#### **Quarterly load update**

May 3, 2021





Andy Wendell – Director of Customer Services

#### Today's agenda



- Updated load forecast
- Overview of active projects of note
- Lake Chelan South shore feeder
- Substation build update
- No action requested today <Information only>



#### System growth observations moving into Q2 2021



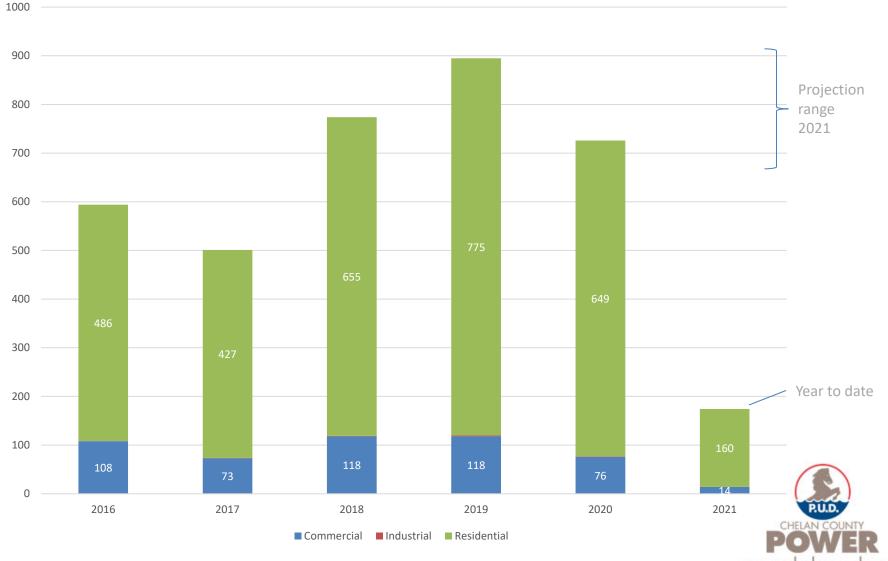
Photo: Triad Development, Wenatchee

- New residential housing remains a primary focus across the county Single family, multi-family & low barrier / affordable housing
- Moderate new development in commercial including hotels and retail shops
- Schools, restaurants and bars becoming re-occupied
- Pre-Covid norms emerging



#### Electrical system growth

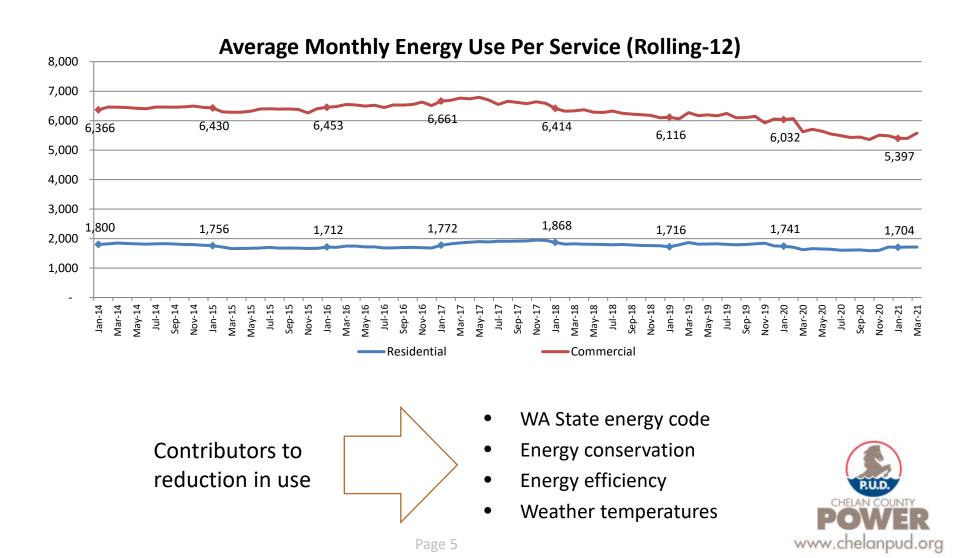
#### New electric meters by customer class



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#### Electrical system energy

**Residential and Commercial** 



#### Chelan & Douglas counties

Data source: Institute for Public Policy & Economic Analysis (EWU)



