I. SUMMARY

In this Order, we grant ReEnergy Fort Fairfield’s (ReEnergy) petition for certification of the Fort Fairfield biomass facility (Facility) as a Class I new renewable resource pursuant to Chapter 311, § 3(B)(3)(d) of the Commission’s rules.1

II. BACKGROUND

A. New Renewable Resource Portfolio Requirement

During its 2007 session, the Legislature enacted an Act To Stimulate Demand for Renewable Energy (Act). P.L. 2007, ch. 403 (codified at 35-A M.R.S. § 3210(3-A)). The Act added a mandate that specified percentages of electricity that supply Maine’s consumers come from “new” renewable resources.2 Generally, new renewable resources are renewable facilities that have an in-service date, resumed operation or were refurbished after September 1, 2005. The percentage requirement starts at one percent in 2008 and increases in annual one percent increments to ten percent in 2017, unless the Commission suspends the requirement pursuant to the provisions of the Act.

1 All Commissioners agree that the facility should be certified as a Class I renewable resource. Commissioner Littell disagrees with the conclusion that the Facility should be certified under the first prong of the refurbishment vintage category (the resource has been refurbished and is operating beyond its useful life). Commissioner Vannoy disagrees with the conclusion that the turbine overhaul does not constitute a refurbishment under the statute. See attached Separate Opinions of Commissioner Littell and Commissioner Vannoy.

2 Maine’s electric restructuring law, which became effective in March 2000, contained a portfolio requirement that mandated that at least 30% of the electricity to supply retail customers in the State come from eligible resources, which are either renewable or efficient resources. 35-A M.R.S. § 3210(3). The Act did not modify this 30% requirement.
As required by the Act, the Commission modified its portfolio requirement rule (Chapter 311) to implement the “new” renewable resource requirement. *Public Utilities Commission Amendments to Portfolio Requirement Rule (Chapter 311)*, Docket No. 2001-391, Order Adopting Rule and Statement of Factual and Policy Basis (Oct. 22, 2007) (Order Adopting Rule). The implementing rules designated the “new” renewable resource requirement as “Class I”\(^3\) and incorporated the resource type, capacity limit, and the vintage requirements as specified in the Act. The rules thus state that a new renewable resource used to satisfy the Class I portfolio requirement must be of the following types:

- fuel cells;
- tidal power;
- solar arrays and installations;
- wind power installations;
- geothermal installations;
- hydroelectric generators that meet all state and federal fish passage requirements; or
- biomass generators, including generators fueled by landfill gas.

In addition, except for wind power installations, the generating resource must not have a nameplate capacity that exceeds 100 MW. Finally, the resource must satisfy one of four vintage requirements. These are:

1) renewable capacity with an in-service date after September 1, 2005;

2) renewable capacity that has been added to an existing facility after September 1, 2005;

3) renewable capacity that has not operated for two years or was not recognized as a capacity resource by the ISO-NE or the NMISA prior to September 1, 2005, and, after September 1, 2005, has resumed operation or has been recognized by the ISO-NE or NMISA as a capacity resource; or

4) renewable capacity that has been refurbished after September 1, 2005 and is operating beyond its useful life or employing an alternate technology that significantly increases the efficiency of the generation process.

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\(^3\) The “new” renewable resource requirement was designated as Class I because the requirement is similar to portfolio requirements in other New England states that are referred to as “Class I.” Maine’s pre-existing “eligible” resource portfolio requirement is designated as Class II.
To clarify the meaning of refurbishment, the Legislature recently enacted an amendment that specifies that, “to refurbish” means “to make an investment in equipment or facilities, other than for routine maintenance and repair, to renovate, reequip or restore the renewable capacity resource.” 35-A M.R.S. § 3210(2)(B-4).

The Commission’s implementing rule, Chapter 311, § 3(B)(4), establishes a certification process that requires generators to pre-certify facilities as a new renewable resource under the requirements of the rule and provides for a Commission determination of resource eligibility on a case-by-case basis. The rule contains the information that must be included in a petition for certification and specifies that the Commission shall provide an opportunity for public comment if a petitioner seeks certification under vintage categories 2, 3 or 4. Finally, the rule specifies that the Commission may revoke a certification if there is a material change in circumstance that renders the generation facility ineligible as a new renewable resource.

**B. Petition for Certification**

On October 17, 2011, Boralex Fort Fairfield LP (Boralex) filed a petition (Initial Petition) to certify its 36 MW biomass generation facility (Facility) located in Fort Fairfield, Maine as a Class I new renewable resource under the refurbishment provision of the Commission’s renewable portfolio rules, Ch. 311, § 3(B)(3)(d). An opportunity for comment was issued on October 24, 2011 and one comment was filed by William Short III, an electricity consultant, on November 9, 2011.

