic submission, including online payment of associated permitting fees, shall be offered through either an online portal available on the website of the Permit Granting Authority or via electronic mail to a dedicated account that shall be capable of receiving permit applications.

(b) Upon submission of required permit application documents, the application shall be deemed complete if, after five business days have elapsed, the Permit Granting Authority has not issued a written correction notice detailing all deficiencies in the application and identifying additional information explicitly necessary for the Permit Granting Authority to complete a review.

(c) An application shall be deemed approved and the applicant may begin installation if ten business days after the application was deemed complete has elapsed and the following are true:

(i) the Permit Granting Authority has not administratively approved the application.

(ii) the Permit Granting Authority has not denied the permit.

(d) A Permit Granting Authority may use an automated permitting platform that verifies code compliance and issues permits in real time to satisfy the requirements of subdivisions (a), (b), and (c). An applicant may begin installation after the issuance of a permit from such an automated permitting platform.

Section 71. Solar and Energy Storage Inspections

(a) Applicant shall notify the Permit Granting Authority upon completion of system installation. Permit Granting Authorities shall require no more than one inspection for a solar PV system, building-integrated PV system, solar thermal system, energy storage device, or the solar system combined with an energy storage device in order for the system or device to receive a certificate of completion. The Permit Granting Authority shall issue a certificate of completion no later than 10 business days following the receipt of notice from the applicant that the system, device, or combined system and device, is installed.

(b) An electric distribution company shall not require additional inspections by the electric distribution company or any other entity as a precondition to granting the customer permission to operate.

SECTION 12. Section 1 of chapter 164 of the General Laws, as so appearing in the 2020 Official Edition, is hereby amended by inserting the following after the definition of "FERC":-

"Fusion energy", energy generated when nuclei from light atoms, such as hydrogen, combine to form a single heavier one, such as helium. SECTION 13. Said section 1 of chapter 164, is hereby further amended by inserting after the word "hydroelectric" in line 286 the following words:- ; fusion energy

SECTION 14. Section 1F of chapter 164 of the General Laws, as appearing in the 2022 Official Edition, is hereby amended by striking subsection (4) and replacing it with the following subsection:-

(4)(i) The department shall require that distribution companies provide discounted rates for lowincome customers comparable to the low-income discount rate in effect prior to March 1, 1998; and for eligible moderate-income customers. Said discounts shall be in addition to any reduction in rates that becomes effective pursuant to said subsection (b) of said section 1B on March 1, 1998, and to any subsequent rate reductions provided by a distribution company after said date pursuant to said subsection. The cost of such discounts shall be included in the rates charged to all other customers of a distribution company upon approval by the department. Each distribution company shall guarantee payment to the generation supplier for all power sold to low-income and eligible moderate-income customers at said discounted rates. Eligibility for the discount rates established herein shall be established upon verification of a low-income customer's receipt of any means tested public benefit, or verification of eligibility for the low-income home energy assistance program, or its successor program, for which eligibility does not exceed 200 per cent of the federal poverty level based on a household's gross income; and by criteria determined by the department for verification of an eligible moderate-income customer. Said public benefits may include, but are not limited to, assistance which provides cash, housing, food, or medical care, including, but not limited to, transitional assistance for needy families, supplemental security income, emergency assistance to elders, disabled, and children, food stamps, public housing, federally-subsidized or state-subsidized housing, the low-income home energy assistance program, veterans' benefits, and similar benefits. The department of energy resources shall make available to distribution companies the eligibility guidelines for said public benefit programs. Each distribution company shall conduct substantial outreach efforts to make said low-income or moderate-income discount available to eligible customers and shall report to said department of energy resources, at least annually, as to its outreach activities and results.

Outreach may include establishing an automated program of matching customer accounts with (a) lists of recipients of said means tested public benefit programs and based on the results of said matching program, to presumptively offer a low-income discount rate to eligible customers so identified, and (b) criteria established by the department for verification of a moderate-income customer to presumptively offer a moderate-income discount rate to eligible customers so identified; provided, however, that the distribution company, within 60 days of said presumptive enrollment, informs any such low-income customer or eligible moderate-income customer of said presumptive enrollment and all rights and obligations of a customer under said program, including the right to withdraw from said program without penalty.

In a program year in which maximum eligibility for the low-income home energy assistance program, or its successor program, exceeds 200 per cent of the federal poverty level, a household that is income eligible for the low-income home energy assistance program shall be eligible for the low-income discount rates required by this subparagraph.

(ii) A residential customer eligible for low-income or moderate-income discount rates shall receive the service on demand. Each distribution company shall periodically notify all customers of the availability and method of obtaining low-income or moderate-income discount rates. An existing residential customer eligible for a low-income or moderate-income discount on the date of the start of retail access who orders service for the first time from a distribution company shall be offered basic service by that distribution company.

The department shall promulgate rules and regulations requiring utility companies organized pursuant to this chapter to produce information, in the form of a mailing, webpage, or other approved method of distribution, to their consumers, to inform them of available rebates, discounts, credits, and other cost-saving mechanisms that can help them lower their monthly utility bills, and send out such information semi-annually, unless otherwise provided by this chapter.

(iii) Repealed.

(iv) There shall be no charge to any residential customer for initiating or terminating low-income or moderate-income discount rates, default service, or standard offer service when said initiation or termination request is made after a regular meter reading has occurred and the customer is in receipt of the results of said reading. A distribution company may impose a reasonable charge, as set by the department through regulation, for initiating or terminating low-income or moderateincome discount rates, default service, or standard offer service when a customer does not make such an initiation or termination request upon the receipt of said results and prior to the receipt of the next regularly scheduled meter reading. For purposes of this subsection, there shall be a regular meter reading conducted of every residential account no less often than once every two months. Notwithstanding the foregoing, there shall be no charge when the initiation or termination is involuntary on the part of the customer.

