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PERMANENT ADMINISTRATIVE ORDER

DOE 2-2019
CHAPTER 330
DEPARTMENT OF ENERGY

FILED
12/19/2019 4:13 PM
ARCHIVES DIVISION
SECRETARY OF STATE
& LEGISLATIVE COUNSEL

FILING CAPTION: Updates and clarifies requirements of 1.5 Percent for Green Energy Technology Program.

EFFECTIVE DATE: 01/01/2020

AGENCY APPROVED DATE: 12/19/2019

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RULES:

330-135-0010, 330-135-0015, 330-135-0018, 330-135-0020, 330-135-0025, 330-135-0030, 330-135-0031, 330-135-0032, 330-135-0035, 330-135-0036, 330-135-0037, 330-135-0040, 330-135-0045, 330-135-0050, 330-135-0051, 330-135-0052, 330-135-0055, 330-135-0060

AMEND: 330-135-0010

RULE TITLE: Purpose

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes update the rule language to take into account that amendments made by House Bill 3169 (2013) have since been incorporated into statute, and that the Legislative Assembly has adopted an additional alternative (i.e., energy use efficiency) to green energy technology in House Bill 2496 (2019).

RULE TEXT:

The purpose of these rules is to establish procedures to administer ORS 279C.527 through 279C.528 and Oregon Laws 2019 chapter 160 (HB 2496), which require a contracting agency to include an appropriate green energy technology, or if green energy technology is not appropriate an eligible alternative to green energy technology in the construction, reconstruction, or major renovation of a public building by spending an amount equal to at least 1.5 percent of the total contract price associated with that building.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0015

RULE TITLE: Definitions

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes update and add definitions for terms used in Division 135 rules to take into account changes made by House Bill 2496 (2019) and to clarify definitions where needed.

RULE TEXT:

For the purpose of this division, the following definitions apply:

- (1) "Baseline building" means a building that complies with the minimum requirements of the energy code, using either the prescriptive or performance pathways as specified in the energy code.
- (2) "Building" means any structure utilized or intended for supporting or sheltering any occupancy, as defined in Section 202 of the 2019 Oregon Structural Specialty Code.
- (3) "Contracting agency" means a public body as defined in ORS 174.109 that plans to enter into a public improvement contract for the construction, reconstruction or major renovation of a public building.
- (4) "Cost-effective" means that an investment in green energy technology or woody biomass energy technology away from the site has a higher estimated economic benefit than an investment in corresponding green energy technology or woody biomass energy technology at the site. The comparison must include, but is not limited to, the cost of green energy technology or woody biomass energy technology, the cost of energy transmission infrastructure back to the public building, the value of electrical energy produced, saved or used over the life of the system, and the value of thermal energy produced, saved or used over the life of the system.
- (5) "Department" means the Oregon Department of Energy.
- (6) "Director" means the Director of the Oregon Department of Energy.
- (7) "Direct use" of geothermal energy means using the geothermal resource directly for space or water heating in a building without the assistance of a heat pump. For the purpose of these rules, direct use applications employ resource temperatures of at least 140°F, except when applied to public school construction, in which case the minimum resource temperature is 128°F.
- (8) "Energy Code" means the Oregon energy code as adopted by the Department of Consumer and Business Services, Building Codes Division as Chapter 13 of the 2019 Oregon Structural Specialty Code.
- (9) "Energy Use Efficiency" means the use of construction and design standards, construction methods, products, equipment, and devices to increase efficient use of, and reduce consumption of, electricity, natural gas, and fossil fuels in buildings undergoing new construction, reconstruction, alteration, and repair.
- (10) "Geothermal energy" means the energy from a geothermal source including, but not limited to, indigenous steam, hot water, and hot brines.
- (11) "Green energy technology" has the definition given in ORS 279C.527 as updated by Oregon Laws 2019, chapter 160 (HB 2496).
- (12) "Lower Heating Value" means the net heat production during combustion with return of the temperature of the combustion products to 150 degrees Celsius and water vapor as product of combustion (reflecting the fact that evaporation requires heat and the latent heat of vaporization of water in the combustion reaction products is not recovered).
- (13) "ODOE 1.5 Percent for Green Energy Technology database" means a database, administered by the Oregon Department of Energy, of public building construction projects that report subject to these rules.
- (14) "Proposed Building" means the building as-designed with energy use efficiency improvements that reduce the energy consumption of a building compared to the baseline building.
- (15) "Public school" means a public educational program offering kindergarten through grade 12 or any part thereof.
- (16) "Site" means a land parcel or a group of contiguous land parcels, controlled by the contracting agency, on which a building either is or will be located.
- (17) "Total contract price" has the definition given in ORS 279C.527 and means all of the costs a contracting agency

anticipates incurring in all contracts and subcontracts involved in constructing, reconstructing or performing a major renovation of a public building including design or architecture, engineering, transportation or environmental impact assessment and planning, construction management, labor, materials, land surveying and site preparation, demolition, hazardous material removal, required reinforcements or improvements to existing structures or appurtenant infrastructure, insurance, inspections and certifications and, except as provided in this paragraph, other costs the contracting agency would not incur but for the construction, reconstruction or major renovation of the public building.