On or about December 20, 2011, ReEnergy Biomass V LLC (ReEnergy) acquired all the membership interests in the Facility, changing the name of the Facility to ReEnergy Fort Fairfield LLC. Under new ownership, and also in response to Staff’s questions issued in this case on January 5, 2012, ReEnergy filed an amended petition for Class I certification on June 7, 2012 (Amended Petition). Given the change in ownership of the Facility, modifications that ReEnergy made to the Initial Petition, and in light of the Supreme Judicial Court’s decision in *Covanta Maine, LLC v. Public Utilities Commission*, 2012 ME 74, 44 A.3d 960 (2012) (hereinafter referred to as the *Covanta Decision*), the Commission issued an opportunity for comment on the Amended Petition on June 25, 2012. One comment was received from Mr. Short to which ReEnergy provided responsive comments on July 25, 2012. On August 17, 2012, the Commission denied a request by Mr. Short to file additional responsive comments to ReEnergy’s

4 The Commission interprets this language as making “explicit the Commission’s existing practice of disregarding investments made for routine maintenance and repair when looking at whether a facility has been refurbished.” *Verso Androscoggin LLC Request for Certification for RPS Eligibility*, Docket No. 2012-301, Order Granting New Renewable Resource Certification at 6, fn. 9 (Dec. 19, 2012).

5 In the Order adopting Chapter 311, the Commission noted that a request for certification can be made at any time so that a ruling can be obtained before a capital investment is made in a generation facility. Order Adopting Rule at 6.
July 25, 2012 comments. Staff issued further questions on September 21, 2012 and October 19, 2012, to which ReEnergy submitted its responses on October 12, November 12, and December 18, 2012, respectively.

ReEnergy states in the Amended Petition that the Fort Fairfield facility has been refurbished based upon capital investments that were made to the Facility related to the installation of an ECOTUBE system, overhaul of the Facility’s turbine, purchase of a new Komatsu loader, overhaul of the KOM-6 fuel loader, purchase of a new Komatsu d155 bulldozer, purchase of a new telescoping fuel conveyor and hopper, overhaul of the boiler grate, replacement of the service air ejector vacuum system, expansion of the fuel yard, replacement of the Facility’s motor protection relays, replacement and overhaul of breakers, replacement of tubular air heater tubes, replacement of UPS batteries, refurbishment of the boiler furnace refractory and another overhaul of the boiler grate system, upgrade of the Bailey control system, replacement of the suspended electromagnet, replacement of the feedwater regulator station and related piping, and the replacement of the cation/anion resin in the Facility’s demineralizer.

ReEnergy indicates in the Amended Petition that the ECOTUBE system can extend the life expectancy of the biomass boiler and is an alternative technology that can significantly increase the efficiency of the generation process. ReEnergy states the Fort Fairfield facility was constructed between 1986 and 1987, entered commercial production in 1987, and is now operating beyond its previous useful life, having exceeded the Facility’s 20-year life expectancy. ReEnergy also states the ECOTUBE installation has substantially increased the boiler’s thermal efficiency through more effective combustion of the biomass fuel.

C. Public Comments

On July 11, 2012, Mr. Short filed comments on the Amended Petition stating that certification should only be granted based upon the ECOTUBE investment provided that certain air emissions levels are achieved for future quarters and that reports of the air emissions be publicly filed with the Commission. Short Comments at 2. He also states that the turbine overhaul should qualify as a refurbishment expenditure if it is the first such overhaul of the turbine at the Facility and further overhauls should not qualify and instead be treated as preventative maintenance. Mr. Short also provides comments on certain other expenditures that he believes should not be considered as refurbishment expenditures (e.g., the new bulldozer and loader, overhaul of the boiler grate, expansion of the fuel yard) and those that should (e.g., the new telescoping fuel conveyor and hopper system, new breakers). Further, Mr. Short states that the predicted efficiency gains of 1%-5% from installation of the ECOTUBE system are not significant. Short Comments at 3. Finally, Mr. Short proposes that the Commission institute a financial standard for determining whether Class I certification is granted that would require that any combination of qualifying refurbishment expenditures, which over any consecutive five-year period, total at least $100,000.00 per megawatt (MW) should be deemed sufficient to pass any materiality standard for Maine Class I treatment. Id. at 7.
In its responsive comments, ReEnergy agrees with Mr. Short that the ECOTUBE system should qualify the Facility as refurbished, but disagrees that any emission requirements should be attached, as there is no air emission standard in Maine’s RPS statute. ReEnergy Responsive Comments at 3. ReEnergy also states that the turbine has only been overhauled three times since 1987 and that these overhauls cannot reasonably be classified as routine or preventative maintenance because each overhaul is a significant undertaking, carrying multi-year, capitalized costs. ReEnergy also responds that mobile equipment, such as the bulldozer and loader, should qualify as refurbishment expenditures, because they are integral to the operation of the Facility, and represent a facility design choice which is an alternative to using fixed, fully-automated equipment. ReEnergy Responsive Comments at 5-6. Finally, ReEnergy states that a 1%-5% efficiency gain is substantial for a facility that already achieves 70% efficiency, given the challenges of moving above what ReEnergy characterizes as an already high level of efficiency.

