

Regulatory Impact Statement

1. Statutory authority: The statutory authority to promulgate this rulemaking is derived from Sections 15 and 16 of the “Advanced Building Codes, Appliance and Equipment Efficiency Standards Act of 2022” (the “Appliance Standards Act”). Energy Law Section 16-105, as amended, authorizes and directs NYSERDA to adopt “regulations establishing procedures for testing the energy reduction, water conservation, greenhouse gas reduction, and/or increased demand flexibility associated” with any products subject to adopted Federal Efficiency Standards, if such Federal Efficiency standards have been “withdrawn, repealed, voided, or otherwise ceases to remain in effect”. Energy Law Section 16-104(1), as amended, authorizes and directs NYSERDA to “adopt regulations establishing efficiency standards for the products listed in paragraphs (a) through (xx) of” Section 16-104. Energy Law Section 16-104(2), as amended, authorizes and directs NYSERDA to adopt regulations establishing efficiency standards, procedures for testing, and procedures for manufacturers to certify compliance, and such other matters as required to ensure proper implementation and enforcement.

Public Authorities Law (PAL) Sections 1854(1), (2), (7), and (11)) assign to NYSERDA the purpose, powers, and duties: to conduct, sponsor, assist and foster programs of research, development and demonstrations in new technologies including energy conservation; to provide services required for the development and use of new energy technologies and related methods by the industrial, commercial organizations within the state; to advise the legislature of recommendations for implementing new energy technologies and energy conservation measures; and to advise and assist the governor and legislature in the development and implementation of state policies relating

to energy and energy resources. PAL Sections 1855 (4) (10), and (17) grants to NYSERDA the general power: to make rules and regulation for the fulfillment of its corporate purposes; execute all instruments for the fulfillment of its corporate purposes; and to do all things necessary or convenient to carry out its corporate purposes and exercise its powers. State Administrative Procedures Act Section 102 generally authorizes the promulgation of rules and regulation.

Pursuant to this statutory authority and as directed by the Appliance Standards Act, NYSERDA is proposing to adopt efficiency standards, testing specifications, and testing protocols for products listed in subdivision 1 of section 16-104 of the Energy Law, as amended by the Appliance Standards Act.

2. Legislative objectives: To establish minimum energy and water conservation standards for products sold or offered for sale, leased or offered for lease, rented or offered for rent, and installed or offered to install in New York as directed by the Appliance Standards Act; to advance the stated purpose of the Energy Law to promote the clean energy and climate agenda; and to promulgate appliance standards and testing protocols that advance the legislative mandate contained in the Climate Leadership and Community Protection Act of 2019 (CLCPA) of reducing 22 million metric tons of carbon dioxide equivalent (MMTCO_{2e}) through energy efficiency and electrification improvements.

3. Needs and benefits: The purpose of the rulemaking is to increase the installation and use of appliances within the State of New York that meet or exceed minimum energy standards, or water conservation standards. The rule will assist New York State in achieving the goals established by the CLCPA by compelling the use of more efficient

products in order to conserve the natural resources of the State. The U.S. Department of Energy (DOE) estimates that the building sector accounts for approximately 32% of energy consumption, 74% of water used; and 21% of carbon dioxide emissions produced in the United States, making emissions reductions in this sector an essential component of New York's effort to achieve the significant decarbonization targets established by the CLCPA. The proposed action is needed to reduce this major source of energy consumption.

Analysis of the annual energy, water, net present value, and avoided pollution for each proposed appliance standard indicates that the implementation of the proposed standards will conserve up to 1.49 TWh of electricity, 26 billion gallons of water, and 71 MMtherms of oil and gas annually by 2035, which represents a net present value for New York consumers of approximately \$1.3B from 2030-2035 and \$2.3B over product lifetimes when fully implemented. Full implementation of the standards would result in the avoidance of approximately 6.5 million metric tons of CO₂e emissions through 2035.

4. Costs:

Costs to Local Government: The proposed regulation places no mandates directly on local governments and, therefore, no additional costs to local government are expected.

