1. Effect of rule: The proposed regulation applies to anyone who manufactures, sells, leases, rents, distributes, or installs one or more of the newly regulated products. These entities will now be required to demonstrate compliance with the applicable standards.

Any affected products that do not meet an applicable standard will be prohibited in New York. This change may result in short term disruption to supply chains, loss on existing inventory, and expenses associated with future compliance activities.

According to the 2016 U.S. Census Bureau, small business manufacturing is estimated to include approximately 14,555 firms and employ 248,021 New Yorkers, though only a subset of the manufacturer sector is expected to be involved in the 21 products included in this regulation. Manufacturers of one or more of the affected products will be required to test and certify their products for compliance with the regulation. However, the effect of the rule on small business manufacturers will be minimal since the majority of small business manufacturers operating within New York already produce compliant products.

Within New York, the trades sector as a whole represents almost 87,000 firms and 638,867 employers in 2016 from the US Census Bureau, but it is expected that only a small subset of theses will be impacted by the proposed regulation. Retailers, distributors, and installers of one or more of an affected products, including small businesses, must verify that the products they acquire for sale, lease, rental, distribution, and installation are limited to compliant products. This activity may require use of electronic databases, such as Northeast Energy Efficiency Partnerships State Appliance Standards Database

(SASD) or the California Energy Commission Modernized Appliance Efficiency Database System (MAEDbS), or the purchase of products certified and labelled under an existing and recognized standards regime (such as an ENERGY STAR certified and labeled product that meets a requirement equivalent to ENERGY STAR).

For small business operations that have infrequent purchases of an affected product, it is possible that that existing inventories may become ineligible for sale, resulting in a loss. To avoid this outcome, the legislation allows retailers, distributors, or installers to utilize existing non-compliant products if the product's manufacture date is prior to the effective date of the applicable standard. Because of this sell-through flexibility, it is not expected that small business retailers, distributors, or installers would be disproportionately impacted by any remaining stock issues.

The proposed rule will not regulate or impose special or additional obligations on local governments or consumers/product end users that do not engage in the sale, lease, or rental of an affected product.

2. Compliance requirements: Compliance with this regulation applies to products manufactured both within and outside of New York if the products will be sold within New York. The reporting, recordkeeping, and other compliance requirements are the same for any sized business.

The proposed regulation will impose minimal additional reporting and recordkeeping obligations on manufacturers, distributors, retailers, and installers.

Manufacturers with affected products sold in New York must ensure their products meet the standard requirements established by this regulation, are tested according to the

specified test procedure, and are certified to a database such as the SASD or MAEDbS. These two databases have been designed specifically to certify compliance with state appliance standards. Additionally, the proposed efficiency standards align with standards adopted between one and 13 other states. As a result, a majority of manufacturers of these products have already certified their compliant products to these databases and satisfied existing requirements. Given the wide availability of these compliant products, most if not all manufacturers already have products that meet the standard requirements.

For appliance standards set by New York that align directly with California standards, it is expected that any manufacturer selling into the California market will already be listed on the MAEDbS in which case no additional testing or certification steps will be necessary to comply with the regulation. For product standards set by New York that align with other states' standards that require manufacturers to list their products on the SASD, no additional certification is required. If a manufacturer does not have products certified to either database, they will need to test their products, create accounts on one or both of the respective databases, and verify or upload product data. A conservative estimate would be that manufacturers upload new product data monthly, with the first month taking an upper bound of three hours and each subsequent month taking one hour. That would result in an annual conservative certification estimate of 15 hours for the first year for one staff member for a given manufacturer, with subsequent years at most 12 hours per year. Listing compliant products on either the SASD or the MAEDbS serves as the reporting or recordkeeping obligation for manufacturers; no other reporting is required. SASD and MAEDbS are developed for manufacturers to submit their data

directly, however, manufacturers may procure professional services to list their products in the databases.

Retailers, distributors, and installers will have a joint obligation to verify the products they sell meet the applicable standards. Both the MAEDbS and SASD are designed to be public websites easily searchable by brand, product type, or model number. Retailers, distributors, and installers, including small businesses, would be expected to spend 1-5 minutes per model number to verify compliance. Small business retailers, distributors, and installers will not be required to provide reporting or recordkeeping to prove compliance. It may be more challenging for small businesses to stock and sell compliant products that may otherwise be more accessible for larger businesses. However, these products have been selected for the wide availability of compliant products and the same standards are in place in other states, so it is not expected that availability of compliant products will be a significant barrier. Although it is not expected that retailers, distributors, or installers would need to utilize any types of professional services to comply with this regulation, small business retailers and distributors may choose to hire a procurement specialist who ensures that all products purchased from manufacturers comply with the requirements.

