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## **INTRODUCTION**

On May 7, 2019, Washington Governor Jay Inslee signed into law the <u>Clean Energy Transformation Act (CETA)</u> (E2SSB 5116 or RCW 19.405), which commits Washington to 100% greenhouse gas free electricity supply by 2045. By the end of 2025, utilities must eliminate coal-fired electricity from their state portfolios. In 2030, electric generation must be greenhouse gas neutral (GHG Neutral Standard). To meet this goal, utilities can use a combination of non-emitting resources and renewable resources to meet 80% of their retail load over a four-year compliance period beginning in 2030 and alternative compliance options, such as renewable energy credits (RECS) or energy transformation projects, for the remaining 20%.

Existing hydropower is eligible as a renewable resource under CETA. By 2045, CETA requires utilities to supply Washington customers with 100% renewable or non-emitting electricity (100% Clean Standard). Currently, there are no penalty provisions in the event a utility does not meet the 100% clean energy obligation. CETA does provide some cost-cap provisions and regulatory relief related to electric reliability standards and transmission availability.

## **ABOUT THE CEIP**

The first milestone for CETA is in 2022, when each utility must prepare and publish a Clean Energy Implementation Plan (CEIP). Grant PUD's first CEIP provides a roadmap that guides Grant PUD's clean energy actions and investments for the next four years (2022-2025). In addition, Grant PUD must include specific actions they are taking to ensure an equitable transition. Subsequent CEIPs will be developed every four years.

Grant PUD is providing this supplemental report in addition to its <u>published CEIP</u>. This report describes the specific actions Grant PUD will take over the next four years (CEIP planning period) to track progress towards meeting CETA established milestones. Grant PUD's CEIP includes the following:

- Interim targets for the percentage of retail load Grant PUD plans to serve using renewable or nonemitting resources during 2022-2025;
- Optimize Grant PUD's wholesale fiber optic network expansion by offering competitive product and services (within limits of existing legal limitations and authorizing resolution);
- Specific targets for energy efficiency, demand response and renewable energy for 2022-2025;
- Specific actions Grant PUD will take between 2022-2025 to reach those targets;
- Information about Grant PUD's plans to ensure an equitable transition to clean energy;
- Grant PUD's resource adequacy standard and measurement metrics used to establish the 2022-2025 interim and specific targets.

#### **CEIP TARGETS**

#### **Renewable Energy Interim & Specific Targets**

Grant PUD's CEIP must establish an interim target for the percentage of retail load to be served using renewable and non-emitting resources during the CEIP planning period. CETA defines the following energy

sources as renewable: water (i.e., hydropower), wind, solar, geothermal, renewable natural gas, renewable hydrogen, wave, ocean or tidal power, biodiesel fuel that is not derived from crops raised on land cleared from old growth or first growth forests and some forms of biomass. Nonemitting resources are defined as resources that do not emit GHGs as a by-product of energy generation and include nuclear energy resources.

The interim targets must demonstrate progress toward meeting CETA's GHG Neutral Standard. Grant PUD established its interim renewable energy target based on its understanding that CETA compliance will be measured based on renewable energy ownership/acquisition. However, administrative rules implementing CETA's GHG Neutral Standard were still under development during the development of this CEIP. Grant PUD's approach to establishing interim targets may change in future CEIPs based on final administrative rules.

Grant PUD's renewable energy interim target for 2022-2025 is 212 aMW<sup>1</sup> or 7,414 GWh<sup>2</sup> total for the four-year period and is based on the following specific targets:

- 2022- Renewable Energy: 28%, Nonemitting: 0%, Total: 28%
- 2023- Renewable Energy: 28%, Nonemitting: 0%, Total: 28%
- 2024- Renewable Energy: 28%, Nonemitting: 0%, Total: 28%
- 2025- Renewable Energy: 28%, Nonemitting: 0%, Total: 28%

Grant PUD's forecasted retail load for the same planning period is 754 aMW or 26,408 GWh total.

## **Energy Efficiency Specific Target**

Grant PUD conducted a Conservation Potential Assessment (CPA) in 2021 to estimate the conservation potential for the coming 20 years. Grant PUD has historically been able to meet the targets set for conservation. Due to the current wholesale market rates and concern of rate increases for customers, Grant PUD has focused its conservation efforts on the industrial customers. Grant PUD continues to offer several rebate programs for residential and non-residential applications.