SECTION 15. Chapter 164 of the General Laws is hereby amended with the addition of a new Section following Section 1K:

Section 1L. Distributed energy services; Microgrid operations

For the purposes of climate resiliency and mitigation, reliability, and encouragement of installation of distributed electricity generation and storage capacity, no right to exclusive service or franchise established within Section 1B or elsewhere in this chapter shall prevent a municipality, or agencies of the Commonwealth or private electric customers in coordination with a municipality, within an electric or gas company's service territory, from:

(a) establishing an energy microgrid or district energy system;

(b) sharing electric generation or storage resources among facilities that are contiguous and owned by the same utility customer, irrespective of the number of electric meters installed at such facilities; or

(c) using public rights of way to conduct electrical conduit or other energy resources point to point where the municipality deems there is benefit from sharing energy resources.

Notwithstanding the foregoing, electrical microgrids shall not sell energy to retail customers, shall not distribute energy across property owned by others than the municipality, and shall limit

any new electrical connection between utility-metered facilities to cases when such facilities have been disconnected from utility supply of electrical energy.

SECTION 16. Subsection (a) of section 85B of chapter 164 of the General Laws is hereby amended by striking out paragraphs (7) and (8) and inserting in place thereof the following:

(7) identification of additional supplies and equipment needed during an emergency and the means of obtaining additional supplies and equipment;

(8) designation of a call center in the commonwealth for service assistance for the duration of an emergency or until full service is restored, whichever occurs first. The call center shall be staffed continuously for the duration of the emergency and to ensure sufficient staffing levels to handle all customer calls; and

(9) a description of how the company is implementing its climate vulnerability and resilience plan in its response to emergency events and in its efforts to minimize the effects of extreme weather on the company's infrastructure and operations, including disruptions to service.

SECTION 17. Chapter 164 of the General Laws is hereby amended by inserting after section 92C the following 3 sections:

Section 92D. Customer access to a modern distribution grid is a right and the public utility obligation to serve customers requires distribution companies to facilitate such access at reasonable costs and on reasonable terms. The capability and accessibility of the Commonwealth's electrical system must be facilitated by investments in the electric grid that are aligned with the Commonwealth's ambitious climate, renewable energy, and economic development goals. The implementation and periodic update of grid modernization efforts and formal interconnection standards to ensure fair, reasonable, and transparent customer grid access is essential to the achievement of the Commonwealth's goals. As distribution companies pursue

grid modernization efforts, related technical, operational, policy and regulatory opportunities and challenges must continuously be examined and addressed to ensure non-discriminatory customer access and to achieve the full potential of a modern grid. Establishing frameworks for continuous and collaborative efforts will assist utilities, regulators, distributed energy resource developers and other stakeholders to timely and effectively address these issues. The department shall establish standards to ensure reasonable and timely access to the distribution grid for all customers and to ensure that distribution companies undertake investments and process improvements to facilitate the transformation of the Commonwealth's distribution grid to align with the Commonwealth's ambitious climate, energy, equity and economic development goals.

Section 92E. (a) No customer shall be denied the right to interconnect a distributed generation facility, energy storage system or a combined distributed generation facility and energy storage system to the extent such interconnection does not compromise the safety and reliability of the distribution system. The department shall promulgate rules: (i) specifying a limit of the time that may elapse from the date of initial interconnection application to the receipt of an interconnection services agreement for various sizes and types of distributed generation facilities and energy storage systems; (ii) specifying a limit of the time that may elapse from the distribution company's commencement of design of required interconnection-related upgrades and authorization to interconnect for various sizes and types of distributed generation facilities and energy storage systems; and (iii) requiring distribution companies to enable the interconnection of distributed generation facilities and energy storage systems in accordance with the schedule promulgated by the department.

(b) Rules adopted by the department under this section shall include: (i) provisions to track the performance of distribution companies under these rules; (ii) mechanisms to ensure compliance

by distribution companies with the schedule and rules required by this section including revisions to existing timeline enforcement mechanisms; (iii) mechanisms to enable customers to seek department review and enforcement of the schedule and rules required by this section; and (iv) provisions for expeditiously resolving disputes between customers and distribution companies.

(c) The department shall establish a cost allocation framework to implement the electric-sector modernization plans established by section 92B commencing with the 2030-2034 electric-sector modernization plans. Such electric-sector modernization plans shall identify (i) an amount, in megawatts of alternating current, of incremental grid hosting capacity that will be available to interconnect distributed generation and energy storage systems upon implementation of the plans; and (ii) a proportional share of the benefits of the electric-sector modernization plans that is attributable to distributed generation and energy storage systems. The department shall establish a sub-regional uniform fee to be assessed to interconnecting customers of system sizes by applying the proportional share of benefits attributable to distributed generation and energy storage to the total number of megawatts of capacity enabled by the plans. This shall result in a dollar amount per kilowatt AC to be assessed to interconnecting customers based on project export capacity for their use of the grid capacity enabled by the plans. Such fee shall be uniform within a distribution company's service territory sub-region regardless of the customer's point of interconnection. The electrical boundaries of a distribution company's service territory subregions shall be proposed by the distribution company and defined within the respective distribution company's electric-sector modernization plan. Interconnecting customers, with proposed facilities above 60 kW may be assessed additional interconnection costs for upgrades identified in the interconnection studies.

For projects with an export capacity between 60 kW and 500 kW the following standardized interconnection cost allocation shall apply to customers for distributed generation facilities and energy storage systems: (i) no customer shall be charged more than a fixed \$/kW AC of export capacity within a distribution company's service territory sub-region to interconnect distributed generation facilities and energy storage systems; and (ii) any costs incurred by the distribution company for interconnecting a distributed generation facility or energy storage system that exceed the applicable fixed \$/kW AC of export capacity shall be included in the distribution company's revenue requirement and recovered through fully reconciling rates approved by the DPU. The DPU shall require each distribution company to propose a fixed sub-regional \$/kW fee within each electric sector modernization plan for approval..

