Senate Bill 832

Sponsored by Senator SMITH DB

SUMMARY

The following summary is not prepared by the sponsors of the measure and is not a part of the body thereof subject to consideration by the Legislative Assembly. It is an editor's brief statement of the essential features of the measure as introduced.

Removes small modular reactor power plants from regulation of energy facilities by Energy Facility Siting Council. Permits developer or local government to elect to obtain site certificate from council for small modular reactor power plant. Defines “small modular reactor power plant.” Allows counties to approve permits for small modular reactor energy facilities. Establishes permit criteria.

A BILL FOR AN ACT

Relating to small modular reactor energy facilities; creating new provisions; and amending ORS 469.300 and 469.320.

Be It Enacted by the People of the State of Oregon:

SECTION 1. Section 2 of this 2023 Act is added to and made a part of ORS chapter 215.

SECTION 2. (1) As used in this section:

(a) “Average electric generating capacity” has the meaning given that term in ORS 469.300.

(b) “Small modular reactor energy facility” means an energy facility that uses a nuclear reactor with an average electric generating capacity of 300 megawatts or less and that is made up of components that are factory fabricated and transported to location for on-site assembly.

(2) An application for a land use permit to establish a small modular reactor energy facility must be made under ORS 215.416. An applicant must demonstrate to the satisfaction of the county that the small modular reactor energy facility meets the standards under subsection (3) of this section.

(3) In order to issue a permit, the county shall require that the applicant:

(a)(A) Consult with the State Department of Fish and Wildlife, prior to submitting a final application to the county, regarding fish and wildlife habitat impacts and any mitigation plan that is necessary;

(B) Conduct a habitat assessment of the proposed development site;

(C) Develop a mitigation plan to address significant fish and wildlife habitat impacts consistent with the administrative rules adopted by the State Fish and Wildlife Commission for the purposes of implementing ORS 496.012; and


(b) Demonstrate that the construction and operation of the small modular reactor energy facility, taking into account mitigation, will not result in significant adverse impacts to historic, cultural and archaeological resources that are:

NOTE: Matter in boldfaced type in an amended section is new; matter [italic and bracketed] is existing law to be omitted. New sections are in boldfaced type.

LC 1693
(A) Listed on the National Register of Historic Places under the National Historic Preservation Act (P.L. 89-665, 54 U.S.C. 300101 et seq.);

(B) Inventoried in a local comprehensive plan; or

(C) Evaluated as a significant or important archaeological object or archaeological site, as those terms are defined in ORS 358.905.

(c) Demonstrate that the site for a small modular reactor energy facility, taking into account mitigation, can be restored adequately to a useful, nonhazardous condition following permanent cessation of construction or operation of the facility and that the applicant has a reasonable likelihood of obtaining financial assurances in a form and amount satisfactory to the county to secure restoration of the site to a useful, nonhazardous condition.

(d) Meet the general and specific standards for a nuclear power plant adopted by the Energy Facility Siting Council under ORS 469.470 (2) and 469.501 that the county determines are applicable.

(e) Meet any applicable federal standards or requirements for small modular reactors.

(f) Provide the financial assurances described in paragraph (c) of this subsection in the form and at the time specified by the county.

(4) Upon receipt of a reasonable cost estimate from the state agency or tribe, the applicant and county may jointly enter into a cost reimbursement agreement administered by the county with:

(a) The State Department of Fish and Wildlife to receive comments under subsection (3)(a) of this section.

(b) The State Historic Preservation Officer or any affected federally recognized Indian tribe to receive comments under subsection (3)(b) of this section.

(c) The State Department of Energy to receive comments under subsection (3)(c) and (d) of this section as well as comments regarding other matters as the county may require.

(5) A county that receives an application for a permit under this section shall, upon receipt of the application, provide notice to persons listed in subsection (6) of this section. The notice must include, at a minimum:

(a) A description of the proposed small modular reactor energy facility;

(b) A description of the lots or parcels subject to the permit application;

(c) The dates, times and locations where public comments or public testimony on the permit application can be submitted; and

(d) The contact information for the governing body of the county and the applicant.

(6) The notice required under subsection (5) of this section must be delivered to:

(a) The State Department of Fish and Wildlife;

(b) The State Department of Energy;

(c) The State Historic Preservation Officer;

(d) The Oregon Department of Aviation;

(e) The United States Department of Defense; and

(f) Federally recognized Indian tribes that may be affected by the application.

