

## Testimony in Support of S.190; BASELOAD RENEWABLE POWER PORTFOLIO REQUIREMENT

### Renewing the Ryegate Power Plant Legislation

13 February, 2020

My name is Alan Robertson. I'm a retired engineer and own 60 acres of well- managed forest in Sheffield, Vermont. I've been a member of the Vermont Woodlands Association for over 25 years and have been the Secretary for over 15 years; I have also been the Co-Chair of the Vermont American Tree Farm System program for over ten years. I'm honored and pleased to provide the following testimony on behalf VWA for the enactment of senate Bill 190.

VWA is a Non-Profit (501(c)(3)) association of approximately 1000 landowners dedicated to the health and enhancement of the working forest in Vermont. Through education, outreach, and advocacy we are a Voice for Healthy Forests in the Green Mountain State. VWA believes in the sustainable management of our private forests, but successful management needs good markets for wood products, and most notably right now in Vermont, good markets for low quality wood. At present the low quality wood market is suffering due to several recent political decisions including New Hampshire's failure to support their biomass power plants. Not only does forest management suffer because of this but so too, do the harvesting industry and all their employees. This plant's consumption of low quality wood represents a critical component in the forest products economy.

The VWA board met on January 17th and discussed the Ryegate legislation. We note that the Ryegate operation wood procurement policies are very similar to the exceptional BED operation, and that the plant has invested in air quality upgrades recently. Given the need for a robust low quality wood market in order to further the Associations mission of sustainable forestry on private lands, we are very supportive of the continued operation of the Ryegate plant.

We are hopeful that during the legislative process the Ryegate plant will negotiate a fair price for the future power costs, ensure appropriate procurement and continue the excellent harvesting procedures to support forest health, and that the plant will investigate potential efficiency increases through the development of uses for the waste heat the plant emits, as the Burlington Electric Department is doing.

Testimony in Support of S. 1 Baseload Renewable Power Portfolio Requirement  
As passed by the Senate  
Renewing the Ryegate Power Plant legislation  
March 2021

My name is Alan Robertson. I'm a retired professional engineer and own and have managed 60 acres of forest in Sheffield, Vermont for over 35 years. I've been a member of the Vermont Woodlands Association for over 35 years and have been the Secretary for over 15 years; I have also been the Co-Chair of the Vermont American Tree Farm System program for over ten years. I'm honored and pleased to provide the following testimony on behalf of the **Vermont Woodlands Association** (VWA) for the enactment of senate Bill 1. (I have previously testified in favor of both this bill and previous bills for this facility earlier this year and on 13 February 2020.)

VWA is a Non-Profit (501(c) (3)) association of approximately 1000 landowners dedicated to the health and enhancement of the working forest in Vermont. Through education, outreach, and advocacy we are a Voice for Healthy Forests in the Green Mountain State. VWA believes in the sustainable management of our private forests, but successful management needs good markets for wood products, and most notably right now in Vermont, good markets for low quality wood. At present the low quality wood market is suffering due to past political decisions including New Hampshire's failure to support their biomass power plants, and for the past year, the fallout from the Covid 19 virus. Not only does forest management suffer because of this but so, too, do the harvesting industry and all their employees. **This plant's consumption of low quality wood represents a critical component in the forest products economy.**

The VWA board has discussed and reviewed the Ryegate legislation several times since 2020. We note that the Ryegate operation wood procurement policies are very similar to the exceptional Burlington Electric Department operation, and that the plant has invested in air quality upgrades. We also understand the management is seriously exploring ways to utilize the waste heat product generated by the plant- a very worthy goal. Given the need for a robust low quality wood market in order to further the Associations mission of sustainable forestry on private lands, **we are very supportive of the continued operation of the Ryegate plant.**

To emphasize the need for the Ryegate plant I would like to add the following additional comments:

- I had a small logging job (approx. 1 acre) done in July 2020 on one of my S-F stands severely damaged by a wind event on 29 May 2020. It was a very small harvest but the logger did develop a couple of truckloads of hardwood pulp, even after leaving a lot of coarse woody debris. The market was so glutted with low quality wood- because of the lack of markets- that one load ended up piled on the property- in the way of the planting I want to accomplish. I was eventually able to have my site contractor haul it

away for firewood. This illustrates both the amount of legitimate low quality wood out in our forests as well as what careful landowners are experiencing in their efforts to perform well-managed sustainable silvicultural prescriptions.

