STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

Washington State Energy Code Development

Standard Energy Code Proposal Form

181 Part A

Log No.24-GP1-181 Parts A & B
Received 5/19/25

Code being amended: ☒ Commercial Provisions ☐ Residential Provisions

Code Section # **C411**

Brief Description:

This proposal adds renewable fuels and their associated renewable thermal certificates (RTC) as an option for off-site renewable energy to comply with Section C411.2.2.

This proposal also provides editorial clarifications to the existing language in Section C411.2 regarding renewable energy certificate (REC) tracking requirements for whole buildings and multitenant buildings. In particular, it highlights that unbundled RECs do not satisfy the requirements of this section and that the Green-e Framework for RECs apply to all buildings complying via a Renewable Energy Purchase Agreement and not just multitenant buildings.

Proposed code change text: (Copy the existing text from the Integrated Draft, linked above, and then use underline for new text and ~~strikeout~~ for text to be deleted.)

Black text – 2024 WSEC Integrated Draft; Green text – Part B proposed new language
Red text – Part A editorial changes; Blue text – Part A moved text

RENEWABLE ENERGY CERTIFICATE (REC). A market-based instrument that represents and conveys the environmental, social and other nonpower attributes of 1 megawatt hour of renewable electricity generation and could be sold separately from the underlying physical electricity associated with *renewable energy resources*, also known as energy attribute and energy attribute certificate (EAC).

RENEWABLE THERMAL CERTIFICATE (RTC). A market-based instrument that represents and conveys the environmental attributes of generating and using one dekatherm of renewable thermal energy for various fuel sources, including clean hydrogen, renewable natural gas (RNG/ Biomethane), and *biogas*.

RENEWABLE ENERGY INVESTMENT FUND (REIF). A fund established by a jurisdiction to accept payment from building project owners to construct or acquire interests in qualifying renewable energy systems, together with their associated RECs, on the building project owners' behalf.

RENEWABLE ENERGY RESOURCES. Energy derived from solar radiation, wind, waves, tides, ~~biogas,~~ *biomass waste*, or extracted from hot fluid or steam heated within the earth.

RENEWABLE FUELS. Gaseous or liquid fuels made from *biomass* or *biogas*.

RENEWABLE ~~POWER~~ ENERGY PURCHASE AGREEMENT. A ~~power~~ purchase agreement for off-site renewable energy where the owner agrees to purchase renewable energy output and the associated *renewable energy certificates* and/or *renewable thermal certificates* at a fixed price schedule.

Integrated Draft: C411.1 On-site renewable energy systems. Each new *building or addition* shall be provided with on-site renewable electricity generation systems with a direct current (DC) nameplate power rating of not less than 0.75 watts per square foot (8.1 W/m^2) multiplied by the sum of the gross *conditioned floor area* of all floors…

C411.2 On-site and off-site renewable energy accounting. Qualifying on-site and off-site renewable energy delivered or credited to the building project to comply with this code shall ~~meet the requirements of this section~~ comply with Sections C411.2.1, C411.2.2 and C411.2.3 as applicable. ~~Renewable energy certificates for an on-site or off-site renewable energy system shall be retired on behalf of the building owner for a period of not less than 15 years and tracked in accordance with Section C411.2.3 and submitted to the code official as part of the permit application.~~ **(Moved to C411.2.2)**

C411.2.1 Qualifying types of off-site renewable energy systems. The following are considered qualifying off-site renewable energy systems:

1. Self-generation (an off-site renewable energy system owned by the building project owner) systems complying with Section C411.2.2.
2. Community renewable energy facility systems complying with Section C411.2.2.
3. *Renewable energy purchase agreement* contracts complying with Sections C411.2.2 and C411.2.3.
4. Each source of renewable electric energy delivered to or credited to the building project shall be connected to the Western Interconnection and energy or capacity shall be multiplied by the factors in Table C411.2.1.
5. Each source of *renewable fuels* delivered to or credited to the building project used to replace or offset fossil fuel use on site shall be located within the western region as defined by the Western Interconnection area and energy or capacity shall be multiplied by the factors in Table C411.2.1.

TABLE C411.2.1
MULTIPLIERS FOR RENEWABLE ENERGY PROCUREMENT METHODS

Include the following change in the Renewable Energy Source column of this table – Renewable ~~Power~~ Energy Purchase Agreement

C411.2.2 Documentation requirements for off-site renewable energy systems. Off-site renewable energy delivered or credited to the building project to comply with Section C407.3 item 2.2 shall be subject to a legally binding contract to procure qualifying off-site renewable energy.

Qualifying off-site renewable energy shall meet the following requirements:

1. Documentation of off-site renewable energy procurement shall be submitted to the *code official*.
2. The purchase contract shall have a duration of not less than 15 years. The contract shall be structured to survive a partial or full transfer of ownership of the building property.
3. Records on renewable ~~power~~ energy purchased by the building owner from the off-site renewable energy ~~generator~~ facility that specifically assign the *renewable energy certificates* (RECs) or *renewable thermal certificates* (RTCs) to the building owner shall be retained or retired by the building owner on behalf of the entity demonstrating financial or operational control over the building seeking compliance ~~to~~ with this standard and made available for inspection by the *code official* upon request.
4. **(Moved and edited)** ~~Renewable energy certificates~~ RECs and RTCs for an on-site or off-site renewable energy system shall be retired on behalf of the building owner for a period of not less than 15 years and tracked in accordance with Section C411.2.3. ~~and submitted to the code official as part of the permit application.~~
5. Unbundled RECs or RTCs in lieu of a *renewable energy purchase agreement* are not permitted.
6. Where multiple buildings in a building project are allocated energy procured by a contract subject to this section, the owner shall allocate for not less than 15 years the energy procured by the contract to the buildings in the building project. A plan on operation shall be developed which shall indicate how

renewable energy produced from on-site or off-site systems that is not allocated before issuance of the certificate of occupancy will be allocated to new or existing buildings included in the building project.