SECTION 3. ORS 469.300 is amended to read:

469.300. As used in ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992, unless the context requires otherwise:

(1) “Applicant” means any person who makes application for a site certificate in the manner provided in ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992.
(2) “Application” means a request for approval of a particular site or sites for the construction
and operation of an energy facility or the construction and operation of an additional energy facility
upon a site for which a certificate has already been issued, filed in accordance with the procedures
established pursuant to ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992.

(3) “Associated transmission lines” means new transmission lines constructed to connect an en-
ergy facility to the first point of junction of such transmission line or lines with either a power
distribution system or an interconnected primary transmission system or both or to the Northwest
Power Grid.

(4) “Average electric generating capacity” means the peak generating capacity of the facility
divided by one of the following factors:
(a) For wind facilities, 3.00;
(b) For geothermal energy facilities, 1.11; or
(c) For all other energy facilities, 1.00.

(5) “Combustion turbine power plant” means a thermal power plant consisting of one or more
fuel-fired combustion turbines and any associated waste heat combined cycle generators.

(6) “Construction” means work performed on a site, excluding surveying, exploration or other
activities to define or characterize the site, the cost of which exceeds $250,000.

(7) “Council” means the Energy Facility Siting Council established under ORS 469.450.

(8) “Department” means the State Department of Energy created under ORS 469.030.

(9) “Director” means the Director of the State Department of Energy appointed under ORS
469.040.

(10) “Electric utility” means persons, regulated electrical companies, people's utility districts,
joint operating agencies, electric cooperatives, municipalities or any combination thereof, engaged
in or authorized to engage in the business of generating, supplying, transmitting or distributing
electric energy.

(11)(a) “Energy facility” means any of the following:
(A) An electric power generating plant with a nominal electric generating capacity of 25 mega-
watts or more, including but not limited to:
(i) Thermal power;
(ii) Combustion turbine power plant; or
(iii) Solar thermal power plant.
(B) A nuclear installation as defined in this section.
(C) A high voltage transmission line of more than 10 miles in length with a capacity of 230,000
volts or more to be constructed in more than one city or county in this state, but excluding:
(i) Lines proposed for construction entirely within 500 feet of an existing corridor occupied by
high voltage transmission lines with a capacity of 230,000 volts or more;
(ii) Lines of 57,000 volts or more that are rebuilt and upgraded to 230,000 volts along the same
right of way; and
(iii) Associated transmission lines.
(D) A solar photovoltaic power generation facility using more than:
(i) 160 acres located on high-value farmland as defined in ORS 195.300;
(ii) 1,280 acres located on land that is predominantly cultivated or that, if not cultivated, is
predominantly composed of soils that are in capability classes I to IV, as specified by the National
Cooperative Soil Survey operated by the Natural Resources Conservation Service of the United
States Department of Agriculture; or

[3]
(iii) 1,920 acres located on any other land.

(E) A pipeline that is:
(i) At least six inches in diameter, and five or more miles in length, used for the transportation of crude petroleum or a derivative thereof, liquefied natural gas, a geothermal energy form in a liquid state or other fossil energy resource, excluding a pipeline conveying natural or synthetic gas;
(ii) At least 16 inches in diameter, and five or more miles in length, used for the transportation of natural or synthetic gas, but excluding:
   (I) A pipeline proposed for construction of which less than five miles of the pipeline is more than 50 feet from a public road, as defined in ORS 368.001; or
   (II) A parallel or upgraded pipeline up to 24 inches in diameter that is constructed within the same right of way as an existing 16-inch or larger pipeline that has a site certificate, if all studies and necessary mitigation conducted for the existing site certificate meet or are updated to meet current site certificate standards; or
   (iii) At least 16 inches in diameter and five or more miles in length used to carry a geothermal energy form in a gaseous state but excluding a pipeline used to distribute heat within a geothermal heating district established under ORS chapter 523.

(F) A synthetic fuel plant which converts a natural resource including, but not limited to, coal or oil to a gas, liquid or solid product intended to be used as a fuel and capable of being burned to produce the equivalent of two billion Btu of heat a day.

(G) A plant which converts biomass to a gas, liquid or solid product, or combination of such products, intended to be used as a fuel and if any one of such products is capable of being burned to produce the equivalent of six billion Btu of heat a day.

(H) A storage facility for liquefied natural gas constructed after September 29, 1991, that is designed to hold at least 70,000 gallons.

(I) A surface facility related to an underground gas storage reservoir that, at design injection or withdrawal rates, will receive or deliver more than 50 million cubic feet of natural or synthetic gas per day, or require more than 4,000 horsepower of natural gas compression to operate, but excluding:
(i) The underground storage reservoir;
(ii) The injection, withdrawal or monitoring wells and individual wellhead equipment; and
(iii) An underground gas storage reservoir into which gas is injected solely for testing or reservoir maintenance purposes or to facilitate the secondary recovery of oil or other hydrocarbons.