- The renewable energy program in Vermont has been an exceptional success with such facilities as BED, Ryegate, and the school heating program. But it clearly can grow as the availability of low quality wood from carefully managed forests, even with the introduction of upcoming carbon sequestration programs, is still not remotely fully utilized. I note that one of the questions asked repeatedly by legislators is, aren't there other markets/ways to deal with the low quality wood? The answer is yes there are, theoretically, other technical/market solutions including more efficient combined heat and power plants (CHP-type facilities, which we included in past testimony and recognized in the present legislation), Biochar production facilities, an enhanced school and municipal heating program, a robust pellet industry, and possibly other technologies. But all of those facilities require a state environment receptive to such siting and construction and that is a very difficult process in Vermont due, in no small part, to the permitting environment. **That leaves Ryegate and BED as the only serious facilities to handle low quality wood at present.**
- Most of what gets hauled out of the woods by the forest products industry is low value wood. But by doing this the remaining forest is of better quality and primed for future higher quality stems. If this wood isn't removed the labor and equipment needed to do logging and trucking can't economically survive simply in the sustainable harvest the higher quality stems. The result is the loss of the logging industry- jobs and equipment- and eventually the loss of the entire forest products industry.

Thank you for allowing us the opportunity to provide this testimony; if you have any questions or need any further information please feel free to contact me,

-AMR-

Al Robertson, PE (ret)

Vermont Tree Farm Committee

Secretary,

Vermont Woodlands Association

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FROM: Markus Bradley  
TO: Jess Vintinner, Agency of Commerce and Community Development  
RE: Ryegate Report Public Meeting, Public Comment

The backstory on the wood industry is one of near constant losses of mills over the past three decades. Sawmills, paper mills, and biomass facilities have all closed in the northeast recently. When I graduated from forestry school over 25 years ago, there were over 15 paper mills in the State of Maine alone. Today there are 6-7 remaining. Many of my colleagues have been around longer and have seen even more declines than what I can remember.

Since the explosion and closure of the paper mill in Jay, Maine (Verso) in 2019, we have had no softwood pulpwood market in the Connecticut River Valley. The Ryegate power plant represents the very last option for the crooked, rotten, and non-sawlog portions of trees in this area. When one understands the backstory of the wood industry, the near constant closing of mills and other facilities, and the economic upheaval and hardships that people have endured, you understand why folks are fighting for this plant. I agree with some of the points regarding inefficiencies and the need for significant improvements.

I believe members of the logging and forestry community are largely misunderstood. We care about the land and what we do, we think about the future, and we choose to do this with our lives. It is similar to hunters being some of the best and most outspoken conservationists.

I view forest health differently than some. I actually agree that human intervention is not needed. In fact, I would be happy to argue that the forest would be better if humans had never come along in the first place. Every person is like a PAC-MAN machine, gobbling up natural resources. It is us that need the forest and the products, not the other way around. Provided there are humans here, and we continue to use wood products, there needs to be logging. I believe it will ALWAYS work best when we are thoughtful and intentional about the amount of logging we do, and the resulting environmental impacts.

A good number of the critics of the plant last night clearly live in wood houses. Some even admit that they use wood heat. I think we are at a critical crossroad in our environmental ethic and understanding. I do not think Americans have ever had a poorer understanding of what it means to produce basic commodities like wood, electricity, food, etc. I think we have to be very careful about promoting policies that can have really terrible impacts in other places of the world and increase the chances of additional externalities of global trade. I think globalization misses the boat on a lot of topics and there is nothing wrong with a country, community, or state deciding we want an agricultural based economy. Importing forest products from outside this region and country has caused SIGNIFICANT, IRREVERSIBLE, and ONGOING ecological damage through the introduction of non-native insects, diseases, and other damaging agents, all while SUPPORTING ECONOMIES OTHER THAN OUR OWN. When we reduce our ability to locally produce the products we are using and consuming every day, without changing our use and consumption, we are certain to cause more ecological damage through irresponsible forestry practices in other parts of the world, the carbon footprint of shipping wood products overseas, and the inevitable introduction of more damaging agents that our native forests and other ecosystems have not evolved to deal with. For those who are not familiar with some of these

issues, I would encourage you to learn about Chestnut blight, Dutch elm disease, beech bark disease, emerald ash borer, Asian longhorned beetle, and white pine blister rust, as a start.