"Total contract price" does not include:

- (a) Costs of advertising, soliciting, evaluating bids or proposals for or awarding a public contract;
- (b) Costs of moving contracting agency employees, equipment and furnishings from and to a public building;
- (c) Costs of locating, renting or leasing and preparing to occupy alternative facilities;
- (d) Ordinary operating costs for a public building during periods of reconstruction or renovation;
- (e) Costs of storing equipment or furnishings at a site away from a public building;
- (f) Labor costs for employees of a contracting agency;
- (g) Direct costs that are solely for the purpose of retrofitting or improving a public building's ability to withstand a seismic event; and
- (h) Costs that bear only a tenuous relationship to the construction, reconstruction or major renovation of a public building.

(18) "Total solar resource fraction" (TSRF) means the percent of energy produced by a fixed axis solar energy system when compared to the annual performance of the same system with optimal tilt and orientation and no external shading.

(19) "Woody Biomass Energy Technology" means a system that, for space or water heating or as a combined heat and power system, uses a boiler with lower heating value combustion efficiency of at least 80 percent and that uses as fuel material from trees and woody plants, such as limbs, tops, needles, leaves and other woody parts, that grow in a forest, woodland, farm, rangeland, or wildland that borders an urban area, and is a by-product of forest management, agriculture, ecosystem restoration or fire prevention or related activities.

(a) Woody biomass does not include wood pieces that have been treated with creosote, pentachlorophenol, chromated copper arsenate or other chemical preservatives or municipal solid waste.

(b) Sawdust that is a by-product of forest management, ecosystem restoration, fire prevention or related activities is considered to be a fuel that meets the woody biomass requirement. Woody biomass does not include wood products that are not a by-product of forest management, agriculture, ecosystem restoration or fire prevention or related activities, such as construction and demolition waste, or other industrial wood waste.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0018

RULE TITLE: Requirement for Inclusion of Green Energy Technology

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed amendments to this rule would implement changes made by House Bill 2496 to add battery storage and energy use efficiency as alternatives under the 1.5 Percent for Green Energy Technology program, as well as take into account renumbering made by the bill and this rulemaking.

RULE TEXT:

(1) Except as provided in OAR 330-135-0040, contracting agencies must spend an amount equal to at least 1.5 percent of the total contract price of a subject public building project, as defined in OAR 330-135-0020, for the inclusion of eligible green energy technology, or if green energy technology is not appropriate energy use efficiency or woody biomass energy technology, in the subject public building.

(2) Contracting agencies may install the green energy technology (other than battery storage), energy use efficiency, or woody biomass energy technology required under subsection (1) of this section at a site located away from the eligible public building in accordance with ORS 279C.527(3)(a) to (b), as amended by Oregon Laws 2019, chapter 160 (HB 2496).

(3) Contracting agencies may defer expenditure of these funds under the conditions of OAR 330-135-0045 and 330-135-0051.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 279C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 279C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0020

RULE TITLE: Subject Building Projects

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes to this rule would: raise the threshold for the project size which would entail compliance with the 1.5 percent requirement from \$1 million to \$5 million; update the reference to the Oregon Structural Specialty Code to the most current version; and take into account that airports are not considered "public buildings" for the purpose of compliance with the 1.5 percent requirement.

RULE TEXT:

(1) These rules apply to any permanent building(s) which will be owned, partially owned or controlled by a contracting agency and which is either:

(a) Used for conducting public business; or

(b) Used or occupied by employees of the contracting agency on a regular basis for a significant part of their work.

(2) Subject public building projects are new capital construction projects for which the total contract price is \$5,000,000 or more for a single building or a group of buildings on the same site and major renovations for which the total contract price is \$5,000,000 or more and at least 50 percent of the insured value of the building.

(3) The amendments to these rules made pursuant to HB 2496 and effective January 1, 2020 apply to procurements that a contracting agency first advertises or otherwise solicits or, if the contracting agency did not advertise or otherwise solicit the procurement, to public contracts into which the contracting agency enters on or after January 1, 2020. Procurement solicitations, procurements or contracts that occur before January 1, 2020 shall be subject to the rules in effect on the date of procurement solicitation or if the contracting agency did not advertise or otherwise solicit the procurement, to public contracts into which the contracting agency enters on the date into which the contract was entered. If an agency will install green energy technology or an eligible alternative under the amendments effective January 1, 2020 in order to meet the 1.5 percent spending obligation for procurements or contracts on or after January 1, 2020, then an agency may also apply that same technology to meet the 1.5 percent obligation for procurements that occurred before January 1, 2020 and are part of the same total contract price. The amendments to these rules effective January 1, 2020 do not nullify or remove any requirement for green energy technology or an alternative that was in effect and applicable before January 1, 2020. For purpose of these rules, "procurement" has the meaning set forth in ORS 279A.010(1)(w).