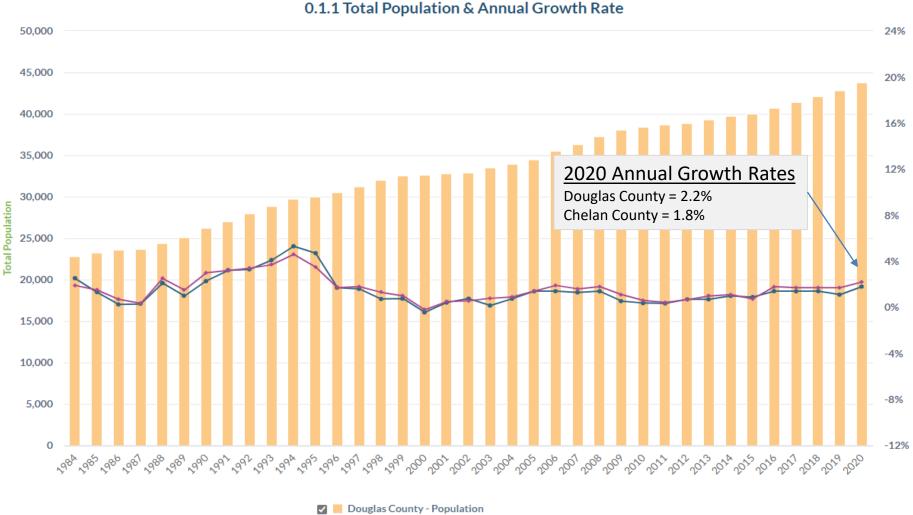
0.1.1 Total Population & Annual Growth Rate

🗹 📕 Chelan & Douglas Counties - Population

- Chelan & Douglas Counties Annual Growth Rate
- 🗹 🔶 Washington State Annual Growth Rate

#### Chelan & Douglas counties

Data source: Institute for Public Policy & Economic Analysis (EWU)



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Annual Growth Rate

🗹 🔶 Chelan & Douglas Counties - Annual Growth Rate

🗹 🔶 Douglas County - Annual Growth Rate

# **10 Year Load Forecast**

#### (Net of Energy Conservation Plans)

	Date of Forecast	Base Case	High Case	Low Case
	Oct 2020	26 aMW * 1.1 %	130 aMW 4.6 %	-1 aMW - 0 %
	Jan 2021	26 aMW * 1.1 %	130 aMW 4.6 %	-1 aMW - 0 %
Current Forecast	April 2021 Annual Growth Rate	26 aMW * 1.1 %	130 aMW 4.6 %	-1 aMW -0%

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### New growth impact on the Fiber optic network



- Developers interest in Chelan PUDs fiber network remains high
- In partnership w/retail service providers, we can serve those developments
- District policies ensure fiber duct & vaults are built with electrical system infrastructure
- New developments often occur in areas where fiber exists
- New large developments of >100 units can necessitate offsite system improvements
- System improvements can include, replacing or adding fiber cables, and adding Distribution towers
- County and city development pre-applications processes help identify impacts to fiber, electric and water infrastructure

## Active projects of note:

**NEW Large Project Applications Since December of 2020:** 

Winton Mill composting plant - Cole's corner	0.75 MW
Electrify America car charging stations- Leavenworth	0.80 MW
66 unit farmworker housing - Entiat	0.55 MW
21-lot residential development – Chelan	0.15 MW

Peak Demand ~ 2.21 MW

#### Ohme substation



#### Substation build progress – Hawley Street



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# Substation build activity

Station	Next Build Phase	Expected Complete
Hawley	Energize	July 2021
Ohme	Energize	September 2021
North Shore	Outreach and civil design	June 2021
Leavenworth (Bavarian)	Outreach and civil design	June 2021
Wenatchee (upsize)	Finalize project plan	April 2021 (delayed)
Wenatchee Foothills	Siting and utility plans	Q4 2021
Project team restructure	Program team rollout	May 2021

Please note:

- Schedules are subject to change (station build team is updating)

