

**Style Definition:** TOC 1: Font: 12 pt, Font color: Text 1

# Attachment 1

**OAR CHAPTER 345 – OREGON ENERGY FACILITY SITING COUNCIL RULES**

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DIVISION 15 - PROCEDURES GOVERNING COUNCIL AND DEPARTMENT OF ENERGY PROCEEDINGS, INCLUDING SITE CERTIFICATE HEARINGS

**345-015-0205 – Agency Coordination**

Each agency with legal authority to implement or enforce state statutes, state administrative rules or local government ordinances that must be satisfied in order for the Council to issue a site certificate for a proposed facility is encouraged to conduct its review of the application for a site certificate and other permit applications for the proposed facility filed with the agency on a timeline and in a manner that enables the agency to:

- (1) Make recommendations to the Department of Energy and Council about compliance of the applications with the state statutes, administrative rules or ordinances administered by the agency.
- (2) Recommend conditions for inclusion in the site certificate that will ensure compliance with such statutes, rules and ordinances.
- (3) Present testimony and evidence at the contested case hearing on the site certificate application.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501, ORS 469.503, ORS 469.504, ORS 469.505

Commented [TJ1]: Was 345-022-0005.

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### DIVISION 21 - APPLICATION FOR SITE CERTIFICATE

#### 345-021-0000 - General Requirements

(1) Except for facilities that the Council has determined exempt as described in OAR 345-015-0350 to 345-015-0370 or for which a separate site certificate is not required according to ORS 469.320(5), a person may not construct or expand a facility unless the Council has granted a site certificate or an amendment to an existing site certificate.

(2) An applicant may not submit an application for a site certificate before the Department has issued a project order for the proposed facility as described in OAR 345-015-0160. The applicant may submit a draft application before the issuance of a project order. The applicant must submit the application before the expiration of the notice of intent.

(3) For an expedited review granted under OAR 345-015-0300 or 345-015-0310, section (3) does not apply and the applicant may submit an application for a site certificate any time after the Department determines the request for expedited review satisfies the requirements for expedited review as described in those rules.

(4) If the applicant submits a written request for waiver or modification of requirements in OAR ~~345-021-0010~~, [divisions 22 through 24](#) to the Department, the Department may waive or modify those requirements that the Department determines are not applicable to the proposed facility.

(5) For any state or local government agency permits, licenses or certificates proposed by the applicant to be included in and governed by the site certificate, the applicant must include within the site certificate application all information that would otherwise be required by the state or local government agency in an application for such permit, license or certificate.

(6) For any federally-delegated permits that are needed for construction or operation of the proposed facility, the applicant must submit to the Department one copy of each federally-delegated permit application. The applicant may submit the site certificate application before submitting a copy of a federally-delegated permit application if the applicant submits a schedule of the date by which the applicant intends to submit the federally-delegated permit application. The Department may not find the site certificate application to be complete before receiving copies of all federally-delegated permit applications and a letter or other indication from each agency responsible for issuing a federally-delegated permit stating that the agency has received the permit application, identifying any additional information the agency is likely to need from the applicant and estimating the date when the agency will complete its review and issue a permit decision.

(7) If the proposed facility is a non-generating facility for which the applicant must demonstrate need under OAR 345-023-0005, in addition to the application for a site certificate described in ~~345-021-0010~~[OAR 345, divisions 22 through 24](#), the applicant must submit, to the Department, two copies of each energy resource plan or combination of plans on which the applicant relies to demonstrate need under OAR 345-023-0020, unless the applicant chooses to incorporate copies of the plans as part of the application for a site certificate. The applicant must submit the plans to the Department with the site

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certificate application. The Department may not find the site certificate application to be complete before receiving copies of the plans. The plans described in this section are part of the decision record for the Department's proposed order, described in OAR 345-015-0230.

(8) The applicant must submit an application for a site certificate to the Department with 25 percent of the fee the Department determines necessary for review of the application under ORS 469.421(3), payable to the Oregon Department of Energy. The applicant must pay the balance of the fee periodically, as specified by the Department.

(9) Until the Department determines the application to be complete as described in OAR 345-015-0190 or 345-015-0310, it is a preliminary application. For the purpose of determining the applicable substantive criteria under ORS 469.504(1)(b)(A), the date the preliminary application is received by the Department is the date the application is submitted.

**Statutory/Other Authority:** ORS 469.373 & 469.470

**Statutes/Other Implemented:** ORS 469.350, 469.370 & 469.421

### 345-021-0010 - Contents of an Application

(1) The project order described in OAR 345-015-0160(1) identifies the provisions of this rule and OAR 345, divisions 22 through 24, that are applicable to the application for the proposed facility, including any appropriate modifications to applicable provisions of ~~these~~ rules. The applicant must include in its application for a site certificate information that addresses each provision of ~~this~~ the rules identified in the project order. The applicant must designate the information with ~~the~~ an appropriate exhibit label ~~identified in the following subsections~~ that corresponds with the standard in question, e.g., the information provided for the land use standard described in OAR 345-022-0030 should be labeled as "Land Use Exhibit." If the same information is required in each of several exhibits the applicant may provide the required information in one exhibit and include appropriate references in the others. For the purpose of submitting an application for a site certificate in an expedited review granted under OAR 345-015-0300 or 345-015-0310, the applicant must include information that addresses all applicable provisions of this rule and OAR 345, divisions 22 through 24. In such expedited reviews, analysis areas addressed in this rule are the study areas defined in OAR 345-001-0010, subject to later modification in the project order.

(2) The Council standards referred to in the project order described in OAR 345-015-0160(1) are detailed in OAR 345, divisions 22 through 24, including all applicable factual support.

(3) In addition to the material required in OAR 345, divisions 22 through 24, the applicant must submit the following background information about the project to assist the Council in its review of the application:

~~(b)~~ Exhibit B-Information about the proposed facility, construction schedule and temporary disturbances of the site, including:

(A) A description of the proposed energy facility, including as applicable:

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- (i) For electric power generating plants, the nominal electric generating capacity and the average electrical generating capacity, as defined in ORS 469.300;
  - (ii) Major components, structures and systems, including a description of the size, type and configuration of equipment used to generate, store, transmit, or transport electricity, useful thermal energy, or fuels;
  - (iii) A site plan and general arrangement of buildings, equipment and structures;
  - (iv) Fuel and chemical storage facilities, including structures and systems for spill containment;
  - (v) Equipment and systems for fire prevention and control;
  - (vi) For thermal power plants, combustion turbine power plants, or other facilities designed to generate electricity from gas, liquid, or solid fuels:
    - (I) A discussion of the source, quantity and availability of all fuels proposed to be used in the facility to generate electricity or useful thermal energy;
    - (II) If the facility will generate electric power from natural gas, petroleum, coal or any form of solid, liquid or gaseous fuel derived from such material, a discussion of methods the facility will use to ensure that the facility does not emit greenhouse gases into the atmosphere, and a description of any equipment the facility will use to capture, sequester, or store greenhouse gases;
    - (III) A description of energy flows within the facility, including power cycle and steam cycle diagrams, as appropriate;
    - (IV) A description of equipment and systems for disposal of waste heat generated by the facility;
    - (IV) The fuel chargeable to power heat rate of the energy facility;
  - (vii) For surface facilities related to underground gas storage, estimated daily injection and withdrawal rates, horsepower compression required to operate at design injection or withdrawal rates, operating pressure range and fuel type of compressors;
  - (viii) For facilities to store liquefied natural gas, the volume, maximum pressure, liquefaction and gasification capacity in thousand cubic feet per hour;
- (B) A description of major components, structures and systems of each related or supporting facility;
- (C) The approximate dimensions of major facility structures and visible features;
- (D) If the proposed energy facility is a pipeline or a transmission line or has, as a related or supporting facility, a transmission line or pipeline that, by itself, is an energy facility under the definition in ORS 469.300, a corridor selection assessment explaining how the applicant selected the corridors for analysis in the application. In the assessment, the applicant must evaluate the

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corridor adjustments the Department has described in the project order, if any. The applicant may select any corridor for analysis in the application and may select more than one corridor. However, if the applicant selects a new corridor, then the applicant must explain why the applicant did not present the new corridor for comment at an informational meeting under OAR 345-015-0130. In the assessment, the applicant must discuss the reasons for selecting the corridors, based upon evaluation of the following factors:

- (i) Least disturbance to streams, rivers and wetlands during construction;
  - (ii) Least percentage of the total length of the pipeline or transmission line that would be located within areas of Habitat Category 1, as described by the Oregon Department of Fish and Wildlife;
  - (iii) Greatest percentage of the total length of the pipeline or transmission line that would be located within or adjacent to public roads and existing pipeline or transmission line rights-of-way;
  - (iv) Least percentage of the total length of the pipeline or transmission line that would be located within lands that require zone changes, variances or exceptions;
  - (v) Least percentage of the total length of the pipeline or transmission line that would be located in a protected area as described in OAR 345-022-0040;
  - (vi) Least disturbance to areas where historical, cultural or archaeological resources are likely to exist;
  - (vii) Greatest percentage of the total length of the pipeline or transmission line that would be located to avoid seismic, geological and soils hazards;
  - (viii) Least percentage of the total length of the pipeline or transmission line that would be located within lands zoned for exclusive farm use;
- (E) If the proposed energy facility is a pipeline or transmission line or has, as a related or supporting facility, a transmission line or pipeline of any size:
- (i) The length of the pipeline or transmission line;
  - (ii) The proposed right-of-way width of the pipeline or transmission line, including to what extent new right-of-way will be required or existing right-of-way will be widened;
  - (iii) If the proposed transmission line or pipeline corridor follows or includes public right-of-way, a description of where the transmission line or pipeline would be located within the public right-of-way, to the extent known. If the applicant proposes to locate all or part of a transmission line or pipeline adjacent to but not within the public right-of-way, describe the reasons for locating the transmission line or pipeline outside the public right-of-way. The applicant must include a set of clear and objective criteria and a description of the type of evidence that would support locating the transmission line or pipeline outside the public right-of-way, based on those criteria;



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(iv) For pipelines, the operating pressure and delivery capacity in thousand cubic feet per day and the diameter and location, above or below ground, of each pipeline;

(v) For transmission lines, the rated voltage, load carrying capacity, and type of current and a description of transmission line structures and their dimensions; and

(F) A construction schedule including the date by which the applicant proposes to begin construction and the date by which the applicant proposes to complete construction. Construction is defined in OAR 345-001-0010. The applicant must describe in this exhibit all work on the site that the applicant intends to begin before the Council issues a site certificate. The applicant must include an estimate of the cost of that work. For the purpose of this exhibit, “work on the site” means any work within a site or corridor, other than surveying, exploration or other activities to define or characterize the site or corridor, that the applicant anticipates or has performed as of the time of submitting the application.

(eb) ~~Exhibit C~~—Information about the location of the proposed facility, including:

(A) A map or maps showing the proposed locations of the energy facility site, all related or supporting facility sites and all areas that might be temporarily disturbed during construction of the facility in relation to major roads, water bodies, cities and towns, important landmarks and topographic features, using a scale of 1 inch = 2000 feet or smaller when necessary to show detail;

(B) A description of the location of the proposed energy facility site, the proposed site of each related or supporting facility and areas of temporary disturbance, including the total land area (in acres) within the proposed site boundary, the total area of permanent disturbance, and the total area of temporary disturbance. If a proposed pipeline or transmission line is to follow an existing road, pipeline or transmission line, the applicant must state to which side of the existing road, pipeline or transmission line the proposed facility will run, to the extent this is known; and

(C) For energy generation facilities, a map showing the approximate locations of any other energy generation facilities that are known to the applicant to be permitted at the state or local level within the study area as defined in OAR 345-001-0010 for impacts to public services;

(cf) ~~Exhibit F~~—A list of the names and mailing addresses of property owners, as described in this subsection:

(A) The list must include all owners of record, as shown on the most recent property tax assessment roll, of property located:

(i) Within 100 feet of property which is the subject of the application, where the subject property is wholly or in part within an urban growth boundary;

(ii) Within 250 feet of the property which is the subject of the application, where the subject property is outside an urban growth boundary and not within a farm or forest zone; or

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(iii) Within 500 feet of the property which is the subject of the application, where the property is within a farm or forest zone;

(B) The applicant must submit an updated list of property owners as requested by the Department before the Department issues notice of any public hearing on the application for a site certificate as described in OAR 345-015-0220; and

(C) In addition to incorporating the list in the application, the applicant must submit the list to the Department in an electronic format approved by the Department.

~~(bb) Exhibit BB. Any other information that the Department requests in the project order or in a notification regarding expedited review.~~

~~(cc) Exhibit CC.~~ Identification, by legal citation, of all state statutes and administrative rules and local government ordinances containing standards or criteria that the proposed facility must meet for the Council to issue a site certificate, other than statutes, rules and ordinances identified in Exhibit E, and identification of the agencies administering those statutes, administrative rules and ordinances. The applicant must identify all statutes, administrative rules and ordinances that the applicant knows to be applicable to the proposed facility, whether or not identified in the project order. To the extent not addressed by other materials in the application, the applicant must include a discussion of how the proposed facility meets the requirements of the applicable statutes, administrative rules and ordinances.

~~(dd) Exhibit DD.~~

~~(A)~~ If the proposed facility is a facility for which the Council has adopted specific standards, information about the facility providing evidence to support findings by the Council as required by the following rules:

(i) For wind energy facilities, OAR 345-024-0010 and 345-024-0015;

(ii) For surface facilities related to underground gas storage reservoirs, OAR 345-024-0030, including information required by OAR 345-024-0030(3); and

(iii) For any transmission line under Council jurisdiction, OAR 345-024-0090.

(iv) For a fossil-fueled power plant or other facility that emits carbon dioxide, OAR 345-024-0500 to 345-024-0720.

(B) Documents prepared in connection with an environmental assessment or environmental impact statement for the proposed facility under the National Environmental Policy Act of 1970, if any, may contain some of the information required under section (1) of this rule. The applicant may copy relevant sections of such documents into the appropriate exhibits of the site certificate application. The applicant may otherwise submit full copies of those documents and include, in the appropriate exhibits of the site certificate application, cross-references to the relevant sections of those documents. The applicant may use such documents only to avoid

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duplication. The applicant must include additional information in the site certificate application as needed to meet the requirements of section (1) of this rule.

**Commented [TJ2]:** Update for rule movement.

(C) The applicant must include a table of contents in the preliminary application identifying the location of each exhibit required by this rule.

(D) The applicant must submit, to the Department, an original and a copy of the printed preliminary application, and a non-copy-protected electronic version of the preliminary application in a format acceptable to the Department. The applicant must submit additional printed copies of the preliminary application to the Department upon request. The applicant must prepare and distribute additional copies of the application as required by OAR 345-021-0050.