ReEnergy also urges rejection of Mr. Short’s proposed $100,000 per MW standard for automatic qualification as a Class I new renewable resource, stating that the RPS statute and the Commission’s rules do not contain a minimum investment amount and that the Supreme Judicial Court’s Covanta Decision reinforced that no specific monetary limit was required. ReEnergy also states that the standard for determining whether there has been a refurbishment is set forth in the statutory definition of refurbishment – “an investment in equipment or facilities, other than for routine maintenance and repair, to renovate, reequip or restore the renewable capacity resource.” Id. at 6-7.

III. DECISION

A. Refurbishment Vintage Requirement

ReEnergy is seeking certification under the “refurbishment” vintage category set forth in both Chapter 311 of the Commission’s rules and the RPS statute, 35-A M.R.S. § 3210. Under Chapter 311, the refurbishment vintage category requires that a new renewable generation facility:

has been refurbished after September 1, 2005 and is operating beyond its previous useful life or is employing an alternate technology that significantly increases the efficiency of the generation process.

Ch. 311, § 3(B)(3)(d). The refurbishment vintage category in the RPS statute has essentially the same wording. 35-A M.R.S. § 3210(2)(B-4)(4).

As noted above, the statute further defines “refurbish” as “to make an investment in equipment or facilities, other than for routine maintenance and repair, to renovate, reequip or restore the renewable capacity resource.” 35-A M.R.S. § 3210(2)(B-4). Accordingly, in the course of making our determination regarding whether there has been a refurbishment, we must consider the nature and character of the expenditures to
determine whether they were made for the purpose of repair or maintenance or for investment in equipment or facilities. *Covanta Decision*, 2012 ME 74, ¶¶ 16, 17, 19.

ReEnergy is seeking qualification under both the first prong of the refurbishment vintage category, which states that the resource “has been refurbished after September 1, 2005 and is operating beyond its previous useful life,” and the second prong of the refurbishment vintage category, which states that the resource “has been refurbished after September 1, 2005 and . . . is employing an alternate technology that significantly increases the efficiency of the generation process.”

Under both prongs of the refurbishment vintage category, the initial threshold inquiry is whether the facility “has been refurbished after September 1, 2005.” No single factor is determinative. Instead, the Commission examines the collection of factors and determines whether the bulk of available information weighs in favor of, or against, a finding of refurbishment.

One factor we consider in determining whether investments constitute a refurbishment is the tax treatment of the expenditures. Multi-year life assets are generally required to be capitalized. Therefore, items that would “renovate, reequip or restore” the facility would be expected to be capitalized, whereas items fully used or consumed in the year they are purchased, or related to routine maintenance or repairs, would be expensed.6 The Law Court, in the *Covanta Decision*, permitted the Commission to consider the tax treatment of investments as one indicator of whether an expenditure should be considered a refurbishment investment. The tax treatment of the expenditure, while helpful as an indicator, is not dispositive in deciding whether it is a refurbishment investment or a repair or maintenance item. *Covanta Decision*, 2012 ME 74, ¶ 18. We also consider other factors including the nature and character of the expenditures and whether, from a technical and engineering perspective, the investments are related to routine maintenance and repair or refurbishment of the Facility. *Id.* at ¶¶ 17, 19.

Mr. Short has asserted that the Commission should establish a $100,000.00 per MW expenditure threshold that, if reached in the period five years prior to the application for Class I certification, would be a prima facie demonstration of refurbishment. We agree with ReEnergy, however, that the Law Court’s decision prohibits the Commission from using such financial limits as determinative of whether a facility has been refurbished, and we, accordingly, decline to adopt such a standard here.