- See 2021 District Performance Plan for more details

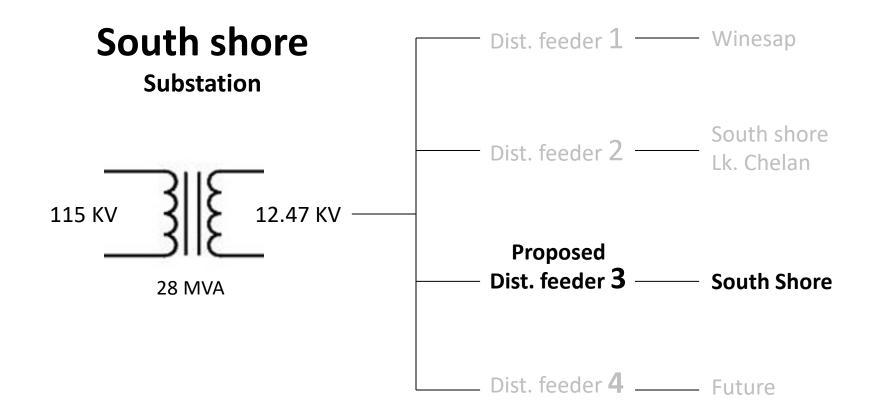


## Special topic: Electrical demand on the South shore Lake Chelan

# Work plan initiative:

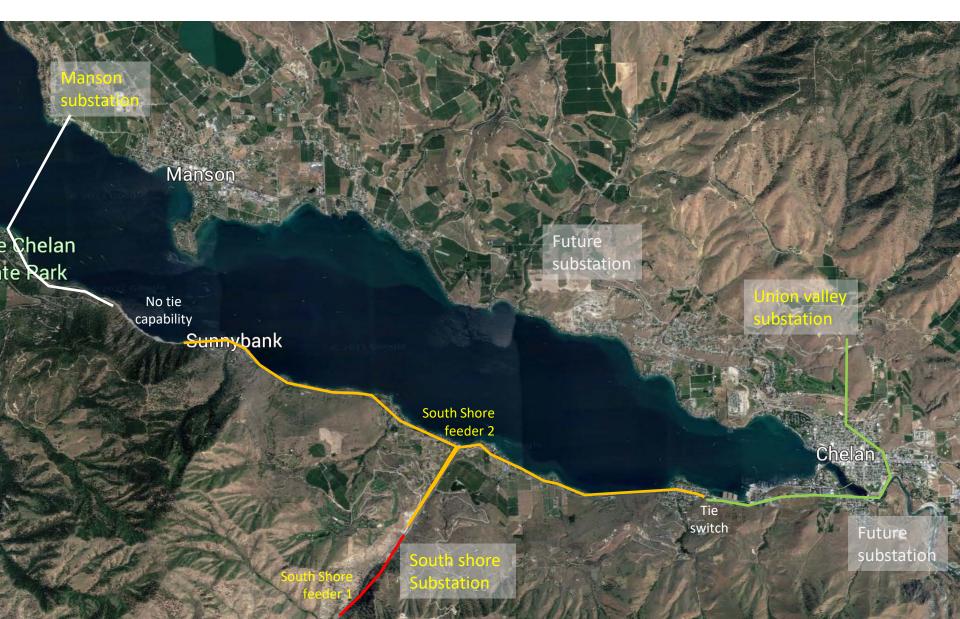
Construction of the South shore 3<sup>rd</sup> feeder







# **Existing substation arrangement**



#### South shore Lake Chelan

(Looking south)

Feeder 2

#### **Existing** distribution feeder arrangement

Feeder 1 = Knapp's Coulee and Winesap Feeder 2 = South shore Orondo

Feeder 1

Existing overhead distribution & transmission

South shore substation

Existing overhead distribution

Existing overhead distribution

Existing overhead distribution

#### South shore Lake Chelan

(Looking south)

Feeder 2

Feeder 3

Double circuited

overhead

distribution

#### Proposed distribution feeder arrangement

Feeder 1 = Knapp's Coulee & Winesap Feeder 2 = South shore (up lake) **New** Feeder 3 = South shore (down lake)

Orondo

Feeder 1

**Existing overhead** distribution & transmission

South shore substation

New underground distribution section

Feeder 3

Existing overhead distribution -

Feeder 2 A REAL

> **Existing overhead** distribution

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#### South shore Lake Chelan

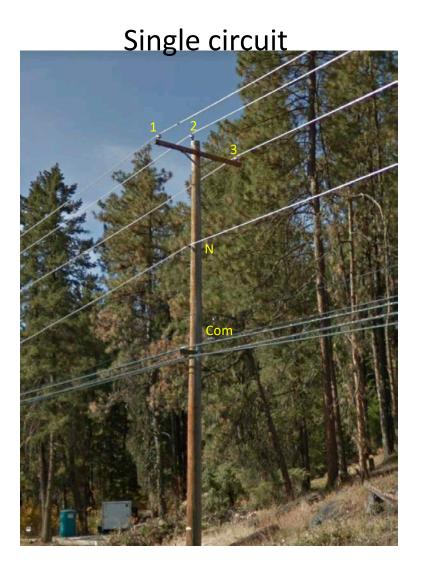
(Looking south)

Orondo

- District engaged property owner discussing options OH vs. UG
- Property could convert to development in the future
- Property owner and District agree to pursue UG conversion with future development efforts
- New UG section is "greenfield" & subject to scenic highway standards

South Shore Substation

## **Overhead distribution**



Double circuit



#### Questions