**(f) Any other information that the Department requests in the project order or in a notification regarding expedited review.**

**Commented [TJ3]:** Moved as it makes to put the catch all provision at the end.

**Commented [TJ4]:** So that there aren't pages and pages of redlines, the track changes showing the removed exhibits are not here. All other exhibits from OAR 345-021-0010 that are not listed above have been moved as shown below to divisions 022 through 024. See the notice of proposed rulemaking for a showing of all redlines.

**Statutory/Other Authority:** ORS 469.373 & 469.470  
**Statutes/Other Implemented:** ORS 469.350, 469.370, 469.413, 469.501, 469.503 & 469.504

**345-021-0020 – Specific Application Requirements for Siting of Surface Facilities Related to Underground Gas Storage Reservoirs**

**Commented [TJ5]:** Moved to Div 24.

~~In addition to the requirements of OAR 345-021-0010, in an application for a site certificate for a surface facility related to an underground storage reservoir, the applicant shall include the following information:~~

- ~~(1) The design rates of natural or synthetic gas injection or withdrawal;~~
- ~~(2) The compression horsepower required to operate at design injection or withdrawal rates;~~
- ~~(3) The fuel type of the compressor;~~
- ~~(4) The estimated carbon dioxide emissions from the compressor for the projected life of the facility;~~  
~~and~~
- ~~(5) The proposed location of all wells.~~

~~Statutory/Other Authority: ORS 469.470  
Statutes/Other Implemented: ORS 469.350 & 469.503~~

**345-021-0021 – Specific Application Requirements for Facilities that Emit Carbon Dioxide**

**Commented [TJ6]:** Moved to OAR 345-024-0500.

~~In addition to the requirements of OAR 345-021-0010, in an application for a site certificate for a fossil-fueled power plant, or other facility that will emit carbon dioxide into the atmosphere, the application must include the following:~~

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(1) A description of the means by which the applicant will comply with the applicable carbon dioxide emissions standard under OAR 345-024-0500.

(2) Information about the carbon dioxide emissions that are reasonable likely to result from the operation of the energy facility, including the following:

(a) The maximum hourly fuel use at:

(A) Net electrical power output at average annual conditions for a base load gas plant; or

(B) Nominal electric generating capacity for a non-base load power plant or a base load gas plant with power augmentation technologies;

(b) The gross capacity as estimated at the generator output terminals for each generating unit.

(A) For a base load gas plant, gross capacity must be estimated based on the average annual ambient conditions for temperature, barometric pressure and relative humidity at the site. For a baseload gas plant with power augmentation, gross capacity for power augmentation mode must be estimated separately based on the average temperature, barometric pressure and relative humidity at the site during the times of year when the facility is intended to operate with power augmentation; or

(B) For a non-base load plant, gross capacity must be estimated based on the average temperature, barometric pressure and relative humidity at the site during the times of year when the facility is intended to operate.

(c) A table showing a reasonable estimate of all on-site electrical loads and losses greater than 50 kilowatts, including losses from on-site transformers, plus a factor for incidental loads, that are required for the normal operation of the plant when the plant is at its designed full power operation;

(d) The maximum number of hours per year and energy content (Btu per year, higher heating value) of alternate fuel use;

(e) The total estimated gross carbon dioxide emissions for 30 years, unless an applicant for a non-base load power plant or nongenerating energy facility proposes to limit operation to a shorter time;

(f) The gross carbon dioxide emissions rate expressed as:

(A) Pounds of carbon dioxide per kilowatt-hour of net electric power output for a base load gas plant with power augmentations, the rate for plant operations with and without power augmentation must be reported separately;

(B) Pounds of carbon dioxide per horsepower-hour for nongenerating facilities for which the output is ordinarily measured in horsepower; or

(C) A rate comparable to pounds of carbon dioxide per kilowatt-hour of net electric power output for nongenerating facilities other than those measured in horsepower;

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- (g) The total excess carbon dioxide emissions for 30 years, unless an applicant for a non-base load power plant or a nongenerating energy facility proposes to limit operation to a shorter time;
- (h) The excess carbon dioxide emissions rate, using the same measure as required for subsection (f);
- (i) The average annual site conditions, including temperature, barometric pressure and relative humidity, together with a citation of the source and location of the data collection devices;
- (j) For a non-base load power plant (or a base load power plant using power augmentation), the average temperature, barometric pressure and relative humidity at the site during the times of the year when the facility is intended to operate, together with a citation of the source and location of the data collection devices;
- (k) The annual fuel input in British thermal units, higher heating value, to the facility for each type of fuel the facility will use, assuming:
  - (A) For a base load gas plant, a 100-percent capacity factor on a new and clean basis and the maximum number of hours annually that the applicant proposes to use alternative fuels;
  - (B) For a non-base load power plant, the applicant's proposed annual hours of operation on a new and clean basis, the maximum number of hours annually that the applicant proposes to use alternative fuels and, if the calculation is based on an operational life of fewer than 30 years, the proposed operational life of the facility;
  - (C) For a nongenerating energy facility, the reasonably likely operation of the facility based on one year, 5 year, 15 year, and 30 year averages, unless an applicant proposes to limit operation to a shorter time;
- (l) For each type of fuel a base load gas plant or a non-base load power plant will use, the estimated heat rate and capacity of the facility measured on a new and clean basis with no thermal energy to cogeneration, consistent with the data supplied in Exhibit B;
- (m) For each type of fuel a nongenerating energy facility will use, the estimated efficiency and capacity of the facility with no thermal energy to cogeneration;
- (n) If the facility provides thermal energy for cogeneration to lower its net carbon dioxide emissions rate:
  - (A) The estimated annual useful thermal energy available from the facility for non-electric processes, annual useful thermal energy used by non-electric processes, and annual thermal energy rejected as waste heat;
  - (B) For a base load gas plant or non-base load power plant, the estimated annual net electric power output and annual fuel input in British thermal units higher heating value for the facility for each type of fuel the facility will use and the basis of such estimates;
  - (C) A description of the non-electric thermal processes, the names and addresses of the persons intending to use the non-electric thermal energy, and a description and an estimate of the fuel displaced by cogeneration, including supporting assumptions;

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- (D) A description of the products produced and thermal energy needed for production of the primary products made by the persons intending to use the non-electric thermal energy produced by the proposed facility, supported by fuel use and steam production records or estimates, if the production facility is new;
  - (E) The efficiency of each boiler that the thermal energy will displace;
  - (F) For each boiler, the annual fossil fuel displaced in million Btu, higher heating value, by type of fuel that will be displaced by the thermal energy;
  - (G) The annual carbon dioxide offset by the cogeneration host, using a rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel (higher heating value) and a rate of 161 pounds of carbon dioxide per million Btu of distillate fuel (higher heating value);
  - (H) The cumulative carbon dioxide offset by the steam host through the thirtieth year of facility operation, or for a shorter period if an applicant for a nongenerating facility proposes a shorter operational period;
  - (I) A copy of the contractual agreement between the applicant and the cogeneration host for the use of the thermal energy;
  - (J) A description of the guarantees of offsets that the applicant must provide for cogeneration projects, pursuant to OAR 345-024-0560(1) and 345-024-0600(1);
  - (K) A proposed monitoring and evaluation plan and an independent verification plan, pursuant to paragraphs (o)(S) and (T);
  - (L) A copy of the instrument by which the certificate holder will transfer the offsets to the Council for it to hold in trust;
- (o) If the applicant proposes to offset carbon dioxide emissions as described in OAR 345-024-0550(3), 345-024-0560(2), 345-024-0590(3), 345-024-0600(2), 345-024-0620(3) or 345-024-0630(1):
- (A) A description of each offset project;
  - (B) A description of who will implement the offset project, including qualifications and experience;
  - (C) Detailed estimates of the of carbon dioxide offset, measured in short tons, that the offset projects will achieve over the life of the project;
  - (D) For each offset project, an explanation of how the applicant quantified its carbon dioxide estimates to a degree of certainty acceptable to the Council through a transparent and replicable calculation methodology;
  - (E) For each offset project, evidence that the offset project would not likely have been implemented if not for the applicant's activities or funding;
  - (F) For each offset project, a description of a "Baseline" projection that does not include the proposed project and a "Project Case" projection that does. The historic Baseline must use

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reliable emissions data or pre-project data available for the most recent three years unless the applicant can demonstrate that a different period more closely represents historical operations or unless it can demonstrate that another method provides a more reasonable estimate. The applicant must show how the Baseline projection changes over time if changes from business-as-usual could be reasonably anticipated during the project life;

(G) For each offset project, a description, in a transparent and realistic manner, of the assumptions and methodologies used to quantify the Baseline and the Project Case projections, including a description of key parameters and data sources. This must include a description of the formulae used to estimate carbon dioxide emissions or sequestration within the project boundary and a net change of carbon dioxide emissions or sequestration that occurs outside of the project boundary that is measurable and attributable to the project activity;

(H) For projects that avoid conventional electricity generation, a description of a Baseline that calculates the carbon dioxide emissions per kilowatt hour in two steps:

(i) For the first five years of operation, a description of the rate based on dispatch data or models or, absent that, a weighted average of all resources in a power pool except zero-fuel-cost or must-run facilities; and

(ii) A description of the rate for any subsequent years based on a group of similar facilities built within the prior five years or under construction in the electrical distribution region of the project or the three most recent plants built in the region, whichever rate is lower;

(I) For projects that avoid conventional electricity generation, a description of avoided transmission and distribution losses, using average grid area or national losses;

(J) A description of any guarantee for offsets from projects that the applicant proposes pursuant to OAR 345-024-0560(2), 345-024-0600(2), and 345-024-0630(1), if the applicant chooses to offer a guarantee;

(K) A description of the offset project boundary. The boundary must encompass all carbon dioxide emissions under the control of the project that are significant and reasonably attributable to the project activity. If the project is being conducted by one part of a corporation, the boundary must include the emissions and reductions of the whole corporate entity and the carbon dioxide emissions resulting from processes and facilities that are related to the project, with identification of subsidiaries that are affected by the project;

(L) A description of significant risks and risk mitigation strategies, including an estimate of the range of uncertainty around the expected carbon dioxide offsets;

(M) For biological sequestration projects, an assessment of the risk of climate change to natural systems that are sequestering the carbon dioxide, including, if appropriate, the risks from forest fires, pest and other unplanned releases of carbon from sequestration;

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(N) A description of whether the offset project will permanently avoid or displace emissions of carbon dioxide. If a project only temporarily sequesters carbon, an indication of the duration of sequestration or storage;

(O) A description of the amount of funding the applicant will provide for each offset project it proposes;

(P) If the applicant anticipates that a project will have funding sources in addition to itself, identification of the sources of those funds, the amount of other funding that is required to implement a project, the amount of funds other parties have committed, and the risks of other funds not being available;

(Q) If the applicant proposes that a project will have funding sources in addition to itself, a description of how ownership of the offsets will be allocated among the several funding sources;

(R) A copy of the instrument by which the certificate holder will transfer all the offsets to the Council for it to hold in trust;

(S) A description of a transparent and replicable methodology for the applicant's monitoring and evaluation plan and for an independent verification plan, including:

(i) Procedures the applicant and the independent entity will employ;

(ii) How the applicant will assure funds for ongoing monitoring, evaluation and verification;

(iii) The time frame and frequency over which the applicant will conduct monitoring and evaluation and over which the independent entity will conduct verification, including the frequency of site visits, if applicable;

(iv) The reporting procedures and guidelines for the plans; and

(v) Whether the applicant has identified the independent entity that will perform the verification;

(T) The monitoring and evaluation plan and the verification plan must identify the data needs and data quality with regard to accuracy, comparability, completeness and validity. It must include methodologies to be used for data collection, monitoring, storage, reporting and management, including quality assurance and quality control provisions. It must provide complete calculations used to calculate and estimate carbon dioxide emissions from activity within the project boundary. It must show any formulae and assumptions the applicant used to calculate offset project leakage;

(U) A description of reasonably likely, significant undesirable long term environmental impacts from the implementation of an offset project; and

(p) If the applicant elects to comply with the applicable carbon dioxide emissions standard by using the monetary path under OAR 345-024-0560(3), 345-024-0600(3) or 345-024-0630(2), the applicant must include:



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(A) A statement of the applicant's election to use the monetary path;

(B) The amount of carbon dioxide reduction, in tons, for which the applicant is taking credit by using the monetary path;

(C) The qualified organization to whom the applicant will provide offset funds and funds for the cost of selecting and contracting for offsets. The applicant must include evidence that the organization meets the definition of a qualified organization under OAR 345-001-0010. The applicant may identify an organization that has applied for, but has not received, an exemption from federal income taxation, but the Council will not find that the organization is a qualified organization unless the organization is exempt from federal taxation under section 501(c)(3) of the Internal Revenue Code as amended and in effect on September 18, 2015; and

(D) A statement of whether the applicant intends to provide a bond or letter of credit to secure the funds it must provide to the qualified organization or whether it requests the option of providing either a bond or a letter of credit.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.413, 469.501 & 469.503

### 345-021-0090 - Amendment of an Application

(1) When the applicant is preparing to submit an amended application, the applicant must notify the Department.

(2) The applicant may amend a preliminary application at any time.

(3) If the applicant submits an amended application after the date of filing as determined under OAR 345-015-0190 or 345-015-0310, the Department may withdraw the filing of the application until the Department has reviewed the amended application for completeness as described under OAR 345-015-0190 or 345-015-0310.

(4) If the applicant submits an amended application after issuance of a contested case notice under OAR 345-015-0014, the Department may, by motion, request that the contested case proceeding be terminated and the Council's hearing officer may issue an order terminating the proceeding. Upon issuance of the order, the Department may withdraw the filing of the application until the Department has reviewed the amended application for completeness as described under OAR 345-015-0190 or 345-015-0310.

(5) The applicant must submit, to the Department, two printed copies of the amended application, and an electronic version of the amended application in a non-copy-protected format acceptable to the Department. The applicant must provide additional printed copies of the amended application to the Department upon request. The applicant must prepare and distribute additional copies of the amended application in the manner described in OAR 345-015-0180.

Statutory/Other Authority: ORS 469.373 & 469.470

Statutes/Other Implemented: ORS 469.350

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### **345-021-0100 - Contested Case Proceeding on the Application - Burden of Proof**

(1) After the issuance of a notice of contested case as described in OAR 345-015-0230, the hearing officer shall conduct a contested case proceeding on the application according to the provisions of OAR chapter 345, division 15.

(2) The applicant has the burden of proving, by a preponderance of the evidence in the decision record, that the facility complies with all applicable statutes, administrative rules and applicable local government ordinances.