Costs to Private regulated parties: The costs and benefits of the proposed regulation were examined through a series of evaluations which compiled and examined data relating to each affected appliance or product, including annual product shipments, per-unit energy and water savings, product lifetime, and per-unit incremental costs. Data sets were adjusted where necessary to derive New York specific estimates. For example, national shipment data was adjusted to account for a specific product being more or less

common in New York when compared to other parts of the nation in order to minimize overestimating local impacts and savings. This analysis also incorporated naturally occurring market adoption (“NOMAD”), e.g., not claiming savings for the fraction of products that would already meet the efficiency standard level. Using this adjusted data, annual statewide costs of purchasing more efficient products were estimated using a stock turnover model that combined data on the average lifetime and the annual shipments of each product to estimate the total stock of the more efficient products in use each year, which allowed NYSERDA to calculate statewide energy and water savings in each year.

NYSERDA estimates that retailers, distributors, and installers of affected products within the State of New York may incur a direct, one-time, cost ranging from a low of \$0 to upwards of \$83 to verify product compliance. NYSERDA further estimates that manufacturers may incur a direct, one-time, cost ranging from a low of \$0 to upwards of \$20,375 per manufacturer required to comply with this regulation. It is not anticipated that the proposed regulation will impose a direct cost on individual consumers, homeowners, or commercial users of affected appliances who are not engaged in the business of manufacturing, selling, distributing, or installing of affected products.

The significant range in manufacturer cost is driven by product testing costs and is based on the diversity of products being impacted by this regulation. However, NYSERDA expects that all manufacturers selling these products in New York will already be testing their products to show compliance with other state appliance standards. Therefore, manufacturers will not incur additional expense. The majority of manufacturers with regulated products are not based within New York.

For a manufacturer, retailer, distributor, or installer who is already complying with similar regulations in other states, including neighboring states of New Jersey, Massachusetts, and Vermont, it is expected that there will be no additional cost to comply in New York.

For retailers, distributors, and installers who sell regulated products but are not already complying with similar regulations in other states, it is estimated that verifying whether a product is compliant via the California Energy Commission's Modernized Appliance Efficiency Database System (MAEDbS) or the Northeast Energy Efficiency Partnership's State Appliance Standard Database (SASD) would take 1-5 minutes per product. At an estimate of 40 products at a rate of \$25/hour, that could cost retailers, distributors, and installers up to approximately \$83 in staff time to verify compliance with the regulation.

For manufacturers that are testing regulated products but not currently certifying them to the MAEDbS or SASD, it is conservatively estimated that certification could require up to 15 hours in the first year and 12 hours in subsequent years (approximately one hour per month for new products). At a rate of \$25/hr, that could cost manufacturers upwards of \$375 in staff time to comply with the regulation in year one, and \$300 in subsequent years.

For manufacturers who are not currently testing their regulated products and would therefore be required to test and certify their products to the MAEDbS or SASD, testing costs are estimated to range from \$1000 to \$20,000 as a one-time cost for each product

model being sold, as well as the certification costs conservatively estimated at \$375 per manufacturer for the first year and \$300 per manufacturer for subsequent years.

Costs to NYSERDA: Administration of this regulation is estimated at 0.5 full time employee (FTE) with additional \$500,000 per year of consultant support for certification databases, compliance certification, and technical assistance programs.

Costs to other State Agencies: There are no additional costs to other State Agencies as a result of this regulation.

5. Local government mandates: Adoption of the proposed rule would not impose any mandates on local governments.

6. Paperwork: Paperwork requirements would apply for both manufacturer testing and certification; however, it is anticipated that certification will occur through internet-based portals with no physical paperwork requirements. Testing results may be electronic or physical. No paperwork would be required from retailers, distributors, or installers.

7. Duplication: The proposal does not duplicate, nor is it inconsistent with any other existing Federal or State regulations or statutes. However, NYSERDA identified a variety of state and local requirements that also regulate the installation of appliances in the state and has determined that the regulation is consistent with those programs.