For projects with an export capacity that does not exceed 60kW, the following standardized interconnection cost allocation shall apply to customers for distributed generation facilities and energy storage systems: (i) no customer shall be charged more than a fixed \$/kW AC of export capacity to interconnect distributed generation facilities and energy storage systems; and (ii) such fee shall be inclusive of interconnection costs for upgrades not included in the approved electric-sector modernization plans including, but not limited to, shared service distribution system upgrades; and (iii) any costs incurred by the distribution company for interconnecting a distributed generation facility or energy storage system that exceed the applicable fixed \$/kW AC of export capacity shall be included in the distribution company's revenue requirement and recovered through fully reconciling rates approved by the DPU. The DPU shall require each distribution company to propose a fixed sub-regional \$/kW fee within each electric sector modernization plan for approval. The utilities may include costs of upgrades identified in the interconnection studies in their proposed fixed sub-regional \$/kW fee.

(e) The department shall establish a permanent office of a distributed generation and clean energy ombudsperson to advocate for improvements to distribution company interconnection processes and practices and to receive and facilitate the resolution of disputes between distributed generation customers and the distribution companies. The department shall immediately appoint an ombudsperson to lead such office. The office of the ombudsperson shall be staffed with two or more individuals, one of whom shall be an expert in the interconnection tariff and department precedent and one of whom shall be an expert in technical solutions and standards for interconnecting distributed generation customers. The ombudsperson may recommend that the department impose civil penalties upon a finding that a distribution company has intentionally or negligently violated one or more requirements of the interconnection tariff, that the company has exhibited a pattern or history of violating such tariff, or that the company has failed to provide an acceptable level of customer service for a distributed generation customer or customers. In considering penalties under this section, the ombudsperson and the department shall consider the severity of the violation, the financial impact upon the distribution customer or customers, the distribution company's history of violations and customer service, and other factors that may be relevant to determining the level of penalty that may be appropriate. The department may direct that all or a portion of a penalty take the form of restitution to be paid to an affected distribution customer. Penalties imposed by the department shall be effective upon the date they are imposed.

Section 92F. (a) There is hereby established within the department a permanent and open interconnection working group for the purpose of considering improvements to interconnection tariffs and interconnection technical standards and processes. The working group shall be

facilitated by the office of the ombudsperson and shall meet no less frequently than 4 times per year.

(b) The working group shall study and make recommendations on topics including, but not limited to: (i) cost and best available technology for interconnecting and metering distributed generation, energy storage systems, and other distributed energy resources; (ii) process improvements to improve timeliness and efficiency of distributed generation and storage interconnection; (iii) processes for identifying and achieving distribution system upgrade cost avoidance through the use of advanced inverter functions and other non-wires solutions under the distribution company's operational control, along with earning sharing mechanisms or incentives for capital investment deferrals; (iv) processes and customer service improvements for interconnecting customers adopting distributed generation and energy storage; (v) revisions to distribution company interconnection and metering standards that impact distributed energy resources and/or exporting and non-exporting energy storage systems; (vi) implementation of programs, guidelines, and schedules for grid-enabling technologies and platforms such as distributed energy resource management systems; and (vii) without limitation, such other technical, policy, and tariff issues related to and affecting interconnection performance and customer service for distributed generation and energy storage customers in the commonwealth, as determined by the working group. The chairs may jointly create subcommittees of the working group to focus on specific issues of importance, and may invite technical or policy experts to assist the working group in its work.

(c) The office of the ombudsperson shall develop and submit a report detailing consensus recommendations of the working group and, if applicable, additional recommendations for which consensus was not reached to the department and the clerks of the house of representatives and senate with recommendations for improvements to interconnection oversight and reporting, interconnection tariffs and such other topics designated to the working group in subsection (b), within 180 days of its first meeting, and every 180 days thereafter. Such report shall include consensus recommendations of the working group and, if applicable, additional recommendations for which consensus was not reached. The department shall within 180 days of the report filing issue an order addressing the recommendations of the working group. The order shall specify those recommendations adopted and explain in detail the reasons for rejecting any recommendations not adopted.

SECTION 18. Chapter 164 of the General Laws, as so appearing, is hereby amended by inserting after section 116B the following section:

SECTION 116C: Advanced Metering Infrastructure

(a) Distribution companies deploying advanced metering infrastructure in their territories shall establish a joint, centralized data repository to allow customers and third parties, including competitive suppliers, access to advanced metering data, including billing, interval usage, and load data, in near-real time for all customer classes cost-effective manner approved by the department.

(b) A non-utility competitive supplier of energy, pursuant to section 1D of chapter 164 or other third party is entitled to access to detailed advanced metering infrastructure customer data, subject to appropriate customer approval and protections. A customer's intent to enroll on a nonutility competitive supplier of energy or third party's product is considered approval for the purposes of this section. (c) Electric customers may opt out of inclusion in the implementation of advanced metering infrastructure with notice to the distribution company. Upon receiving such notice, the distribution company shall remove the customer from the implementation plan, notify the department of the customer's decision to not be a part of such implementation plan in a manner determined by the department, and charge such a customer any reasonable and necessary fees for delivering non-advanced metering service.

(d) A non-utility competitive supplier of energy, pursuant to section 1D of chapter 164, may provide consolidated billing services to electric customers utilizing advanced metering infrastructure. For a competitive supplier of energy who implements supplier consolidated billing services for their customers, said competitive supplier of energy shall be subject to the same customer protection rules and requirements as distribution companies for suspension, disconnection, and reconnection of electric services.

(e) Distribution companies shall implement accelerated switching permitting a residential or small commercial electric customer to change electric suppliers within three business days. Customers moving within a distribution company's territory shall be permitted to transfer their competitive supplier of energy directly to their new service location without being required to switch to an interim rate provided by the distribution company or other supplier. Customers establishing electric service shall be permitted to take service from their competitive energy supplier on day one of service. Customers shall not be required to take basic service from a distribution company prior to selecting and switching to a competitive supplier.