Statutory/Other Authority: ORS 469.470

Statutes/Other Implemented: ORS 469.370

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### DIVISION 22 - GENERAL STANDARDS FOR SITING FACILITIES

#### 345-022-0000 - General Standard of Review

(1) To issue a site certificate for a proposed facility or to amend a site certificate, the Council shall determine that the preponderance of evidence on the record supports the following conclusions:

- (a) The facility complies with the requirements of the Oregon Energy Facility Siting statutes, ORS 469.300 to 469.570 and 469.590 to 469.619, and the standards adopted by the Council pursuant to 469.501 or the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards the facility does not meet as described in section (2);
- (b) Except as provided in OAR 345-022-0030 for land use compliance and except for those statutes and rules for which the decision on compliance has been delegated by the federal government to a state agency other than the Council, the facility complies with all other Oregon statutes and administrative rules identified in the project order, as amended, as applicable to the issuance of a site certificate for the proposed facility. If the Council finds that applicable Oregon statutes and rules, other than those involving federally delegated programs, would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

(2) The Council may issue or amend a site certificate for a facility that does not meet one or more of the applicable standards adopted under ORS 469.501 if the Council determines that the overall public benefits of the facility outweigh any adverse effects on a resource or interest protected by the applicable standards the facility does not meet. The Council shall make this balancing determination only when the applicant has shown that the proposed facility cannot meet applicable Council standards or has shown, to the satisfaction of the Council, that there is no reasonable way to meet the applicable Council standards through mitigation or avoidance of any adverse effects on a protected resource or interest. The applicant has the burden to show that the overall public benefits outweigh any adverse effects on a resource or interest, and the burden increases proportionately with the degree of adverse effects on a resource or interest. The Council shall weigh overall public benefits and any adverse effects on a resource or interest as follows:

- (a) The Council shall evaluate any adverse effects on a resource or interest by considering factors including, but not limited to, the following:
  - (A) The uniqueness and significance of the resource or interest that would be affected;
  - (B) The degree to which current or future development may adversely affect the resource or interest, if the proposed facility is not built;
  - (C) Proposed measures to reduce any adverse effects on a resource or interest by avoidance of impacts;
  - (D) The magnitude of any anticipated adverse effects on a resource or interest, taking into account any proposed mitigation.

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(b) The Council shall evaluate overall public benefits by considering factors including, but not limited to, the following:

- (A) The overall environmental effects of the facility, considering both beneficial and adverse environmental effects;
- (B) The degree to which the proposed facility promotes Oregon energy policy as described in ORS 469.010 by demonstrating or advancing new efficiency or renewable technology or by expanding electric generating capacity from renewable energy sources;
- (C) Recommendations from any special advisory group designated by the Department under OAR 345-015-0115;
- (D) Evidence that the benefits are likely to occur only if the proposed facility is built;
- (E) For facilities that are subject to a need standard, evidence underlying the Council's decision on compliance with the rules in OAR 345, Division 23, except that the Council shall not find that need for a facility is sufficient, by itself, to outweigh any adverse effects on a resource or interest affected by the proposed facility.

(3) Notwithstanding section (2) of this rule, the Council shall not apply the balancing determination to the following standards:

- (a) The organizational expertise standard described in OAR 345-022-0010;
- (b) The land use standard described in OAR 345-022-0030;
- (c) The retirement and financial assurance standard described in OAR 345-022-0050;
- (d) The need standards described in OAR 345-023-0005;
- (e) The standards for energy facilities that emit carbon dioxide described in OAR 345-024-0500 through 345-024-0720;
- (f) The protected areas standard described in OAR 345-022-0040, if the statutes or administrative rules governing the management of the protected area prohibit location of the proposed facility in that area; or
- (g) The sage-grouse specific habitat mitigation requirements under the Council's fish and wildlife habitat standard described in OAR 345-022-0060, except that the Council may apply the balancing determination to the requirements of 635-140-0025(2)(a) and (b) for indirect impacts on core and low density sage-grouse habitat, as defined in 635-140-0015, which are caused by transmission lines or pipelines as defined in ORS 469.300(11)(a), and by transmission lines or pipelines that are related or supporting facilities to an energy facility as defined in ORS 469.300(24), proposed to be sited entirely outside of core and low density sage-grouse habitat.

(4) In making determinations regarding compliance with statutes, rules and ordinances normally administered by other agencies or compliance with requirements of the Council statutes if other agencies have special expertise, the Department of Energy shall consult with such other agencies during

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the notice of intent, site certificate application and site certificate amendment processes. Nothing in these rules is intended to interfere with the state's implementation of programs delegated to it by the federal government.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501, ORS 469.503, ORS 469.504, ORS 469.505

### ~~345-022-0005 – Agency Coordination~~

Commented [TJ7]: Moved to 345-021-0005

~~Each agency with legal authority to implement or enforce state statutes, state administrative rules or local government ordinances that must be satisfied in order for the Council to issue a site certificate for a proposed facility is encouraged to conduct its review of the application for a site certificate and other permit applications for the proposed facility filed with the agency on a timeline and in a manner that enables the agency to:~~

~~(1) Make recommendations to the Department of Energy and Council about compliance of the applications with the state statutes, administrative rules or ordinances administered by the agency.~~

~~(2) Recommend conditions for inclusion in the site certificate that will ensure compliance with such statutes, rules and ordinances.~~

~~(3) Present testimony and evidence at the contested case hearing on the site certificate application.~~

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501, ORS 469.503, ORS 469.504, ORS 469.505

### 345-022-0010 - Organizational Expertise

(1) To issue a site certificate, the Council must find that the applicant has the organizational expertise to construct, operate and retire the proposed facility in compliance with Council standards and conditions of the site certificate. To conclude that the applicant has this expertise, the Council must find that the applicant has demonstrated the ability to design, construct and operate the proposed facility in compliance with site certificate conditions and in a manner that protects public health and safety and has demonstrated the ability to restore the site to a useful, non- hazardous condition. The Council may consider the applicant's experience, the applicant's access to technical expertise and the applicant's past performance in constructing, operating and retiring other facilities, including, but not limited to, the number and severity of regulatory citations issued to the applicant.

(2) The Council may base its findings under section (1) on a rebuttable presumption that an applicant has organizational, managerial and technical expertise, if the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program.

(3) If the applicant does not itself obtain a state or local government permit or approval for which the Council would ordinarily determine compliance but instead relies on a permit or approval issued to a third party, the Council, to issue a site certificate, must find that the third party has, or has a reasonable likelihood of obtaining, the necessary permit or approval, and that the applicant has, or has a reasonable likelihood of entering into, a contractual or other arrangement with the third party for access to the resource or service secured by that permit or approval.

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(4) If the applicant relies on a permit or approval issued to a third party and the third party does not have the necessary permit or approval at the time the Council issues the site certificate, the Council may issue the site certificate subject to the condition that the certificate holder shall not commence construction or operation as appropriate until the third party has obtained the necessary permit or approval and the applicant has a contract or other arrangement for access to the resource or service secured by that permit or approval.

(5) To demonstrate that the standard outlined in (1) through (4) has been met, the Applicant must submit:

(a) ~~Exhibit A.~~ Information about the applicant and participating persons, including:

(A) The name and address of the applicant including all co-owners of the proposed facility, the name, mailing address, email address and telephone number of the contact person for the application, and if there is a contact person other than the applicant, the name, title, mailing address, email address and telephone number of that person;

(B) The contact name, mailing address, email address and telephone number of all participating persons, other than individuals, including but not limited to any parent corporation of the applicant, persons upon whom the applicant will rely for third-party permits or approvals related to the facility, and, if known, other persons upon whom the applicant will rely in meeting any facility standard adopted by the Council;

(C) If the applicant is a corporation:

(i) The full name, official designation, mailing address, email address and telephone number of the officer responsible for submitting the application;

(ii) The date and place of its incorporation;

(iii) A copy of its articles of incorporation and its authorization for submitting the application; and

(iv) In the case of a corporation not incorporated in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon;

(D) If the applicant is a wholly owned subsidiary of a company, corporation or other business entity, in addition to the information required by paragraph (C), the full name and business address of each of the applicant's full or partial owners;

(E) If the applicant is an association of citizens, a joint venture or a partnership:

(i) The full name, official designation, mailing address, email address and telephone number of the person responsible for submitting the application;

(ii) The name, business address and telephone number of each person participating in the association, joint venture or partnership and the percentage interest held by each;

(iii) Proof of registration to do business in Oregon;

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(iv) A copy of its articles of association, joint venture agreement or partnership agreement and a list of its members and their cities of residence; and

(v) If there are no articles of association, joint venture agreement or partnership agreement, the applicant must state that fact over the signature of each member;

(F) If the applicant is a public or governmental entity:

(i) The full name, official designation, mailing address, email address and telephone number of the person responsible for submitting the application; and

(ii) Written authorization from the entity's governing body to submit an application;

(G) If the applicant is an individual, the individual's mailing address, email address and telephone number; and

(H) If the applicant is a limited liability company:

(i) The full name, official designation, mailing address, email address and telephone number of the officer responsible for submitting the application;

(ii) The date and place of its formation;

(iii) A copy of its articles of organization and its authorization for submitting the application; and

(iv) In the case of a limited liability company not registered in Oregon, the name and address of the resident attorney-in-fact in this state and proof of registration to do business in Oregon.

~~(b) Exhibit D.~~ Information about the organizational expertise of the applicant to construct and operate the proposed facility, ~~providing evidence to support a finding by the Council as required by OAR 345-022-0010,~~ including:

(A) The applicant's previous experience, if any, in constructing and operating similar facilities;

(B) The qualifications of the applicant's personnel who will be responsible for constructing and operating the facility, to the extent that the identities of such personnel are known when the application is submitted;

(C) The qualifications of any architect, engineer, major component vendor, or prime contractor upon whom the applicant will rely in constructing and operating the facility, to the extent that the identities of such persons are known when the application is submitted;

(D) The past performance of the applicant, including but not limited to the number and severity of any regulatory citations in constructing or operating a facility, type of equipment, or process similar to the proposed facility;

(E) If the applicant has no previous experience in constructing or operating similar facilities and has not identified a prime contractor for construction or operation of the proposed facility,

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other evidence that the applicant can successfully construct and operate the proposed facility. The applicant may include, as evidence, a warranty that it will, through contracts, secure the necessary expertise;

(F) If the applicant has an ISO 9000 or ISO 14000 certified program and proposes to design, construct and operate the facility according to that program, a description of the program; and

(G) If the applicant relies on mitigation to demonstrate compliance with any standards of Division 22 or 24 of this chapter, evidence that the applicant can successfully complete such proposed mitigation, including past experience with other projects and the qualifications and experience of personnel upon whom the applicant will rely, to the extent that the identities of such persons are known at the date of submittal.

(ec) ~~Exhibit E~~ Information about permits needed for construction and operation of the facility, including:

(A) Identification of all federal, state and local government permits related to the siting of the proposed facility, a legal citation of the statute, rule or ordinance governing each permit, and the name, mailing address, email address and telephone number of the agency or office responsible for each permit;

(B) A description of each permit, the reasons the permit is needed for construction or operation of the facility and the applicant's analysis of whether the permit should or should not be included in and governed by the site certificate;

(C) For any state or local government agency permits, licenses or certificates that are proposed to be included in and governed by the site certificate, evidence to support findings by the Council that construction and operation of the proposed facility will comply with the statutes, rules and standards applicable to the permit. The applicant may show this evidence:

(i) In Exhibit J for permits related to wetlands; or

(ii) In Exhibit O for permits related to water rights;

(D) For federally-delegated permit applications, evidence that the responsible agency has received a permit application and the estimated date when the responsible agency will complete its review and issue a permit decision;

(E) If the applicant relies on a state or local government permit or approval issued to a third party, identification of any such third-party permit and for each:

(i) Evidence that the applicant has, or has a reasonable likelihood of entering into, a contract or other agreement with the third party for access to the resource or service to be secured by that permit;

(ii) Evidence that the third party has, or has a reasonable likelihood of obtaining, the necessary permit;



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(iii) An assessment of the impact of the proposed facility on any permits that a third party has obtained and on which the applicant relies to comply with any applicable Council standard;

(F) If the applicant relies on a federally-delegated permit issued to a third party, identification of any such third-party permit and for each:

(i) Evidence that the applicant has, or has a reasonable likelihood of entering into, a contract or other agreement with the third party for access to the resource or service to be secured by that permit;

(ii) Evidence that the responsible agency has received a permit application;

(iii) The estimated the date when the responsible agency will complete its review and issue a permit decision; and

(G) The applicant's proposed monitoring program, if any, for compliance with permit conditions.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### **345-022-0020 - Structural Standard**

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that:

(a) The applicant, through appropriate site-specific study, has adequately characterized the seismic hazard risk of the site.

(b) The applicant can design, engineer, and construct the facility to avoid dangers to human safety and the environment presented by seismic hazards affecting the site, as identified in subsection (1)(a).

(c) The applicant, through appropriate site-specific study, has adequately characterized the potential geological and soils hazards of the site and its vicinity that could, in the absence of a seismic event, adversely affect, or be aggravated by, the construction and operation of the proposed facility; and

(d) The applicant can design, engineer and construct the facility to avoid dangers to human safety and the environment presented by the hazards identified in subsection (c).

(2) The Council may not impose the Structural Standard in section (1) to approve or deny an application for an energy facility that would produce power from wind, solar or geothermal energy. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may not impose the Structural Standard in section (1) to deny an application for a special criteria facility under OAR345-015-0310. However, the Council may, to the extent it determines appropriate, apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

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(4) To demonstrate that the standard outlined in (1) through (3) has been met, the Applicant must submit

~~(h) Exhibit H. I~~ information from reasonably available sources regarding the geological and soil stability within the analysis area, ~~providing evidence to support findings by the Council as required by OAR 345-022-0020~~, including:

~~(Aa)~~ A geologic report meeting the Oregon State Board of Geologist Examiners geologic report guidelines. Current guidelines must be determined based on consultation with the Oregon Department of Geology and Mineral Industries, as described in paragraph (B) of this subsection;

~~(bB)~~ A summary of consultation with the Oregon Department of Geology and Mineral Industries regarding the appropriate methodology and scope of the seismic hazards and geology and soil-related hazards assessments, and the appropriate site-specific geotechnical work that must be performed before submitting the application for the Department to determine that the application is complete;

~~(cC)~~ A description and schedule of site-specific geotechnical work that will be performed before construction for inclusion in the site certificate as conditions;

~~(dD)~~ For all transmission lines, and for all pipelines that would carry explosive, flammable or hazardous materials, a description of locations along the proposed route where the applicant proposes to perform site specific geotechnical work, including but not limited to railroad crossings, major road crossings, river crossings, dead ends (for transmission lines), corners (for transmission lines), and portions of the proposed route where geologic reconnaissance and other site specific studies provide evidence of existing landslides, marginally stable slopes or potentially liquefiable soils that could be made unstable by the planned construction or experience impacts during the facility's operation;

~~(eE)~~ An assessment of seismic hazards, in accordance with standard-of-practice methods and best practices, that addresses all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection, and an explanation of how the applicant will design, engineer, construct, and operate the facility to avoid dangers to human safety and the environment from these seismic hazards. Furthermore, an explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters. The applicant must include proposed design and engineering features, applicable construction codes, and any monitoring and emergency measures for seismic hazards, including tsunami safety measures if the site is located in the DOGAMI-defined tsunami evacuation zone; and

~~(Ff)~~ An assessment of geology and soil-related hazards which could, in the absence of a seismic event, adversely affect or be aggravated by the construction or operation of the facility, in accordance with standard-of-practice methods and best practices, that address all issues relating to the consultation with the Oregon Department of Geology and Mineral Industries described in paragraph (B) of this subsection. An explanation of how the applicant will design, engineer,

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construct and operate the facility to adequately avoid dangers to human safety and the environment presented by these hazards, as well as:

(iA) An explanation of how the applicant will design, engineer, construct and operate the facility to integrate disaster resilience design to ensure recovery of operations after major disasters; and

(iiB) An assessment of future climate conditions for the expected life span of the proposed facility and the potential impacts of those conditions on the proposed facility.