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6 Specifically, “Regulations issued under section 263(a) provided that capital expenditures included amounts paid or incurred to (1) add to the value, or substantially prolong the useful life, of property owned by the taxpayer, or (2) adapt the property to a new or different use. However, those regulations also provided that amounts paid or incurred for incidental repairs and maintenance of property within the meaning of section 162 and §1.162-4 of the Income Tax Regulations are not capital expenditures under §1.263(a)-1.” Internal Revenue Bulletin: 2012-14, issued April 2, 2012.
B. Facility Refurbishment

ReEnergy states that the Facility has had $7.9 million in capital investments since September 1, 2005, Amended Petition at 7, and all of those investments were capitalized for federal tax purposes except for some minor software expenditures. The investment in the ECOTUBE over-fire air system constitutes around half of the total capital investment that ReEnergy claims as refurbishment investments in the Facility. The majority of the remaining capital expenditures were made to overhaul the Facility’s turbine, purchase a new Komatsu loader, purchase a new Komatsu d155 bulldozer, purchase a new telescoping fuel conveyor and hopper, and overhaul the boiler grate. As described earlier, ReEnergy also included capital expenditures related to a variety of other, less significant, miscellaneous projects, which are listed above. Because the ECOTUBE System is the most significant monetary investment contained in ReEnergy’s Amended Petition, we address it first.

1. ECOTUBE System

The ECOTUBE system consists of four retractable lances that are inserted in the upper portion of the boiler to inject high velocity air into the boiler to improve combustion of the biomass fuel. Amended Petition at 17-18. According to the Amended Petition, the Facility’s prior owner purchased the ECOTUBE system at the Facility in late 2005, but the system was not placed into full operation until August 2012. See June 6, 2012 Affidavit of Robert Bruce and October 12, 2012 Affidavit of Robert Bruce.

ReEnergy asserts that the ECOTUBE system constitutes a refurbishment that was installed to extend the useful life of the boiler and that it is an alternative technology that significantly increases the efficiency of the generation process. Amended Petition at 9. We agree that the ECOTUBE system was a substantial project that changed the nature of the facility, and was not routine maintenance or repair. Therefore, we find that this investment, independent of the other projects, meets the standards to be considered a refurbishment of the Facility pursuant to 35-A M.R.S. § 3210(2)(B-4).

2. Turbine Overhaul

According to the Amended Petition, the turbine at the Facility has been overhauled three times since 1987. In the Amended Petition, ReEnergy claims the April 2009 turbine overhaul as part of its refurbishment of the Facility. Industry practice appears to be that turbines are overhauled about every five to eight years. See, e.g., Amended Petition, Affidavit of Robert Bruce, Exhibit 6 at 31 (included as page 2 of the Exhibit). Although ReEnergy contends that routine maintenance and repair is restricted to yearly inspections of the turbine, we disagree. Routine maintenance and repair also includes work that can be reasonably assumed to be periodically necessary over the expected useful life of the Facility. If during the course of a turbine overhaul, it becomes clear that additional, significant, and unanticipated work is required, it is possible that the
overall project might qualify as a refurbishment of the turbine. However, that is not the case in this instance and the improvements made to ReEnergy’s turbine appear to be the regularly necessary work of a routine turbine overhaul constituting routine maintenance and repair rather than a refurbishment. 7

3. Other Expenditures

While ReEnergy Fort Fairfield qualifies as a refurbishment based upon the ECOTUBE investment alone, we address other expenditures included in Fort Fairfield’s petition.

We conclude that a new bulldozer and loader do not constitute refurbishment expenditures. While these expenditures were capitalized expenditures and were significant in terms of the amount paid, we disagree with ReEnergy that they constitute refurbishments of the Facility. First, we disagree with ReEnergy’s argument that the bulldozer and loader are directly comparable to a fixed-in-place automated fuel delivery system and therefore should be considered an essential part of the Facility. While equipment such as bulldozers, loaders, and logging trucks may be necessary to the operation of the facility, these are stand-alone pieces of equipment, not physically attached to the facility, that can operate independently of the facility, and that have monetary value separate and unrelated to the value of the facility. Accordingly, the bulldozer and loader are not part of the Fort Fairfield Facility proper and we find that these investments do not constitute refurbishment investments in the Facility for purposes of RPS eligibility.