(4) Public improvement projects that are not buildings are not required to comply with these rules. Projects that are not subject to these rules include, but are not limited to:

(a) Group U occupancies as defined in Section 312 of the 2019 Oregon Structural Specialty Code.

(b) Motor pool lots, parking lots not associated with a building, highways, bridges, sewers, fishponds, fish ways, and similar non-architectural structures.

(c) Buildings that house public industrial processes where only a small portion of the square footage houses employees of the contracting agency, such as: maintenance sheds, and water and waste water facilities including reservoirs, dams, conduit, pipe, pumps, wells, collection basins, pump stations, controls and other buildings primarily used for the purpose of water or waste water treatment.

(5) Airports, as defined in ORS 836.005, are not considered public buildings for the purposes of these rules.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0025

RULE TITLE: Eligible Contract Price

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes to this rule would: add references to "energy use efficiency" to take into account the addition by HB 2496 of energy efficiency as an alternative to green energy technology in certain circumstances; and clarify when in the construction process to use the "total contract price" as the basis for calculating the 1.5 percent obligation, given the possibility of changes to a project during the process.

RULE TEXT:

- (1) The 1.5 percent to be spent on green energy technology, energy use efficiency, or woody biomass energy technology must be based on the total contract price.
- (2) The total contract price must not be reduced by federal, state, or other incentives that may be available for the green energy technology, energy use efficiency, or woody biomass energy technology.
- (3) Any constitutionally, statutorily or contractually dedicated government funds for the building that have been determined to be unavailable for the installation of green energy technology, energy use efficiency, or woody biomass energy technology may be excluded when determining eligible costs under this section.
- (4) For buildings with a joint public-private ownership, the total contract price must be pro-rated based on the contracting agency's share of the ownership.
- (5) For buildings that are being constructed or renovated with private funding but which are intended for ultimate ownership by a contracting agency, the total contract price must include the privately-funded share of the construction contract.
- (6) Dividing a single project into multiple smaller projects in order to avoid or reduce the level of compliance with ORS 279C.527 through 279C.528 and Oregon Laws 2019 chapter 160 (HB 2496) and these rules is not permitted.
- (7) The total contract price used for the purposes of calculating a contracting agency's 1.5 percent obligation for expenditure on green energy technology, energy use efficiency, or woody biomass technology shall be the anticipated, budgeted costs for all required elements of the total contract price as best known to the contracting agency during project planning and schematic design phases.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0030

RULE TITLE: Green Energy Technology Performance Requirements

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes would reduce the requirement for the required reduction to baseline energy use that must be made by passive solar thermal or daylighting systems from 20 percent to 10 percent in order to qualify as expenditures under the 1.5 percent program. The proposed changes would also update a reference to the Oregon Energy Code and remove a reference to a 2013 law that has since been incorporated into statute.

RULE TEXT:

(1) Solar electric (photovoltaic), solar water heating, solar pool heating, and active solar space heating systems are to be installed in locations that have a total solar resource fraction (TSRF) of 75 percent or greater.

(2) Photovoltaic and geothermal electric systems must be separately metered to record electricity production.

(3) Geothermal systems that directly supply heat to the building system(s), passive solar thermal systems, daylighting systems or any combination thereof must jointly reduce the building's energy use by 10 percent or more, as demonstrated with whole building energy modeling prepared under the direction of a licensed professional engineer.

(a) For local or special government bodies, the baseline and proposed buildings must be modeled according to the requirements of the 2019 Energy Code.

(b) For state government bodies, the baseline and proposed buildings must be modeled according to the requirements of the Proposed Building as defined in the State Energy Efficient Design (SEED) Guidelines.

(c) The model for the proposed geothermal systems supplying heat to the building system(s), passive solar thermal systems, daylighting systems or any combination thereof must only include differences that are directly attributable to the geothermal heating system, passive solar thermal systems or daylighting systems. Lighting, HVAC and other equipment efficiencies, etc., must be identical between the baseline and proposed models.

(d) The system(s) must be commissioned by a third-party commissioning agent.

(4) Purchase of renewable energy certificates does not constitute compliance with the requirements of ORS 279C.527 through 279C.528 and Oregon Laws 2019, chapter 160 (HB 2496).

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0031

RULE TITLE: Energy Use Efficiency Performance Requirements

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes would adopt new language regarding performance requirements for energy use efficiency which was added by HB 2496 as an alternative to including green energy technology in a public construction contract under the 1.5 percent program. Contracting agencies may expend any portion of the 1.5 percent on energy use efficiency if the available area-weighted average total solar resource fraction at the site is 75 percent or less. However, the proposed language also describes conditions under which a contracting agency may spend up to half of the required amount on energy use efficiency when a site is appropriate for green energy technology, yet some areas of the site meet the requirements for energy use efficiency (i.e., the site includes sufficient available roof and ground area with TSRF greater than 75 percent to meet at least half of their program obligation with green energy technology, yet cannot meet the total program obligation using the available area having TSRF over 75 percent).

