

The University of New Hampshire – Northwest Heat Plant

2021 APPA Sustainability Award

Abstract

In 2018 the University of New Hampshire commissioned the design and construction of a new biomass-fired, district heat plant called the Northwest Heat Plant (NWHP). This state of the art facility provides heating hot water to five buildings totaling over 100,000 net square feet of academic and research space. The project includes a new building as well as new district hot water piping to connect to the buildings served. The plant utilizes semi-dry woodchips which are a new and innovative biomass fuel that is widely used in Europe, but just beginning to gain adoption in the United States. UNH is the first higher education institution to use semi-dry chips in the United States. This emerging biomass fuel type has benefits when compared to more traditional wet woodchips and wood pellets and its unique characteristics made it the optimal choice for our project.