

Wood-burning power plant is clean and green

By Todd Payne

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In a Dec. 15 guest viewpoint, Lisa Arkin, executive director of Beyond Toxics, attacked the Eugene Water & Electric Board and Seneca Sustainable Energy by making false accusations, suggesting that it is better to meet our county's electricity needs with fossil fuels than renewable biomass fuel. I feel obliged to state the facts about green energy generation in Eugene.

- Fact: Seneca helps combat global warming.

Seneca uses wood as fuel that cannot be used to make lumber, wood that historically was burned in the forest or in other non-controlled burners. In 2014, Stanford University researchers identified the significant impacts on global warming associated with open burning of biomass.

The soot emitted when biomass is open burned is a potent source of warming. Seneca dramatically reduces the amount of soot associated with managing forest thinning and harvest material. The best way to reduce impacts on global warming is to increase the amount of biomass used as fuel.

- Fact: Seneca is carbon neutral.

Biomass generated from Seneca's forests that are harvested and replanted results in no carbon addition to the atmosphere when burned. This is referred to as carbon neutrality. On Oct. 23 of this year, the U.S. Environmental Protection Agency stated, "EPA recognizes that the use of some biomass-derived fuels can play an important role in controlling increases of

CO2 levels in the atmosphere ... biomass has the potential to offer a wide range of environmental benefits, including carbon benefits.”

Generating electricity by burning fossil fuel, however, places carbon into the atmosphere that has been underground for longer than people have roamed the planet. In contrast, generating electricity using biomass is part of a natural cycle where carbon is absorbed by a new generation of growing trees, and carbon is stored in forest products.

- Fact: Seneca is clean burning.

Seneca uses the most advanced and effective controls to minimize particulate emissions from its boiler. Don't take my word for it. The EPA wrote a letter commending Seneca Sustainable Energy, saying, "EPA applauds SSE's commitment to protect air quality." This letter was in recognition of how low our emissions are.

Let's put our emissions into context. Our boiler emits up to 3.5 pounds per hour of particulate. The EPA states that a single residential fireplace emits 0.14 pounds of particulate per hour. Our boiler is therefore the equivalent of 25 residential fireplaces.

Yet our boiler makes nearly 20,000 kilowatts of electricity per hour. The U.S. Energy Information Administration determined that Oregon homes use an average of 930 kilowatt hours per month. At that rate, Seneca makes enough electricity to fully power more than 15,000 homes, and yet has emissions equal to only 25 residential fireplaces.

In addition, Seneca paid another company in the area to forfeit its right to emit particulate equal to twice our emissions. This all means that the airshed is cleaner because Seneca is here.

Yes, let me repeat myself: Our airshed is cleaner because Seneca built our renewable energy facility.

- Fact: Seneca makes for healthier forests.

By removing trimming and thinning debris from the woods, Seneca reduces the likelihood of wildfires that destroy forests, homes and lives. In addition, smoke from forest fires affects our health. We have all experienced the bad air when forests burn. Seneca pulls thousands of tons of debris out of the forests every year to promote forest health and reduce the potential for wild fires.

- Fact: Biomass is a sustainable resource.

Growing trees for use in timber absorbs an immense amount of carbon from the atmosphere. When trees are harvested, the majority of that carbon is locked up in lumber (i.e., homes) that holds the carbon in place for generations.

Some of that carbon is present in the biomass fuel which enters the atmosphere and is absorbed by the next generation of trees that grow to replace the harvested trees. Every cycle represents a “net” reduction in greenhouse gas emissions. Unlike petroleum products, this cycle has gone on forever and will continue. We need sustainable resources with which to generate electricity.

When it comes to biomass, fuel literally grows on trees.

- Fact: Arkin wants to scare people with falsehoods.

Arkin should check her facts before criticizing Seneca and EWEB. If Oregon is going to meet its greenhouse gas reduction targets, it needs a variety of sustainable carbon neutral sources of electricity. Both Oregon and the EPA recognize the importance of using biomass to reduce carbon levels. Seneca is doing its part to help.

In closing, Seneca invested 25 percent of its \$65 million investment in air emission control equipment and technology, making our renewable energy facility the cleanest and most efficient in the United States — a commitment we’re very proud of here at Seneca!

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