The conservation potential analysis evaluated four sectors including: residential, commercial, industrial, and agricultural. The industrial sector is where Grant PUD receives the greatest gains by installing more energy efficient cooling and power supplies in data centers, converting to more efficient lighting, upgrading refrigeration storage, and performing cold storage equipment tune-ups and retrofits. The commercial sector represents the second greatest potential for conservation with lighting and HVAC upgrades. The following table and chart are taken directly from the CPA to illustrate the base case of where the conservation potential is through 2041.

**Table 1: Conservation Potential (Base Case)** 

TABLE 1-1: COST-EFFECTIVE POTENTIAL (AMW)				
	2-Year	4-Year	10-Year	20-Year
Residential	0.13	0.65	2.57	7.01
Commercial	0.43	1.20	6.63	20.68
Industrial	3.98	4.32	8.71	18.13
Agricultural	0.02	0.06	0.50	1.33
Total	4.57	6.24	18.41	47.15
Note: Numbers in this table and others throughout the report may not add to total due to rounding.				

Grant PUD's energy efficiency specific target for CETA was developed using methodologies established in the Energy Independence Act (EIA/I-937)<sup>3</sup>. Grant PUD's CPA shows cost-effective four-year (2022-2025) energy savings of 6.24 aMW, or 54,662 MWh<sup>4</sup> (as measured in first-year savings).

The energy efficiency MWh will be acquired over the CEIP period with annual energy efficiency targets as follows:

- 2022- 1.44 aMW or 12,614.4 MWh
- 2023- 1.5 aMW or 13,140 MWh
- 2024- 1.6 aMW or 14,016 MWh
- 2025- 1.7 aMW or 14,892 MWh

#### **Demand Response Specific Target**

Grant PUD's demand response specific target for CETA is 1.56 MW to be acquired over the CEIP period. While Grant PUD does not currently have a Demand Response program our conservation efforts are expected to reduce our Demand target by the 1.56 MW.

## **CEIP ACTIONS**

#### **Renewable Energy Specific Actions**

Grant PUD's renewable energy specific actions were developed based upon Grant PUD's current portfolio of clean energy resources combined with customer driven clean energy investments. The plan allows Grant PUD to demonstrate progress towards the 2030 GHG neutral standard while protecting against significant rate impacts.

<sup>&</sup>lt;sup>1</sup>An aMW is the equivalent of 1 Mega-watt hour per hour across an entire year or 8,760 MWh/year. The energy does not necessarily have to average 1 MWh per hour every hour.

<sup>&</sup>lt;sup>2</sup>GWh or Gigawatt hour is a unit of energy representing one-billion-watt hours and is equivalent to one million kilowatt hours or one thousand megawatt hours.

<sup>&</sup>lt;sup>3</sup> The EIA establishes a renewable portfolio standard (RPS) with renewable energy targets as a percentage of customer load. The targets increase over time, from 3% in 2012, to 9% in 2016, to 15% in 2020.

<sup>&</sup>lt;sup>4</sup>MWh or megawatt hour is a unit of energy representing one-million-watt hours and is equivalent to one thousand kilowatt hours.

Figure 1: CEIP Renewable Energy Interim & Specific Targets



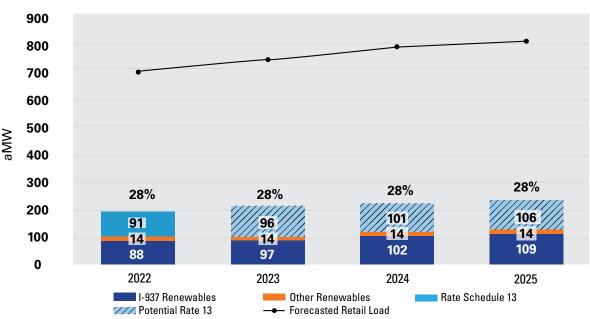


Figure 1 above shows Grant PUD's renewable energy interim & specific targets with the following actions being taken to reach those targets:

- I-937 Incremental Hydropower: Grant PUD has made improvements at Priest Rapids Project (PRP), including Top Spill Fish Bypasses and improvements to turbines and generators, that produce EIA/I-937 qualified incremental hydropower. Grant PUD has sold the output of Priest Rapids Project in short term slice contracts but has retained the incremental hydro qualified as renewable to meet its compliance obligation under the EIA/I-937. Grant PUD expects to use approximately 99 aMW of renewable energy from I-937 incremental hydropower during this CEIP planning period.
- Other Renewables: Grant PUD purchases 12.54% of the Nine Canyon Wind Project output. In addition, Grant PUD purchases 100% of the output of both the Quincy Chute and P.E.C Headworks Projects. Both projects are hydroelectric generating facilities operating seasonally during the irrigation season (March through October). Grant PUD also purchases Priority Firm power from Bonneville Power Administration (BPA) to serve load in the Grand Coulee area. Based on BPA's fuel mix reports, approximately 84% of BPA power is assumed to be from renewable resources and 11% is assumed to be from nonemitting resources. For purposes of CETA, BPA power is 95% compliant. Grant PUD expects to use a combined 14 aMW of renewable energy from these other resources during this CEIP planning period.
- Schedule 13: Grant PUD provides voluntary clean energy rate schedule options for its customers.

The first option is <u>Specified Source Purchase Schedule 13SS</u>, which provides large retail customers with the option to purchase energy with a carbon emission factor of zero. The second option is <u>Alternative Energy Rate 13</u>, which provides all metered retail customers with the option to purchase Qualified Alternative Energy Resources. These clean energy rate schedule options are made available at prevailing market rates. Grant PUD expects an average of 98 aMW of additional clean energy will be procured on behalf of its customers during this CEIP planning period. As of now, only the clean energy purchases for 2022 have been executed.

To demonstrate compliance with its interim and specific renewable energy targets Grant PUD intends to retire associated renewable energy credits (REC) as applicable. Utilities are not required to retire RECs until 2030 if the energy source for the generating facility is water. For this first CEIP period, Grant PUD expects to only retire Nine Canyon Wind RECs, RECs associated with incremental hydropower, and any RECs associated with BPA Preference Power. Additional RECs may be retired if RECs are bundled with energy procured under Schedule 13.

## **Energy Efficiency Specific Actions**

Grant PUD's primary approach to reducing the customer's energy burden will be to offer specific energy efficiency products. Any applicable energy efficiency savings will also be counted toward the state mandated targets under the Energy Independence Act (also known as EIA or I-937). Energy audits are available which include tips on ways to save energy, information on assistance programs, specific recommendations for customer's homes, direct installation of LED light bulbs, weather stripping replacement, and blower door and duct testing, if applicable.

## **Demand Response Specific Actions**

In conjunction with EES Consulting, Grant PUD has been working on a Demand Response Potential Assessment (DRPA). The Demand Response product data for the DRPA was taken directly from the Demand Response modeling used by the Northwest Power and Conservation Council's Demand Response modeling. There was a total of 23 products evaluated, with Demand Voltage Regulation (DVR) and Irrigation showing the largest demand potential. Grant PUD needs to further evaluate the DRPA and its findings. Irrigators may not be willing (or able) to curtail the application of water in the hottest of weather when Demand Response is needed. Grant PUD's system needs a thorough evaluation to determine if DVR is plausible. Grant PUD's Demand Response might better be met with the curtailment of the loads from our crypto currency or other customers. Grant PUD is still evaluating the best demand response actions to be taken.

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## **EQUITABLE TRANSITION**

CETA requires that equity considerations become an explicit part of utility planning. Utilities must assess the potential impacts of their decisions on two communities: vulnerable populations and highly impacted communities. Vulnerable populations (VP) are defined as communities that experience a disproportionate cumulative risk from environmental burdens due to socioeconomic and biological factors that are identified by utilities in conjunction with public input. Highly impacted communities (HIC) are defined as geographic communities, impacted by fossil fuels and climate change, and identified by the <a href="Washington State Department of Health's Environmental Health Disparities Map">Washington State Department of Health's Environmental Health Disparities Map</a> (EHD Map).

#### **Highly Impacted Communities**

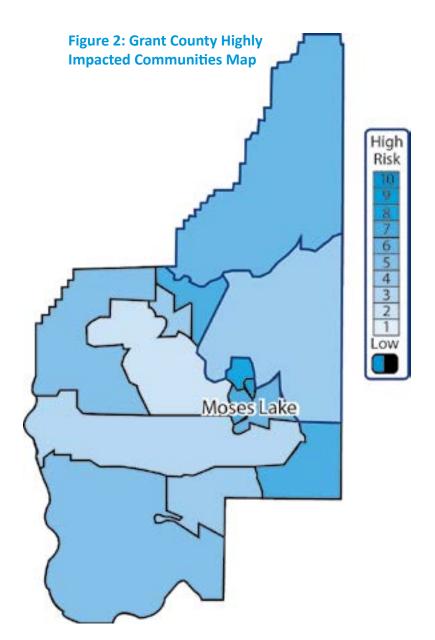
The Washington Department of Health (WA DOH) designates HICs as those ranking 9 or 10 on the EHD Map or if located on a census tract covered or partially covered by 'Indian Country' as defined in 18 U.S.C. Sec. 1151. Rankings are determined by the WA DOH on cumulative impact analyses by census tract. There is one census tract within Grant County that meets this designation:

Census Tract Health (enter 11 digit FIPS code)	County Name	Tribal Lands (Yes/No) Envioronmental	Disparities Topic Rank
53025010100	Grant	Yes	5

At the time of development of this CEIP, WA DOH's HIC list also included several other census tracks located outside of Grant County that were identified as within Grant PUD's jurisdiction. Grant PUD understands that the inclusion of these census tracks was due to mapping inaccuracies.

## **Vulnerable Populations**

CETA establishes a policy that the public interest includes the "equitable distribution of energy benefits and reduction of burdens to vulnerable populations and highly impacted communities." CETA requires and places targets on the reduction of the energy burden of low-income households. Energy burden is the percentage of a customer's income that is dedicated to energy. For example, a customer with income of \$30,000 per year with an annual electric bill of \$900 would have an energy burden of three percent (\$900/\$30k). Grant PUD will focus on helping customers with a high "energy burden," defined in CETA as those that spend six percent or more of household income on utility bills, and are in the most need of utility bill assistance.



## **Forecast of Impacts**

Grant PUD has identified specific actions and benefit indicators to ensure an equitable transition to a clean energy economy. Much of the work noted in this CEIP includes the development of targeted energy assistance and energy conservation programs aimed at assisting our customers that are in the most need of assistance. These efforts will focus on energy burdened customers, as well as customers who reside in highly impacted communities as identified using the EHD Map.

According to the 2019 Census Reporter, Grant County has approximately 97,733 residents living in 30,866 households. Grant County has a 14.8% poverty rate (approximately 4,568 homes). The median household income is \$56,997. The Grant PUD's CPA indicated in 2019 there were 59% single family homes, 30% manufactured homes, 11% multifamily low rise, and 99% of these homes have electric heat. A random sampling of 20 customers for Grant PUD's share the warmth, disabled discounted rate, and senior discounted rate show that 14 customers (70%) meet or exceed the

6% energy burden threshold under CETA. Based on this information, Grant PUD believes the target number of high "energy burden" homes in Grant County will be 3,197.

Grant PUD will be required to demonstrate progress towards meeting a substantial portion of the county's energy assistance need (60% of the need by 2030 and 90% of the need by 2050). Qualified households are in zones 9 and 10 on the EHD Map and their energy burden is six percent of their income or higher. Grant PUD's primary approach to reduce this energy burden will be to reduce power usage for these customers through specific energy efficiency offerings. Any applicable conservation savings will be counted toward EIA/I-937 state mandated targets.

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Table 2: Distribution of Energy and Non-energy Costs and Benefits

CATEGORY	INDICATOR	DETAILS	SOURCE	DATE LAST UPDATED
Reduction of burden	< 6% of income	Energy Bill Reductions	Billing history, BPA UES measure list	2021
Reduction in cost (customer)	High energy bills	Weatherization	In home audits - education and energy conservation tips and BPA UES measure list	2021
Non-energy benefits	Customer request for bill assistance	Income verification	Share the Warmth (customer donated low income bill assistance), Low income, Senior and Disability Rate Discounts)	2021

#### **Customer Benefit Indicators**

**Table 3: Customer Benefit Indicator Table** 

UTILITY SPECIFIC ACTION OR (e.g. name of resource or program)	POPULATION EFFECTED	INDICATOR	DETAIL (Describe distribution of energy and non-energy benefits on named population)
Community Engagement	Highly Impacted Communities	Customer Outreach	Multi-lingual surveys and tips
Energy Burden / Affordabiltiy	Vulnerable Populations	Reduction of burden	Energy efficiency to reduce utility bills
Access to Assistance	Vulenerable Populations	Bill pay assistance	Energy Assistance programs (STW, Senior and Disability discounts)
In-home Audits	Vulnerable Populations	Bill exceeds 6% of income	Identify areas to conserve energy

#### Reducing Risks to Vulnerable Populations and Highly Impacted Communities

Each energy audit will consist of an information pamphlet on additional ways to save energy, survey, inspection, recommendations, direct installation of LED light bulbs, weather stripping replacement, blower door and duct testing, if applicable. Grant PUD will work with contractors for upgrades such as insulation, duct sealing and thermostat replacement. Grant PUD is tracking all audit information to determine what future programs can be tailored to best suit these customers. Grant PUD's clean energy transition plan benefits all customers equally. HIC and VP customers will benefit without having to pay any additional costs as the incremental costs will be borne by those customers who opt into the voluntary clean energy rate schedules. This approach helps protect HIC and VP customers from experiencing an increase in their energy burden.