Because we find that the ECOTUBE system investment constitutes a refurbishment within the meaning of the statute, we do not address the other expenditures ReEnergy’s filing. 8

C. Alternative Technology and Process Efficiency

ReEnergy states that the ECOTUBE system is an alternative technology that significantly increases the efficiency of the generation process. Amended Petition at 17. Our review of the materials provided by ReEnergy, as well as a review of other over-fire air systems, suggests that the ECOTUBE system does constitute an "alternative technology" within the meaning of the statute. October 12, 2012 ReEnergy Additional Comments Regarding Staff Information Request No. 2. We also conclude that the ECOTUBE system results in a significant increase in the efficiency of the Facility’s generation process due to improvements in boiler efficiency. Thus, we conclude that the Facility is eligible for Class I RPS certification under the alternative technology/increased efficiency prong of the refurbishment vintage category.

7 Commissioner Vannoy does not agree with the majority opinion on this point. See Separate Opinion of Commissioner Vannoy.
8 Commissioner Littell would find that the purchase of a new telescoping fuel conveyor and hopper is an additional investment in the refurbishment of the Facility.
Efficiency testing results in accordance with ASME PTC 4.1 provided by ReEnergy indicate that the ECOTUBE system increases boiler efficiency from [REDACTED] for a net boiler efficiency increase of [REDACTED] (a relative gain in efficiency of [REDACTED]). December 18, 2012 ReEnergy Additional Comments Regarding Staff Information Request No. 3. ReEnergy claims that this efficiency gain is significant because the Facility started with a relatively high boiler efficiency (pre-ECOTUBE installation) and additional efficiencies are incrementally more difficult to achieve. In our view, a [REDACTED] net boiler efficiency gain constitutes a significant efficiency gain of the generation process in this instance.

We also point out that efficiency gains can be viewed in a context more broadly than just the thermodynamic effects that result. ReEnergy submits that the increased boiler efficiency will save the facility at least $110,740 per year in fuel costs, avoid the need to procure, process and burn 3,164 tons of biomass, and burn all of its fuel at a higher efficiency to eliminate 843 tons of unburned char and ash. See ReEnergy Exceptions, April 5, 2013 at 8. Moreover, it is important to note that small efficiency gains in baseload, high-capacity factor plants produce a significant number of additional megawatt hours of electricity.

Finally, what is considered “significant” for one facility may not be for another, taking into account factors such as initial efficiency, fuel type, the specific technology involved, and the engineering estimates that underlie the initial investment decision.

D. Operation Beyond Useful Life

ReEnergy states in its petition that the Facility, having been commissioned in October 1987, is now operating beyond its previous useful life of 20 years. Amended Petition at 8; June 6, 2012 Robert Bruce Affidavit at 1; Amended Petition, Exhibit 10. We agree and conclude that the Facility qualifies under the refurbishment/useful life prong of the refurbishment vintage category of the RPS statute.


In light of the purpose of the statute, we should not create a disincentive to investing in promising and innovative alternative technologies to increase efficiency because they fail to achieve the highest end of the potential efficiency gains.

Commissioner Littell disagrees with this conclusion and does not join in Section III.D. See Separate Opinion of Commissioner Littell.
We do not view “useful life” as a term relative only to the initial design, service, or accounting life of a facility. The term useful life is broader and refers to the life over which a facility is useful, often determined by the economics of continued operation. In the competitive electric generation market, useful life includes a facility’s ability to continue operating in the market. The failure to continue operations in the market could be for a host of reasons including: exceeding equipment service life, the economics of operating the plant in the competitive market, or changing environmental standards that require significant capital upgrades in order to remain compliant.

While the statute requires a facility both to have been refurbished and to be operating beyond its previous useful life to qualify under the refurbishment/useful life prong of the refurbishment vintage requirement, the statutory language does not require a strict causal nexus between the refurbishment and the extension of life. Such an interpretation would lead us to an effort to parse the motivations of managers in making investments, motivations that may be complex and many-faceted. Accordingly, it is our view that when the plant is in fact operating beyond its useful life, and the plant has been refurbished, no further inquiry is needed into the nexus between the refurbishment and the longer life – although, as a general matter, refurbishment and a longer operating life are commonly connected. Thus we find the Facility qualifies under the refurbishment/useful life aspect of the refurbishment prong of the statute.

IV. CONCLUSION

For the above-described reasons, we certify the ReEnergy Fort Fairfield biomass facility as a Class I new renewable resource eligible to satisfy Maine’s new renewable resource portfolio requirement pursuant to 35-A M.R.S. § 3210 and Chapter 311, § 3(B)(3)(d) of the Commission rules. ReEnergy is directed to provide timely notice to the Commission of any material change in the characteristics or operation of the Facility, including the type of fuel used in the generation process, from that described in the submissions file by ReEnergy in this certification proceeding.

Dated at Hallowell, Maine, this 14th day of June, 2013.

