Clean Energy Transformation Act (SB 5116)
Rulemaking Workshop – Planning Issues (Sections 6 and 14)
Sept. 18, 2019
Commerce Olympia Office
9:00 a.m. – 12:00 noon

Webinar Option:
https://lync.wa.gov/commerce.wa.gov/meet/glenn.blackmon/N9D43Z4D
Phone Option: (360) 407-3813, Conference ID 3989917#

Agenda

Meeting Objectives:
- Identify areas where there needs to be rules
- Prioritize areas where rulemaking is most important
- Hear from practitioners and subject matter experts on what is most important

Schedule:

9:00   Introductions and Welcome – Rebecca Stillings and Rachel Revisky

9:10   Agenda Review and Opening Remarks – Rebecca Stillings

9:15   Presentations
       The Energy Authority, Climate Solutions, Snohomish PUD, NW Energy Coalition

10:05  Presentations Q&A

10:25  Reviewing Rulemaking Priorities – Rachel Revisky

10:30  Updating Priorities- Rachel Revisky

10:35  BREAK

10:45  Shift and Share – Rebecca Stillings

11:55  Wrap Up and Next Steps – Glenn Blackmon

12:00  End of Workshop
NOTE: This document was prepared in response to stakeholders who requested specific questions or issues that may be discussed at the CETA workshop on 9/18/2019. It is not intended to exclude other possible questions or issues or to suggest that a rule is necessary on any particular topic.

### Section 14 (RCW 19.280.030)

<table>
<thead>
<tr>
<th>Sec. 14.</th>
<th>RCW 19.280.030 and 2015 3rd sp.s. c 19 s 9 are each amended to read as follows:</th>
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<tr>
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<td>Each electric utility must develop a plan consistent with this section.</td>
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<td>(1) Utilities with more than twenty-five thousand customers that are not full requirements customers (§§14) must develop or update an integrated resource plan by September 1, 2008. At a minimum, progress reports reflecting changing conditions and the progress of the integrated resource plan must be produced every two years thereafter. An updated integrated resource plan must be developed at least every four years subsequent to the 2008 integrated resource plan. The integrated resource plan, at a minimum, must include:</td>
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<td>(a) A range of forecasts, for at least the next ten years or longer, of projected customer demand which takes into account econometric data and customer usage;</td>
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<td>(b) An assessment of commercially available conservation and efficiency resources, as informed, as applicable, by the assessment for conservation potential under RCW 19.285.040 for the planning horizon consistent with (a) of this subsection. Such assessment may include, as appropriate, opportunities for development of combined heat and power as an energy and capacity resource, demand response and load management programs, and currently employed and new policies and programs needed to obtain the conservation and efficiency resources;</td>
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<td>(c) An assessment of commercially available, utility scale renewable and nonrenewable generating technologies including a comparison of the benefits and risks of purchasing power or building new resources;</td>
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<p>| Should a rule specify the methodologies or standards for any of the plan components in subsections (a) through (j)? |</p>
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<td>(d) A comparative evaluation of renewable and nonrenewable generating resources, including transmission and distribution delivery costs, and conservation and efficiency resources using &quot;lowest reasonable cost&quot; as a criterion;</td>
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<td>(e) An assessment of methods, commercially available technologies, or facilities for integrating renewable resources, including but not limited to battery storage and pumped storage, and addressing overgeneration events, if applicable to the utility's resource portfolio;</td>
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<td>(f) An assessment and ten-year forecast of the availability of regional generation and transmission capacity on which the utility may rely to provide and deliver electricity to its customers;</td>
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<td>(g) A determination of resource adequacy metrics for the resource plan consistent with the forecasts;</td>
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<td>(h) A forecast of distributed energy resources that may be installed by the utility's customers and an assessment of their effect on the utility's load and operations;</td>
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<td>(i) An identification of an appropriate resource adequacy requirement and measurement metric consistent with prudent utility practice in implementing sections 3 through 5 of this act;</td>
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<td>(j) The integration of the demand forecasts, resource evaluations, and resource adequacy requirement into a long-range assessment describing the mix of supply side generating resources and conservation and efficiency resources that will meet current and projected needs, including mitigating overgeneration events and implementing sections 3 through 5 of this act, at the lowest reasonable cost and risk to the utility and its customers, while maintaining and protecting the safety, reliable operation, and balancing of its electric system;</td>
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|  | Is the term “regional generation and transmission capacity” clear? |
|  | Is the term “resource adequacy metrics” clear? |
|  | Is the term “prudent utility practice” clear? |
|  | Is the term “resource adequacy requirement” clear? Does it differ in meaning from “resource adequacy metric” in subsection (g)? |
Section 14 (RCW 19.280.030)