C411.2.3 Renewable energy certificate (REC) and renewable thermal certificate (RTC) tracking. ~~For multitenant buildings where RECs are transferred to tenants, the plan for operation shall include procedures for tracking the quantity and vintage of RECs that are required to be retained and retired. The plan shall include provisions to transfer the RECs to building tenants, or to retire RECs on their behalf, in proportion to the gross conditioned and semi-heated floor area leased or rented.~~ **(Moved to below)**
The plan for operation shall include provisions to use a REC or RTC tracking system that meets the requirements of Section V.B of the Green-e Framework for Renewable Energy Certification or M-RETS for Renewable Thermal Certificates. The plan shall describe how the building owner will procure alternative qualifying renewable energy in the case that the renewable energy producer ceases. For multitenant buildings where RECs or RTCs are transferred to tenants, the plan shall include procedures for tracking the quantity and vintage of RECs or RTCs that are required to be retained and retired. The plan shall include provisions to transfer the RECs or RTCs to building tenants, or to retire RECs or RTCs on their behalf, in proportion to the gross conditioned and semi-heated floor area leased or rented.

Purpose of code change:

This proposal supports the use of renewable fuels as an approved source of off-site renewable energy to comply with Section C411.

The main benefit of renewable energy in any form is the carbon emissions. Carbon emissions are zero for renewable electricity, not accounting for the embodied emissions. They range from net negative to positive (but much lower than fossil fuel) for renewable natural gas depending on feed stock. Note that the energy code assumes renewable electricity delivered to the building to be 100% efficient, even though energy generation via solar and wind include embodied energy as well, although to a lesser degree than renewable natural gas.

Your amendment must meet one of the following criteria. Select at least one:

- ☐ Addresses a critical life/safety need.
- ☒ The amendment clarifies the intent or application of the code.
- ☒ Addresses a specific state policy or statute. (Note that energy conservation is a state policy)
- ☐ Consistency with state or federal regulations.
- ☐ Addresses a unique character of the state.
- ☐ Corrects errors and omissions.

Check the building types that would be impacted by your code change:

- ☐ Single family/duplex/townhome
- ☐ Multi-family 1 – 3 stories
- ☒ Multi-family 4 + stories
- ☒ Commercial / Retail
- ☒ Institutional
- ☐ Industrial

Your name	**Gary Heikkinen**	Email address	gary.heikkinen@nwnatural.com
Your organization	Energy Consultant on behalf of NW Natural	Phone number	503-997-9334

Other contact name **Editorial Updates: Lisa Rosenow – Evergreen Technology Consulting, lrosenow@evergreen-tech.net; 360-539-5202**

Economic Impact Data Sheet

Is there an economic impact: ☒ Yes ☐ No

Briefly summarize your proposal's primary economic impacts and benefits to building owners, tenants, and businesses. If you answered "No" above, explain your reasoning.

It is possible that renewable fuels could be more expensive than renewable electricity in the early years. The potential added cost could be offset by modifying the multipliers for renewable energy. Refer to 24-GP1-181 Part C for proposed revisions to Table C411.2.1 multipliers.

No cost impact for clarifications to original code intent.

Provide your best estimate of the **construction cost** (or cost savings) of your code change proposal? (See OFM Life Cycle Cost **Analysis tool** and **Instructions;** use these **Inputs**. **Webinars on the tool can be found Here and Here**)

$Click here to enter text./square foot (For residential projects, also provide $Click here to enter text./ dwelling unit)

Show calculations here, and list sources for costs/savings, or attach backup data pages

This should have no impact on construction cost.

Provide your best estimate of the **annual energy savings** (or additional energy use) for your code change proposal?

Click here to enter text.KWH/ square foot (or) Click here to enter text.KBTU/ square foot

(For residential projects, also provide Click here to enter text.KWH/KBTU / dwelling unit)

Show calculations here, and list sources for energy savings estimates, or attach backup data pages

Each credit in Section C406 of the IECC is worth 0.1% energy savings. Therefore, 50 credits = 5% savings.

List any **code enforcement** time for additional plan review or inspections that your proposal will require, in hours per permit application:

Code enforcement time could increase by the requirement to verify the off-site energy contracts.

Small Business Impact. Describe economic impacts to small businesses:

Could benefit any small business involved in the supply chain of renewable energy.

Housing Affordability. Describe economic impacts on housing affordability:

Does not affect housing affordability.

Other. Describe other qualitative cost and benefits to owners, to occupants, to the public, to the environment, and to other stakeholders that have not yet been discussed:

Instructions: Send this form as an email attachment, along with any other documentation available, to: sbcc@des.wa.gov. For further information, call the State Building Code Council at 360-407-9255.

All questions must be answered to be considered complete. Incomplete proposals will not be accepted.