BY ORDER OF THE COMMISSION

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/s/ Harry Lanphear
Harry Lanphear
Administrative Director

COMMISSIONERS VOTING FOR: Welch
                        Littell
                        Vannoy
Separate Opinion of Commissioner Littell

I agree that the major investment in the Facility, the ECOTUBE system, is a refurbishment that significantly increases the efficiency of the generation process and, accordingly, the Facility qualifies for the portfolio requirement under the efficiency gain prong of the refurbishment vintage category.

However, I disagree that the Facility may be certified under the operation beyond the useful life prong of the refurbishment vintage category. When the investment has already occurred, the question of whether the Commission’s interpretation is consistent with creating an incentive for owners to make the investments necessary to preserve and extend the useful lives of these older facilities, Covanta, 2012 ME 74, ¶ 16, 44 A.3d 960, 965, cannot simply become an inquiry of retrospective divining of subjective motivation. Our review of qualification for Class 1 certification should be based on objective evidence on whether the useful life of the facility was in fact extended by claimed refurbishment investment.

ECOTUBE System

ReEnergy states in its petition that the Facility, having been commissioned in October 1987, is now operating beyond its previous useful life of 20 years. Amended Petition at 8; June 6, 2012 Robert Bruce Affidavit at 1; Amended Petition, Exhibit 10. I agree with ReEnergy that Fort Fairfield is operating beyond its previous useful life. I find, however, that the ECOTUBE investment is not eligible for consideration under the useful life prong of the refurbishment vintage category. The Maine Law Court has stated that the purpose of the refurbishment provision is to encourage the preservation of older existing renewable generation facilities by creating an incentive for owners to make the investments necessary to preserve and extend their useful lives. Covanta, 2012 ME 74, ¶ 18. This conclusion suggests some linkage, causal or otherwise, between the action of refurbishment and preservation and extension of the useful lives of older facilities. In my view, there needs to be a direct connection between the refurbishment investment and the extension of the previous useful life of the facility. If a facility is operating beyond its useful life, but not as a result primarily of refurbishment investments, the facility should not be certified as Class I eligible, unless the investments satisfy the alternative technology prong of the refurbishment vintage category. To be clear, a simple observation that a facility is operating beyond its useful life together with a long list of investments is not sufficient in my view nor consistent with this Commission’s prior interpretation of the first prong of the fourth vintage category.

A random association of a refurbished facility that happens to be operating beyond its useful life is not what the statute contemplates because the statute is intended to incentivize certain types of investments. It is not a subsidy statute to any facility that has invested and happens to continue to be operating beyond its useful life. Indeed, no facility can operate beyond its useful life without some investment, but the statute contemplates investments constituting a “refurbishment” which is intended to
have meaning beyond expenses for “maintenance and repair.”

The statute when read in light of the age of the thermal-generation units when this provision was enacted and amended further supports the suggestion in the Law Court’s *Coventa* decision. At the time the statute was passed in 2007 and certainly when amended in 2011, almost all of Maine’s thermal-generation units that might qualify were near or at the end of their useful life. Useful life is a tax, accounting and engineering concept which has slightly different meanings in each context. It is not a defined in the statute. Under none of these disciplines does it mean the unit cannot operate. Units beyond their useful life often are operable with regular maintenance and repair. Operable may or may not mean financially viable.

Being well aware of the age of these biomass units, the Legislature created two prongs to the 4th Vintage category¹²: the first prong of the refurbishment vintage category, which states that the resource “has been refurbished after September 1, 2005 and is operating beyond its previous useful life,” and the second prong of the refurbishment vintage category, which states that the resource “has been refurbished after September 1, 2005 and . . . is employing an alternate technology that significantly increases the efficiency of the generation process.” The reasoning in Section III.D of the majority opinion says it is enough to satisfy the first prong that a refurbishment has occurred and that the facility be operating beyond its useful life. Section III.D rejects the need for any nexus between the refurbishment and operation beyond its useful life. That narrow interpretation of the words in the first prong of the 4th vintage category in isolation is inconsistent with the structure of the entire statute and the legislative facts surrounding its enactment and amendment.

The renewable thermal-generation units, commonly called biomass units, are understood as the primary subjects and potential beneficiaries of the 4th Vintage category. Because these units were constructed in Maine in the mid-1980’s, they were and are well understood to be at or near the end of their useful life. Knowing this, under the Section III.D. reasoning, the only additional test therefore for Class 1 RPS certification would be for such a unit to be refurbished. I see two problems for the Section III.D. reasoning.

