CORNISH ENERGY COMMITTEE MINUTES-draft February 13, 2024, 7-8:30pm Cornish Town Offices and via Zoom

PRESENT: in person: CEC members: Joanna Sharf, Richard Thompson, Nancy Wightman, Everett Cass, Mike Belanger, Myron Kuhre, Bill Schmidt. Via Zoom, CEC member Dan Poor. In person: Dick Gendron and Frank Parks. Via Zoom: Guest Speaker Parker Fairfield, President of Ultra Geothermal

APPROVAL OF MINUTES: Nancy made the motion to accept January 8, 2024 minutes. Richard seconded and all approved.

PARKER FAIRFIELD PRESENTATION ON GEOTHERMAL SYSTEMS. Parker Fairfield, president of Ultra Geothermal from Portsmouth, NH, joined us via Zoom to talk about geothermal installations. He shared a video (also available on ultrageothermal.com website) which states that there is a 30% tax credit for geothermal installations, as well as health and environmental benefits. Geothermal systems take advantage of the stable 50° temperature of the ground about 7-10 ft. below grade. Liquid mixed with methanol circulates through pipes in the earth and draws heat from the earth or releases heat into the earth. Every geothermal installation requires a 3'x3'x3' condensing unit inside the house and ductwork to distribute the heated (or cooled) air. The best way to install geothermal is during new construction. For existing homes, Parker explained there are 2 methods for garnering heat from the earth: (a) Horizontal method: a 2000 ft. closed loop of plastic pipe laid in a 10' deep excavated area about 60' by 120' in dimension. This is the least expensive method. (b) Vertical method: 2-4 boreholes drilled 350' deep into ground or within a well. Total cost for interior work for a 3,000 sq. ft. house is about \$30,000. Exterior work for the drilled bore holes is estimated at \$30 per ft. (2 bore holes (350' x 2) would cost about \$21,000). The exterior cost for the horizontal method would be about \$3,000-\$5,000.

REVIEW OF DON JORDAN'S GEOTHERMAL SYSTEM. A few members of the Energy Committee were invited to see Don Jordan's geothermal system in his house in Plainfield on January 20. He has an open loop system which involves an extra pipe sent down part-way into his well. For every 10 gallons of water drawn from the well to extract heat or cooling, 9 gallons are returned. The reason for this is to prevent the well water from becoming too cold or hot due to the returning water having had heat or cold extracted from it. Don's system was installed when the house was built, and using the well is the least expensive way to do this.

NHSAVES BUTTON-UP WORKSHOP. Tuesday, APRIL 16 from 6:30-8pm via Zoom. Ted Stiles, a BPI building analyst, will be the presenter. Robbin Adams, who runs the Button Up Program for NHSaves, has created a press release and a flyer. Publicity will go out in March.

INFLATION REDUCTION ACT UPDATES: Joanna has contacted 2 people at the NH Dept. of Energy: Griffin Roberge, State Energy Program Manager and Joshua Elliott, Director, Division of Policy and Programs. Josh Elliott has agreed to meet with the Energy Committee on April 8 via Zoom to explain how the implementation of the IRA incentives will be carried out in NH. We will post links that explain the IRA program on Connect Cornish and the Energy Committee website. One good link is: <u>https://www.energy.gov/save</u>

WINDPOWER FORUM: Richard spoke to Virginia Parker of the Groton Wind Farm (which also oversees the Lempster wind farm). She was receptive to a Zoom presentation in the fall. They also give tours and Richard will look into the possibility of a tour for our towns on May 11 or June 8.

ENERGY AUDIT FOR TOWN OFFICE: Received an estimate from Earthshare Construction of \$6,493 for insulating and air sealing the Town Offices. Waiting for other requested estimates. Mike Belanger will try to follow up with Rich Burns of Shakes to Shingles to see if he wants to provide an estimate.

Discussion on the purpose of collecting yearly energy usage of town buildings. The data gives a base line from which we can monitor and attempt to reduce town energy usage. It also provides a picture of the grouping of town usage within each of the 3 utilities (Eversource, Liberty & NHEC), which is important to know if the Town ever wants to offset electricity usage with renewable energy or wants to host community solar.

PORTFOLIO MANAGER: This is an Energy Star federally operated software program that helps towns keep track of energy usage. Joanna will contact Zack for login info. Bill S. will contact River Valley Community College to see if a student or class would like to take on this project of producing graphs for showing how energy is used in the town. Nancy will send him an idea of what is wanted.

OTHER: Mike Belanger was introduced to the committee and will be the replacement for Fred Weld who resigned last fall.

NEXT MEETING: March 11, 7pm at the Town Offices.