Contracting agencies can determine whether energy use efficiency improvements meet the requirements of the program through either measure-specific comparisons or through whole-building energy modeling. If agencies use the whole-building modeling approach, local and special government bodies must reduce or offset energy consumption by 20 percent below baseline, which is determined according to the state energy code, while state government bodies must reduce or offset energy consumption by an amount that exceeds the requirements of the State Energy Efficient Design program in OAR 330-130 by 10 percent.

Energy use efficiency improvements at a site other than the public building are not eligible for the 1.5 percent program.

Rule language regarding performance requirements for woody biomass energy technology previously included in OAR 330-135-0031 have not been changed, but will instead be found under a new number, 330-135-0032.

RULE TEXT:

(1)(a) A contracting agency may only expend any portion of the amount required under ORS 279C.520(2)(b) on energy use efficiency improvements if the available area-weighted average total solar resource fraction (TSRF) at the site of the public building is 75 percent or less, notwithstanding the conditions presented under subparagraph (b).

(b) If the agency is pursuing active or passive solar as a green energy technology and the following conditions exist, then the contracting agency may determine that green energy technology is appropriate for the public building and expend as much as half of the required 1.5% of total contract price expenditure on energy use efficiency in accordance with ORS 279C.527(4)(a). This is due to the site having both been determined to be appropriate for green energy technology, but also meeting the TSRF criteria for some areas of the site under ORS 279C.527(4)(a)(A) for energy use efficiency to be an eligible alternative.

(i) Sufficient portions of the available roof area and ground area have a TSRF greater than 75 percent such that the contracting agency can meet at least half of their 1.5 percent expenditure obligation on green energy technology; and
(ii) the contracting agency has not yet met and cannot meet their total 1.5 percent of total contract price expenditure obligation using the available area with a TSRF greater than 75 percent; and

(iii) the TSRF of the remaining areas are 75 percent or less; and

(iv) the contracting agency has requested from the department a technical review of its analysis and determination in accordance with OAR 330-135-0052

(2) Energy use efficiency improvements achieved by designing, engineering and constructing, reconstructing or renovating the public building, or by installing devices, technologies, and other measures must reduce or offset the

building's energy use by the following amounts, as demonstrated by either a performance and energy consumption comparison to the measure-specific prescriptive energy code requirement or by whole building energy modeling prepared under the direction of a licensed professional engineer. The contracting agency shall submit documentation, calculations, energy models, or other information to ODOE as requested to document and demonstrate energy use efficiency improvement.

(a) For measure-specific prescriptive comparisons: envelope components, heating equipment, ventilation equipment, air conditioning equipment, domestic hot water equipment, or lighting, performance must be improved beyond the measure-specific prescriptive energy code requirement to reduce annual energy consumption for that equipment or energy end-use by at least 20 percent. Individual components or systems that are improved by this amount meet the performance requirements.

(b) For whole-building performance comparisons:

(i) For local or special government bodies, the proposed public building must reduce or offset the whole-building's energy consumption by at least 20 percent as compared to the baseline building. The baseline and proposed buildings must be modeled according to the requirements of the energy code.

(ii) For state government bodies, the proposed public building must reduce or offset the whole-building energy consumption by an amount that exceeds the requirements of OAR 330-130 by least 10 percent. The proposed and baseline building must be modeled according to the requirements as defined in the State Energy Efficient Design (SEED) Guidelines.

(3) The system(s) used to achieve energy use efficiency must be commissioned by a third-party commissioning agent.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 297C.527, OL 2019, Ch. 160 (HB 2496)

ADOPT: 330-135-0032

RULE TITLE: Woody Biomass Energy Technology Performance Requirements

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The rule language in OAR 330-135-0032 is identical to language previously found in OAR 330-135-0031, which now includes language relating to energy use efficiency performance requirements. The shift in numbering is in order for department rules to follow the order of provisions in statute.

RULE TEXT:

- (1) The woody biomass energy technology must be used for space or water heating or as a combined heat and power system.
- (2) The woody biomass boiler must have a lower heating value combustion efficiency rating of at least 80 percent.
- (3) The woody biomass energy technology must be located in an area that complies with DEQ particulate matter air quality standards, or if located in an area that does not comply with DEQ particulate matter air quality standards, must use pelletized woody biomass fuel or produce particulate matter at the same level as a system that uses pelletized woody biomass for fuel.
- (4) Woody biomass energy technology located in any area that exceeds the federal particulate matter (PM) standards, or has been designated as not meeting the federal standards at the time DEQ receives a notice to construct application for the woody biomass technology, must use pelletized woody biomass fuel or a fuel that produces particulate matter at the same level as a system that uses pelletized woody biomass for fuel.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 279C.528

STATUTES/OTHER IMPLEMENTED: ORS 279C.527, ORS 279C.528

AMEND: 330-135-0035

RULE TITLE: Eligible Green Energy Technology Costs

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes would add battery storage equipment to eligible costs for geothermal electricity generation systems and solar photovoltaic systems, while not allowing costs associated with reroofing. The proposed rule amendments would also clarify that eligible costs for daylighting systems include costs associated with elements that represent more than the minimum code requirement, while costs for daylighting system elements that are required by the energy code would not be eligible.