(k) An assessment, informed by the cumulative impact analysis conducted under section 24 of this act, of: Energy and nonenergy benefits and reductions of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits, costs, and risks; and energy security and risk; and

(1) A ten-year clean energy action plan for implementing sections 3 through 5 of this act at the lowest reasonable cost, and at an acceptable resource adequacy standard, that identifies the specific actions to be taken by the utility consistent with the long-range integrated resource plan.

(3)(a) An electric utility shall consider the social cost of greenhouse gas emissions, as determined by the commission for investor-owned utilities pursuant to section 15 of this act and the department for consumer-owned utilities, when developing integrated resource plans and clean energy action plans. An electric utility must incorporate the social cost of greenhouse gas emissions as a cost adder when:

(i) Evaluating and selecting conservation policies, programs, and targets;

(ii) Developing integrated resource plans and clean energy action plans; and

(iii) Evaluating and selecting intermediate term and long-term resource options.

(b) For the purposes of this subsection (3): (i) Gas consisting largely of methane and other hydrocarbons derived from the decomposition of organic material in landfills, wastewater treatment facilities, and anaerobic digesters must be considered a nonemitting resource; and (ii) qualified biomass energy must be considered a nonemitting resource.

[RESERVED for future discussion. The analysis required in Sec. 24 is due by December 31, 2020.]

Should a rule specify minimum requirements for the 10-year clean energy action plan?

Should a rule specify whether a resource adequacy standard is “acceptable”?

[NOTE: Cost values to be used was covered at the 8/22 workshop and in comments submitted on 9/6.]

Should a rule specify one or more acceptable methodologies for incorporating GHG emission costs into the listed activities?

Should a rule specify the scope of GHG emissions to be incorporated (point of combustion, upstream emissions, etc.)?

Is the term “cost adder” clear?
Section 14 (RCW 19.280.030)

(4) To facilitate broad, equitable, and efficient implementation of this act, a consumer-owned energy utility may enter into an agreement with a joint operating agency organized under chapter 43.52 RCW or other nonprofit organization to develop and implement a joint clean energy action plan in collaboration with other utilities.

(5) All other utilities may elect to develop a full integrated resource plan as set forth in subsection (1) of this section or, at a minimum, shall develop a resource plan that:

(a) Estimates loads for the next five and ten years;

(b) Enumerates the resources that will be maintained and/or acquired to serve those loads; (and)

(c) Explains why the resources in (b) of this subsection were chosen and, if the resources chosen are not: (i) Renewable resources; (ii) methods, commercially available technologies, or facilities for integrating renewable resources, including addressing any overgeneration event; or (iii) conservation and efficiency resources, why such a decision was made; and

(d) By December 31, 2020, and in every resource plan thereafter, identifies how the utility plans over a ten-year period to implement sections 4 and 5 of this act.

(5+) (6) Assessments for demand side resources included in an integrated resource plan may include combined heat and power systems as one of the measures in a conservation supply curve. The value of recoverable waste heat resulting from combined heat and power must be reflected in analyses of cost-effectiveness under this subsection.

(5+) (7) An electric utility that is required to develop a resource plan under this section must complete its initial plan by September 1, 2008.

(5)–Resource) (8) Plans developed under this section must be updated on a regular basis, on intervals approved by the commission or the department, or at a minimum on intervals of two years.

(3+) (9) Plans shall not be a basis to bring legal action against electric utilities.

