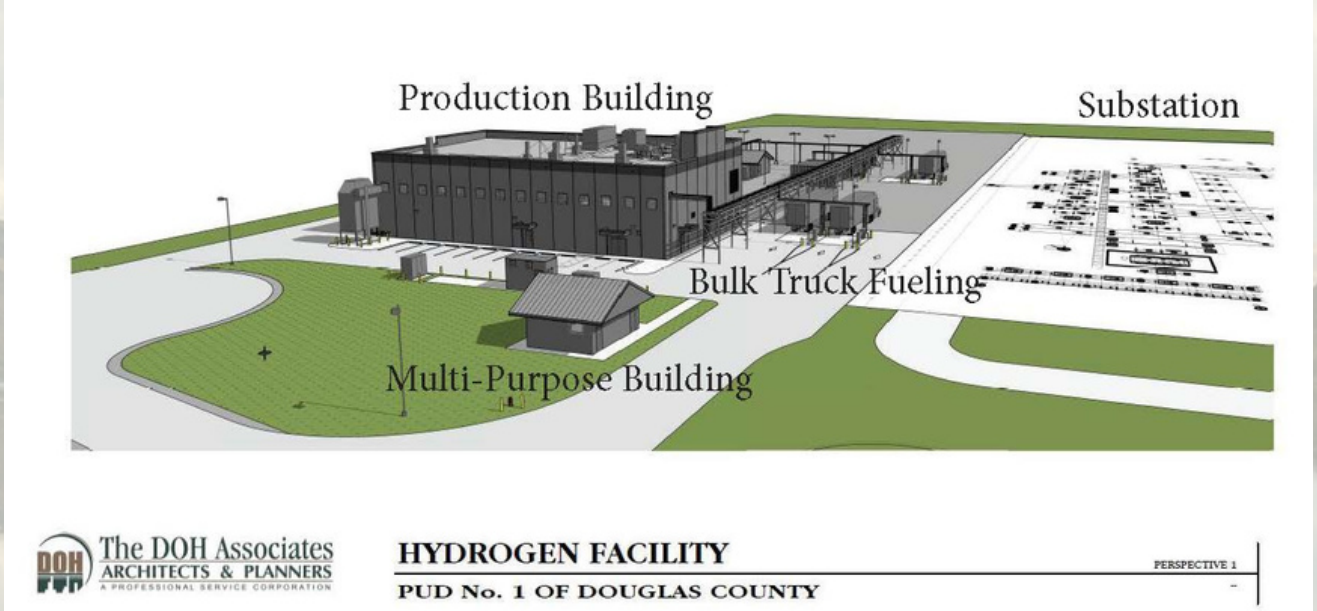
The Power Line

Douglas PUD Quarterly Customer Newsletter

Renewable Hydrogen in Douglas County

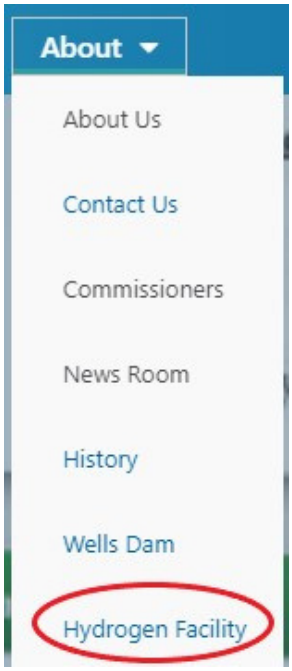


A contract to construct our hydrogen production and fueling facility was recently awarded to IMCO General Construction, Inc. A 5 MW hydrogen electrolyzer that can produce up to 2 tons of hydrogen per day will be installed in a concrete 80 foot by 136 foot building in Baker Flats. The hydrogen will be sold as a transportation fuel and for industrial purposes. But the utility will realize more benefits than just the hydrogen sales.

Creating renewable hydrogen from hydropower will help Douglas PUD improve operations at Wells Dam. Hydroelectric project operators face a tough balancing act as they attempt to integrate renewable resources like wind and solar power into the grid. At times, there is an oversupply of electricity on the grid. For example, when the sun is shining, the wind is blowing and the mountain snowpack is melting there is an over supply of electricity on the grid. When runoff is high hydroelectric dams are forced to generate electricity rather than spill water which adds total dissolved gas to the river which negatively impacts fish.