(f) Within 180 days of enactment of this legislation, all distribution companies operating within the state shall submit a plan for implementation of advanced metering data access protocols to

the department for approval. The department shall approve or reject such a plan within 90-days of receipt. The department shall provide rules and protocols for ensuring the timely rehearing of a rejected plan and means to make such plans acceptable to the department. All electric companies are expected to have approved plans at the department within 1 year of enactment unless good cause shown. Approved plans should implement advanced metering data access to all customer classes and authorized third parties, including competitive suppliers, within 5 years of approval, unless the department determines that such a timeline would create undue costs to consumers, compromise reliability of electric service, or compromise safe operation of the electric grid. Distribution companies shall make regular updates to the department on the progress towards implementing advanced metering infrastructure in their territory, no less than quarterly.

(g) Distribution companies shall be entitled to recovery of prudent and necessary expenses for the implementation of advanced metering data repositories. The department may also implement penalties for failure of distribution companies to meet implementation goals.

(h) The department shall, in consultation with the distribution companies, conduct a process to investigate establishing and refining standards that expand the use of distributed grid edge software on AMI meters already approved by the department, which supports efficiency, load flexibility, and distribution system intelligence to improve system utilization, reduce costs, and/or improve reliability to customers. Standards shall include but not be limited to methods for increasing capacity for managing loads and resources in the grid by electric utilities and third parties. The utilities shall design at least one metric for improved monitoring and controlling the grid using high-resolution data in utility meters that will allow them to earn an incentive for positive performance.

SECTION 19. Section 141 of chapter 164 of the General Laws, as so appearing, is hereby amended by striking out the second sentence and inserting in place thereof the following sentence:- "Where the scale of on-site generation would have an impact on affordability for lowincome or eligible moderate-income customers, a fully compensating adjustment shall be made to the low-income or moderate-income rate discount."

SECTION 20. Section 164 of the General Laws, as appearing in the 2022 Official Edition, is hereby amended by inserting the following section.-

Section 149. (a) For the purposes of this section, the following words shall have the following meanings unless the context clearly requires otherwise:

"Advanced power flow control", any hardware and software technologies used to push or pull electric power in a manner that balances overloaded lines and underutilized corridors within the distribution system.

"Advanced reconductors", any hardware technology that can conduct electricity across distribution lines and demonstrate enhanced performance over traditional conductor products.

"Dynamic line rating", any hardware and/or software technologies used to appropriately update the calculated thermal limits of existing distribution lines based on real-time and forecasted weather conditions.

"Grid enhancing technology", any hardware or software technology that enables enhanced or more efficient performance from the electric distribution system, including, but not limited to dynamic line rating, advanced power flow control technology, topology optimization, and energy storage when used as a distribution resource.

"Topology optimization", any hardware or software technology that identifies reconfigurations of the distribution grid and can enable the routing of power flows around congested or overloaded distribution elements.

(b) For base rate proceedings and other proceedings in which a distribution company proposes capital improvements or additions to the distribution system, the distribution company shall

conduct a cost-effectiveness and timetable analysis of multiple strategies including but not limited to the deployment of grid enhancing technology, advanced reconductors, or energy storage used as a distribution resource. Where grid enhancing technology, advanced reconductors, or energy storage used as a distribution resource whether in combination with or instead of capital investments, offer a more cost-effective strategy to achieving distribution goals including, but not limited to distributed energy resource interconnection, the department may approve the deployment of grid enhancing technology, advanced reconductors, or energy storage used as a distribution resource as part of the overall solutions strategy.

(c) As part of a base rate filing or other filing in which it proposes capital improvements or additions to the distribution system, the distribution company may propose a performance incentive mechanism that provides a financial incentive for the cost-effective deployment of grid enhancing technologies, advanced reconductoring, or energy storage used as a distribution resource.

(d) The department may promulgate regulations to implement the provisions of the subsections(b) and (c).

(e) Every fifth year, each distribution company shall make a compliance filing with the department and provide a separate report to both ISO-NE and the joint committee on telecommunications, utilities, and energy on or before September 1st on the deployment of grid enhancing technology, advanced reconductors, or energy storage used as a distribution resource in a format determined by the department.

SECTION 21. Chapter 164 is hereby amended by adding the following section:

Section 149.

Section 1.

(a)The department of energy resources shall ensure equity, accessibility, and promote participation by renters and low-income retail electric customers in the solar incentive program established in section 11 of chapter 75 of the acts of 2016, and in any successor solar incentive program, by implementing a low-income customer verification process in which low income

customers shall be persons whose income is at or below 80 percent of the area median income or 200 percent of the federal poverty level or is a small business, who are, for the purposes of this section defined as business entities, including their affiliates that are (i) independently owned and operated; and (ii) are defined as a "small business" under applicable federal law, as established in the United States Code and promulgated from time to time by the United States Small Business Administration.

(b)A low-income multi-unit building that meets the definition under M.G.L. c. 40B, § 20 or otherwise receives tax credits under the U.S. Department of Housing and Urban Development Low-Income Housing Tax Credit program shall qualify as one Low Income Customer.