3. Professional services: Small business manufacturers may seek professional services in the form of testing facilities for equipment not already certified by independent organizations. Additionally, small business manufacturers may choose to utilize professional services such as third party certifiers to certify their product data to the SASD or the MAEDbS. Since compliant products are widely available and many of the

standard requirements are based on existing and tested products, it is expected that the need for such professional services will be minimal.

It is not expected that small business retailers, installers, and distributors would require any types of professional services to comply with this regulation, but they may elect to hire a procurement specialist who ensures that all products purchased from manufacturers comply with the requirements.

4. Compliance costs: NYSERDA expects that all products covered by this regulation have already been tested for compliance with similar standards in other states or with voluntary standards such as ENERGY STAR or WaterSense. However, if a product requires testing, this could range from a one-time cost of \$1,000 to \$20,000 per manufacturer per product. This significant range includes estimates for product costs, shipping to test facilities, cost to test, and staff time to receive and review the test results. The testing costs will vary significantly given the vast range of average product costs for products regulated by these standards. The SASD and MAEDbS do not have fees associated with certifying products, but certification will require staff time. Staff time obligations are conservatively estimated at 15 hours for the first year and 12 hours for subsequent years per manufacturer. At an estimated rate of \$25/hour (based on the average 2016 annual New York State (NYS) employee salary in the manufacturing industry of \$47,881), the cost to comply could be \$375 per manufacturer in year one and \$300 per manufacturer in subsequent years.

While small businesses have the same obligations to certify products, the staff burden to certify products may be more challenging to manage than for a larger manufacturer. However, both testing and certification cost estimates vary based on the number of

products offered and frequency of availability for new products. As a result, small business manufacturers are likely to have fewer product models and/or introduce new models less often, so testing and certification may be significantly less costly compared to a larger manufacturer. Small business retailers, distributors, and installers will need to ensure that products sold, leased, or rented comply. At a conservative average rate of 5 minutes per product, confirmation for 40 complaint products (5-10 models offered of 4-8 product categories), at an estimated rate of \$25/hour (based on the average 2016 annual NYS employee salary in the trades sector of \$46,384), could equal \$83 per retailer, distributor, or installer to ensure compliance. While the staff burden to verify compliance may be more challenging to manage for a small business than for a larger company, it is expected that the number of models offered for sale needing verification would roughly scale with the size of the retail, distribution, or installer operation.

5. Economic and technological feasibility:

Technologically Feasible: All product standards in this regulation have been adopted and successfully implemented in other jurisdictions throughout the U.S. In addition to being screened for consumer cost-effectiveness, all products with proposed standards have been found to have a significant market share that already meets the proposed standard requirements, as well as a diversity of manufacturers who produce the compliant products. In many cases, the same manufacturers make both compliant and non-compliant products, and will be able to shift efforts to increase supply of more efficient, compliant products.

Economically feasible: Compliance is expected to be highly economically feasible for most small businesses impacted by this regulation. Manufacturers who sell products in

any states with the same standards would already be expected to meet their compliance obligation for New York. Small business retailers, distributors, and installers would be expected to confirm compliance for up to \$83 of staff time. Additionally, the design of the regulation allows for the sell through of in-stock non-compliant products manufactured before the effective date of the regulation. While NYSERDA was not able to identify any small business manufacturers in New York producing only non-compliant products, the costs for testing and certification would still be feasible.

6. Minimizing adverse impact: The enabling legislation for this regulation allows for sell through of in-stock non-compliant products as long as they were manufactured before the effective date of this rule. This minimizes the largest potentially adverse impact to be incurred by a small business retailer, distributor, or installer. Additionally, NYSERDA considered different timetables, reporting requirements, and possible exemptions in order minimize any adverse impact of the rule on small businesses and local governments. Because of the nature of setting minimum performance requirements across products sold, leased, or rented throughout New York, performance or outcome standards rather than design or input standards was not a feasible approach. Furthermore, because the products impacted by this rule have a large supply chain outside of New York and complaint products are both widely available and have been selected based on costeffectiveness, an exemption from the rule for impacted rural areas was not established. It is expected if small businesses are not able to comply with the rule, it will be because they are unaware of the rule and thus have not adjusted their stocking or ordering practices in anticipation of compliance.

NYSERDA intends to provide education and outreach about this regulation to small businesses before the regulation takes effect 180 days after adoption, to help ensure they are informed and equipped to comply with the regulation once it becomes effective.

7. Small business and local government participation: Upon publication of the Notice of Proposed Rulemaking, NYSERDA will notify small businesses and local governments about the regulation and the opportunity for public comment, as well as publish a general notice of the proposed rulemaking.