The first problem with the Section III.D reasoning is that this interpretation makes the second prong of the 4th vintage category surplusage¹³. Every unit that undertakes a refurbishment would qualify because it would already be operating beyond its useful life. There would never be a need to apply the second prong to determine where a refurbishment is employing an alternate technology that significantly increases the

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¹² The 4th vintage category was drafted with the thermal-generation units burning biomass for electrical generation intended as the primary subject and potentially beneficiary. This is true of both the 2007 enactment and the 2011 amendments.

¹³ Surplusage is a legal term meaning that a part of the statute becomes unnecessary. It is generally our obligation to interpret statutes to avoid making any portions of the statutes passed by the Legislature unnecessary.
efficiency of the generation process because all refurbishments would qualify under the 1st prong. So the second prong becomes unnecessary statutory language under the majority’s reasoning in Section III.D. We should not interpret statutes to make portions of them unnecessary.

The second problem I see for the reasoning in Section III.D. is that qualifying refurbishments (vintage category 4) are listed among other vintage categories: construction of a new facilities (vintage category 1), new capacity at an existing facility (vintage category 2), or starting a mothballed facility out of operation for more than two years (vintage category 3), all involving substantial investments. I would apply the interpretive principle of ejusdem generis in which the meaning of general words of a phrase is to be limited to things or items of the same general class as those expressly mentioned. See Penobscot Nation v. Stilphen, 461 A.2d 478, 489 (Me. 1983). The fourth vintage category should be read with the company it keeps in vintages one through three to be somewhat akin with the levels of investment to qualify for those vintages. Indeed, prong 1 should be read with prong 2 of vintage category 4. Prong 2 clearly requires a refurbishment and an investment in an alternative technology increasing efficiency. For these reasons, in my view, a mere refurbishment alone is not intended to qualify unless it is employing an alternate technology that significantly increases the efficiency of the generation process (prong 2) or it extends the useful life of the facility (prong 1). It is not enough to merely say that the facility is operating beyond its useful life and did a refurbishment therefore it qualifies for Class 1 Certification.

ReEnergy asserts that the ECOTUBE system extended the useful life of the Facility because it increased the complete combustion of the biomass fuel and provides some reduction in wear and tear on the boiler components and downstream auxiliary equipment. Amended Petition at 18. In support of this assertion, ReEnergy cites a report prepared by Riley Power and submitted in this proceeding titled, “ECOTUBE OFA (Over-Fire Air) System Optimization Test Report” (Riley report). According to the Riley report, “[t]he improvement in boiler efficiency will potentially reduce boiler wear and tear costs.” Riley Report, at 20 (emphasis added). However, the Riley report falls short of predicting this is a likely outcome or whether potential cost reductions in wear and tear would result in extending the useful life of the facility.

It appears from the materials provided in support of the Petition that the primary purpose of the investment in the ECOTUBE system relates to reducing air emission and increasing the efficiency of the facility. The Air Emission License for the Facility indicates that the ECOTUBE system was installed in order to meet the criteria of the Massachusetts RPS program and acquire certification for a new low emission advanced biomass power conversion technology. June 23, 2005 Boralex Fort Fairfield Part 70 Air Emission License (quoted in the January 17, 2012 Reply Comments of William Short at 6).

A facility owner or operator’s reasons for installing a measure or making an investment can be difficult to divine with certainty and are not always determinative as
to whether that measure or investment is a refurbishment that extents the useful life of the facility, as there may be a situation where an investment is made for one purpose, but has the effect of extending the previous useful life of the facility. In this case, however, the record indicates that the Facility or the boiler is not operating beyond its previous useful life as a result of the installation or operation of the ECOTUBE system. There is scant evidence to support any causal connection between the ECOTUBE system and the extending the facility useful life. Further, it appears from the after-the-fact application, that as a factual matter, the Class 1 certification is not necessary to make the ECOTUBE or any other of the submitted investments in the Facility. Accordingly, I find that the ECOTUBE system is not eligible as a refurbishment under the useful life prong of the refurbishment vintage category.

.Turbine Overhaul

I also conclude that allowing turbine overhauls that must occur three to four times to properly maintain the unit to achieve its useful life to qualify as refurbishments is inconsistent with the RPS statute. If during its initially designed useful life or at the end of the useful life three or four turbine overhauls are necessary, the same turbine overhaul investment does not change in character at the end of the facility’s useful life. If a turbine overhaul were intended to extend a useful life, the useful life of unit would only be five to eight years, whereas we generally consider the useful life to be twenty to twenty-five year for biomass thermal-generation units. The statute recognizes this by distinguishing between routine maintenance and repairs such as turbine overhauls that occur during a useful life and refurbishments which are something beyond those investments necessary during the useful life to keep the facility in operation.