Discussion document for planning requirements – 2019-09-18 – page 4
<table>
<thead>
<tr>
<th>Section 14 (RCW 19.280.030)</th>
<th>Should a rule specify any minimum requirements for publication of plans and data?</th>
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<td>(10)(a) To maximize transparency, the commission, for investor-owned utilities, or the governing body, for consumer-owned utilities, may require an electric utility to make the utility's data input files available in a native format. Each electric utility shall publish its final plan either as part of an annual report or as a separate document available to the public. The report may be in an electronic form.</td>
<td>[RESERVED for future discussion. The analysis required in Sec. 24 is due by December 31, 2020.]</td>
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<td>(b) Nothing in this subsection limits the protection of records containing commercial information under RCW 80.04.095.</td>
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<td>(11) By December 31, 2021, the department and the commission must adopt rules establishing the requirements for incorporating the cumulative impact analysis developed under section 24 of this act into the criteria for developing clean energy action plans under this section.</td>
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| Section 6 (RCW 19.404.060) | |
|-----------------------------| |
| (2)(a) By January 1, 2022, and every four years thereafter, each consumer-owned utility must develop and submit to the department a four-year clean energy implementation plan for the standards established under sections 4(1) and 5(1) of this act that: | Should a rule specify the time periods for interim targets (such as a target for the period 2022 through 2025 and 2026 through 2029)? |
| (i) Proposes interim targets for meeting the standard under section 4(1) of this act during the years prior to 2030 and between 2030 and 2045, as well as specific targets for energy efficiency, demand response, and renewable energy; | Are interim targets expressed in the same terms as targets under Section 4(1): Amount of nonemitting electric generation and electricity from renewable sources as a percent of the utility’s retail electric loads over the period? |
| | Should a rule specify minimum levels for interim targets to demonstrate progress (such interim target for 2022-2025 target must be at least X% of the target in 4(1))? |
Section 6 (RCW 19.404.060)

| For the compliance periods between 2030 and 2045, should a rule specify minimum levels for interim targets? |
| Should a rule specify the minimum requirements for energy efficiency, demand response, and renewable energy targets? |

(ii) Is informed by the consumer-owned utility's clean energy action plan developed under RCW 19.280.030(1) or other ten-year plan developed under RCW 19.280.030(5);

(iii) Is consistent with subsection (4) of this section; and

(iv) Identifies specific actions to be taken by the consumer-owned utility over the next four years, consistent with the utility's long-range resource plan and resource adequacy requirements, that demonstrate progress towards meeting the standards under sections 4(1) and 5(1) of this act and the interim targets proposed under (a)(i) of this subsection. The specific actions identified must be informed by the consumer-owned utility's historic performance under median water conditions and resource capability and by the consumer owned utility's participation in centralized markets. In identifying specific actions in its clean energy implementation plan, the consumer-owned utility may also take into consideration any significant and unplanned loss or addition of load it experiences.

(b) The governing body of the consumer-owned utility must, after a public meeting, adopt the consumer-owned utility's clean energy implementation plan. The clean energy implementation plan must be submitted to the department and made available to the public. The governing body may adopt more stringent targets than those proposed by the consumer-owned utility and periodically adjust or expedite timelines if it can be demonstrated that such targets or timelines can be achieved in a manner consistent with the following:

[RESERVED for discussion with other reporting requirements.]
### Section 6 (RCW 19.404.060)

(i) Maintaining and protecting the safety, reliable operation, and balancing of the electric system;

(ii) Planning to meet the standards at the lowest reasonable cost, considering risk;

(iii) Ensuring that all customers are benefiting from the transition to clean energy: Through the equitable distribution of energy and nonenergy benefits and reduction of burdens to vulnerable populations and highly impacted communities; long-term and short-term public health and environmental benefits and reduction of costs and risks; and energy security and resiliency; and

(iv) Ensuring that no customer or class of customers is unreasonably harmed by any resulting increases in the cost of utility-supplied electricity as may be necessary to comply with the standards.

(4)(a) A consumer-owned utility must be considered to be in compliance with the standards under sections 4(1) and 5(1) of this act if, over the four-year compliance period, the average annual incremental cost of meeting the standards or the interim targets established under subsection (2) of this section meets or exceeds a two percent increase of the consumer-owned utility's retail revenue requirement above the previous year. All costs included in the determination of cost impact must be directly attributable to actions necessary to comply with the requirements of sections 4 and 5 of this act.

[RESERVED for future discussion]

(b) If a consumer-owned utility relies on (a) of this subsection as a basis for compliance with the standard under section 4(1) of this act, and it has not met eighty percent of its annual retail electric load using electricity from renewable resources and nonemitting electric generation, then it must demonstrate that it has maximized investments in renewable resources and nonemitting electric generation prior to using alternative compliance options allowed under section 4(1)(b) of this act.