(c)In the implementation of the program, the department shall:

(i)Require income data verification to determine eligibility for low-income customers. Proof of eligibility required for low-income customers shall include one or more than one of the following: proof of participation in a low income discount program including Medicaid; Supplemental Security Income; Temporary Assistance for Needy Families; Women, Infants, and Children Nutrition Program; Low Income Home Energy Assistance Program; Supplemental Nutrition Assistance Program or food stamps; Head Start; National School Lunch Program; Emergency Aid to the Elderly, Disabled, and Children; School Breakfast Program; Public Housing; Transitional Aide to Families with Dependent Children; Veterans' Service Benefits established in Chapter 115 of the Massachusetts General Laws; Veterans Dependency and Indemnity Compensation Surviving Parent or Spouse; Veterans Non-Service Disability Pension; Fuel Assistance; or proof that the residential Low-income Customer lives in or is a business entity located in a Census block group where the median household income is at or below 200 percent of the U.S. Federal Poverty Guidelines or 80 percent of the area median gross income published by the United States Census Bureau, whichever is greater; by living in or owning a low-income multi-unit building, including those that are master-metered; or proof of income of

the account holder including pay stubs or form W-2; or any verification method authorized by the U.S. Department of Treasury for qualified low-income economic benefit projects Investment Tax Credit (ITC) adder under United States Public Law 117-169 Section 13103(2)(C);

(ii)prohibit credit checks as a means of establishing eligibility for residential customers to become a subscriber;

(iii) prohibit the use of early termination and exit fees for residential customers;

(iv)require distribution companies generating an alternative form of on-bill credits as approved by the department of public utilities from distributed solar generation facilities to accept and implement no less frequently than once per month any changes to the identities of designated recipients and amount of credits to be attributed to such recipients, as provided by the owner of the solar distributed generation facility; and

(v)exempt low-income multi-unit building owners from bill credit maximums and subscriber count minimums for the host project.

SECTION 22. Section 102 of Chapter 8 of the Acts of 2021 is hereby repealed.

SECTION 23. Section 83B of chapter 169 of the acts of 2008, as most recently amended by section 60 of chapter 179 of the acts of 2022, is hereby further amended by striking out, in line 1, the words "83C and 83D" and inserting in place thereof the following words:- 83C, 83D, and 83E

SECTION 24. Section 83B of Chapter 169, as so appearing, is hereby further amended by striking out the definition of "clean energy generation" and inserting in place thereof the following definition:-

"Clean energy generation", (i) firm service hydroelectric generation from hydroelectric generation alone; (ii) new Class I RPS eligible resources that are firmed up with energy storage

or firm service hydroelectric generation; (iii) new Class I renewable portfolio standard eligible resources or (iv) nuclear power generation that is located in the ISO-NE control area and commenced commercial operation before January 1, 2011.

SECTION 25.

Section 83B of chapter 169, as so appearing, is hereby further amended by striking out the definition of "long-term contract" and inserting in place thereof the following definition:-"Long-term contract", a contract for a period of 15 to 30 years for offshore wind energy generation pursuant to section 83C or for clean energy generation pursuant to section 83D or 83E; provided, however, that a contract for offshore wind energy generation pursuant to said section 83C may include terms and conditions for renewable energy credits associated with the offshore wind energy generation that exceed the term of generation under the contract.

SECTION 26. Section 83C of chapter 169 of the acts of 2008, as most recently amended by section 61 of chapter 179 of the acts of 2022, is hereby amended in the last sentence of subparagraph (b) thereof by inserting after the word "commitments" the following:

", plans to minimize total carbon emissions generated by vessels during both the construction phase and the operation and maintenance phase of the project,"

SECTION 27. Said chapter 169, as amended by chapter 188 of the acts of 2016, is hereby further amended by inserting after section 83D the following section:-

Section 83E. (a) In order to provide a cost-effective mechanism for procuring beneficial, reliable clean energy generation resources on a long-term basis, taking into account the factors outlined in this section, , not later than August 31, 2025, every distribution company shall, in coordination

with the department of energy resources, jointly and competitively solicit proposals for clean energy generation and, provided that reasonable proposals have been received, shall enter into cost-effective long-term contracts for clean energy generation for an annual amount of electricity up to approximately 9,450,000 megawatt-hours additional to the amount of clean energy generation purchased from the seller in 2022 via the spot market or other contracts; provided

further, that the department may require additional solicitations and procurements if it determines they are necessary to meet emissions reductions requirements of section 4 of Chapter 21N. Long-term contracts executed pursuant to this section shall be subject to the approval of the department of public utilities and shall be apportioned among the distribution companies under this section.

(b) The timetable and method for solicitation of long-term contracts shall be proposed by the department of energy resources in coordination with the distribution companies using a competitive bidding process and shall be subject to review and approval by the department of public utilities. The department of energy resources shall consult with the distribution companies and the attorney general's office regarding the choice of solicitation methods. A solicitation may be coordinated and issued jointly with other New England states or entities designated by those states. The distribution companies, in coordination with the department of energy resources, may conduct 1 or more competitive solicitations through a staggered procurement schedule developed by the department of energy resources; provided, that the schedule shall ensure that the distribution companies enter into cost-effective long-term contracts for the delivery of clean energy generation up to approximately 9,450,000 megawatt-hours by December 31, 2030, additional to the amount of clean energy generation purchased from the seller in 2022 via the spot market or other contracts. Proposals received pursuant to a solicitation under this section

shall be subject to review by the department of energy resources and the executive office of housing and economic development in consultation with the independent evaluator and the electric distribution companies shall offer technical advice. If the department of energy resources, in consultation with the independent evaluator, determines that reasonable proposals were not received pursuant to a solicitation, the department may terminate the solicitation, and may require additional solicitations to fulfill the requirements of this section.

(c) In developing proposed long-term contracts, the distribution companies shall consider long-term contracts for clean energy certificates, for energy and for a combination of both clean energy certificates and energy. A distribution company may decline to pursue a contract if the contract's terms and conditions would require the contract obligation to place an unreasonable burden on the distribution company's balance sheet after consultation with the department of energy resources; provided, however, that the distribution company shall take all reasonable actions to structure the contracts, pricing or administration of the products purchased under this section to prevent or mitigate an impact on the balance sheet or income statement of the distribution company or its parent company, subject to the approval of the department of public utilities; and provided further, that mitigation shall not increase costs to ratepayers. If a distribution company deems all contracts to be unreasonable, the distribution company shall consult with the department of energy resources and, within 20 days of the date of its decision, submit a filing to the department of public utilities. The filing shall include, in the form and detail prescribed by the department of public utilities, documentation supporting the distribution company's decision to decline the contract. Following a distribution company's filing, and within 4 months of the date of filing, the department of public utilities shall approve or reject the distribution company's decision and may order the distribution company to reconsider any

contract. The department of public utilities shall take into consideration the department of energy resources' recommendations on the distribution company's decision. The department of energy resources may require additional solicitations to fulfill the requirements of this section.