If we were to adopt the view that a turbine overhaul is a refurbishment and not a routine maintenance and repair item, the initial threshold test of being “refurbished after September 1, 2005” would be rendered rather inconsequential, as within 5 to 8 years after the September 1, 2005 statutory threshold date, almost every existing thermal power generation facilities would be operating beyond their useful lives and, as a result of the turbine overhaul, would be considered “refurbished” and qualify for Class 1 status. Such an interpretation collapses the term “refurbished” into “routine maintenance and repair after 5 to 8 years.” Such an interpretation will flood the Maine REC market and make the Maine RECs far less valuable than today and far less valuable than in other New England states in the same markets. There is no legislative suggestion that this outcome was the intention of the Legislature in enacting the refurbishment provision in the statute. As discussed above, the structure of the statute itself suggests that the fourth vintage category should be read with vintages one through three to be somewhat akin with the levels of investment to qualify for those vintages rather than the type of regular turbine overhauls performed every 5 to 8 years.

Moreover, the level of effort and magnitude of the work involved in the 2009 turbine overhaul does not appear to be of a significant enough nature or scope to constitute a refurbishment in, and of, itself. In this instance and the improvements made
to ReEnergy’s turbine appear to be the regularly necessary work of a routine turbine overhaul constituting routine maintenance and repair.
I agree that the ECOTUBE installation constitutes a “refurbishment” within the meaning of the RPS statute. However, although not determinative, in this case I would find that the overhaul of a steam turbine is a contributing element to a refurbishment as contemplated under the statute.

It is my view that the statutory language of refurbishment can be viewed in terms of the difference between routine maintenance and overhaul. I would equate overhaul with the legislative language which specifies refurbishment to mean “an investment in equipment or facilities, other than for routine maintenance and repair, to renovate, reequip or restore the renewable capacity resource.” 35-A M.R.S. § 3210(2)(B-4).

Large, complex, capital intensive pieces of equipment or machinery are often managed under an engineered lifecycle maintenance program. Under an engineered lifecycle approach to maintenance, three categories are typically used to characterize work that is done on the equipment or machinery. These categories include maintenance, repair, and overhaul. Overhauls of equipment, although they may be periodic, are in no way routine and typically due to their size and scope are capitalized and not expensed. In order to give meaning to the three categories of actions outlined in the statute (routine maintenance, repair, and refurbishment) I think it is reasonable to equate overhaul, a category of typical engineered lifecycle maintenance, with refurbishment.

The point of an overhaul is to re-equip or restore the capacity. When a complex piece of equipment such as a steam turbine undergoes an overhaul it becomes like new. Because of its complexity and cost, the decision to proceed with an overhaul involves an analysis between the economics of continued operation and the economics of the overhaul. This is the very decision point at which the Legislature, through the RPS statute, provides an incentive to encourage the investment in the overhaul of the equipment and thereby extend the useful life of the facility.

In this case, there was a steam turbine overhaul and, while the case for certification stands on the ECOTUBE work alone, I would find that the steam turbine overhaul provides an additional qualifying contribution to the overall plant refurbishment.
NOTICE OF RIGHTS TO REVIEW OR APPEAL

5 M.R.S. § 9061 requires the Public Utilities Commission to give each party to an adjudicatory proceeding written notice of the party's rights to review or appeal of its decision made at the conclusion of the adjudicatory proceeding. The methods of review or appeal of PUC decisions at the conclusion of an adjudicatory proceeding are as follows:

1. **Reconsideration** of the Commission's Order may be requested under Section 11(D) of the Commission's Rules of Practice and Procedure (65-407 C.M.R. 110) within 20 days of the date of the Order by filing a petition with the Commission stating the grounds upon which reconsideration is sought. Any petition not granted within 20 days from the date of filing is denied.

2. **Appeal of a final decision** of the Commission may be taken to the Law Court by filing, within 21 days of the date of the Order, a Notice of Appeal with the Administrative Director of the Commission, pursuant to 35-A M.R.S. § 1320(1)-(4) and the Maine Rules of Appellate Procedure.

3. **Additional court review** of constitutional issues or issues involving the justness or reasonableness of rates may be had by the filing of an appeal with the Law Court, pursuant to 35-A M.R.S. § 1320(5).

**Note:** The attachment of this Notice to a document does not indicate the Commission's view that the particular document may be subject to review or appeal. Similarly, the failure of the Commission to attach a copy of this Notice to a document does not indicate the Commission's view that the document is not subject to review or appeal.