[RESERVED for future discussion]
Integrated Resource Planning and the Clean Energy Transformation Act

Department of Commerce Rulemaking Workshop
September 18, 2019
Agenda

• How Snohomish approaches Integrated Portfolio Planning

• What parts of the IRP stay the same, what needs to change?

• How does the IRP interface with the Clean Energy Implementation Plan?

• Issues for rulemaking
Current PUD Long-Term Planning
Input -> Outputs

Integrated Resource Plan
- What Needs do we need to satisfy and what are our options?
- What is the best combination of options to deliver affordable, reliable, environmentally sustainable service?
- What are the attributes and timing of that resource strategy?

Resource Strategy

Input Sources:
- Demand Management Potential Assessment
- Conservation Potential Assessment
- Existing and Prospective Supply Side Resources
- Distributed Energy Resource Inputs
- Resource Adequacy/Planning standards
- Post-2028 RPA Contract
- Wholesale Market Price Forecasts
- Regulatory Compliance Obligations (CETA/I-937)
- Electrification Load Growth Considerations

Outputs:
- IRP Document
- 10-yr Clean Energy Action Plan
- 4-yr Clean Energy Implementation Plan
- EIA Compliance Strategy
IRP Process – What Stays the Same?

- Integrated portfolio approach
- Emphasis on 10-year plan/Clean Energy Action Plan [Section 14(1)(L, F)]
- DER forecasting on system [Section 14(1)(H)]
- Market depth and Transmission capacity assessment [Section 14(1)(F)]
- Planning standards for portfolio adequacy [Section 14(1)(G, I)]
- CPA and DRPA processes [Section 14(1)(B)]
- Societal Cost of Carbon [Section 14(3)(A)]
IRP Process – What will change?

- Addition of a 4 Year Clean Energy Implementation Plan informed by IRP [Section 6 (2)(a)]

- Multiple new compliance pathways

- Policy effects on market mix and market forecast fundamentals
  - Energy
  - Capacity
Timeline for IRP and CEIP

2019 | 2020 | 2021 | 2022
---|---|---|---
Aug | Sep | Oct | Nov | Dec | Jan | Feb | Mar | Apr | May | Jun | Jul | Aug | Sep | Oct | Nov | Dec | Jan

- IRP Work
- IRP Complete (Clean Energy Action Plan)
- CPA Work
- CPA Deadline
- Clean Energy Implementation Plan due
Issues for Rulemaking

• Clean Energy Implementation Plan

• How utilities demonstrate compliance

• Regulatory and compliance pathways for CETA/EIA
Clean Energy Implementation Plan

• Informed by the Integrated Resource Plan [Section 6 (2)(a)(ii)]
  – Snohomish interprets this statement as meaning that interim targets for the CEIP are derived from IRP’s Long-Term Resource Strategy

• Questions
  – CEIP is a four year plan, but IRPs are updated every two years
    • How are interim targets affected by changes in IRP updates?
    • How do energy efficiency targets in CEIP relate to EIA targets?
    • Would a rule allowing an optional 2-year CEIP update make sense?
  – How are near term actions evaluated as future compliance mechanisms from a portfolio standpoint? (Ex: Energy transformation projects)
Demonstrating Compliance

• Very broad question: how will compliance accounting be handled?
  – Snohomish assumes, based on Section 4(1)(a), total load over the compliance period must equal total renewable/non-emitting generation

• How compliance accounting is handled will affect planning

• What information will be required in compliance filings with Commerce?
  – In a surplus portfolio, how are the attributes of a surplus MWh established?
  – How are market purchases and market sales accounted for?
Regulatory and Compliance Pathways

• When using the 100% compliance method for the EIA [Section 29(2)(m)] what information/filings will be required by Commerce?
  – Will the EIA compliance accounting for this compliance method follow the same methodology as the CETA accounting?
Questions?
Goals

• Not to dispute the law or merits thereof
• Our questions / concerns are focused on implementation methodology
• Consistency = success
Social Cost of Carbon

• Cost of carbon allocation scope
  – Utility specific
  – Washington
  – Washington & bordering entities
  – WECC-wide?