RULE TEXT:

(1) For photovoltaic systems, eligible costs include the photovoltaic modules, racking system, mounting structure and hardware, modifications to the building structure specifically to accommodate the solar energy system, associated electrical equipment, battery storage equipment and technology, metering, labor and system commissioning. Specific elements that do not qualify as eligible costs include, but are not limited to, the following:

(a) Costs for auxiliary distribution systems such as chargers in electric vehicle charging stations.

(b) Costs for reroofing.

(2) For building integrated photovoltaic (BIPV) systems, eligible costs include the difference between the costs for the BIPV components and the costs of the conventional building components that are modified or replaced to accommodate the installation of the BIPV system components.

(3) For solar water heating and solar pool heating systems, eligible costs include the solar collectors, mounting structure and hardware, associated plumbing and controls, metering, labor, and system commissioning. Costs for backup systems that use conventional energy sources do not qualify.

(4) For active solar space heating systems, eligible costs include the solar collectors, mounting structure and hardware, associated plumbing and controls, metering, labor, and system commissioning. Costs for heat distribution systems, such as ductwork or radiant floors, or costs for backup systems that use conventional energy sources, do not qualify.

(5) For passive solar systems and daylighting systems, eligible costs include materials and labor costs that can be directly and exclusively attributed to the passive solar and daylighting system, the cost for modeling the building energy performance, and commissioning.

(a) For passive solar systems eligible costs may include, but not be limited to, added thermal mass, incremental insulation costs above energy code levels, and shading controls.

(b) For daylighting systems, eligible costs may include, but not be limited to, automatic controls, light shelves, overhangs, automated louvers and blinds and related controls, skylights in spaces where automatic controls are present, and the portion of windows higher than 7 feet above the floor. Eligible costs include those associated with daylighting system elements that represent more than the minimum energy code requirement. Costs for energy code-required daylighting system elements are not eligible.

(6) For geothermal electricity generation, eligible costs include the cost of supply and disposal pipelines, turbine generators, controls, transformers, battery storage equipment and technology, metering, labor, and balance of plant.

(7) For geothermal energy use in building systems, eligible costs include the cost of supply and disposal pipelines, pumps, heat exchangers, controls, the cost for modeling the building energy performance, metering, and labor.

(8) Costs for permanent educational displays located in or on the building that explain the green energy technology incorporated in the project are allowed.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0036

RULE TITLE: Eligible Energy Use Efficiency Costs

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes are new language to provide that eligible costs for energy use efficiency improvements are only the incremental costs directly associated with achieving the performance requirements in OAR 330-135-0031. Only additional costs for improvements compared to baseline equipment or baseline building performance are eligible under the 1.5 percent program.

Rule language regarding eligible woody biomass energy technology costs that was previously found in OAR 330-135-0036 is now included in OAR 330-135-0037 so that provisions in department rules are in the same order as they appear in statute. No changes have been made to the language regarding woody biomass energy technology costs.

RULE TEXT:

For energy use efficiency improvements, eligible costs include only those incremental costs that are directly associated with achievement of the energy use efficiency performance requirements in section 330-135-0031. Only the additional costs of energy use efficiency improvements compared to the cost of baseline equipment or baseline building performance shall be eligible. The contracting agency shall determine the appropriate incremental costs and submit information to ODOE as requested to document and demonstrate the incremental cost. Eligible costs may include but are not limited to the incremental costs of equipment such as light fixtures, heating, ventilating, and air conditioning equipment, envelope materials and assemblies, controls systems, connected building management systems, labor, and system commissioning. Any incentives received for energy use efficiency improvements do not reduce or impact the amount of expenditure on energy use efficiency for the purposes of determining compliance with the requirements or ORS 279C.527, 279C.528, and these rules.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 297C.527, OL 2019, Ch. 160 (HB 2496)

ADOPT: 330-135-0037

RULE TITLE: Eligible Woody Biomass Energy Technology Costs

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: This proposed language is identical to the rule language previously found in OAR 330-135-0036. The shift in numbering is in order for provisions in department rule to appear in the same order as provisions in statute.

RULE TEXT:

(1) For space or water heating, eligible costs include the cost of the boiler, associated piping, boiler controls, fuel storage bins, fuel delivery system from the storage tank, piping, heat exchangers, de-ashing equipment, pumps, metering, controls, labor, and commissioning. Costs for heat distribution systems, such as ductwork or radiant floors, or costs for backup systems that use conventional energy sources, do not qualify.