(J) An electric power generating plant with an average electric generating capacity of 50 megawatts or more if the power is produced from geothermal or wind energy at a single energy facility or within a single energy generation area.

(b) “Energy facility” does not include a hydroelectric facility or an energy facility under paragraph (a)(A)(iii) or (D) of this subsection that is established on the site of a decommissioned United States Air Force facility that has adequate transmission capacity to serve the energy facility.

(12) “Energy generation area” means an area within which the effects of two or more small generating plants may accumulate so the small generating plants have effects of a magnitude similar to a single generating plant of 35 megawatts average electric generating capacity or more. An “energy generation area” for facilities using a geothermal resource and covered by a unit agreement, as provided in ORS 522.405 to 522.545 or by federal law, shall be defined in that unit agreement. If no such unit agreement exists, an energy generation area for facilities using a geothermal resource shall be the area that is within two miles, measured from the electrical generating equipment of the
facility, of an existing or proposed geothermal electric power generating plant, not including the site
of any other such plant not owned or controlled by the same person.

(13) “Extraordinary nuclear occurrence” means any event causing a discharge or dispersal of
source material, special nuclear material or by-product material as those terms are defined in ORS
453.605, from its intended place of confinement off-site, or causing radiation levels off-site, that the
United States Nuclear Regulatory Commission or its successor determines to be substantial and to
have resulted in or to be likely to result in substantial damages to persons or property off-site.

(14) “Facility” means an energy facility together with any related or supporting facilities.

(15) “Geothermal reservoir” means an aquifer or aquifers containing a common geothermal fluid.

(16) “Local government” means a city or county.

(17) “Nominal electric generating capacity” means the maximum net electric power output of
an energy facility based on the average temperature, barometric pressure and relative humidity at
the site during the times of the year when the facility is intended to operate.

(18) “Nuclear incident” means any occurrence, including an extraordinary nuclear occurrence,
that results in bodily injury, sickness, disease, death, loss of or damage to property or loss of use
of property due to the radioactive, toxic, explosive or other hazardous properties of source material,
special nuclear material or by-product material as those terms are defined in ORS 453.605.

(19) “Nuclear installation” means any power reactor, nuclear fuel fabrication plant, nuclear fuel
reprocessing plant, waste disposal facility for radioactive waste, and any facility handling that
quantity of fissionable materials sufficient to form a critical mass. “Nuclear installation” does not
include any such facilities that are part of a thermal power plant or small modular reactor power
plant.

(20)(a) “Nuclear power plant” means an electrical or any other facility using nuclear energy
with a nominal electric generating capacity of 25 megawatts or more, for generation and distribution
of electricity, and associated transmission lines.

(b) “Nuclear power plant” does not include a facility or any part of a facility that is a
small modular reactor power plant.

(21) “Person” means an individual, partnership, joint venture, private or public corporation, as-
sociation, firm, public service company, political subdivision, municipal corporation, government
agency, people’s utility district, or any other entity, public or private, however organized.

(22) “Project order” means the order, including any amendments, issued by the State Department
of Energy under ORS 469.330.

(23)(a) “Radioactive waste” includes all material which is discarded, unwanted or has no present
lawful economic use, and contains mined or refined naturally occurring isotopes, accelerator
produced isotopes and by-product material, source material or special nuclear material as those
terms are defined in ORS 453.605.

(b) “Radioactive waste” does not include:

(A) Materials identified by the council by rule as presenting no significant danger to the public
health and safety.

(B) Uranium mine overburden or uranium mill tailings, mill wastes or mill by-product materials
as those terms are defined in Title 42, United States Code, section 2014, on June 25, 1979.

(24) “Related or supporting facilities” means any structure, proposed by the applicant, to be
constructed or substantially modified in connection with the construction of an energy facility, in-
cluding associated transmission lines, reservoirs, storage facilities, intake structures, road and rail
access, pipelines, barge basins, office or public buildings, and commercial and industrial structures.
“Related or supporting facilities” does not include geothermal or underground gas storage reservoirs, production, injection or monitoring wells or wellhead equipment or pumps.

(25) “Site” means any proposed location of an energy facility and related or supporting facilities.

(26) “Site certificate” means the binding agreement between the State of Oregon and the applicant, authorizing the applicant to construct and operate a facility on an approved site, incorporating all conditions imposed by the council on the applicant.

(27) “Small modular reactor power plant” means an electrical facility that uses a nuclear reactor with an average electric generating capacity of 300 megawatts or less and that is made up of components that are factory fabricated and transported to location for on-site assembly.