(d) The department of public utilities shall promulgate regulations consistent with this section. The regulations shall: (1) allow developers or owners of clean energy generation resources to submit proposals for long-term contracts; (2) require that contracts executed by the distribution companies under such proposals are filed with, and approved by, the department of public utilities before they become effective; (3) provide for an annual remuneration for the contracting distribution company equal to 2.25 per cent of the annual payments under the contract to compensate the company for accepting the financial obligation of the long-term contract; provided, however, that such provision shall be acted upon by the department of public utilities at the time of contract approval; (4); require associated transmission costs to be incorporated into a proposal; provided, however, that, to the extent there are regional or projectspecific transmission costs included in a bid, the department of public utilities may, if it finds such recovery to be in the public interest, authorize or require the contracting parties to seek recovery of such transmission costs from other states or from benefitted entities or populations in other states through federal transmission rates, consistent with policies and tariffs of the Federal Energy Regulatory Commission and (5) require that the clean energy resources to be used by a developer or owner under the proposal meet the following criteria: (i) provide enhanced electricity reliability, system safety and energy security; (ii) contribute to reducing winter electricity price spikes; (iii) are cost effective to electric ratepayers in the commonwealth over the term of the contract taking into consideration potential costs and benefits to the ratepayers, including potential economic and environmental benefits and opportunities to equitably allocate

costs to, and equitably share costs with, other states and populations within other states that may benefit from clean energy generation procured by the commonwealth;; (iv) if applicable, avoid line loss and mitigate transmission costs to the extent possible and ensure that transmission cost overruns, if any, are not borne by ratepayers; (iv) allow long-term contracts for clean energy generation resources to be paired with energy storage systems, including new and existing midduration and long-duration energy storage systems; (v) if applicable, adequately demonstrate project viability in a commercially reasonable timeframe; (vi) include benefits to environmental justice populations and low-income ratepayers in the commonwealth ; and (vii) include opportunities for diversity, equity and inclusion, including, at a minimum, a workforce diversity plan and supplier diversity program plan.

(e) A proposed long-term contract shall be subject to the review and approval of the department of public utilities and shall be apportioned among the distribution companies. As part of its approval process, the department of public utilities shall consider recommendations by the attorney general, which shall be submitted to the department within 45 days following the filing of a proposed long-term contract with the department. The department of public utilities shall take into consideration the department of energy resources' recommendations on the potential costs and benefits to the rate payers, including opportunities to equitably allocate costs to, and equitably share costs with, other states and populations within other states that may benefit from clean energy generation procured by the commonwealth, and the requirements of chapter 298 of the acts of 2008 and chapter 21N of the General Laws. The department of public utilities shall consider the potential costs and benefits of the proposed long-term contract if the department finds that the proposed contract is in the public interest and is a cost-effective mechanism for procuring beneficial, reliable clean energy on a

long-term basis, taking into account the factors outlined in this section. A distribution company shall be entitled to cost recovery of payments made under a long-term contract approved under this section.

(f) The department of energy resources and the attorney general shall jointly select, and the department of energy resources shall contract with, an independent evaluator to monitor and report on the solicitation and bid selection process in order to assist the department of energy resources in determining whether a proposal received pursuant to subsection (b) is reasonable and to assist the department of public utilities in its consideration of long-term contracts or filed for approval. To ensure an open, fair and transparent solicitation and bid selection process that is not unduly influenced by an affiliated company, the independent evaluator shall: (1) issue a report to the department of public utilities analyzing the timetable and method of solicitation and the solicitation process implemented by the distribution companies and the department of energy resources under subsection (b) and include recommendations, if any, for improving the process; and (2) upon the opening of an investigation by the department of public utilities into a proposed long-term contract for a winning bid proposal, file a report with the department of public utilities summarizing and analyzing the solicitation and the bid selection process, and providing its independent assessment of whether all bids were evaluated in a fair and non-discriminatory manner. The independent evaluator shall have access to all information and data related to the competitive solicitation and bid selection process necessary to fulfill the purposes of this subsection but shall ensure all proprietary information remains confidential. The department of public utilities shall consider the findings of the independent evaluator and may adopt recommendations made by the independent evaluator as a condition for approval. If the independent evaluator concludes in the findings that the solicitation and bid selection of a longterm contract was not fair and objective and that the process was substantially prejudiced as a result, the department of public utilities shall reject the contract.

(g) The distribution companies shall each enter into a contract with the winning bidders for their apportioned share of the market products being purchased from the project. The apportioned share shall be calculated and based upon the total energy demand from all distribution customers in each service territory of the distribution companies.

(h) An electric distribution company may elect to use any energy purchased under such contracts for resale to its customers, and may elect to retain clean energy certificates to meet any applicable annual portfolio standard requirements, including section 11F of said chapter 25A, and other clean energy compliance standards as applicable. If the energy and clean energy certificates are not so used, such companies shall sell such purchased energy into the wholesale market and shall sell such purchased clean energy certificates attributed to any applicable portfolio standard eligible resources to minimize the costs to ratepayers under the contract. The department of energy resources shall conduct periodic reviews to determine the impact on the energy and clean energy certificates under this section and may issue reports recommending legislative changes if it determines that actions are being taken that will adversely affect the energy and clean energy certificate markets.

(i) If a distribution company sells the purchased energy into the wholesale spot market and auctions the clean energy certificates as described in this section, the distribution company shall net the cost of payments made to projects under the long-term contracts against the net proceeds obtained from the sale of energy and clean energy certificates, and the difference shall be

credited or charged to all distribution customers through a uniform fully reconciling annual factor in distribution rates, subject to review and approval of the department of public utilities.