(2) For combined heat and power systems, eligible costs include the costs listed in (1) above and costs for power generation equipment.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 279C.528

STATUTES/OTHER IMPLEMENTED: ORS 279C.527, ORS 279C.528

AMEND: 330-135-0040

RULE TITLE: Alternative Financing

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes are to reflect that OL 2013 Ch. 612 has been incorporated into ORS, while OL 2019 Ch. 160 (HB 2496) has not yet been incorporated into ORS.

RULE TEXT:

- (1) Alternative financing arrangements to allow leveraging of federal, state, utility and other incentives, including but not limited to, lease-purchase agreements, power purchase agreements or energy savings performance contracts qualify under this program if the contracting agency documents that the costs of the green energy system meets or exceeds 1.5 percent of the total contract price.
- (2) The minimum term of the agreement between the owner of the green energy system and the contracting agency must be at least ten years, unless ownership of the green energy system reverts to the contracting agency before that time.
- (3) The agreement between the owner of the green energy system and the contracting agency must be exclusive to the green energy system required under the provisions of ORS 279C.527 through 279C.528 and Oregon Laws 2019, chapter 160. It may not include terms relating to operation and maintenance or capital equipment purchase of any other equipment or services. For power purchase agreements and energy savings performance contracts, the output of the green energy system must be separately metered.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0045

RULE TITLE: Determination Whether Green Energy Technology is Appropriate

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed rule change would take into the account an amendment made by HB 2496 requiring public bodies to make a written determination about the appropriateness of green energy technology or eligible alternatives. Proposed changes also would: add provisions for energy use efficiency, which was added as an alternative by HB 2496; update references to rule numbers that will be changed in this rulemaking; provide guidance for calculating the total solar resource fraction (TSRF) for sites having multiple planes for potential installation of green energy technology; and update numbering to take into account changes made by HB 2496.

RULE TEXT:

(1) The contracting agency must make a written determination whether constructing green energy technology is appropriate or whether energy use efficiency or woody biomass energy technology at the site of the public building is suitable as an addition or alternative to green energy technology. In making its determination, the contracting agency may consider factors including but not limited to:

- (a) Whether there is opportunity to use photovoltaic or geothermal electric, solar thermal, passive solar heating systems or the direct use of geothermal energy in building systems;
- (b) Whether green energy technology can be installed in a manner that meets the minimum performance requirements of OAR 330-135-0030, energy use efficiency measures can be installed in a manner that meets the minimum performance requirements of OAR 330-135-0031 or woody biomass energy technology can be installed in a manner that meets the minimum performance requirements of OAR 330-135-0032;
- (c) Whether the building is listed or eligible for listing on the National Register of Historic Places and the installation of green energy technology, energy use efficiency measures, or woody biomass energy technology would be disruptive to the historic character of the building;
- (d) Whether the installation of green energy technology, energy use efficiency measures, or woody biomass energy technology would create security risks for staff or inhabitants of the building.

(2)(a) The contracting agency must also determine whether constructing green energy technology, energy use efficiency, or woody biomass energy technology away from the site is appropriate if the contracting agency:

- (A) Determines that constructing green energy technology, energy use efficiency, or woody biomass energy technology at the public building site is not appropriate; or
- (B) Prefers to construct the green energy technology, energy use efficiency, or woody biomass energy technology away from the public building site instead of at the public building site.

(b) In making its determination, the contracting agency must consider whether green energy technology, energy use efficiency, or woody biomass energy technology installed away from the public building site meets the factors listed in subsection (1) of this section, the performance requirements for each technology or alternative as specified in these rules, and the requirements of ORS 279C.527(3)(a) and (b), as amended by Oregon Laws 2019 chapter 160 (HB 2496).

(3) In making a written determination as to whether green energy technology is appropriate, the contracting agency is required to perform an analysis of the total solar resource fraction (TSRF) available for use at the site in accordance with ORS 279C.527(5)(B). The TSRF analysis must be performed separately for each roof and ground plane that is available for installation of green energy technology that is greater than 3000 square feet for the purposes of determining solar feasibility and green energy technology appropriateness. The TSRF analysis for each plane should consider the average TSRF across that plane. Where a public building has multiple available planes available for potential installation of green energy technology, an area-weighted average TSRF for the site should be calculated and reported to ODOE using Formula 1 (see attachment).

(4) The contracting agency must report its determination to the department in accordance with the reporting requirements in OAR 330-135-0055.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 279C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 279C.527, ORS 279C.528, OL 2019, Ch. 160 (HB 2496)

1.5 Percent for Green Energy Technology Program Rules

Attachment 1

Formulas used in OAR 330-135-0045

Formula 1: Area-weighted Average TSRF

$$\text{Area weighted Average TSRF} = \sum_{i=1}^n \frac{(TSRF_n \times Area_n)}{Area_{total}}$$

Where:

n = number of different planes or areas

TSRF_n = TSRF for that specific plane or area

Area_n = Square Footage of a specific plane or area

$$Area_{total} = \sum_{i=1}^n Area_n$$

AMEND: 330-135-0050

RULE TITLE: Requirements for Construction that is Away from the Site of the Public Building

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed rule changes to OAR 330-135-0050 would bring together a provision currently in OAR 330-135-0045 related to off-site installations and a new provision to implement HB 2496 which would allow contracting agencies to consolidate expenditures from more than one public building into one public building or off-site location.