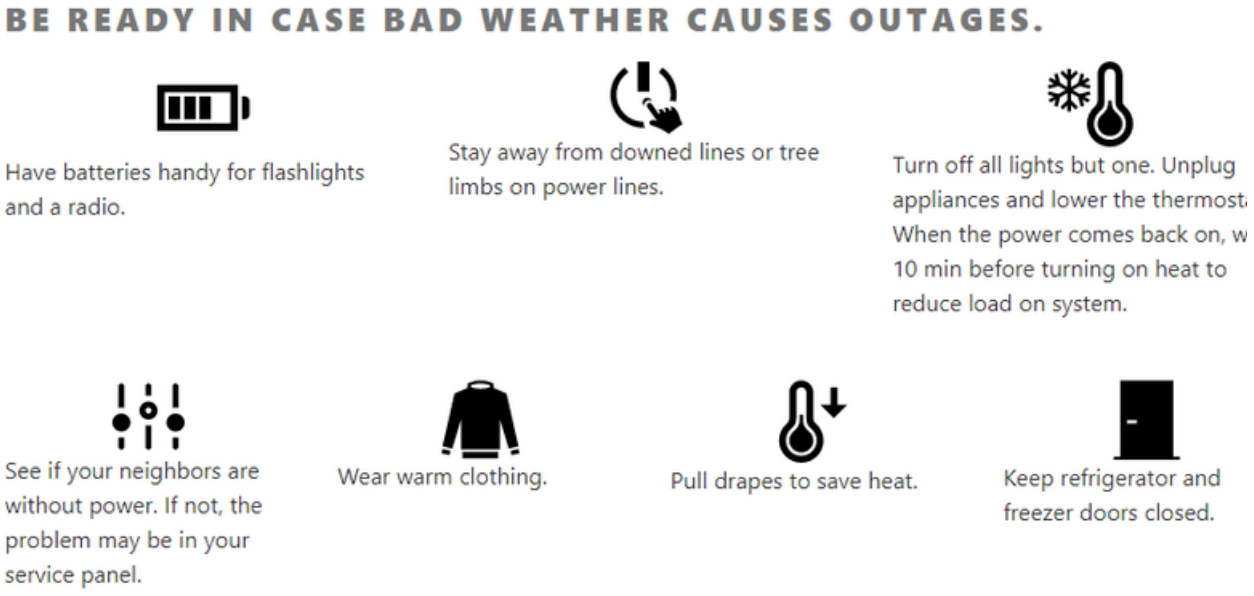
The ability to increase or decrease production at the hydrogen facility will create maintenance efficiencies at Wells Dam. Every four seconds signals are given to our generating units to adjust production for grid stability.

Renewable Hydrogen Continued:
These adjustments cause wear and tear on this large machinery. Rather than sending signals to adjust our generating units at Wells Dam, the signals will be sent to the hydrogen electrolizer to smooth out the adjustments necessary to balance the grid and produce power at Wells Dam. One of our goals is to increase the efficiency of the generating units and decrease maintenance issues. The other goal is to provide Douglas County with carbon free transportation fuels to prepare for laws passed by Washington State legislators.



Douglas PUD's mission is to provide the best possible utility services at the lowest possible cost consistent with sound business principles. As a public utility, everything we do is for the benefit of our customers. The efficiencies gained at Wells Dam by the ability to integrate renewables effectively and reduce generator unit maintenance costs will translate to better rates and reliability for our customer owners.

More information can be found on our website www.DouglasPUD.org under About and Hydrogen Facility

Winter Outages

Douglas PUD strives to provide reliable electric service. However, winter storms can make that a challenge at times. If your power does go out, please report it through your SmartHub App or call us at 509-884-7191. Follow @DouglasPUD on Twitter and Facebook for outage updates. Depending on the cause and extent of the damage, it may take a few hours to restore service. If you use a generator during outages, please make sure it is properly installed with a transfer switch to avoid backfeeding into the electric system and injuring a lineworker.