Stat. Authority: ORS 469.470, ORS 469.501  
Stat. Implemented: ORS 469.501

### 345-022-0022 - Soil Protection

(1) To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in a significant adverse impact to soils including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills.

(2) -To demonstrate that the standard outlined in (1) has been met, the Applicant must submit:

~~(a)~~ ~~Exhibit G~~ - A materials analysis, including:

- (A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;
- (B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and
- (C) The applicant's plans to manage non-hazardous waste materials during construction and operation.

~~(b)~~ ~~Exhibit I~~ - Information from reasonably available sources regarding soil conditions and uses in the analysis area, providing evidence to support findings by the Council as required by OAR 345-022-0022, including:

- (A) Identification and description of the major soil types in the analysis area;
- (B) Identification and description of current land uses in the analysis area, such as growing crops, that require or depend on productive soils;
- (C) Identification and assessment of significant potential adverse impact to soils from construction, operation and retirement of the facility, including, but not limited to, erosion and chemical factors such as salt deposition from cooling towers, land application of liquid effluent, and chemical spills;
- (D) A description of any measures the applicant proposes to avoid or mitigate adverse impact to soils; and

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(E) The applicant’s proposed monitoring program, if any, for adverse impact to soils during construction and operation.

Stat. Authority: ORS 469.470, ORS 469.501  
Stat. Implemented: ORS 469.501

### 345-022-0030 - Land Use

(1) To issue a site certificate, the Council must find that the proposed facility complies with the statewide planning goals adopted by the Land Conservation and Development Commission.

(2) The Council shall find that a proposed facility complies with section (1) if:

(a) The applicant elects to obtain local land use approvals under ORS 469.504(1)(a) and the Council finds that the facility has received local land use approval under the acknowledged comprehensive plan and land use regulations of the affected local government; or

(b) The applicant elects to obtain a Council determination under ORS 469.504(1)(b) and the Council determines that:

(A) The proposed facility complies with applicable substantive criteria as described in section (3) and the facility complies with any Land Conservation and Development Commission administrative rules and goals and any land use statutes directly applicable to the facility under ORS 197.646(3);

(B) For a proposed facility that does not comply with one or more of the applicable substantive criteria as described in section (3), the facility otherwise complies with the statewide planning goals or an exception to any applicable statewide planning goal is justified under section (4); or

(C) For a proposed facility that the Council decides, under sections (3) or (6), to evaluate against the statewide planning goals, the proposed facility complies with the applicable statewide planning goals or that an exception to any applicable statewide planning goal is justified under section (4).

(3) As used in this rule, the “applicable substantive criteria” are criteria from the affected local government’s acknowledged comprehensive plan and land use ordinances that are required by the statewide planning goals and that are in effect on the date the applicant submits the application. If the special advisory group recommends applicable substantive criteria, as described under OAR 345-015-0180, the Council shall apply them. If the special advisory group does not recommend applicable substantive criteria, the Council shall decide either to make its own determination of the applicable substantive criteria and apply them or to evaluate the proposed facility against the statewide planning goals.

(4) The Council may find goal compliance for a proposed facility that does not otherwise comply with one or more statewide planning goals by taking an exception to the applicable goal. Notwithstanding the requirements of ORS 197.732, the statewide planning goal pertaining to the exception process or

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any rules of the Land Conservation and Development Commission pertaining to the exception process, the Council may take an exception to a goal if the Council finds:

- (a) The land subject to the exception is physically developed to the extent that the land is no longer available for uses allowed by the applicable goal;
- (b) The land subject to the exception is irrevocably committed as described by the rules of the Land Conservation and Development Commission to uses not allowed by the applicable goal because existing adjacent uses and other relevant factors make uses allowed by the applicable goal impracticable; or
- (c) The following standards are met:
  - (A) Reasons justify why the state policy embodied in the applicable goal should not apply;
  - (B) The significant environmental, economic, social and energy consequences anticipated as a result of the proposed facility have been identified and adverse impacts will be mitigated in accordance with rules of the Council applicable to the siting of the proposed facility; and
  - (C) The proposed facility is compatible with other adjacent uses or will be made compatible through measures designed to reduce adverse impacts.

(5) If the Council finds that applicable substantive local criteria and applicable statutes and state administrative rules would impose conflicting requirements, the Council shall resolve the conflict consistent with the public interest. In resolving the conflict, the Council cannot waive any applicable state statute.

(6) If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(11)(a)(C) to (E) or for a related or supporting facility that does not pass through more than one local government jurisdiction or more than three zones in any one jurisdiction, the Council shall apply the criteria recommended by the special advisory group. If the special advisory group recommends applicable substantive criteria for an energy facility described in ORS 469.300(11)(a)(C) to (E) or a related or supporting facility that passes through more than one jurisdiction or more than three zones in any one jurisdiction, the Council shall review the recommended criteria and decide whether to evaluate the proposed facility against the applicable substantive criteria recommended by the special advisory group, against the statewide planning goals or against a combination of the applicable substantive criteria and statewide planning goals. In making the decision, the Council shall consult with the special advisory group, and shall consider:

- (a) The number of jurisdictions and zones in question;
- (b) The degree to which the applicable substantive criteria reflect local government consideration of energy facilities in the planning process; and
- (c) The level of consistence of the applicable substantive criteria from the various zones and jurisdictions.

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(7) To demonstrate that the standard outlined in (1) through (6) has been met, the Applicant must submit:

(a) Information about the proposed facility's compliance with the statewide planning goals adopted by the Land Conservation and Development Commission, providing evidence to support a finding by the Council as required by ORAR 345-022-0030.

(b) The applicant must state whether the applicant elects to address the Council's land use standard by obtaining local land use approvals under ORS 469.504(1)(a) or by obtaining a Council determination under ORS 469.504(1)(b). An applicant may elect different processes for an energy facility and a related or supporting facility but may not otherwise combine the two processes. Once the applicant has made an election, the applicant may not amend the application to make a different election. In this subsection, "affected local government" means a local government that has land use jurisdiction over any part of the proposed site of the facility. In the application, the applicant must:

- (A) Include a map showing the comprehensive plan designations and land use zones in the analysis area;
- (B) If the applicant elects to obtain local land use approvals:
  - (i) Identify the affected local governments from which land use approvals will be sought;
  - (ii) Describe the land use approvals required in order to satisfy the Council's land use standard;
  - (iii) Describe the status of the applicant's application for each land use approval;
  - (iv) Provide an estimate of time for issuance of local land use approvals;
- (C) If the applicant elects to obtain a Council determination on land use:
  - (i) Identify the affected local governments;
  - (ii) Identify the applicable substantive criteria from the affected local government's acknowledged comprehensive plan and land use regulations that are required by the statewide planning goals and that are in effect on the date the application is submitted and describe how the proposed facility complies with those criteria;
  - (iii) Identify all Land Conservation and Development Commission administrative rules, statewide planning goals and land use statutes directly applicable to the facility under ORS 197.646(3) and describe how the proposed facility complies with those rules, goals and statutes;
  - (iv) If the proposed facility might not comply with all applicable substantive criteria, identify the applicable statewide planning goals and describe how the proposed facility complies with those goals;
  - (v) If the proposed facility might not comply with all applicable substantive criteria or applicable statewide planning goals, describe why an exception to any applicable statewide

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planning goal is justified, providing evidence to support all findings by the Council required under ORS 469.504(2); and

(D) If the proposed facility will be located on federal land:

- (i) Identify the applicable land management plan adopted by the federal agency with jurisdiction over the federal land;
- (ii) Explain any differences between state or local land use requirements and federal land management requirements;
- (iii) Describe how the proposed facility complies with the applicable federal land management plan;
- (iv) Describe any federal land use approvals required for the proposed facility and the status of application for each required federal land use approval;
- (v) Provide an estimate of time for issuance of federal land use approvals; and
- (vi) If federal law or the land management plan conflicts with any applicable state or local land use requirements, explain the differences in the conflicting requirements, state whether the applicant requests Council waiver of the land use standard described under paragraph (B) or (C) of this subsection and explain the basis for a waiver.

(c) A materials analysis, including:

(A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;

(B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and

(C) The applicant's plans to manage non-hazardous waste materials during construction and operation.

Stat. Authority: ORS 469.470  
Stat. Implemented: ORS 469.504

### 345-022-0040 - Protected Areas

1) To issue a site certificate, the Council must find:

- (a) The proposed facility will not be located within the boundaries of a protected area designated on or before the date the application for site certificate or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363;
- (b) The design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to a protected area designated on or before the date the application for site certificate or request for amendment was determined to be complete under OAR 345-015-0190 or 345-027-0363.

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(2) Notwithstanding section (1)(a), the Council may issue a site certificate for:

(a) A facility that includes a transmission line, natural gas pipeline, or water pipeline located in a protected area, if the Council determines that other reasonable alternative routes or sites have been studied and that the proposed route or site is likely to result in fewer adverse impacts to resources or interests protected by Council standards; or

(b) Surface facilities related to an underground gas storage reservoir that have pipelines and injection, withdrawal or monitoring wells and individual wellhead equipment and pumps located in a protected area, if the Council determines that other alternative routes or sites have been studied and are unsuitable.

(3) The provisions of section (1) do not apply to:

(a) A transmission line routed within 500 feet of an existing utility right-of-way containing at least one transmission line with a voltage rating of 115 kilovolts or higher; or

(b) A natural gas pipeline routed within 500 feet of an existing utility right of way containing at least one natural gas pipeline of 8 inches or greater diameter that is operated at a pressure of 125 psig.

(4) The Council shall apply the version of this rule adopted under Administrative Order EFSC 1-2007, filed and effective May 15, 2007, to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 before the effective date of this rule. Nothing in this section waives the obligations of the certificate holder and Council to abide by local ordinances, state law, and other rules of the Council for the construction and operation of energy facilities in effect on the date the site certificate or amended site certificate is executed.

(5) To demonstrate that the standard outlined in (1) through (4) has been met, the Applicant must submit information about the potential impacts of the proposed facility on protected areas in the analysis area, providing evidence to support a finding by the Council as required by ~~OAR 345-022-0040~~ this rule, including:

(a) A list of all protected areas within the analysis area identifying:

(i) The distance and direction of the protected area from the proposed facility

(ii) The basis for protection by reference to a specific subsection of OAR 345-001-0010(26); and

(iii) The name, mailing address, phone number, and email address of the land management agency or organization with jurisdiction over the protected area;

(b) A map showing the location of the proposed facility in relation to the protected areas; and

(c) A description of significant potential impacts of the proposed facility, if any, on the protected areas including, but not limited to, potential impacts such as:

(i) Noise resulting from facility construction or operation;



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- (B~~ii~~) Increased traffic resulting from facility construction or operation;
- (C~~iii~~) Water use during facility construction or operation;
- (D~~iv~~) Wastewater disposal resulting from facility construction or operation;
- (E~~v~~) Visual impacts of facility structures or plumes, including, but not limited to, changes in landscape character or quality; and
- (F~~vi~~) Visual impacts from air emissions resulting from facility construction or operation, including, but not limited to, impacts on Class 1 Areas as described in OAR 340-204-0050.

(d) A materials analysis, including:

- (A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;
- (B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and
- (C) The applicant's plans to manage non-hazardous waste materials during construction and operation.

Stat. Authority: ORS 469.470, ORS 469.501  
Stat. Implemented: ORS 469.501

### 345-022-0050 - Retirement and Financial Assurance

To issue a site certificate, the Council must find that:

- (1) The site, taking into account mitigation, can be restored adequately to a useful, non-hazardous condition following permanent cessation of construction or operation of the facility.
- (2) To demonstrate that the standard outlined in (1) has been met, the Applicant must submit:

~~(\*) Exhibit X-1~~ information about site restoration, providing evidence to support a finding by the Council as required by ~~OAR 345-022-0050(1) this rule~~. The applicant must include:

- (A~~a~~) The estimated useful life of the proposed facility;
- (b~~b~~) Specific actions and tasks to restore the site to a useful, non-hazardous condition;
- (c~~c~~) An estimate, in current dollars, of the total and unit costs of restoring the site to a useful, non-hazardous condition;
- (d~~d~~) A discussion and justification of the methods and assumptions used to estimate site restoration costs; and
- (E~~e~~) For facilities that might produce site contamination by hazardous materials, a proposed monitoring plan, such as periodic environmental site assessment and reporting, or an explanation why a monitoring plan is unnecessary.

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(3) The applicant has a reasonable likelihood of obtaining a bond or letter of credit in a form and amount satisfactory to the Council to restore the site to a useful, non- hazardous condition.

(4) To demonstrate that the standard outlined in (3) has been met, the Applicant must submit:

~~(m) Exhibit M-1~~ information:

~~(a)~~ about the applicant's financial capability, providing evidence to support a finding by the Council as required by OAR 345-022-0050(2). Nothing in this ~~sub~~section requires the disclosure of information or records protected from public disclosure by any provision of state or federal law. The applicant must include:

~~(A)~~ An opinion or opinions from legal counsel stating that, to counsel's best knowledge, the applicant has the legal authority to construct and operate the facility without violating its bond indenture provisions, articles of incorporation, common stock covenants, or similar agreements;

~~(B)~~ The type and amount of the applicant's proposed bond or letter of credit to meet the requirements of OAR 345-022-0050; and

~~(C)~~ Evidence that the applicant has a reasonable likelihood of obtaining the proposed bond or letter of credit in the amount proposed in paragraph (B), before beginning construction of the facility.

(b) A materials analysis, including:

(A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;

(B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and

(C) The applicant's plans to manage non-hazardous waste materials during construction and operation.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### **345-022-0060 - Fish and Wildlife Habitat**

To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are consistent with:

(1) the general fish and wildlife habitat mitigation goals and standards of OAR 635-415-0025(1) through (6) in effect as of February 24, 2017, and

(2) for energy facilities that impact sage-grouse habitat, the sage-grouse specific habitat mitigation requirements of the Greater Sage-Grouse Conservation Strategy for Oregon at OAR 635-415-0025(7) and OAR 635-140-0000 through -0025 in effect as of February 24, 2017.