Rule language regarding deferral of expenditures that was previously found in OAR 330-135-0050 is now included in OAR 330-135-0051 so that provisions in department rules follow the order in which a contracting agency is likely to consider options for complying with the program.

RULE TEXT:

(1) If a contracting agency intends to install green energy technology, energy use efficiency or woody biomass energy technology away from the site of the public building, the contracting agency must:

(a) Request from the department, in accordance with OAR 330-135-0052, a technical review of its determination that an away-from-the-site installation is appropriate.

(b) Comply with the requirements of ORS 279C.527(3)(a) and (b), as amended by Oregon Laws 2019 chapter 160 (HB 2496).

(2) Installation of green energy technology, energy use efficiency, or woody biomass energy technology away from the site of the public building must meet the same performance requirement as on-site installation as specified in OAR 330-135-0030, OAR 330-135-0031, and OAR 330-135-0032. Installation of energy use efficiency improvements away from the site of the public building shall represent additional, new performance improvements that have not already been funded.

(3) Consolidation of green energy technology of one or more public buildings that are part of the same project into one public building and in compliance with ORS 279C(7) as amended by Oregon Laws 2019 chapter 160 (HB 2496) is not considered to be construction away from the site of the public building for the purposes of requiring a technical review by the department under this section.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

ADOPT: 330-135-0051

RULE TITLE: Requirements for Deferral of Expenditures

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed new rule includes provisions relating to deferral of expenditures that were previously found in OAR 330-135-0050 and adds energy use efficiency to the rule language describing situations which do and do not require the deferral of expenditures for use in a future project. The proposed rule would also clarify the language relating to projects that do not directly or indirectly use state funds to more closely align with the language in statute.

RULE TEXT:

(1) If a contracting agency determines, in accordance with OAR 330-135-0045, that it is not appropriate to install green energy technology, energy use efficiency, or woody biomass energy technology at the public building site or green energy technology, energy use efficiency, or woody biomass energy technology away from the public building site, the contracting agency must:

- (a) Defer the expenditure of 1.5 percent of the total contract price of the current public building project to a future public building project for which green energy technology or an eligible alternative is appropriate;
- (b) Request from the department a technical review of its determination in accordance with OAR 330-135-0052; and
- (c) Report, in accordance with OAR 330-135-0055, information about the deferred expenditure and the future project to which the deferred expenditure will be applied, if known.

(2) If the contracting agency defers the expenditure, the amount spent on green energy technology, energy use efficiency, or woody biomass energy technology in the next building project must include the deferred expenditure from the current building project plus the 1.5 percent of total contract price for including green energy technology, energy use efficiency, or woody biomass energy technology in the future building project, if required.

(3) Any amount spent on green energy technology, energy use efficiency or woody biomass energy technology in excess of 1.5 percent of the total contract price may not be credited to other current or future projects.

(4) Public improvement contracts for which state funds are not directly or indirectly used are not required to defer funds, however the contracting agency must comply with (1)(b) of this section.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 279C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 279C.527, ORS 279C.528, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0052

RULE TITLE: Requirements for Technical Review

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes would add provisions for determining whether energy use efficiency is appropriate, to take into account changes made by HB 2496 which added energy use efficiency as an alternative under the program. Contracting agencies would not be required to submit a request for technical review when consolidating green energy technology at a location offsite.

RULE TEXT:

(1) The director will appoint a permanent technical panel with members serving terms of up to three years. The technical panel will include, but not be limited to, the following membership:

(a) A chair from the Oregon Department of Energy;

(b) A representative from a public body;

(c) A representative from green energy technology industry;

(d) A representative from woody biomass energy technology industry; and

(e) An engineer or architect.

(2) A contracting agency that intends to construct green energy technology, energy use efficiency, or woody biomass energy technology away from the public building site must submit to the department a request for technical review of its determination that green energy technology, energy use efficiency, or woody biomass energy technology constructed away from the site is appropriate and meets the requirements of ORS 279C.527(3)(a) and (b) as amended by Oregon Laws 2019 chapter 160 (HB 2496). The contracting agency must provide supporting documentation for review.

(3) A contracting agency that intends to construct a combination of green energy technology and energy use efficiency, in accordance with OAR 330-135-0031(1)(b) must submit to the department a request for technical review of its determination that this is appropriate and meets the requirements of these rules. The contracting agency must provide supporting documentation for review.