Federal preemption: NYSERDA has conducted a federal preemption analysis and has determined that there are currently no federal energy conservation standards with preemptive effect (10 CFR Part 430) for the product categories with proposed standards. Certain plumbing product categories are subject to federal standards but are explicitly exempted from preemptive effect under a federal waiver granted in 2010 subject to 42

USC Section 6295. As a result, NYSERDA is not federally preempted from adopting the proposed standards.

In 2005, New York enacted the Appliance and Equipment Energy Efficiency Standards Act. This law gave NYSERDA authority to set energy efficiency standards for 19 products. Since the passage of the law, 14 of these products have been preempted by federal energy efficiency regulations. Of the 5 remaining products, none have been regulated by the New York State Department of State or NYSERDA. These products include consumer audio and video products, portable light fixtures, bottle-type water dispensers, commercial hot food holding cabinet, and portable electric spas. As a result, the proposal does not conflict with any prior appliance efficiency standards set by New York.

New York Building Code: The New York State plumbing code mandates water efficiency requirements for showerheads, faucets, toilets, and urinals. Specifically, Table 604.4 in Section 604 of the 2020 New York State Plumbing Code contains the maximum flow rates.

These water efficiency requirements only impact building construction that requires a permit, such as new construction or permitted retrofits. The proposed appliance standards will apply to a broader scope of products since the standards apply to all regulated products that are sold or offered for sale, leased or offered for lease, and rented or offered for rent in the state and that are installed in any building.

The New York City Energy Conservation Code (NYCECC) has efficacy standards for whole-house mechanical ventilation system fans. These requirements only impact

permitted projects. The proposed standards will apply to all in-scope products sold or offered for sale in the state.

New York State and New York City have a wide array of lighting requirements and guidelines that are relevant to the proposed standards, which can be found in the NYCECC and New York City Department of Transportation (DOT) manual, and New York State DOT manual. However, the proposed standards cover a larger scope of products since they will apply to all products sold or offered for sale, leased or offered for lease, and rented or offered for rent in the state.

(1) Parking lot luminaires: The NYCECC has numerous requirements for parking lot luminaires. The proposed standards will limit inefficient technologies and may ease compliance with parking lot luminaire efficiency code requirements.

(2) Streetlight luminaires: The New York City DOT stated that it is retrofitting all New York City streetlights with LEDs. This project is in line with the Smart Street Lighting New York effort from the New York Power Authority. This program calls for at least 500,000 streetlights across the state to be replaced by LEDs by 2025. The proposed standards will limit inefficient technologies and may ease compliance with streetlight luminaire efforts.

(3) Highway luminaires: The New York State DOT's Highway Design Manual contains various specifications for lighting used on highways. There are no efficacy requirements, but it is noted that high pressure sodium lamps are the preferred products. This manual was last updated in 1995. The proposed standards do not directly conflict with the highway design manual specifications.

(4) Area luminaires: The 2020 NYCECC contains lighting power allowances for building grounds (walkways, dining areas, stairways, pedestrian tunnels, and landscaping). The allowances range from 0.03 W/sf to 21 W/sf depending on the space type and zone. The proposed standards will limit inefficient technologies and may ease compliance with lighting power allowances.

8. Alternatives: Through the Appliance Standards Act, the New York State Legislature directed NYSERDA to promulgate the proposed regulation. The alternatives considered were an evaluation of different available standard levels for individual products and an evaluation of existing alternative regulatory or policy approaches that attempted to achieve the same or comparable energy, water, and greenhouse gas savings.

For alternative standard levels, NYSERDA compared existing product standards originating from the Appliance Standards Awareness Project (ASAP) States Go First report or California Energy Commission requirements, or both. NYSERDA reviewed each product and potential standard level to determine if the standard requirements would be appropriate in the New York market. The evaluation criteria included current market share of compliant products, technical feasibility of achieving standard requirements, incremental cost of compliant products, range of manufacturers offering compliant products, consumer and environmental benefit including utility bill savings, and alignment and consistency with other state standards. NYSERDA also evaluated the effectiveness of alternative regulatory and policy mechanisms that promote the use of more efficient appliances, including building codes and incentive programs. Incentive programs were deemed significantly less effective than the proposed standards because incentive programs reach only a small subset of consumer and products, are temporary, require

higher per-unit cost to administer, and do not have broad reach. Similarly, building codes do not impact entire product markets because they only regulate products that are installed at the time of construction or renovation. Appliance standards address products installed as part of construction or renovation as well as those supplied by building occupants, or otherwise not subject to building permits, such as an air purifier or computer that would be supplied by the inhabitant of a building. Changes to the building code do not apply to all buildings or all products being regulated by this rule. As such, building codes are complementary to appliance standards but are not a suitable alternative because of their limitations to achieve the same impact.