In regards to the Ryegate plant, perhaps it will need to close at some point, but right now the people in the position to do so should be given every opportunity to improve the power plant itself. If it must close, we truly need to develop an alternative to consume a similar amount of crooked, rotten, and non-sawlog type wood. This is crucial if we are going to manage our forests in a way that produces the wood products that we need and use every day. If we can agree that it is better to produce wood in our backyards rather than in Siberia or Indonesia, then I think we should strive to have a healthy forest products industry. I believe the more honest each of us can be about our own consumption and impacts, the better off we will be.

Respectfully,

Markus Bradley

Todd H. Waldron  
Ruffed Grouse Society  
Northeast Forest Conservation Director

Secretary Lindsay Kurrle  
Agency of Commerce & Community Development  
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Montpelier, VT 05602-0501

**February 17, 2022**

**RE: Economic Opportunity and Mitigation for Ryegate Plant Meeting & Discussion**

To Secretary Kurrle,

Established in 1961, the Ruffed Grouse Society (RGS) is North America's foremost conservation organization dedicated to creating healthy forests, abundant wildlife and promoting a conservation ethic. Together with the American Woodcock Society (established in 2014), RGS & AWS work with landowners and government agencies to develop critical wildlife habitat utilizing scientific management practices.

We have noted the Agency of Commerce and Community Development's meeting scheduled on February 17, 2022, to discuss the economic importance of the Ryegate Power Station (RPS) and would like to share the following comments:

RPS operations provide important support for Vermont's forest products industry, which in turn supports creation of critical wildlife habitat. Numerous wildlife species that require early successional (young tree and shrub) habitats are declining and identified in Vermont's Wildlife Action Plan as Species of Greatest Conservation Need, including ruffed grouse, American woodcock, golden-winged warbler, and New England cottontail. The Wildlife Action Plan identifies the decline of young forests as a threat to conserving the state's biodiversity and indicates conservation cannot depend upon natural disturbance events alone to create these habitats. RPS consumes 250,000 tons of biomass per year, which equates to harvest that produces approximately 4,000 to 8,000 acres of young forest habitat on an annual basis. This consistent harvest provides an important baseline level of sustainably created habitat to maintain ecological function of Vermont's forest lands.

Wood chips represent a small portion of the overall value of Vermont's timber harvest, with more than 90% of the value provided by sawlogs. The \$7 million annual expenditure by RPS to acquire wood chips for this biomass does, however, essentially subsidize other forest products, keeping the forestry operations that provide timber for other wood products financially viable.

Wood chip consumption is occurring at a rate compatible with forest sustainability in Vermont. A forester on staff at the RPS plant manages to the Vermont Harvesting Regulations and coordinates with the Vermont Department of Fish and Wildlife on logging activities that supply the facility with wood chips. The 2018 Vermont Wood Fuel Supply Study concluded that the net available low-grade wood in the forest available for wood energy was 5%

higher than last estimated in 2010. Increased rates of forest management would increase the forest growth rate along with increasing young forest habitat. The Wood Fuel Supply Study found growth declined as Vermont's forests have aged, from a net annual growth rate of 2.10% in 2010 to 1.75% in 2018.

We understand from recent developments that there continue to be concerns regarding the plant's future viability. We strongly encourage you to carefully weigh the important wildlife habitat management and conservation benefits as well as the forest products economy in that region supported by RPS operations.

On behalf of our members and supporters, we thank you for your careful consideration and action to support healthy forests, abundant wildlife and promoting a conservation ethic in Vermont. RGS & AWS would be happy to comment further or address questions on these considerations in your future deliberations.