(j) A long-term contract procured under this section shall utilize an appropriate tracking system to ensure a unit specific accounting of the delivery of clean energy, to enable the department of environmental protection, in consultation with the department of energy resources, to accurately measure progress in achieving the commonwealth's goals under chapter 298 of the acts of 2008 or chapter 21N of the General Laws.

(k) The department of energy resources and the department of public utilities may jointly develop requirements for a bond or other security to ensure performance with requirements under this section.

(l) The department of energy resources may promulgate regulations necessary to implement this section.

(m) If this section is subjected to a legal challenge, the department of public utilities may suspend the applicability of the challenged provision during the pendency of the action until a final resolution, including any appeals, is obtained and shall issue an order and take other actions as are necessary to ensure that the provisions not subject to the challenge are implemented expeditiously to achieve the public purposes of this section.

SECTION 28. Section 82 of chapter 179 of the acts of 2022, is hereby amended by striking out the words "December 31, 2022" and inserting in place thereof the following words:- December 31, 2025

SECTION 29. Subsection (c) of section 85 of chapter 179 of the Acts of 2022 is hereby amended by striking out the word "may", in the first instance that it occurs, and inserting therein the following word:- "shall"

SECTION 30. The legislature shall establish annual targets for solar based on the Governor's stated intent to develop 10 GW of solar by 2030 (1.25 GW/year, or a lower target escalating as necessary), and instruct DOER to revise the SMART Program to meet these targets, as follows:

A. Establish sub-targets for the different types of solar installations (roof-mount, ground-mount, parking lot), and instruct DOER to increase the SMART Program adders in order to achieve those targets (i.e. increase adders for Building, Canopy, Community Shared Solar, Agricultural and Tracker—including single-axis in order that these adders accurately reflect true costs to incentivize adequate additional capacity to meet annual goals and are adjusted annually by DOER).

B. Instruct DOER to revise basic SMART rates to counter substantial component price increases over the past 12 months. The rate revision should be guided by a 3rd party assessment of what rates will be required to drive solar installations to established targets.

C. Instruct DOER to make rates consistent across all utility service territories.

D. Instruct DOER to increase the capacity per block, to lessen the declination between blocks, and to ensure that the revised SMART Program will meet the Governor's stated goal of 10 GW of solar by 2030 (and subsequent goals to be established).

E. Instruct DOER to conduct a review of the SMART program every 2 years to ensure that it is on track to drive solar installations to or beyond established goals, and to address known issues.

F. Instruct DOER to eliminate the Critical Natural Landscapes restriction from the BioMap 2 language and exclusions to SMART program participation.

G. Eliminate the cap on the state investment tax credit for residential installations, and make it refundable.

H. Allow manual reporting for new systems under 60 KW

I. Instruct the Grid Modernization Advisory Council (GMAC) to permit the utilities to recover any grid modernization costs determined by the GMAC to be reasonable and prudent in order to create adequate capacity to interconnect 10 GW of new Solar by 2030;

J. Establish annual storage (without pairing with solar) goals to meet the Governors 2030 storage target goals, including net metering for mobile and stationary storage systems;

K. Enable the DOER to fund the CEC to establish a new solar loan program as a part of the Governor's

proposed Green Bank;

L. Enable legislation to require the DOER to establish a separate solar and storage program in Municipal Light Plant cities and towns (MLPs) to be funded through general revenues of the Commonwealth or through a surtax on those Cities and Towns that opt into this program.

SECTION 31. (a) Notwithstanding any general or special law to the contrary, on or before January 1, 2030, all electricity supply procured by the Commonwealth for use in state facilities must be at least 95% derived from an hourly 24/7 load following zero-emission product.

(b) "Hourly 24/7 load following zero-emission product" is defined as an electric supply product where real-time demand for electricity will be met with zero-emission energy every hour, every day, and produced within either the federally-regulated regional electric grid where the electricity is consumed or the PJM and New York control areas adjacent to where the electricity is consumed.

SECTION 32.

1. Notwithstanding any general or special law to the contrary, as used in this section:

- (a) "Department" means the Department of Public Utilities.
- (b) "Electric company", means as defined in section 1 of Chapter 164.

(c) "Meter socket adapter" means an electronic device that is installed between a residential electric meter and the meter socket, for the purpose of facilitating the deployment of customer-owned or customer-leased technology.

2. An electric company shall authorize the installation and operation of a meter socket adapter, whether owned by a residential customer or by a third-party, provided the meter socket adapter meets the following criteria:

(a) the meter socket adapter is qualified to be connected to the supply side of the service disconnect pursuant to the applicable provisions of the National Electric Code;

(b) the meter socket adapter is approved or listed by a nationally recognized testing laboratory and is rated appropriately for the meter socket into which it is intended to be installed;

(c) the meter socket adapter is certified to meet all applicable standards, as determined by a nationally recognized testing laboratory; and

(d) the meter socket adapter does not prevent access to the sealed meter socket compartment or the pull section of the service section of the electric meter or switchboard, as applicable.

3. A manufacturer of a meter socket adapter, a third-party, a residential customer, or an electric public utility shall all be allowed to install, maintain, or service a meter socket adapter or associated equipment.

4. An electric public utility shall modify its electric service requirements as necessary to implement the provisions of this section immediately after the effective date of this section.

5. An electric public utility shall approve or disapprove a request for approval of a specific model of meter socket adapter for installation in its service area no later than 60 days after a manufacturer or third-party submits a request for approval of the specific model of meter socket adapter. An electric public utility shall provide public notice of all decisions approving a meter socket adapter, including by posting the information on the utility's Internet website. Should an electric public utility shall provide of meter socket adapter, the electric public utility shall provide a specific model of meter socket adapter, the electric public utility shall provide an explanation to the requesting vendor enumerating the reasons the application was denied.