(3) To demonstrate that the standard outlined in (1) through (2) has been met, the Applicant must submit:

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~~(p)~~ ~~Exhibit P-1~~ information about the fish and wildlife habitat and the fish and wildlife species, other than the species addressed in ~~subsection (q)~~ ~~OAR-022-0070(3)~~ ~~(the Threatened and Endangered Species Exhibit)~~ that could be affected by the proposed facility, providing evidence to support a finding by the Council as required by ~~OAR 345-022-0060~~ ~~this rule~~. The applicant must include:

~~(a)~~ ~~A~~ A description of biological and botanical surveys performed that support the information in this exhibit, including a discussion of the timing and scope of each survey;

~~(b)~~ ~~B~~ Identification of all fish and wildlife habitat in the analysis area, classified by the general fish and wildlife habitat categories as set forth in OAR 635-415-0025 and the sage-grouse specific habitats described in the Greater Sage-Grouse Conservation Strategy for Oregon at OAR 635-140-0000 through 635-140-0025 (core, low density, and general habitats), and a description of the characteristics and condition of that habitat in the analysis area, including a table of the areas of permanent disturbance and temporary disturbance (in acres) in each habitat category and subtype;

~~(c)~~ ~~C~~ A map showing the locations of the habitat identified in ~~(B)~~;

~~(d)~~ ~~D~~ Based on consultation with the Oregon Department of Fish and Wildlife (ODFW) and appropriate field study and literature review, identification of all State Sensitive Species that might be present in the analysis area and a discussion of any site-specific issues of concern to ODFW;

~~(e)~~ ~~E~~ A baseline survey of the use of habitat in the analysis area by species identified in ~~(D)~~ performed according to a protocol approved by the Department and ODFW;

~~(f)~~ ~~F~~ A description of the nature, extent and duration of potential adverse impacts on the habitat identified in ~~(B)~~ and species identified in ~~(D)~~ that could result from construction, operation and retirement of the proposed facility;

~~(g)~~ ~~G~~ A description of any measures proposed by the applicant to avoid, reduce, or mitigate the potential adverse impacts described in ~~(F)~~ in accordance with the general fish and wildlife habitat mitigation goals and standards described in OAR 635-415-0025 and a description of any measures proposed by the applicant to avoid, minimize, and provide compensatory mitigation for the potential adverse impacts described in ~~(F)~~ in accordance with the sage-grouse specific habitat mitigation requirements described in the Greater Sage-Grouse Conservation Strategy for Oregon at OAR 635-140-0000 through 635-140-0025, and a discussion of how the proposed measures would achieve those goals and requirements; and

~~(h)~~ ~~H~~ A description of the applicant's proposed monitoring plans to evaluate the success of the measures described in ~~(G)~~.

Stat. Authority: ORS 469.470, ORS 469.501  
Stat. Implemented: ORS 469.501

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### 345-022-0070 - Threatened and Endangered Species

To issue a site certificate, the Council, after consultation with appropriate state agencies, must find that:

(1) For plant species that the Oregon Department of Agriculture has listed as threatened or endangered under ORS 564.105(2), the design, construction and operation of the proposed facility, taking into account mitigation:

(a) Are consistent with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3); or

(b) If the Oregon Department of Agriculture has not adopted a protection and conservation program, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

(2) For wildlife species that the Oregon Fish and Wildlife Commission has listed as threatened or endangered under ORS 496.172(2), the design, construction and operation of the proposed facility, taking into account mitigation, are not likely to cause a significant reduction in the likelihood of survival or recovery of the species.

(3) To demonstrate that the standard outlined in (1) through (2) has been met, the Applicant must submit:

(g) Exhibit Q-1 information about threatened and endangered plant and animal species that may be affected by the proposed facility, providing evidence to support a finding by the Council as required by OAR 345-022-0070. The applicant must include:

(Aa) Based on appropriate literature and field study, identification of all threatened or endangered species listed under ORS 496.172(2) and ORS 564.105(2) that may be affected by the proposed facility;

(bB) For each species identified under (Aa), a description of the nature, extent, locations and timing of its occurrence in the analysis area and how the facility might adversely affect it;

(dC) For each species identified under (Aa), a description of measures proposed by the applicant, if any, to avoid or reduce adverse impact;

(dD) For each plant species identified under (Aa), a description of how the proposed facility, including any mitigation measures, complies with the protection and conservation program, if any, that the Oregon Department of Agriculture has adopted under ORS 564.105(3);

(eE) For each plant species identified under paragraph (Aa), if the Oregon Department of Agriculture has not adopted a protection and conservation program under ORS 564.105(3), a description of significant potential impacts of the proposed facility on the continued existence of the species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species;

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(F) For each animal species identified under (Aa), a description of significant potential impacts of the proposed facility on the continued existence of such species and on the critical habitat of such species and evidence that the proposed facility, including any mitigation measures, is not likely to cause a significant reduction in the likelihood of survival or recovery of the species; and

(G) The applicant's proposed monitoring program, if any, for impacts to threatened and endangered species.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### 345-022-0080 - Scenic Resources

(1) To issue a site certificate, the Council must find that the design, construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse visual impacts to significant or important scenic resources.

(2) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). In issuing such a site certificate, the Council may impose conditions of approval to minimize the potential significant adverse visual impacts from the design, construction, and operation of the facility on significant or important scenic resources.

(3) A scenic resource is considered to be significant or important if it is identified as significant or important in a current land use management plan adopted by one or more local, tribal, state, regional, or federal government or agency.

(4) The Council shall apply the version of this rule adopted under Administrative Order EFSC 1-2007, filed and effective May 15, 2007, to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 before the effective date of this rule. Nothing in this section waives the obligations of the certificate holder and Council to abide by local ordinances, state law, and other rules of the Council for the construction and operation of energy facilities in effect on the date the site certificate or amended site certificate is executed.

(5) To demonstrate that the standard outlined in (1) through (4) has been met, the Applicant must submit:

(a) ~~Exhibit R~~. An analysis of potential visual impacts of the proposed facility, if any, on significant or important scenic resources within the analysis area, providing evidence to support a finding by the Council under OAR 345-022-0080, including:

(A) An inventory of scenic resources identified as significant or important in a land use management plan adopted by one or more local, tribal, state, regional, or federal government or agency applicable to lands within the analysis area for scenic resources. The applicant must provide a list of the land management plans reviewed in developing the inventory and a copy of the relevant portion of the plans;

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- (B) A map or maps showing the location of the scenic resources described under paragraph (A), in relation to the site of the proposed facility;
- (C) A description of the methodology the applicant used to identify and assess potential visual impacts to the scenic resources identified in paragraph (A);
- (D) Identification of potential visual impacts to the scenic resources identified in paragraph (A), including, but not limited to:
  - (i) Loss of vegetation or alteration of the landscape as a result of construction or operation;
  - (ii) Visual impacts of facility structures or plumes, including but not limited to, changes in landscape character or quality; and
  - (iii) Loss of visibility due to air emissions or other pollution resulting from the construction or operation of the proposed facility;
- (E) An assessment of the significance of the visual impacts described under paragraph (D);
- (F) A description of the measures the applicant proposes to avoid, reduce or otherwise mitigate any potential significant adverse visual impacts; and
- (G) The applicant's proposed monitoring program, if any, for impacts to scenic resources.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### 345-022-0090 - Historic, Cultural and Archaeological Resources

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impacts to:

- (a) Historic, cultural or archaeological resources that have been listed on, or would likely be listed on the National Register of Historic Places;
- (b) For a facility on private land, archaeological objects, as defined in ORS 358.905(1)(a), or archaeological sites, as defined in ORS 358.905(1)(c); and
- (c) For a facility on public land, archaeological sites, as defined in ORS 358.905(1)(c).

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(4) To demonstrate that the standard outlined in (1) through (3) has been met, the Applicant must submit ~~(a) Exhibit S-1~~ information about historic, cultural and archaeological resources.

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(a) Information concerning the location of archaeological sites or objects may be exempt from public disclosure under ORS 192.345(11). The applicant must submit such information separately, clearly marked as “confidential,” and shall request that the Department and the Council keep the information confidential to the extent permitted by law.

(b) The applicant must include information in ~~Exhibit this exhibit 5~~ or in confidential submissions providing evidence to support a finding by the Council as required by OAR 345-022-0090, including:

(A) Historic and cultural resources within the analysis area that have been listed, or would likely be eligible for listing, on the National Register of Historic Places;

(B) For private lands, archaeological objects, as defined in ORS 358.905(1)(a), and archaeological sites, as defined in ORS 358.905(1)(c), within the analysis area;

(C) For public lands, archaeological sites, as defined in ORS 358.905(1)(c), within the analysis area;

(D) The significant potential impacts, if any, of the construction, operation and retirement of the proposed facility on the resources described in paragraphs (A), (B) and (C) and a plan for protection of those resources that includes at least the following:

(i) A description of any discovery measures, such as surveys, inventories, and limited subsurface testing work, recommended by the State Historic Preservation Officer or the National Park Service of the U.S. Department of Interior for the purpose of locating, identifying and assessing the significance of resources listed in paragraphs (A), (B) and (C);

(ii) The results of the discovery measures described in subparagraph (i), together with an explanation by the applicant of any variations from the survey, inventory, or testing recommended;

(iii) A list of measures to prevent destruction of the resources identified during surveys, inventories and subsurface testing referred to in subparagraph (i) or discovered during construction; and

(E) The applicant’s proposed monitoring program, if any, for impacts to historic, cultural and archaeological resources during construction and operation of the proposed facility.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### 345-022-0100 - Recreation

(1) To issue a site certificate, the Council must find that the design, construction and operation of a facility, taking into account mitigation, are not likely to result in a significant adverse impact to important recreational opportunities.

(2) The Council must consider the following factors in judging the importance of a recreational opportunity:

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- (a) Any special designation or management of the location;
- (b) The degree of demand;
- (c) Outstanding or unusual qualities;
- (d) Availability or rareness;
- (e) Irreplaceability or irretrievability of the opportunity.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). In issuing such a site certificate, the Council may impose conditions of approval to minimize the potential significant adverse impacts from the design, construction, and operation of the facility on important recreational opportunities.

(4) The Council must apply the version of this rule adopted under Administrative Order EFSC 1-2002, filed and effective April 3, 2002, to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 before the effective date of this rule. Nothing in this section waives the obligations of the certificate holder and Council to abide by local ordinances, state law, and other rules of the Council for the construction and operation of energy facilities in effect on the date the site certificate or amended site certificate is executed.

(5) To demonstrate that the standard outlined in (1) through (4) has been met, the Applicant must submit :

~~(t) Exhibit T.~~ Information about the impacts the proposed facility would have on important recreational opportunities in the analysis area, providing evidence to support a finding by the Council as required by OAR 345-022-0100, including:

- ~~(Aa)~~ A description of the recreational opportunities in the analysis area that includes information on the factors listed in OAR 345-022-0100(1) as a basis for identifying important recreational opportunities;
- ~~(bB)~~ A description of any potential adverse impacts to the important opportunities identified in ~~paragraph (aA)~~ including, but not limited to:
  - ~~(A)~~ Direct or indirect loss of a recreational opportunity as a result of facility construction or operation;
  - ~~(#B)~~ Noise resulting from facility construction or operation;
  - ~~(##C)~~ Increased traffic resulting from facility construction or operation;
  - ~~(#D)~~ Visual impacts of facility structures or plumes, including but not limited to, changes in landscape character or quality;
- ~~(cC)~~ An evaluation of the significance of the potential adverse impacts identified under ~~paragraph (Bb)~~;



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~~(Dd)~~ A description of any measures the applicant proposes to avoid, reduce or otherwise mitigate any significant adverse impacts identified in ~~paragraph (Bb)~~

~~(Ee)~~ A map of the analysis area showing the locations of important recreational opportunities identified in ~~paragraph (Ab)~~; and

~~(Ff)~~ The applicant's proposed monitoring program, if any, for impacts to important recreational opportunities.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### 345-022-0110 - Public Services

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that the construction and operation of the facility, taking into account mitigation, are not likely to result in significant adverse impact to the ability of public and private providers within the analysis area described in the project order to provide: sewers and sewage treatment, water, storm water drainage, solid waste management, housing, traffic safety, police and fire protection, health care and schools.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(4) To demonstrate that the standard outlined in (1) through (3) has been met, the Applicant must submit:

~~(4a) Exhibit U.~~ Information about significant potential adverse impacts of construction and operation of the proposed facility on the ability of public and private providers in the analysis area to provide the services listed in OAR 345-022-0110, providing evidence to support a finding by the Council as required by OAR 345-022-0110. The applicant must include:

(A) The important assumptions the applicant used to evaluate potential impacts;

(B) Identification of the public and private providers in the analysis area that would likely be affected;

(C) A description of any likely adverse impact to the ability of the providers identified in (B) to provide the services listed in OAR 345-022-0110;

(D) Evidence that adverse impacts described in (C) are not likely to be significant, taking into account any measures the applicant proposes to avoid, reduce or otherwise mitigate the impacts; and

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(E) The applicant's proposed monitoring program, if any, for impacts to the ability of the providers identified in (B) to provide the services listed in OAR 345-022-0110.

(b) A materials analysis, including:

(A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;

(B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and

(C) The applicant's plans to manage non-hazardous waste materials during construction and operation.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### **345-022-0115 - Wildfire Prevention and Risk Mitigation**

(1) To issue a site certificate, the Council must find by way of supporting evidence from the applicant, that:

(a) The applicant has adequately characterized wildfire risk within the analysis area using current data from reputable sources, by identifying:

(A) Baseline wildfire risk, based on factors that are expected to remain fixed for multiple years, including but not limited to topography, vegetation, existing infrastructure, and climate;

(B) Seasonal wildfire risk, based on factors that are expected to remain fixed for multiple months but may be dynamic throughout the year, including but not limited to, cumulative precipitation and fuel moisture content;

(C) Areas subject to a heightened risk of wildfire, based on the information provided under paragraphs (A) and (B) of this subsection;

(D) High-fire consequence areas, including but not limited to areas containing residences, critical infrastructure, recreation opportunities, timber and agricultural resources, and fire-sensitive wildlife habitat; and

(E) All data sources and methods used to model and identify risks and areas under paragraphs (A) through (D) of this subsection.

(b) That the proposed facility will be designed, constructed, and operated in compliance with a Wildfire Mitigation Plan approved by the Council. The Wildfire Mitigation Plan must, at a minimum:

(A) Identify areas within the site boundary that are subject to a heightened risk of wildfire, using current data from reputable sources, and discuss data and methods used in the analysis;

(B) Describe the procedures, standards, and time frames that the applicant will use to inspect facility components and manage vegetation in the areas identified under subsection (a) of this section;

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(C) Identify preventative actions and programs that the applicant will carry out to minimize the risk of facility components causing wildfire, including procedures that will be used to adjust operations during periods of heightened wildfire risk;

(D) Identify procedures to minimize risks to public health and safety, the health and safety of responders, and damages to resources protected by Council standards in the event that a wildfire occurs at the facility site, regardless of ignition source; and

(E) Describe methods the applicant will use to ensure that updates of the plan incorporate best practices and emerging technologies to minimize and mitigate wildfire risk.