Respectfully submitted,

*Todd H. Waldron*

Todd H. Waldron - Northeast Forest Conservation Director  
Ruffed Grouse Society & American Woodcock Society  
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February 17, 2022

Jessica Vintinner  
Principle Assistant  
ACCD

RE: Ryegate Power Station Closure Contingency Plan & Remediation Report

Ms. Vintinner,

By way of introduction, I am a forester from Starksboro, Vermont who has been practicing forestry since 1993. I received my BS in Forest Management from UVM. I am currently licensed to practice forestry in both Vermont and New Hampshire. The first 18 years of my career were spent providing forestry consulting services to clients through out Vermont & New Hampshire, ranging from small family ownerships to large industrial/investment owners. For the last 10 years I have worked for the City of Burlington as a procurement forester overseeing timber harvests sending wood chips to the McNeil Generating Station. The comments outlined below are my own and in no way represent or reflect the opinion of the City of Burlington, the Burlington Electric Department or the joint owners of the McNeil Generating Station. My comments on the current draft are as follows:

#### Economic Activity

- The current document only appears to consider direct economic activity and does not include the value of indirect or downstream activity. In my experience, studies evaluating economic impacts traditionally include all the anticipated activity associated with a business, not just the direct impact. Indirect activity is likely to at least double the impact that the plan has on the regional economy. To only consider direct activities greatly diminishes the potential impact the closure of the plant may have. The enabling legislation requesting the report specifically asks for an evaluation of the economic impacts of the plant closure and not including indirect activity would provide an incomplete assessment.
- Unlike other renewable energy projects, economic activity associated with Ryegate are ongoing on an annual basis, year over year. Other renewable generation may initially generate some economic activity, but once construction is complete this activity is significantly reduced for the life of the project.

#### Jobs

- Like Economic Activity, the report only appears to consider jobs directly related to plant operations and does not make a clear assessment of the number of indirect jobs which the plant creates in the wood fuel supply chain and which will likely be lost if the plant closes. Again, this is standard practice in every other economic study I have seen. Not to include these jobs in the analysis would provide an incomplete report.
- Jobs at Ryegate are permanent while the majority of jobs associated with other renewable generation are temporary, only persisting through the construction process.



- The use of bole chips for thermal purposes to heat our schools and institutions is generally a seasonal demand which relies on year-round markets for whole tree chips to generate sufficient economic activity to support these operations in the off season to ensure that they are around to produce bole chips during the winter months. The closure of Ryegate would have a significant downward pressure on the economics of providing bole chips, likely resulting in an increase in price for this product, a decrease in availability, the sourcing of this product from areas outside of the State or a combination of these.

#### Wildlife Habitat

- As outlined in the current draft, chip harvests in VT must go through a pre-approval process with the Department of Fish & Wildlife to ensure that Threatened & Endangered species, critical wildlife habitat, wetlands and water quality will not be negatively impacted by the harvest. This requirement is the single largest regulatory mechanism that Fish & Wildlife has to have an influence on timber harvests in the state. Act 250 & 248 grant them this opportunity as well, but the number of acres pales in comparison to the acres related to chip harvesting. The UVA program does a great job of promoting and requiring sound silvicultural practices on enrolled lands but does not require the maintenance of wildlife considerations. As a result, due to chip harvesting forest management plans are often altered in order to mitigate potential impacts to these wildlife resources. The closure of Ryegate would result in the loss of this opportunity for the Department of Fish & Wildlife and intern result in additional negative impacts to wildlife resources.

#### Environmental Impacts

- Biomass is a renewable, locally sourced fuel which keeps local dollars within the region.
- The closure of Ryegate will result in the direct increase in the consumption of fossil fuel in the form of natural gas.

#### Contingency Recommendations

- The enabling legislation requested this report to develop a plan to reduce the economic impacts if Ryegate were to close. From what I can see, the current report does not outline any meaningful recommendations to reduce the impacts. If this is the case, I would strongly encourage you to very clearly state that fact. The intent of the report is to provide clear and accurate information to legislators so that they can make informed decisions. To leave open ended questions or to make inferences opens the door to interpretation and misunderstanding which leads directly to poor policy and legislation. If there are no good answers, please say that directly.

Respectfully submitted,

Seth Clifford

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