



FAQs on the Proposed PRE Power Plant in Springfield and DOER's Plans to Weaken Biomass Standards in the RPS

When is DOER holding the public hearing in Springfield?

At the request of local groups, the Massachusetts Department of Energy Resources (DOER) agreed to hold a public hearing in Springfield on proposed changes to the state's renewable energy subsidies that will directly impact Springfield's residents. The hearing was originally scheduled for May 29th, but DOER rescheduled the hearing in order to move to a larger room that can accommodate more people. **The hearing will now take place on Wednesday, June 5th from 6:30 to 8:30 PM at the John J. Duggan Academy Auditorium, 1015 Wilbraham Road, Springfield, MA.**

DOER is proposing to allow highly polluting wood-burning (biomass) power plants to qualify for renewable energy credits through the state's primary renewable energy program, known as the Renewable Portfolio Standard ("RPS"). Currently only small, highly efficient biomass plants qualify.

If these changes are adopted, the proposed Palmer Renewable Energy (PRE) plant in East Springfield will be eligible to receive an estimated \$10-14 million dollars of renewable energy subsidies each year.

Arise for Social Justice, the Springfield Climate Justice Coalition, and other Springfield groups have been fighting this proposed plant for more than a decade. Springfield residents and allies will be calling on DOER to withdraw its biomass proposal and will testify against the proposed rule changes at the hearing.

What is the proposed Palmer Renewable Energy (PRE) biomass power plant?

Palmer Renewable Energy (PRE) is a 35-megawatt wood-burning power plant that would be built on the Palmer Paving site at 1000 Page Boulevard in East Springfield. The communities within two miles of this facility meet the state's definition of environmental justice populations based on income, race, and language isolation, and are vulnerable health populations.

Since 2008 when the project was initially proposed, residents have raised concerns about the health impacts of this proposed facility. Modifications were made to the design, most notably a decision to source its fuel from green wood chips rather than

construction and demolition debris. The plant received its approvals in 2011, and in 2015 won a lengthy court battle challenging its permits. ***If constructed, PRE would be the state's largest wood-burning biomass plant.***

According to a Conditional Approval issued to Palmer Renewable Energy by MA Department of Environmental Protection (DEP) in 2011:

- The 35 MW plant will operate 24/7 and burn up to 432,160 tons of wood per year -- ***or nearly a ton of green wood chips per minute.***
- The wood fuel will be delivered to the site in 25-ton trucks, 5-6 days a week, during daylight hours -- more than four truckloads an hour.
- The plant will produce 2,490 pounds of ash per hour, which will be stored in a 170-ton ash storage silo and then trucked off site for disposal.
- The 275-foot smokestack will emit tons of air pollutants each year (see Table 1) including: fine particulates (PM 2.5), which lodge deep in the lungs when inhaled; nitrogen oxides, sulfur dioxide, and volatile organic chemicals, which are smog precursors; and hazardous air pollutants, including mercury, lead, other heavy metals, and hydrochloric acid. ***These chemicals are linked to asthma, diabetes, heart disease and cancer.***
- Far from being climate friendly, the boiler will emit over 430,000 tons per year of carbon dioxide.

**Table 1
Proposed Annual Potential Emission Rates (Tons Per Year)**

| Pollutant | Boiler | Lime Storage Silo | Ash Storage Silo | Wood Storage Shed | Fugitive Emissions | Facility Wide |
|--------------------------------|---------------|--------------------------|-------------------------|--------------------------|---------------------------|----------------------|
| NO _x | 37.9 | - | - | - | - | 37.9 |
| CO | 81.4 | - | - | - | - | 81.4 |
| VOC | 11.15 | - | - | - | - | 11.15 |
| SO ₂ | 26.8 | - | - | - | - | 26.8 |
| PM ¹ | 33.44 | 0.008 | 0.231 | 0.41 | 0.46 | 34.55 |
| PM ₁₀ ² | 33.44 | 0.008 | 0.231 | 0.17 | 0.092 | 33.94 |
| PM _{2.5} ³ | 33.44 | 0.002 | 0.053 | 0.02 | 0.023 | 33.54 |
| HAPs | 13.2 | - | 0.0012 | - | - | 13.2 |
| NH ₃ | 13.4 | - | - | - | - | 13.4 |

¹ PM consists of all filterable and condensable PM including PM₁₀ and PM_{2.5}.