(2) The Council may issue a site certificate without making the findings under section (1) if it finds that the facility is subject to a Wildfire Protection Plan that has been approved in compliance with OAR chapter 860, division 300.

(3) This Standard does not apply to the review of any Application for Site Certificate or Request for Amendment that was determined to be complete under OAR 345-015-0190 or 345-027-0363 on or before the effective date of this rule.

Statutory/Other Authority: ORS 469.470 & 469.501  
Statutes/Other Implemented: 469.501

### 345-022-0120 - Waste Minimization

(1) Except for facilities described in sections (2) and (3), to issue a site certificate, the Council must find that, to the extent reasonably practicable:

(a) The applicant's solid waste and wastewater plans are likely to minimize generation of solid waste and wastewater in the construction and operation of the facility, and when solid waste or wastewater is generated, to result in recycling and reuse of such wastes;

(b) The applicant's plans to manage the accumulation, storage, disposal and transportation of waste generated by the construction and operation of the facility are likely to result in minimal adverse impact on surrounding and adjacent areas.

(2) The Council may issue a site certificate for a facility that would produce power from wind, solar or geothermal energy without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(3) The Council may issue a site certificate for a special criteria facility under OAR 345-015-0310 without making the findings described in section (1). However, the Council may apply the requirements of section (1) to impose conditions on a site certificate issued for such a facility.

(4) To demonstrate that the standard outlined in (1) through (3) has been met, the Applicant must submit:

(w)a) ~~Exhibit W-~~ Information about the applicant's plans to minimize the generation of solid waste and wastewater and to recycle or reuse solid waste and wastewater, providing evidence to support a finding by the Council as required by OAR 345-022-0120. The applicant must include:

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- (A) A description of the major types of solid waste and wastewater that construction, operation and retirement of the facility are likely to generate, including an estimate of the amount of solid waste and wastewater;
- (B) A description of any structures, systems and equipment for management and disposal of solid waste, wastewater and storm water;
- (C) A discussion of any actions or restrictions proposed by the applicant to reduce consumptive water use during construction and operation of the facility;
- (D) The applicant's plans to minimize, recycle or reuse the solid waste and wastewater described in (A);
- (E) A description of any adverse impact on surrounding and adjacent areas from the accumulation, storage, disposal and transportation of solid waste, wastewater and stormwater during construction and operation of the facility;
- (F) Evidence that adverse impacts described in (D) are likely to be minimal, taking into account any measures the applicant proposes to avoid, reduce or otherwise mitigate the impacts; and
- (G) The applicant's proposed monitoring program, if any, for minimization of solid waste and wastewater impacts.

### (b) A materials analysis, including:

- (A) An inventory of substantial quantities of industrial materials flowing into and out of the proposed facility during construction and operation;
- (B) The applicant's plans to manage hazardous substances during construction and operation, including measures to prevent and contain spills; and
- (C) The applicant's plans to manage non-hazardous waste materials during construction and operation.

Stat. Authority: ORS 469.470, ORS 469.501

Stat. Implemented: ORS 469.501

### **345-022-0130 – State and Local Laws and Regulations**

To assist the Council in determining compliance with all applicable state and local laws and regulations, unless directed by the Department that the information does not apply, submit the following, as directed by the project order described in OAR 345-015-0160 the following information is needed to determine compliance with all state and local laws and regulations:

#### (1) Regarding Water:

- (ja) ~~Exhibit J~~-Information based on literature and field study, as appropriate, about waters of this state, as defined under ORS 196.800, including:

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(A) A description of all areas within the site boundary that might be waters of this state and a map showing the location of these features;

(B) An analysis of whether construction or operation of the proposed facility would adversely affect any waters of this state;

(C) A description of the significance of potential adverse impacts to each feature identified in (A), including the nature and amount of material the applicant would remove from or place in the waters analyzed in (B);

(D) If the proposed facility would not need a removal-fill authorization, an explanation of why no such authorization is required for the construction and operation of the proposed facility;

(E) If the proposed facility would need a removal-fill authorization, information to support a determination by the Council that the Oregon Department of State Lands should issue a removal-fill permit, including information in the form required by the Department of State Lands under OAR Chapter 141 Division 85; and

(F) A description of proposed actions to mitigate adverse impacts to the features identified in (A) and the applicant's proposed monitoring program, if any, for such impacts.

(b) ~~Exhibit O~~ Information about anticipated water use during construction and operation of the proposed facility. The applicant must include:

(A) A description of the use of water during construction and operation of the proposed facility;

(B) A description of each source of water and the applicant's estimate of the amount of water the facility will need during construction and during operation from each source under annual average and worst-case conditions;

(C) A description of each avenue of water loss or output from the facility site for the uses described in (A), the applicant's estimate of the amount of water in each avenue under annual average and worst-case conditions and the final disposition of all wastewater;

(D) For thermal power plants, a water balance diagram, including the source of cooling water and the estimated consumptive use of cooling water during operation, based on annual average conditions;

(E) If the proposed facility would not need a groundwater permit, a surface water permit or a water right transfer, an explanation of why no such permit or transfer is required for the construction and operation of the proposed facility;

(F) If the proposed facility would need a groundwater permit, a surface water permit or a water right transfer, information to support a determination by the Council that the Water Resources Department should issue the permit or transfer of a water use, including information in the form required by the Water Resources Department under OAR Chapter 690, Divisions 310 and 380; and

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(G) A description of proposed actions to mitigate the adverse impacts of water use on affected resources.

### (2) Regarding Compliance with DEQ's Noise Control Standards:

~~(y) Exhibit Y.~~ Information about noise generated by ~~construction and~~ operation of the proposed facility, providing evidence to support a finding by the Council that the proposed facility complies with the Oregon Department of Environmental Quality's noise control standards in OAR 340-035-0035. The applicant must include:

(aA) Predicted noise levels resulting from construction and operation of the proposed facility;

(bB) An analysis of the proposed facility's compliance with the applicable noise regulations in OAR 340-035-0035, including a discussion and justification of the methods and assumptions used in the analysis;

(cC) Any measures the applicant proposes to reduce noise levels or noise impacts or to address public complaints about noise from the facility;

(dD) Any measures the applicant proposes to monitor noise generated by operation of the facility; and

(eE) A list of the names and addresses of all owners of noise sensitive property, as defined in OAR 340-035-0015, within one mile of the proposed site boundary.

### (3) Regarding evaporative cooling towers:

If the proposed facility has an evaporative cooling tower, information about the cooling tower plume, including:

(a) The predicted size and frequency of occurrence of a visible plume and an assessment of its visual impact;

(b) The predicted locations and frequency of occurrence of ice formation on surfaces and ground level fogging and an assessment of significant potential adverse impacts, including, but not limited to, traffic hazards on public roads;

(c) The predicted locations and rates of deposition of solids released from the cooling tower (cooling tower drift) and an assessment of significant potential adverse impacts to soils, vegetation and other land uses;

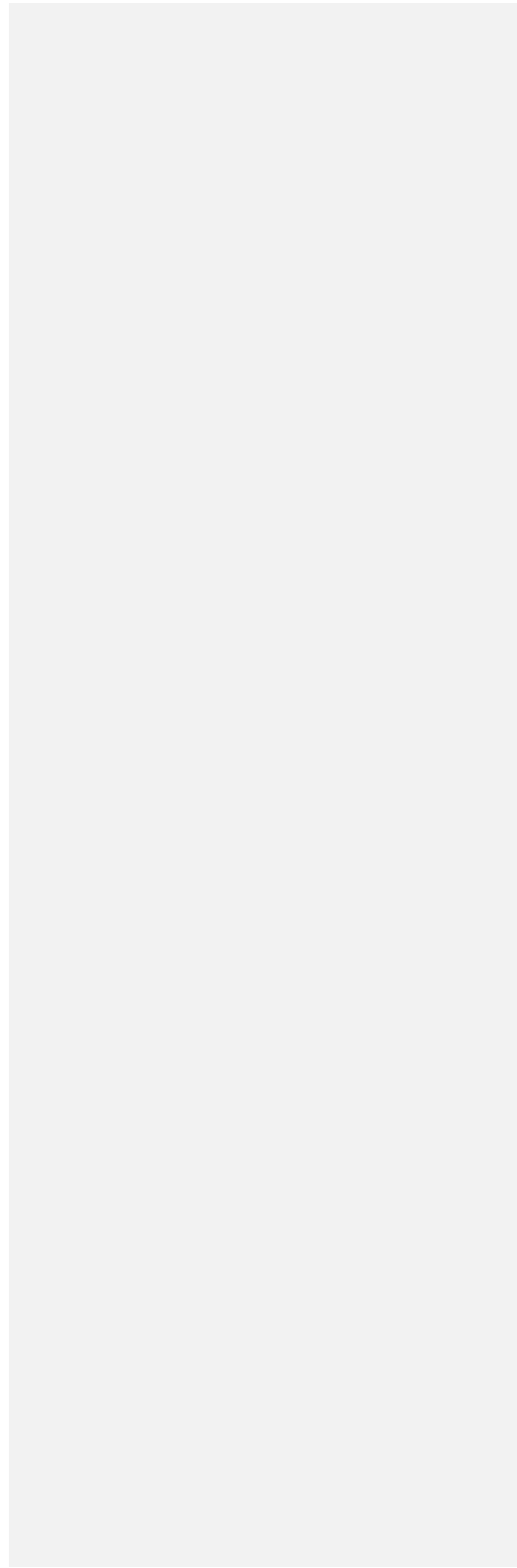
(d) Any measures the applicant proposes to reduce adverse impacts from the cooling tower plume or drift;

(e) The assumptions and methods used in the plume analysis; and

(f) The applicant's proposed monitoring program, if any, for cooling tower plume impacts.

Commented [TJ8]: Moved to Division 23.

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## ORAR CHAPTER 345 – OREGON ENERGY FACILITY SITING COUNCIL RULES

### DIVISION 23 - NEED STANDARD FOR NONGENERATING FACILITIES

#### 345-023-0005 - Need for a Facility

This division applies to nongenerating facilities as defined in ORS 469.503(2)(e), except nongenerating facilities that are related or supporting facilities. To issue a site certificate for a facility described in sections (1) through (3), the Council must find that the applicant has demonstrated the need for the facility. The Council may adopt need standards for other nongenerating facilities. This division describes the methods the applicant shall use to demonstrate need. In accordance with ORS 469.501(1)(L), the Council has no standard requiring a showing of need or cost-effectiveness for generating facilities. The applicant shall demonstrate need:

- (1) For electric transmission lines under the least-cost plan rule, OAR 345-023-0020(1), or the system reliability rule for transmission lines, OAR 345-023-0030, or by demonstrating that the transmission line is proposed to be located within a “National Interest Electric Transmission Corridor” designated by the U.S. Department of Energy under Section 216 of the Federal Power Act;
- (2) For natural gas pipelines under the least-cost plan rule, OAR 345-023-0020(1), or the economically reasonable rule for natural gas pipelines, OAR 345-023-0040;
- (3) For storage facilities for liquefied natural gas with storage capacity of three million gallons or greater under the least-cost plan rule, OAR 345-023-0020(1), or the economically reasonable rule for liquefied natural gas storage facilities, OAR 345-023-0040.

(4) If the proposed facility is a non-generating facility for which the applicant must demonstrate need under OAR 345-023-0005, the applicant must submit information about the need for the facility, providing evidence to support a finding by the Council as required by OAR 345-023-0005 (1)-(3), including

~~(A)~~ identification of the rule in Division 23 of this chapter under which the applicant chooses to demonstrate need;

Statutory/Other Authority: ORS 469.470 & 469.501

#### 345-023-0020 - Least-Cost Plan Rule

(1) The Council shall find that the applicant has demonstrated need for the facility if the capacity of the proposed facility or a facility substantially similar to the proposed facility, as defined by OAR 345-001-0010, is identified for acquisition in the short-term plan of action of an energy resource plan or combination of plans adopted, approved or acknowledged by a municipal utility, people's utility district, electrical cooperative, other governmental body that makes or implements energy policy, or electric transmission system operator that has a governance that is independent of owners and users of the system and if the energy resource plan or combination of plans:



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- (a) Includes a range of forecasts of firm energy and capacity demands and committed firm energy and capacity resources, as defined in OAR 345-001-0010, over the planning period using a reasonable method of forecasting;
- (b) Considers and evaluates a reasonable range of practicable demand and supply resource alternatives over the planning period on a consistent and comparable basis. Practicable alternatives are those that are demonstrated to be technically and economically achievable within the time frame considered to meet potential energy or capacity needs;
- (c) Uses financial assumptions, including discount rates and treatment of resource lifetimes and end effects that are consistent and comparable between resources;
- (d) For electric transmission line facilities, considers alternatives that include but are not limited to:
  - (A) Implementation of cost-effective conservation, peak load management and voluntary customer interruption as a substitute for the proposed facility;
  - (B) Construction and operation of electric generating facilities as a substitute for the proposed facility;
  - (C) Direct use of natural gas, solar or geothermal resources at retail loads as a substitute for use of electricity transmitted by the proposed facility; and
  - (D) Adding standard sized smaller or larger transmission line capacity;
- (e) For natural gas pipeline facilities, considers alternatives that include but are not limited to:
  - (A) Implementation of cost-effective conservation, peak load management and voluntary customer interruption as a substitute for the proposed facility;
  - (B) Installation of propane storage systems, facilities to store liquefied natural gas and underground gas storage reservoirs as a substitute for the proposed facility;
  - (C) Direct use of electricity, solar or geothermal resources at retail loads as a substitute for use of natural gas supplied by the proposed facility; and
  - (D) Adding standard sized smaller or larger pipeline capacity;
- (f) For storage facilities for liquefied natural gas, considers alternatives that include, but are not limited, to:
  - (A) Implementation of cost-effective conservation, peak load management and voluntary customer interruption as a substitute for the proposed facility;
  - (B) Installation of propane storage systems, natural gas pipelines and underground gas storage facilities as a substitute for the proposed facility;
  - (C) Direct use of electricity, solar or geothermal resources at retail loads as a substitute for use of natural gas supplied by the proposed facility; and
  - (D) Adding smaller or larger liquefied natural gas storage capacity;

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(g) Includes the development and evaluation of alternative resource plans to meet forecast energy or capacity needs over the planning time period;

(h) Analyzes the uncertainties associated with alternative resource plans or strategies. The range of uncertainties about the future must be sufficient to test the performance of each alternative resource strategy. The criteria used to evaluate performance of alternative resource strategies must be broad enough to judge the merits of a strategy from a societal perspective;

(i) Aims to minimize long-run total resource costs while taking into account reliability, compatibility with the energy system, strategic flexibility, as defined in OAR 345-001-0010, and external environmental costs and benefits. The value provided by reliability, compatibility with the energy system, strategic flexibility and external environmental costs and benefits may justify actions that increase the total resource cost of the plan. The Council finds that the goals of a least-cost plan are to minimize expected total resource costs for society and the variance in those costs due to uncertainty about future conditions;

(j) Includes a short-term plan of action;

(k) Is consistent with the energy policy of the state as set forth in ORS 469.010. An energy resource plan is consistent with the energy policy of the state if its short-term plan of action describes actions that must be taken within a two to three year time frame to provide a reasonable assurance that future energy or capacity demands can be met while aiming to minimize total resource cost; and

(L) Was adopted, approved or acknowledged after a full, fair and open public participation and comment process. Such a process is one in which the public has reasonable and timely access to the decision-maker and to information and records legally available to the public.