[(27) (28) “Thermal power plant” means an electrical facility using any source of thermal energy with a nominal electric generating capacity of 25 megawatts or more, for generation and distribution of electricity, and associated transmission lines, including but not limited to a nuclear-fueled, geothermal-fueled or fossil-fueled power plant, but not including a small modular reactor power plant or portable power plant the principal use of which is to supply power in emergencies. “Thermal power plant” includes a nuclear-fueled thermal power plant that has ceased to operate.

[(28) (29) “Transportation” means the transport within the borders of the State of Oregon of radioactive material destined for or derived from any location.

[(29) (30) “Underground gas storage reservoir” means any subsurface sand, strata, formation, aquifer, cavern or void, whether natural or artificially created, suitable for the injection, storage and withdrawal of natural gas or other gaseous substances. “Underground gas storage reservoir” includes a pool as defined in ORS 520.005.

[(30) (31) “Utility” includes:

(a) A person, a regulated electrical company, a people’s utility district, a joint operating agency, an electric cooperative, municipality or any combination thereof, engaged in or authorized to engage in the business of generating, transmitting or distributing electric energy;

(b) A person or public agency generating electric energy from an energy facility for its own consumption; and

(c) A person engaged in this state in the transmission or distribution of natural or synthetic gas.

[(31) (32) “Waste disposal facility” means a geographical site in or upon which radioactive waste is held or placed but does not include a site at which radioactive waste used or generated pursuant to a license granted under ORS 453.635 is stored temporarily, a site of a thermal power plant used for the temporary storage of radioactive waste from that plant for which a site certificate has been issued pursuant to this chapter or a site used for temporary storage of radioactive waste from a reactor operated by a college, university or graduate center for research purposes and not connected to the Northwest Power Grid. As used in this subsection, “temporary storage” includes storage of radioactive waste on the site of a nuclear-fueled thermal power plant for which a site certificate has been issued until a permanent storage site is available by the federal government.

SECTION 4. ORS 469.320 is amended to read:

469.320. (1) Except as provided in subsections (2) and (5) of this section, no facility shall be constructed or expanded unless a site certificate has been issued for the site thereof in the manner provided in ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992. No facility shall be constructed or operated except in conformity with the requirements of ORS 469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992.
(2) A site certificate is not required for:

(a) An energy facility for which no site certificate has been issued that, on August 2, 1993, had operable electric generating equipment for a modification that uses the same fuel type and increases electric generating capacity, if:

(A) The site is not enlarged; and

(B) The ability of the energy facility to use fuel for electricity production under peak steady state operating conditions is not more than 200 million Btu per hour greater than it was on August 2, 1993, or the energy facility expansion is called for in the short-term plan of action of an energy resource plan that has been acknowledged by the Public Utility Commission of Oregon.

(b) Construction or expansion of any interstate natural gas pipeline or associated underground natural gas storage facility authorized by and subject to the continuing regulation of the Federal Energy Regulatory Commission or successor agency.

(c) An energy facility, except coal and nuclear power plants, if the energy facility:

(A) Sequentially produces electrical energy and useful thermal energy from the same fuel source; and

(B) Under average annual operating conditions, has a nominal electric generating capacity:

(i) Of less than 50 megawatts and the fuel chargeable to power heat rate value is not greater than 6,000 Btu per kilowatt hour;

(ii) Of 50 megawatts or more and the fuel chargeable to power heat rate value is not greater than 5,500 Btu per kilowatt hour; or

(iii) Specified by the Energy Facility Siting Council by rule based on the council’s determination relating to emissions of the energy facility.

(d) Temporary storage, at the site of a nuclear-fueled thermal power plant for which a site certificate has been issued by the State of Oregon, of radioactive waste from the plant.

(e) An energy facility as defined in ORS 469.300 (11)(a)(G), if the plant also produces a secondary fuel used on site for the production of heat or electricity, if the output of the primary fuel is less than six billion Btu of heat a day.

(f) An energy facility as defined in ORS 469.300 (11)(a)(G), if the facility:

(A) Exclusively uses biomass, including but not limited to grain, whey, potatoes, oilseeds, waste vegetable oil or cellulosic biomass, as the source of material for conversion to a liquid fuel;

(B) Has received local land use approval under the applicable acknowledged comprehensive plan and land use regulations of the affected local government and the facility complies with any statewide planning goals or rules of the Land Conservation and Development Commission that are directly applicable to the facility;

(C) Requires no new electric transmission lines or gas or petroleum product pipelines that would require a site certificate under subsection (1) of this section;

(D) Produces synthetic fuel, at least 90 percent of which is used in an industrial or refueling facility located within one mile of the facility or is transported from the facility by rail or barge; and

(E) Emits less than 118 pounds of carbon dioxide per million Btu from fossil fuel used for conversion energy.