² PM₁₀ consists of filterable and condensable PM with an aerodynamic diameter equal to or less than 10 microns.

³ PM_{2.5} consists of filterable and condensable PM with an aerodynamic diameter equal to or less than 2.5 microns.

How does DOER's proposed rule change allow PRE to qualify as renewable energy?

In 2012, Massachusetts adopted stringent, science-based criteria for allowing biomass power plants to qualify as “renewable energy” in the RPS. Subsidies for electricity-only plants were eliminated, but subsidies were allowed for combined heat and power (CHP) plants. In a 2010 letter to DOER, PRE developer Vic Gatto stated that PRE could not meet the proposed efficiency criteria to qualify for the RPS that were “developed in an attempt to minimize greenhouse gas emissions from biomass resources.”

DOER is now proposing sweeping changes to the biomass eligibility criteria precisely in ways that will allow PRE to qualify for the RPS. Most significantly, DOER is proposing to *eliminate* any efficiency requirement for plants burning “salvage” wood and non-forestry residues, which is the fuel source PRE claims it will use. DOER is also changing how it calculates lifecycle greenhouse gas emissions, and proposing to allow biomass power plants to burn a huge variety of woody fuels, including whole trees, that DOER is re-classifying as “residues.” These changes will make electric-only biomass power plants, such as PRE, eligible for the RPS, instead of just the small, efficient combined heat and power (CHP) plants that were promoted under the 2012 rules.

How does PRE stand to benefit from DOER's proposed rule change?

Vic Gatto stated in his 2010 letter “RECs are critical for the long-term financing of biomass energy plants like PRE.” Assuming that MA renewable energy credits are projected to increase to around \$40/MWh in the next few years, PRE could collect up to **\$14 million per year** from electricity ratepayers, indefinitely. This number could increase if RPS-qualified power plants are allowed to “double-dip” under the new Clean Peak Standard that DOER is currently developing.

Although Palmer has had a clear path to building the biomass power plant since 2015, construction has not moved forward, potentially because the owners could not finance the plant without the RECs. ***Now, even the Massachusetts Forest Alliance agrees that PRE “would likely open if these regulations are approved.”***

Palmer appears to be confident that this rule change will be approved. Last fall, Palmer announced they would break ground in spring 2019. Since early April, even before DOER announced the proposed RPS rule change, Energy New England (ENE) has been pitching municipal light plants in eastern MA to enter into 20-year power purchase agreements (PPAs) with Palmer Renewable Energy as a “relatively low cost “hedge” against future green energy costs.” ENE’s promotional materials claim that the Palmer plant will be eligible to sell MA Class 1 renewable energy credits “likely late 2019.”

How will the Palmer plant impact Springfield residents?

Springfield residents suffer disproportionately from asthma and other health problems due to all the air pollution in their community. The city is already home to a number of polluting facilities, including the Covanta garbage incinerator, the Berkshire Power electricity plant (which was fined \$7.5 million for air quality violations in 2017), and major highways running through it. Springfield was named “Asthma Capital of the US” in 2018 and 2019 by the Asthma and Allergy Foundation of America based on asthma prevalence, emergency room visits, and asthma-related deaths. The American Lung Association rated Hampden County worst in the state for its high ozone levels in the 2018 State of the Air report.

Wood burning is a major source of air pollution in Massachusetts, placing children, the elderly, and people with heart and lung disease particularly at risk. A recently published review of the health literature found that chronic exposure to outdoor fine particulate matter (PM2.5) can harm virtually every organ in the body. The study found that people are more vulnerable to air pollution if they have other illnesses or less social support, and that harmful effects can occur even at air pollution levels currently considered “safe.”

If Palmer gets built, it will not only worsen ozone levels in Springfield but also increase PM2.5 emissions, both from stack emissions, fugitive emissions from associated facilities on the site, and truck exhaust. ***The stack emissions from Palmer could erase gains in air quality that have been achieved through successful local efforts to tackle other significant sources of air pollution in Springfield.***

For more information, visit www.pfpi.net.