(2) The Council shall find that a least-cost plan meets the criteria of an energy resource plan described in section (1) if the Public Utility Commission of Oregon has acknowledged the least cost plan.

(3) If the applicant chooses to demonstrate need for the proposed facility under OAR 345-023-0020(1), the least-cost plan rule, they must submit the following additional information in their application:

(a) Identification of the energy resource plan or combination of plans on which the applicant relies to demonstrate need;

(b) The name, address and telephone number of the person responsible for preparing each energy resource plan identified in ~~subparagraph (A)~~;

(c) For each plan reviewed by a regulatory agency, the agency's findings and final decision, including:

(A) For a plan reviewed by the Oregon Public Utility Commission, the acknowledgment order; or

(B) For a plan reviewed by any other regulatory agency, a summary of the public process including evidence to support a finding by the Council that the agency's decision process included a full, fair and open public participation and comment process as required by

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OAR 345-023-0020(1)(L), and the location of and means by which the Department can obtain a complete copy of the public record;

(d) Identification of the sections of the short-term action plan that call for the acquisition of the proposed facility or, as defined in OAR 345-001-0010, a facility substantially similar to the proposed facility;

(e) The attributes of the proposed facility that qualify it as one called for in the short-term action plan of the energy resource plan or combination of plans identified in subparagraph (ia) or a demonstration that, as defined in OAR 345-001-0010, a facility substantially similar to the proposed facility is called for in the plan.

(~~C4~~) In addition to the information described in ~~paragraph (3B)~~, if the applicant chooses to demonstrate need for the proposed facility under OAR 345-023-0020(1), the least-cost plan rule, and relies on an energy resource plan not acknowledged by the Public Utility Commission of Oregon, they must submit the following additional information:

(a) The names, addresses and telephone numbers of members of any public advisory groups that participated in the preparation and review of each plan identified in ~~paragraph (B)(3)~~;

(b) A discussion of how the plan or combination of plans conforms to the standards in OAR 345-023-0020(1)(a) through (L) including citations to relevant portions of the plan documents or other supporting evidence;

(c) The expected annual emissions in tons of nitrogen oxides, PM-10 particulate, sulfur dioxide, carbon dioxide and mercury and a discussion of other environmental impacts, as compared to resources in the applicable energy resource plan;

(~~D5~~) In addition to the information described in ~~paragraphs (B3)~~ and (~~C4~~), if the applicant chooses to demonstrate need for a proposed natural gas pipeline or storage facility for liquefied natural gas under OAR 345-023-0020(1), the least-cost plan rule, and relies on an energy resource plan not acknowledged by the Public Utility Commission of Oregon, the applicant must include the information described in paragraph (G) of this subsection if the energy resource plan or combination of plans does not contain that information. If the energy resource plan or combination of plans contains the information described in ~~345-023-0040(3) paragraph (G)~~, the applicant must provide a list of citations to the sections of the energy resource plan that contain the information;

(~~E6~~) In addition to the information described in ~~paragraphs (B3)~~ and (~~C4~~), if the applicant chooses to demonstrate need for a proposed electric transmission line under OAR 345-023-0020(1), the least-cost plan rule and relies on an energy resource plan not acknowledged by the Public Utility Commission of Oregon, the applicant must include the information described in paragraph (F) of this subsection if the energy resource plan or combination of plans does not contain that information. If the energy resource plan or combination of plans contains the information described in paragraph (F), the applicant must provide a list of citations to the sections of the energy resource plan that contain the information.

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### 345-023-0030 - System Reliability Rule for Electric Transmission Lines

The Council shall find that the applicant has demonstrated need for an electric transmission line that is an energy facility under the definition in ORS 469.300 if the Council finds that:

(1) The facility is needed to enable the transmission system of which it is to be a part to meet firm capacity demands for electricity or firm annual electricity sales that are reasonably expected to occur within five years of the facility's proposed in-service date based on weather conditions that have at least a 5 percent chance of occurrence in any year in the area to be served by the facility;

(2) The facility is consistent with the minimum operating reliability criteria contained in the Western System Coordinating Council Bulk Power Supply Program 1997-2007, dated April 1, 1998, as it applies either internally or externally to a utility system; and

(3) Construction and operation of the facility is an economically reasonable method of meeting the requirements of sections (1) and (2) compared to the alternatives evaluated in the application for a site certificate.

(4) If the applicant chooses to demonstrate need for a proposed electric transmission line under OAR 345-023-0030, they must submit the following additional information:

(a) Load-resource balance tables for the area to be served by the proposed facility. In the tables, the applicant must include firm capacity demands and existing and committed firm resources for each of the years from the date of submission of the application to at least five years after the expected in-service date of the facility;

(b) Within the tables described in (a), a forecast of firm capacity demands for electricity and firm annual electricity sales for the area to be served by the proposed facility. The applicant must separate firm capacity demands and firm annual electricity sales into loads of retail customers, system losses, reserve margins and each wholesale contract for firm sale. In the forecast, the applicant must include a discussion of how the forecast incorporates reductions in firm capacity demand and firm annual electricity sales resulting from:

- (A) Existing federal, state or local building codes, and equipment standards and conservation programs required by law for the area to be served by the proposed facility;
- (B) Conservation programs provided by the energy supplier, as defined in OAR 345-001-0010;
- (C) Conservation that results from responses to price; and
- (D) Retail customer fuel choice;

(c) Within the tables described in (a), a forecast of existing and committed firm resources used to meet the demands described in (b). The applicant must include, as existing and committed firm resources, existing generation and transmission facilities, firm contract resources and committed new resources minus expected resource retirements or displacement. In the forecast, the applicant must list each resource separately;

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(d) A discussion of the reasons each resource is being retired or displaced if the forecast described in (c) includes expected retirements or displacements;

(e) A discussion of the annual capacity factors assumed for any generating facilities listed in the forecast described in (c);

(f) A discussion of the reliability criteria the applicant uses to demonstrate the proposed facility is needed, considering the load carrying capability of existing transmission system facilities supporting the area to be served by the proposed facility;

(g) A discussion of reasons why the proposed facility is economically reasonable compared to the alternatives described below. In the discussion, the applicant must include a table showing the amounts of firm capacity and firm annual electricity available from the proposed facility and each alternative and the estimated direct cost, as defined in OAR 345-001-0010, of the proposed facility and each alternative. The applicant must include documentation of assumptions and calculations supporting the table. The applicant must evaluate alternatives to construction and operation of the proposed facility that include, but are not limited to:

(A) Implementation of cost-effective conservation, peak load management and voluntary customer interruption as a substitute for the proposed facility;

(B) Construction and operation of electric generating facilities as a substitute for the proposed facility;

(C) Direct use of natural gas, solar or geothermal resources at retail loads as a substitute for use of electricity transmitted by the proposed facility;

(D) Adding standard sized smaller or larger transmission line capacity;

(h) The earliest and latest expected in-service dates of the facility and a discussion of the circumstances of the energy supplier, as defined in OAR 345-001-0010, that determine these dates.

Statutory/Other Authority: ORS 469.470 & 469.501

Statutes/Other Implemented: ORS 469.501

### **345-023-0040 - Economically Reasonable Rule for Natural Gas Pipelines or Liquefied Natural Gas Storage Facilities**

The Council shall find the applicant has demonstrated need for a natural gas pipeline that is an energy facility under the definition in ORS 469.300 or a facility that stores liquefied natural gas, if the Council finds that:

(1) The facility is needed to enable the natural gas supply system of which it is to be a part to meet firm capacity demands for natural gas that are reasonably expected to occur within five years following the facility's proposed in-service date based on weather conditions that have at least a 5 percent chance of occurrence in any year in the area to be served by the proposed facility; and

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(2) Construction and operation of the facility is an economically reasonable method of meeting the demands described in section (1) compared to the alternatives evaluated in the application for a site certificate.

(G3) If the applicant chooses to demonstrate need for a proposed natural gas pipeline or a proposed facility for storing liquefied natural gas under OAR 345-023-0040, they must submit the following additional information:

(a) Load-resource balance tables for the area to be served by the proposed facility. In the tables, the applicant must include firm demands and resource availability for each of the years from the date of submission of the application to at least five years after the expected in-service date of the proposed facility. In the tables, the applicant must list flowing supply and storage supply separately;

(b) Within the tables described in (a), a forecast of firm capacity demands for the area to be served by the proposed facility. The applicant must separate firm capacity demands into firm demands of retail customers, system losses and each wholesale contract for firm sale. The applicant must accompany the tables with load duration curves of firm capacity and interruptible demands for the most recent historical year, the year the facility is expected to be placed in service and the fifth year after the expected in-service date. In the forecast of firm capacity demands, the applicant must include a discussion of how the forecast incorporates reductions in firm capacity demand resulting from:

- (A) Existing federal, state or local building codes and equipment standards and conservation programs required by law for the area to be served by the proposed facility;
- (B) Conservation programs provided by the energy supplier, as defined in OAR 345-001-0010;
- (C) Conservation that results from responses to price; and
- (D) Retail customer fuel choice;

(c) Within the tables described in (a), a forecast of existing and committed firm resources used to meet the demands described in (b). The applicant must include, as existing and committed firm capacity resources, existing pipelines, storage facilities, and scheduled and budgeted new facilities minus expected resource retirements or displacement. In the forecast, the applicant must list each committed resource separately;

(d) A discussion of the reasons each resource is being retired or displaced if the forecast described in (c) includes expected retirements or displacements;

(e) A discussion of the capacity factors assumed for any storage facilities listed in the forecast described in (c);

(f) A discussion of the reliability criteria the applicant uses to demonstrate the proposed facility is needed, considering the capacity of existing gas system facilities supporting the area to be served by the proposed facility;

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(g) A discussion of reasons why the proposed facility is economically reasonable compared to the alternatives described in (h) or (j). In the discussion, the applicant must include a table showing the amounts of firm capacity available from the proposed facility and each alternative and the estimated direct cost, as defined in OAR 345-001-0010, of the proposed facility and each alternative. The applicant must include documentation of assumptions and calculations supporting the table;

(h) In an application for a proposed natural gas pipeline, an evaluation of alternatives to construction and operation of the proposed facility including, but not limited to:

(A) Implementation of cost-effective conservation, peak load management and voluntary customer interruption as a substitute for the proposed facility;

(B) Installation of propane storage systems, facilities to store liquefied natural gas and underground gas storage reservoirs as a substitute for the proposed facility;

(C) Direct use of electricity, solar or geothermal resources at retail loads as a substitute for use of natural gas supplied by the proposed facility;

(D) Adding standard sized smaller or larger pipeline capacity;

(i) In an application for a proposed liquefied natural gas storage facility, an evaluation of alternatives to construction and operation of the proposed facility including, but not limited to:

(A) Implementation of cost-effective conservation, peak load management and voluntary customer interruption as a substitute for the proposed facility;

(B) Installation of propane storage systems, natural gas pipelines and underground gas storage facilities as a substitute for the proposed facility;

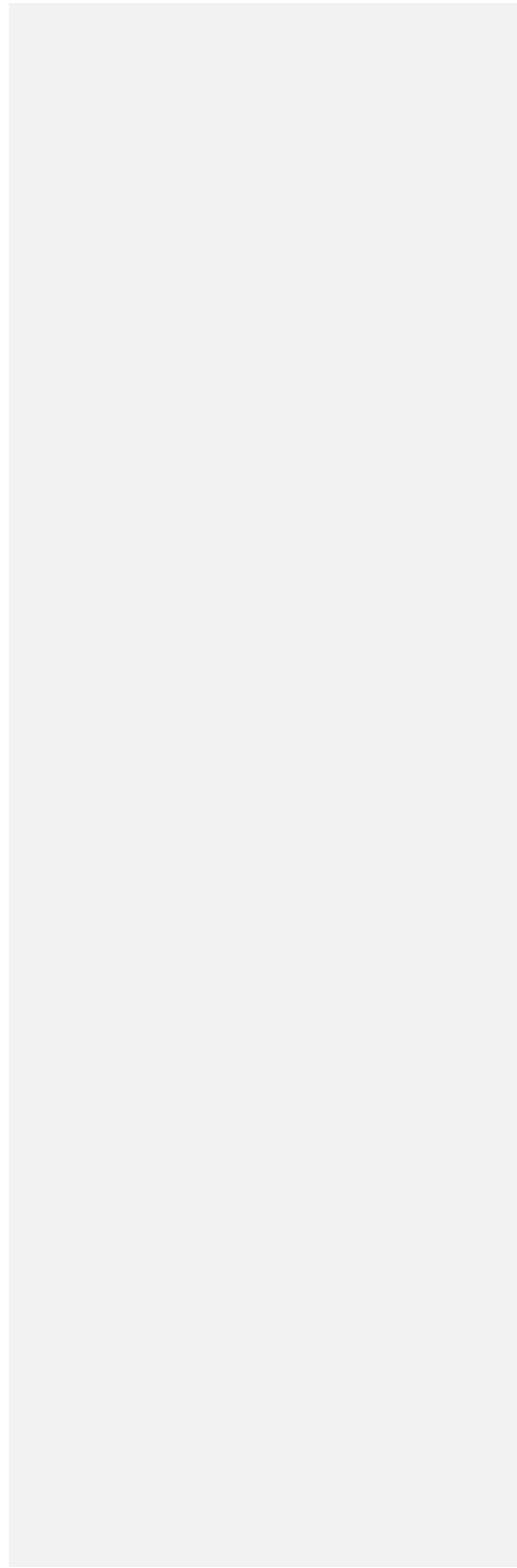
(C) Direct use of electricity, solar or geothermal resources at retail loads as a substitute for use of natural gas supplied by the proposed facility;

(D) Adding smaller or larger liquefied natural gas storage capacity; and

(j) The earliest and latest expected in-service date of the facility and a discussion of the circumstances of the energy supplier, as defined in OAR 345-001-0010, that determine these dates.

Statutory/Other Authority: ORS 469.470 & 469.501  
Statutes/Other Implemented: ORS 469.501

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**DIVISION 24 - SPECIFIC STANDARDS FOR SITING FACILITIES**

**345-024-0030 - Public Health and Safety Standards for Surface Facilities Related to Underground Gas Storage Reservoirs**

To issue a site certificate for a proposed surface facility related to an underground gas storage reservoir, the Council must make the following findings:

(1) The proposed facility is located at distances in accordance with the schedule below from any existing permanent habitable dwelling:

- (a) Major facilities, such as compressor stations, stripping plants and main line dehydration stations - 700 feet.
- (b) Minor facilities, such as offices, warehouses, equipment shops and odorant storage and injection equipment -- 50 feet.
- (c) Compressors rated less than 1,000 horsepower -- 350 feet.
- (d) Roads and road maintenance equipment housing -- 50 feet.