(g) A standby generation facility, if the facility complies with all of the following:

(A) The facility has received local land use approval under the applicable acknowledged comprehensive plan and land use regulations of the affected local government and the facility complies with all statewide planning goals and applicable rules of the Land Conservation and Development Commission
(B) The standby generators have been approved by the Department of Environmental Quality as having complied with all applicable air and water quality requirements. For an applicant that proposes to provide the physical facilities for the installation of standby generators, the requirement of this subparagraph may be met by agreeing to require such a term in the lease contract for the facility; and

(C) The standby generators are electrically incapable of being interconnected to the transmission grid. For an applicant that proposes to provide the physical facilities for the installation of standby generators, the requirement of this subparagraph may be met by agreeing to require such a term in the lease contract for the facility.

(3) The Energy Facility Siting Council may review and, if necessary, revise the fuel chargeable to power heat rate value set forth in subsection (2)(c)(B) of this section. In making its determination, the council shall ensure that the fuel chargeable to power heat rate value for facilities set forth in subsection (2)(c)(B) of this section remains significantly lower than the fuel chargeable to power heat rate value for the best available, commercially viable thermal power plant technology at the time of the revision.

(4)(a)(A) Any person who proposes to construct or enlarge an energy facility and who claims an exemption under subsection (2)(a), (c) or (f) of this section from the requirement to obtain a site certificate shall request the Energy Facility Siting Council to determine whether the proposed facility qualifies for the claimed exemption.

(B) The council may not require a person who operates or proposes to construct or enlarge an energy facility to request that the council determine whether the proposed facility qualifies for exemption under subsection (2)(g) of this section.

(b) The council shall make its determination within 60 days after the request for exemption is filed. An appeal from the council’s determination on a request for exemption shall be made under ORS 469.403, except that the scope of review by the Supreme Court shall be the same as a review by a circuit court under ORS 183.484. The record on review by the Supreme Court shall be the record established in the council proceeding on the exemption.

(5) Notwithstanding subsection (1) of this section, a separate site certificate shall not be required for:

(a) Transmission lines, storage facilities, pipelines or similar related or supporting facilities, if such related or supporting facilities are addressed in and are subject to a site certificate for another energy facility;

(b) Expansion within the site or within the energy generation area of a facility for which a site certificate has been issued, if the existing site certificate has been amended to authorize expansion; or

(c) Expansion, either within the site or outside the site, of an existing council certified surface facility related to an underground gas storage reservoir, if the existing site certificate is amended to authorize expansion.

(6) If the substantial loss of the steam host causes a facility exempt under subsection (2)(c) of this section to substantially fail to meet the exemption requirements under subsection (2)(c) of this section, the electric generating facility shall cease to operate one year after the substantial loss of the steam host unless an application for a site certificate has been filed in accordance with the provisions of ORS 469.300 to 469.563.

(7) As used in this section:
(a) “Standby generation facility” means an electric power generating facility, including standby
generators and the physical structures necessary to install and connect standby generators, that
provides temporary electric power in the event of a power outage and that is electrically incapable
of being interconnected with the transmission grid.

(b) “Total energy output” means the sum of useful thermal energy output and useful electrical
energy output.

(c) “Useful thermal energy” means the verifiable thermal energy used in any viable industrial
or commercial process, heating or cooling application.

(8)(a) If the developer of a facility elects, or the governing body of the local government after
consulting with the developer elects, to defer regulatory authority to the Energy Facility Siting
Council, the developer of a facility shall obtain a site certificate, in the manner provided in ORS
469.300 to 469.563, 469.590 to 469.619, 469.930 and 469.992, for a facility that, notwithstanding the
definition of “energy facility” in ORS 469.300, is:

(A) An electric power generating plant with an average electric generating capacity of less than
50 megawatts produced from wind energy at a single energy facility or within a single energy gen-
eration area;

(B) An associated transmission line; [or]

(C) A solar photovoltaic power generation facility that is not an energy facility as defined in
ORS 469.300 (11)(a)(D); or

(D) A small modular reactor power plant.

(b) An election by a developer or a local government under this subsection is final.

(c) An election by a local government under this subsection is not a land use decision as defined
in ORS 197.015.

(d) A local government may not make an election under this subsection after a permit applica-
tion has been submitted under ORS 215.416 or 227.175.