• Inclusion of existing / proposed carbon legislation?
IRP Methodology

Assumptions
- Fuel costs
- Emissions costs
- RPS obligations
- New resource costs

Planned retirements and known builds

Capacity expansion model run

IRP price stream

Social cost of carbon?
Social Cost of Carbon Implications

- Flow differences
- Generation builds
- Retirements
- Forward prices
- Market purchase carbon content
Capacity / RA

• Current construct:
  – No regional capacity requirement
  – Entities must enter hour load / resource balance and receive a financial penalty if they fail this test.

• Social Cost of Carbon ➔ Renewable Builds ➔ Low market prices

• What if projected penalty is less than procurement?

• Depth of market concerns?
Transmission

• Requirement: “An assessment and ten-year forecast of the availability of regional generation and transmission capacity on which the utility may rely to provide and deliver electricity to its customers”

• Questions
  – Transmission capacity is location specific
  – How should this be approximated?
  – How does the transmission working group integrate?
Commerce Clean Energy Transition Act Workshop

Planning requirements: Section 6 and Section 14

climate solutions
accelerating the transition to our clean energy future

celebrating 20 years
Clean Energy Implementation Plans - Section 6

Development of plans
- Starting in 2022, submitted every four years
- Should be intended to minimize long-term costs and continuous planning

Interim targets
- Plans to include interim targets for meeting the standard during years prior to 2030, as well as between 2030-2045
- Specific targets for energy efficiency, demand response, and renewable energy
- Rules should provide guidance on how utilities are to develop targets and align with public interest, as well as a demonstration of meeting the targets

Adoption of plan
- Governing Board must adopt the plan after a public meeting
- More clearly define how public input is to be considered

Demonstrating progress
- Plans should identify actions to be taken over the four year time period that demonstrate progress towards meetings the goals
- Rules should specify how progress is to be measured
Cost Cap Protection - Section 6

“Over the four-year compliance period, the average annual incremental cost of meeting the standards or the interim targets...meets or exceeds a 2% increase of the COU’s retail revenue requirement above the previous year.”

- To reduce long-term costs, utilities need to begin planning for compliance immediately and demonstrating progress toward the goal
- Even though compliance periods to meet the net-zero standard begin in 2030, utilities still have to comply with interim targets as determined in the four-year CEIPs
- Costs can be averaged over a four-year period to accommodate major investments
- Utilities can choose to exceed the 2% cost cap if, for example, it reduces the long-term cost of compliance or is otherwise in the public interest

“Costs...must be directly attributable to actions necessary to comply with the requirements of Sections 4 and 5 of this act.”

- Incremental cost should be based on a portfolio of resources with Sections 4 and 5 compared
- Baseline for the point of comparison should include all other requirements of CETA beyond Sections 4 and 5
  - For example, coal transition, social cost of GHGs, public interest language, low income assistance should all be included in the baseline scenario
- Rules should clarify incremental cost calculation
SB 5116 public interest guidance

- Ensure all customers benefit from the transition to clean energy through an equitable distribution of energy and nonenergy benefits, a reduction of burdens to vulnerable populations and highly impacted communities, long-term and short-term public health and environmental benefits and reduction of costs and risks, and energy security and resiliency.

UTC IRP Rules

- "Lowest reasonable cost" means the lowest cost mix of resources determined through a detailed and consistent analysis of a wide range of commercially available sources. At a minimum, this analysis must consider resource cost, market-volatility risks, demand-side resource uncertainties, resource dispatchability, resource effect on system operation, the risks imposed on ratepayers, public policies regarding resource preference adopted by Washington state or the federal government and the cost of risks associated with environmental effects including emissions of carbon dioxide.
## Social Cost of Greenhouse Gases – Section 14

### Resource Application
- Resources used in the entire WECC, but only insofar as these are dispatched to serve customers
- Should not apply to Washington-only facilities
- Should not apply to entire WECC facilities that are dispatched to utilities outside of Washington
- Must go beyond IRP process and include resource procurement as well

### Dispatch
- Since utilities operate facilities without a carbon price, utility plans should project economic dispatch prior to adding the carbon price
- Planning adder should be added after the capacity factor and projected dispatch is established

### Emissions covered
- Should be applied at point of generation
- Should also cover upstream leakage emissions
- Leakage should be calculated using the best available science
- Should be based on 20-year GWPs in recognition of the immediate urgency on climate
Thank you!

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