(2) The applicant has developed a program using technology that is both practicable and reliable to monitor the facility to ensure the public health and safety.

(3) In addition to the requirements of OAR 345-024-0010, in an application for a site certificate for a surface facility related to an underground storage reservoir, the applicant shall include the following information:

- (1a) The design rates of natural or synthetic gas injection or withdrawal;
- (b2) The compression horsepower required to operate at design injection or withdrawal rates;
- (c3) The fuel type of the compressor;
- (d4) The estimated carbon dioxide emissions from the compressor for the projected life of the facility; and
- (e5) The proposed location of all wells.

Stat. Authority: ORS 469.470, ORS 469.501  
Stat. Implemented: ORS 469.501

**345-024-0090 - Siting Standards for Transmission Lines**

To issue a site certificate for a facility that includes any transmission line under Council jurisdiction, the Council must find that the applicant:

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(1) Can design, construct and operate the proposed transmission line so that alternating current electric fields do not exceed 9 kV per meter at one meter above the ground surface in areas accessible to the public;

(2) Can design, construct and operate the proposed transmission line so that induced currents resulting from the transmission line and related or supporting facilities will be as low as reasonably achievable.

(3) If the proposed energy facility is a transmission line or has, as a related or supporting facility, a transmission line of any size, the applicant must submit the following:

(a) Information about the expected electric and magnetic fields, including:

(A) The distance in feet from the proposed center line of each proposed transmission line to the edge of the right-of-way;

(B) The type of each occupied structure, including but not limited to residences, commercial establishments, industrial facilities, schools, daycare centers and hospitals, within 200 feet on each side of the proposed center line of each proposed transmission line;

(C) The approximate distance in feet from the proposed center line to each structure identified in (3);

(D) At representative locations along each proposed transmission line, a graph of the predicted electric and magnetic fields levels from the proposed center line to 200 feet on each side of the proposed center line;

(E) Any measures the applicant proposes to reduce electric or magnetic field levels;

(F) The assumptions and methods used in the electric and magnetic field analysis, including the current in amperes on each proposed transmission line;

(G) The applicant's proposed monitoring program, if any, for actual electric and magnetic field levels; and

(b) An evaluation of alternate methods and costs of reducing radio interference likely to be caused by the transmission line in the primary reception area near interstate, U.S. and state highways.

Stat. Authority: ORS 469.470, ORS 469.501  
Stat. Implemented: ORS 469.501

### **345-024-0500 - Standards for Fossil-Fueled Power Plants and Energy Facilities that Emit Carbon Dioxide**

(1) Notwithstanding OAR 345-024-0503 through 345-024-0720, to issue a site certificate for a fossil-fueled power plant on or after September 25, 2021, the Council must find that the facility will only generate electricity in a manner that does not emit greenhouse gasses into the atmosphere.

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(2) If the facility will rely on carbon capture, sequestration, and storage to satisfy the requirements of section (1), the Council must find that the certificate holder has demonstrated that the structures, systems, components, and monitoring programs at the facility are reasonably likely to result in the permanent capture, sequestration, and storage of greenhouse gasses that result from the generation of electricity at the facility.

(3) To issue a site certificate for a nongenerating facility that will emit carbon dioxide into the atmosphere, the Council must find that the energy facility complies with the carbon dioxide emissions standard under OAR 345-024-0620.

(4) In addition to the requirements of OAR 345, division 22, in an application for a site certificate for a fossil-fueled power plant, or other facility that will emit carbon dioxide into the atmosphere, the application must include the following:

(a) A description of the means by which the applicant will comply with the applicable carbon dioxide emissions standard under OAR 345-024-0500.

(b) Information about the carbon dioxide emissions that are reasonable likely to result from the operation of the energy facility, including the following:

(A) The maximum hourly fuel use at:

(i) Net electrical power output at average annual conditions for a base load gas plant; or

(ii) Nominal electric generating capacity for a non-base load power plant or a base load gas plant with power augmentation technologies;

(B) The gross capacity as estimated at the generator output terminals for each generating unit.

(i) For a base load gas plant, gross capacity must be estimated based on the average annual ambient conditions for temperature, barometric pressure and relative humidity at the site. For a baseload gas plant with power augmentation, gross capacity for power augmentation mode must be estimated separately based on the average temperature, barometric pressure and relative humidity at the site during the times of year when the facility is intended to operate with power augmentation; or

(ii) For a non-base load plant, gross capacity must be estimated based on the average temperature, barometric pressure and relative humidity at the site during the times of year when the facility is intended to operate.

(C) A table showing a reasonable estimate of all on-site electrical loads and losses greater than 50 kilowatts, including losses from on-site transformers, plus a factor for incidental loads, that are required for the normal operation of the plant when the plant is at its designed full power operation;

(D) The maximum number of hours per year and energy content (Btu per year, higher heating value) of alternate fuel use;

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(E) The total estimated gross carbon dioxide emissions for 30 years, unless an applicant for a non-base load power plant or nongenerating energy facility proposes to limit operation to a shorter time;

(F) The gross carbon dioxide emissions rate expressed as:

(i) Pounds of carbon dioxide per kilowatt-hour of net electric power output for a base load gas plant with power augmentations, the rate for plant operations with and without power augmentation must be reported separately;

(ii) Pounds of carbon dioxide per horsepower hour for nongenerating facilities for which the output is ordinarily measured in horsepower; or

(iii) A rate comparable to pounds of carbon dioxide per kilowatt-hour of net electric power output for nongenerating facilities other than those measured in horsepower;

(G) The total excess carbon dioxide emissions for 30 years, unless an applicant for a non-base load power plant or a nongenerating energy facility proposes to limit operation to a shorter time;

(H) The excess carbon dioxide emissions rate, using the same measure as required for subsection (F);

(I) The average annual site conditions, including temperature, barometric pressure and relative humidity, together with a citation of the source and location of the data collection devices;

(J) For a non-base load power plant (or a base load power plant using power augmentation), the average temperature, barometric pressure and relative humidity at the site during the times of the year when the facility is intended to operate, together with a citation of the source and location of the data collection devices;

(K) The annual fuel input in British thermal units, higher heating value, to the facility for each type of fuel the facility will use, assuming:

(i) For a base load gas plant, a 100-percent capacity factor on a new and clean basis and the maximum number of hours annually that the applicant proposes to use alternative fuels;

(ii) For a non-base load power plant, the applicant's proposed annual hours of operation on a new and clean basis, the maximum number of hours annually that the applicant proposes to use alternative fuels and, if the calculation is based on an operational life of fewer than 30 years, the proposed operational life of the facility;

(iii) For a nongenerating energy facility, the reasonably likely operation of the facility based on one year, 5-year, 15-year, and 30-year averages, unless an applicant proposes to limit operation to a shorter time;

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(L) For each type of fuel a base load gas plant or a non-base load power plant will use, the estimated heat rate and capacity of the facility measured on a new and clean basis with no thermal energy to cogeneration, consistent with the data supplied in 345-021-0010(3)(b);

(M) For each type of fuel a nongenerating energy facility will use, the estimated efficiency and capacity of the facility with no thermal energy to cogeneration;

(N) If the facility provides thermal energy for cogeneration to lower its net carbon dioxide emissions rate:

(i) The estimated annual useful thermal energy available from the facility for non-electric processes, annual useful thermal energy used by non-electric processes, and annual thermal energy rejected as waste heat;

(ii) For a base load gas plant or non-base load power plant, the estimated annual net electric power output and annual fuel input in British thermal units higher heating value for the facility for each type of fuel the facility will use and the basis of such estimates;

(iii) A description of the non-electric thermal processes, the names and addresses of the persons intending to use the non-electric thermal energy, and a description and an estimate of the fuel displaced by cogeneration, including supporting assumptions;

(iv) A description of the products produced and thermal energy needed for production of the primary products made by the persons intending to use the non-electric thermal energy produced by the proposed facility, supported by fuel use and steam production records or estimates, if the production facility is new;

(v) The efficiency of each boiler that the thermal energy will displace;

(vi) For each boiler, the annual fossil fuel displaced in million Btu, higher heating value, by type of fuel that will be displaced by the thermal energy;

(vii) The annual carbon dioxide offset by the cogeneration host, using a rate of 117 pounds of carbon dioxide per million Btu of natural gas fuel (higher heating value) and a rate of 161 pounds of carbon dioxide per million Btu of distillate fuel (higher heating value);

(viii) The cumulative carbon dioxide offset by the steam host through the thirtieth year of facility operation, or for a shorter period if an applicant for a nongenerating facility proposes a shorter operational period;

(ix) A copy of the contractual agreement between the applicant and the cogeneration host for the use of the thermal energy;

(x) A description of the guarantees of offsets that the applicant must provide for cogeneration projects, pursuant to OAR 345-024-0560(1) and 345-024-0600(1);

(xi) A proposed monitoring and evaluation plan and an independent verification plan, pursuant to paragraphs (O)(ixx) and (xx);

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(xii) A copy of the instrument by which the certificate holder will transfer the offsets to the Council for it to hold in trust;

(O) If the applicant proposes to offset carbon dioxide emissions as described in OAR 345-024-0550(3), 345-024-0560(2), 345-024-0590(3), 345-024-0600(2), 345-024-0620(3) or 345-024-0630(1):

(i) A description of each offset project;

(ii) A description of who will implement the offset project, including qualifications and experience;

(iii) Detailed estimates of the of carbon dioxide offset, measured in short tons, that the offset projects will achieve over the life of the project;

(iv) For each offset project, an explanation of how the applicant quantified its carbon dioxide estimates to a degree of certainty acceptable to the Council through a transparent and replicable calculation methodology;

(v) For each offset project, evidence that the offset project would not likely have been implemented if not for the applicant’s activities or funding;

(vi) For each offset project, a description of a “Baseline” projection that does not include the proposed project and a “Project Case” projection that does. The historic Baseline must use reliable emissions data or pre-project data available for the most recent three years unless the applicant can demonstrate that a different period more closely represents historical operations or unless it can demonstrate that another method provides a more reasonable estimate. The applicant must show how the Baseline projection changes over time if changes from business-as-usual could be reasonably anticipated during the project life;

(vii) For each offset project, a description, in a transparent and realistic manner, of the assumptions and methodologies used to quantify the Baseline and the Project Case projections, including a description of key parameters and data sources. This must include a description of the formulae used to estimate carbon dioxide emissions or sequestration within the project boundary and a net change of carbon dioxide emissions or sequestration that occurs outside of the project boundary that is measurable and attributable to the project activity;

(viii) For projects that avoid conventional electricity generation, a description of a Baseline that calculates the carbon dioxide emissions per kilowatt hour in two steps:

(l) For the first five years of operation, a description of the rate based on dispatch data or models or, absent that, a weighted average of all resources in a power pool except zero-fuel-cost or must-run facilities; and

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(II) A description of the rate for any subsequent years based on a group of similar facilities built within the prior five years or under construction in the electrical distribution region of the project or the three most recent plants built in the region, whichever rate is lower;

(ix) For projects that avoid conventional electricity generation, a description of avoided transmission and distribution losses, using average grid area or national losses;

(x) A description of any guarantee for offsets from projects that the applicant proposes pursuant to OAR 345-024-0560(2), 345-024-0600(2), and 345-024-0630(1), if the applicant chooses to offer a guarantee;

(xi) A description of the offset project boundary. The boundary must encompass all carbon dioxide emissions under the control of the project that are significant and reasonably attributable to the project activity. If the project is being conducted by one part of a corporation, the boundary must include the emissions and reductions of the whole corporate entity and the carbon dioxide emissions resulting from processes and facilities that are related to the project, with identification of subsidiaries that are affected by the project;

(xii) A description of significant risks and risk mitigation strategies, including an estimate of the range of uncertainty around the expected carbon dioxide offsets;

(xiii) For biological sequestration projects, an assessment of the risk of climate change to natural systems that are sequestering the carbon dioxide, including, if appropriate, the risks from forest fires, pest and other unplanned releases of carbon from sequestration;

(xiv) A description of whether the offset project will permanently avoid or displace emissions of carbon dioxide. If a project only temporarily sequesters carbon, an indication of the duration of sequestration or storage;

(xv) A description of the amount of funding the applicant will provide for each offset project it proposes;

(xvi) If the applicant anticipates that a project will have funding sources in addition to itself, identification of the sources of those funds, the amount of other funding that is required to implement a project, the amount of funds other parties have committed, and the risks of other funds not being available;

(xvii) If the applicant proposes that a project will have funding sources in addition to itself, a description of how ownership of the offsets will be allocated among the several funding sources;

(xviii) A copy of the instrument by which the certificate holder will transfer all the offsets to the Council for it to hold in trust;

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(xix) A description of a transparent and replicable methodology for the applicant's monitoring and evaluation plan and for an independent verification plan, including:

(I) Procedures the applicant and the independent entity will employ;

(II) How the applicant will assure funds for ongoing monitoring, evaluation and verification;

(III) The time frame and frequency over which the applicant will conduct monitoring and evaluation and over which the independent entity will conduct verification, including the frequency of site visits, if applicable;

(IV) The reporting procedures and guidelines for the plans; and

(V) Whether the applicant has identified the independent entity that will perform the verification;

(xx) The monitoring and evaluation plan and the verification plan must identify the data needs and data quality with regard to accuracy, comparability, completeness and validity. It must include methodologies to be used for data collection, monitoring, storage, reporting and management, including quality assurance and quality control provisions. It must provide complete calculations used to calculate and estimate carbon dioxide emissions from activity within the project boundary. It must show any formulae and assumptions the applicant used to calculate offset project leakage; and

(xxi) A description of reasonably likely, significant undesirable long-term environmental impacts from the implementation of an offset project.

(P) If the applicant elects to comply with the applicable carbon dioxide emissions standard by using the monetary path under OAR 345-024-0560(3), 345-024-0600(3) or 345-024-0630(2), the applicant must include:

(i) A statement of the applicant's election to use the monetary path;

(ii) The amount of carbon dioxide reduction, in tons, for which the applicant is taking credit by using the monetary path;

(iii) The qualified organization to whom the applicant will provide offset funds and funds for the cost of selecting and contracting for offsets. The applicant must include evidence that the organization meets the definition of a qualified organization under OAR 345-001-0010. The applicant may identify an organization that has applied for, but has not received, an exemption from federal income taxation, but the Council will not find that the organization is a qualified organization unless the organization is exempt from federal taxation under section 501(c)(3) of the Internal Revenue Code as amended and in effect on September 18, 2015; and



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(iv) A statement of whether the applicant intends to provide a bond or letter of credit to secure the funds it must provide to the qualified organization or whether it requests the option of providing either a bond or a letter of credit.

Stat. Authority: ORS 469.470

Stat. Implemented: ORS 469.413(1), 469.501, 469.503