#### **LONG-TERM PLANS**

Grant PUD's CEIP is consistent with its 2020 Integrated Resource Plan (IRP). Grant PUD is taking the following actions consistent with its IRP:

- Grant PUD has enough existing physical resources and Estimated Unmet District Load (EUDL)
  dollars to meet expected load growth on an annual basis through 2028. With a 15% planning
  margin, additional resources requirements are forecasted as soon as 2026. Consistent with
  forecasted resource needs, Grant PUD will not add any new renewable or nonemitting resources
  during this CEIP planning period.
- Grant PUD will continue to meet its EIA/I-937 obligations without acquiring new resources until
  2025. Based on the IRP, Grant PUD will acquire any expected EIA/I-937 deficits with market
  purchases of eligible RECs and other qualifying resources such as solar. Through development of
  this CEIP, Grant PUD will modify this approach and focus on the acquisition of qualifying resources
  instead of RECs to ensure what is procured can be used to also meet its CETA interim renewable
  energy targets.
- Grant PUD will acquire cost-effective conservation consistent with its 2021 Conservation Potential
   Assessment (CPA).

## **PUBLIC PARTICIPATION**

Utilities must provide a public process for receiving feedback on its plans and a description of how public comments were reflected in their CEIPs.

Grant PUD engaged Grant County's helping agencies to gather ideas and information regarding customer interests, concerns, and needs. Grant PUD is also providing surveys to low-income residential customers during energy audits, through helping agencies, and by mail to get feedback. A public notice was published in local

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newspapers regarding virtual meetings to discuss Grant PUD's CEIP. Customers were provided an opportunity to provide feedback and engage via two virtual CEIP meetings held on September 29, 2021. In addition, customers were given opportunities to comment during the review and adoption of the CEIP by Grant PUD's Board of Commissioners (October 26, 2021 and November 9, 2021).

All notices and informational materials are provided in both English and Spanish and a Spanish speaking interpreter was available for both virtual CEIP meetings. Grant PUD has an external <u>CETA webpage</u> where all meeting information, meeting recordings, and materials are posted and a dedicated email (CETA@gcpud.org) has been set up to provide customers with the opportunity to provide ongoing feedback. To date, Grant PUD has not received any public comments on its CEIP.

### **ALTERNATIVE COMPLIANCE OPTIONS**

CETA allows a utility to meet up to 20% of its GHG neutral compliance obligation through December 31, 2044, by using alternative compliance options. Alternative compliance options include:

- Alternative compliance payment
- Use of unbundled renewable energy credits
- Investments in energy infrastructure projects

CETA's GHG Neutral Standard begins on January 1, 2030, and therefore the potential use of alternative compliance options is not required during this CEIP planning period. At this time, Grant PUD is not planning to utilize alternative compliance, but if it did purchase unbundled RECs for EIA/I-937 compliance then those RECs would be categorized as alternative compliance under CETA.

## **RESOURCE ADEQUACY**

Under CETA and in the IRP, utilities are required to identify an appropriate resource adequacy (RA) requirement and measurement metric consistent with prudent utility practice. Grant PUD is currently using a 15% power planning margin designed to cover most prolonged resource outages, variations in weather, water for generation, economics, and general load growth.

In 2019, some of the Northwest Power Pool (NWPP) entities began an effort to start a voluntary NW Resource Adequacy (RA) program. The RA program would set regional standards for planning methods and metrics, provide load, and resource diversity savings, and establish a robust procurement process. Grant PUD is currently participating in the design of this market and using this effort to better understand and design its RA needs as it looks towards the next ten years. Assuming this program is implemented, Grant PUD anticipates in the future it will perform its resource adequacy assessments based on the requirements and metrics developed by the program.

#### **INCREMENTAL COST**

CETA allows utilities to adopt a slower transition path if necessary to avoid rate shock by using a two percent incremental cost cap. Grant PUD is not planning to use the incremental cost cap during this CEIP planning period but will evaluate cost impacts and potential use of the incremental cost cap in future CEIPs.