6. The Department may adopt rules and regulations as necessary to implement the provisions of this section.

SECTION 33. Notwithstanding any general or special law to the contrary, the Department of Energy Resources shall conduct a review to determine the effectiveness of the Commonwealth's existing solicitations and procurements required by section 83C of chapter 169 of the acts of 2008, as amended by chapter 188 of the acts of 2016, for the purposes of ensuring compliance with statewide greenhouse gas emissions limits and sublimits under chapter 21N of the General Laws. The Department's recommendations shall include a review of prior clean energy solicitations, a review of best practices and models utilized by other states to procure clean energy, as well as any legislative recommendations needed to amend or replace existing statutory authority. The Department shall consult with the clean energy industry as part of this review process. Such review and recommendations shall be submitted to the Joint Committee on Telecommunications, Utilities, & Energy no later than September 1, 2024.

SECTION 34. Notwithstanding any general or special law or rule, regulation or order to the contrary, the department of public utilities shall conduct an adjudicatory proceeding to determine the efficacy of current retail rate structures in achieving statewide greenhouse gas reduction and clean energy deployment goals and to explore the establishment of alternative rate designs that:

(a) improve alignment of electric rates with marginal costs of the changing electric system;

(b) do not unreasonably impair volumetric price signals that encourage energy conservation;

(c) provide reasonable opportunities for consumers to invest in beneficial electrification measures and achieve fuel cost savings through shifting electric usage to price-discounted time periods of low system demand or lower than average greenhouse gas content;

(d) maintain simplicity and understandability for default service for residential consumers;

(e) preserve and enhance the bill discounts for qualifying low-income consumers and the opportunities for low-income consumers to achieve additional household expenditure savings through beneficial electrification or utilization of distributed energy resources;

(f) provide rate options and retail billing practices that encourage consumers to adopt technologies that enhance and automate response to price signals in order to achieve bill savings; and

(g) incorporate practices that compensate or provide credits to consumers for engaging in home energy management solutions that avoid the need for grid upgrades to accommodate additional loads associated with beneficial electrification or utilization of an onsite distributed energy resource.

(1) On or before December 15, 2025, the Department shall issue an order addressing the matters in this section and shall provide a report to the legislature on the Department's investigation into retail rate designs and practices, including recommendations for any statutory changes needed to facilitate alternative retail rate designs or electric company investments in advanced metering needed to efficiently and expeditiously meet the Commonwealth's greenhouse gas reduction and clean energy deployment goals. The report shall also identify any other solutions or barriers to widespread consumer adoption of beneficial electrification measures and distributed energy resources that were discussed during the investigatory docket, but that are beyond the traditional jurisdiction of the department.

(2) Nothing in this section shall prevent the department from initiating rate design pilots during the pendency of the investigatory docket or prior the issuance of the order or the submission of the report required in subsection 1.

(3) For purposes of this section:

- (a) "Beneficial electrification measure" means the replacement of direct fossil fuel use with electricity in a way that either reduces overall lifetime emissions or energy costs.
- (b) "Distributed energy resource" means an energy resource located on an electric company's customer that produces or stores electricity or modifies the timing or amount of a customer's electrical consumption.

SECTION 35. Notwithstanding any general or special law or rule, regulation or order to the contrary, (a) "Net Crediting" means a payment mechanism that requires an Electric distribution company to, at the request of a host project or eligible Solar Tariff Generation Unit (STGU) System:

(i) Include the monthly subscription charge of a host project or eligible STGU System on the monthly Bills rendered by the Electric distribution company for electric service and supply to subscribers; and

(ii) Remit payment for those charges to the host project or eligible STGU System, irrespective of whether applicable subscribers have paid their electric bill.

(iii) An Electric distribution company may require a reasonable fee for a host project or eligible STGU Systems that uses net crediting. The fee shall not exceed one percent of the bill credit value remitted to the system unless the Department determines a higher fee is just and reasonable based on substantial evidence presented by the Electric distribution company. The fee for net crediting assessed to a host project or STGU system shall not exceed the fee in effect at the time the host project or eligible STGU System elected for an associated STGU System to participate in net crediting.

SECTION 36. Notwithstanding any general or special law, rule or regulation to the contrary, the department of public utilities shall require the electric distribution companies implement consolidated billing on Alternative On-Bill Credit (AOBC) Low-Income Community Shared Solar (LICSS) Generation Units. In implementing said consolidated billing, the electric distribution companies shall apply the net value of the bill credit directly to customer's accounts and remit the developer or owner portion of the payment directly to the developer or owner.

The net value of the bill credit the electric distribution companies would apply to customer accounts may be calculated from the SMART Participant Disclosure Form.

SECTION 37. Notwithstanding any general or special law, rule or regulation to the contrary, in 2026 and all subsequent compliance years, 225 CMR 15.07 (2) shall be equal to 3.7% of electrical energy sales and 225 CMR 15.08 (4) 2 shall be equal to the alternative compliance rate for the RPS Class II Renewable Energy Minimum Standard set to 225 CMR 15.08 (3) (a) 2.

SECTION 38. The advisory working group for the program to encourage the construction and

operation of solar power generating canopies over large parking lots under section 29 of chapter

21A of the General Laws and established by Section 1 of this act shall make its

recommendations no later than 1 year after the effective date of this act.

SECTION 39. The department shall implement Section 1 no later than 2 years after the effective date of this act.

SECTION 40. The department of public utilities shall promulgate regulations to implement section 14, including the establishment of a moderate-income discount eligibility rate following an investigation thereof.

SECTION 41. The department shall promulgate regulations to implement section 21 within 180 days.

SECTION 42. Section 116(a) of chapter 116 shall be implemented no later than 12 months after the effective date of this act.

SECTION 43. The department shall promulgate rules and regulations necessary for the implementation of section 18 within one year of the effective date of this act.

SECTION 44. The rules required by subsection (b) of section 92E of chapter 164 of the General Laws shall be promulgated by the department of public utilities within 270 days of the effective date of this act.

SECTION 45. The office of the ombudsperson required by section 92E of chapter 164 of the General Laws shall be established by the department of public utilities within 180 days of the effective date of this act.