9. Federal standards: There are currently no preemptive federal energy conservation standards for the products addressed by the proposed state standards. However, there are proposed product standards that warrant the below discussion to clarify why they would not conflict with federal standards.

Commercial battery chargers: In 2016, the U.S. DOE adopted energy conservation standards for several product classes of consumer battery chargers. The U.S. DOE did not regulate *commercial* battery chargers and other product classes that are exempt from the regulations, including inductively-charged batteries with capacities greater than 5 watt-hours, dry environment inductive chargers, and battery chargers that do not fit within the categories of Table I-1 of the U.S. DOE's battery charger energy conservation standards final rule. As a result, the proposed state battery charger standards are not preempted because they will regulate *commercial* battery chargers, which are not regulated by the U.S. DOE.

Plumbing fittings and fixtures: On December 22, 2010, the U.S. DOE waived federal preemption for energy conservation standards for any state regulations concerning water efficiency of certain faucets, showerheads, toilets, and urinals, provided that the state regulations (1) are more stringent than the applicable national standard, and (2) apply to any in-state sale or installation of the product. Since this waiver of federal pre-emption, numerous states have adopted water efficiency standards for plumbing fittings and fixtures. For instance, California, Colorado, Vermont, Hawaii, Washington, Massachusetts, Oregon, Rhode Island, New York, and Washington DC have set standards for faucets that are more stringent than the otherwise-applicable federal standards. The proposed standards for plumbing fittings and fixtures also would satisfy the criteria to avoid federal preemption because they are more stringent than the applicable federal standards and apply to any in-state sale or installation of these products.

Linear fluorescent lamps: The U.S. DOE currently regulates general service linear fluorescent lamps. However, federal regulations exempt lamps (1) with a color rendering index (CRI) above 87 (often referred to as “high CRI lamps”), (2) that are shatterproof (*i.e.*, impact resistant), and (3) temperature resistant variations of these lamps. Thus, states have the authority to set standards for the federally-exempted linear fluorescent lamps that are the focus of the proposed standards.

Air Purifiers: On July 15, 2022, DOE issued a Final Rule effective September 13, 2022 which makes the findings necessary for it to develop test procedures and efficiency standards for air purifiers. If DOE adopts such standards, then on their effective date, they would preempt energy conservation standards adopted by New York and other states.

Gas Fireplaces: On June 16, 2022, DOE issued a Request for Information to begin evaluating whether it should establish energy conservation standards for consumer hearth heaters as a category of Direct Heating Equipment, which products are subject to national standards. On February 7, 2022, DOE issued a Proposed Determination of Miscellaneous Gas Products which concluded that DOE may regulate decorative hearths and outdoor heaters, among other products. These actions indicate that DOE eventually might adopt gas fireplace standards that, on and after their effective date, would supersede the standards proposed in this rule. Until then, the proposed state standards would remain in effect.

Replacement Dedicated Pool Pump Motors: On January 24, 2022, DOE issued a Request for Information as part of an effort to determine whether to modify current energy conservation standards for dedicated-purpose pool pumps. Those standards do not include replacement dedicated pool pump motors, which are included in the proposed state standards. If DOE determines that national standards should be expanded to include these products, then the state standards would be preempted on the effective date of the national standards.

10. Compliance schedule: The regulation will not become effective until one hundred eighty days after the Notice of Adoption is published in the State Register. However, no efficiency standard established by the regulation will become effective if federal government energy efficiency performance standards regarding such product preempt state standards, unless preemption has been waived pursuant to federal law.