(4) A contracting agency that intends to defer expenditure of 1.5 percent of the total contract price to a future building project must submit to the department a request for technical review of its determination that green energy technology, energy use efficiency, or woody biomass energy technology is not appropriate at the public building site or that green energy technology, energy use efficiency, or woody biomass energy technology is not appropriate away from the public building site. The contracting agency must provide supporting documentation for review.

(5) Within two weeks of receiving the contracting agency's request for technical review and supporting documentation, the department will forward the request along with the supporting documentation to the technical review panel. The department will request supplemental information from the contracting agency if needed by the technical review panel to make its recommendation.

(6) Within 60 days of receiving the department's request for technical review, the technical review panel will provide its recommendation to the department, and the department will convey the recommendation to the contracting agency.

(7) After receiving the technical review panel's recommendation, the contracting agency must make a final determination about whether installing green energy technology, energy use efficiency, or woody biomass energy technology is appropriate at the public building site or that green energy technology, energy use efficiency, or woody biomass energy technology is appropriate away from the public building site. The contracting agency must enter its final determination and the technical panel's recommendation into the ODOE 1.5 Percent for Green Energy Technology database described in OAR 330-135-0055.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 279C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 279C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0055

RULE TITLE: Requirement to Report on Green Energy Technology

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed changes would update the name of the database where participating public bodies record information related to projects they construct under the program. The changes would also require additional information to be recorded in the database due to the passage of HB 2496: information regarding consolidation of simultaneous projects, if applicable; results of an analysis of the total solar resource fraction available for use at the site; and specifications and details regarding the energy use efficiency improvements made, if applicable.

RULE TEXT:

- (1) A contracting agency must make a written determination by entering information about its public building project into the ODOE 1.5 Percent for Green Energy Technology database after it makes its final determination before the construction/renovation of the building(s) commences.
- (2) The contracting agency will enter the information into the ODOE 1.5 Percent for Green Energy Technology database using an online form provided by the department and accessible from the department website.
- (3) Information entered in the ODOE 1.5 Percent for Green Energy Technology database must include, but not be limited to:
 - (a) Project name;
 - (b) Address of public building;
 - (c) Name of contracting agency;
 - (d) Contact information for reporting person;
 - (e) Utility companies serving the building;
 - (f) Date the contracting agency first advertised or otherwise solicited a contract for the construction, reconstruction or major renovation of the public building;
 - (g) Total contract price;
 - (h) Total insured building value (renovation projects);
 - (i) Whether the project includes previously deferred funds, the name of the previous project(s), the amount of the deferred funds, and the aggregate amount of funds to be spent on the current project;
 - (j) Projected start of construction and occupation date of building;
 - (k) Description of the proposed green energy technology or woody biomass energy technology;
 - (l) Location details of the green energy technology installation or woody biomass energy technology;
 - (m) Disclosure of non-public funds used in financing the green energy technology or woody biomass energy technology;
 - (n) Estimated annual energy production or savings of the green energy system or woody biomass energy system;
 - (o) For woody biomass projects, the projected cost of fuel on a per dry ton basis, including delivery costs;
 - (p) Contracting agency determination of whether green energy technology or woody biomass energy technology is appropriate at the public building site or away from the public building site, or contracting agency decision to defer the expenditure;
 - (q) Technical review panel recommendation;
 - (r) Future project to which funds will be deferred and projected start of construction of the future building, if applicable and future project is known;
 - (s) The aggregate amount of funds the contracting agency has deferred but not yet used for green energy technology or woody biomass energy technology in another project;
 - (t) Cost-effectiveness comparison between green energy technology or woody biomass energy technology away-from-the-site of the public building compared to green energy technology or woody biomass energy technology at the site of public building under construction or renovation, if applicable;
 - (u) Evidence of additional new renewable energy generation from green energy technology or woody biomass energy technology installed at the away-from-the-site location, if applicable;

- (v) Information regarding consolidation of simultaneous projects, if applicable;
- (v) The results of an analysis of the area-weighted average total solar resource fraction available for use at the site; and
- (w) Specifications and details regarding the energy use efficiency improvements, including energy model file and results as requested by the department, if applicable.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528, OL 2019, Ch. 160 (HB 2496)

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)

AMEND: 330-135-0060

RULE TITLE: Outreach to Public Bodies

NOTICE FILED DATE: 10/29/2019

RULE SUMMARY: The proposed rule changes would add a reference to HB 2496, as well as update the language relating to eligible alternatives to green energy technology to reflect the passage of HB 2496.

RULE TEXT:

The department will conduct outreach to public bodies at least once per year to help inform them of the requirement in ORS 279C.527 through 279C.528 and Oregon Laws 2019 chapter 160 (HB 2496) to spend at least 1.5 percent of the total contract price for eligible public buildings on green energy technology or on an eligible alternative to green energy technology.

STATUTORY/OTHER AUTHORITY: ORS 469.040, ORS 297C.528

STATUTES/OTHER IMPLEMENTED: ORS 297C.528, ORS 279C.527, OL 2019, Ch. 160 (HB 2496)