State of Vermont
Department of Taxes
133 State Street
Montpelier, VT 05633-1401

Agency of Administration

July 30, 2012

[redacted]

Formal Ruling # 2012-05

Dear [redacted]:

This is a formal ruling for [redacted], regarding the applicability of sales and use tax to the concrete foundations used to support wind towers at the [redacted] Wind Facility.

To clarify [redacted] sales tax obligations to the State, you have requested a ruling on whether the wind-turbine foundations qualify for the manufacturing machinery and equipment exemption from Vermont's sales and use tax.

The Commissioner ruled on this issue in Formal Ruling 2010-17, finding that the concrete foundations are not "machinery and equipment" and not used "directly and exclusively" in the manufacturing process, and for these reasons do not qualify for the manufacturing machinery and equipment exemption. You have raised facts and issues in your request, however, that were not raised in the earlier ruling, and these will be addressed here.

This ruling is based upon representations in your letter and enclosures of May 24, 2012, and your supplemental letter and enclosures of July 19, 2012.

FACTS

1. [redacted] is building a commercial wind generation facility on [redacted], Vermont, known as the [redacted]. The facility will produce electricity through the use of wind turbine generators (WTG), and will sell the electricity to its customers or to another utility for sale to its customers.

2. You describe a WTG as having four components: (1) a rotor (the blades), (2) a nacelle (hub assembly, which includes the electric generator, control electronics, rotor yaw mechanism and gear box), and (3) a tower (hollow steel pipe which places the rotor blades upright at the

specified height for wind generation of electricity), and (4) the wind-turbine foundation. The tower does not move or otherwise serve to orient the blades into the wind direction.

3. A WTG tower is bolted onto a concrete foundation specifically designed for the height and weight of the tower, weight of the nacelle, and weight and torsional stress of the blades. This foundation consists of a concrete pad 24 feet in diameter and five feet thick which contains reinforcing steel throughout. Embedded in the concrete pad are two 13 foot diameter steel bolt rings and bolt cage which surround twenty vertical steel rods called "rock bolts." Rock bolts are 2.5-inch thick steel rods 40 to 50 feet long, which are drilled and grouted down into the bedrock and pass upward through the concrete-embedded bolt cage and bolt rings, and protrude above ground to attach to the base of the tower. The top of the tower is connected to the nacelle-rotor assembly.

4. [redacted] has entered into a stipulation with the [redacted] (ANR) under which [redacted] agrees to extensive requirements to maintain the quality of the site. The stipulation covers, among other items, mitigation of impacts to black bear habitat, forestry and wildlife habitat management, development restrictions, acquisition by [redacted] of conservation easements, and $4 million of decommissioning and site restoration expenditures at the "end of Project commercial operations" or "conclusion of the permitting process of a Future CPG Project, whichever is later." [redacted] ("ANR Stipulation"), [redacted]

5. The Decommissioning Plan which is part of the ANR Stipulation requires extensive demolition and site restoration at the end of the project, with all costs to be borne by [redacted], and requires [redacted] to build a $4 million decommissioning fund over the coming 25-year period. [redacted] ("Decommissioning Plan"), [redacted]

6. The Decommissioning Plan requires [redacted] to remove a portion of the concrete foundations at the end of operations as follows:

> As described in more detail below, [redacted] shall remove above-ground structures and removal of below-ground structures to a depth not less than 24 inches, except that as to foundation structures bearing on rock with a surface less than 24 inches below grade, the foundation concrete shall be removed to the surface of the rock and any existing anchors or bolts into the rock will be cut flush to the rock. . . Below-ground structures include foundations for the turbines, collector substation, and maintenance building, fiber optic facilities, collection system conduit and cable. .
>
> Following foundation removal, [redacted] shall fill any remaining excavated area with clean sub-grade material of quality and composition comparable to the immediately surrounding area [and] compact. . .to. . .a density similar to the immediately surrounding sub-grade material.

Id. at p. 2, Section 3a, b, c.

7. The Public Service Board issued [redacted] a Certificate of Public Good through its order entered [redacted], which required that prior to commencement of construction [redacted] file a proposed decommissioning plan including "removing infrastructure in place" that incorporates the requirements of the ANR Stipulation Decommissioning Plan and that [redacted] obtain Board approval for the plan. [redacted].

8. If [redacted] does not cease operations at the end of 25 years, and instead continues operation, the WTGs will be removed and salvaged, and the concrete foundations will be removed as described in the Decommissioning Plan to a depth of not less than 24 inches. New foundations (for new WTGs) would be installed approximately 50 feet away from the prior concrete foundations.

9. The site for the wind facility is on land owned by [redacted]. ANR Stipulation, p. 1. [redacted] has granted an easement to [redacted], in an agreement dated [redacted] (Easement Agreement). Letter from CPA [redacted] of July 19, 2012, Attachment 1 (July 19 Letter). Section 6.1 of this agreement provides that at the termination of the Easement Agreement, [redacted] will

> . . .remove all equipment, improvements, fixtures and other property owned or installed by Grantee on the Property (allowing that all footings and foundations shall be removed to a depth of not less than two feet below the grade of the surrounding ground elevation, and covered with materials similar to the surrounding ground area and graded so that it blends in with the then existing grade and contours). . . .

DISCUSSION

The Commissioner ruled on this issue in Formal Ruling 2010-17. In that ruling, the facts presented to the Commissioner provided that the "The WTGs that [redacted] proposes to purchase are sold as a unit. These units have three distinct parts which work together to produce electricity: (1) a rotor...(2) a nacelle... and (3) the tower." Id. at p. 1. The Commissioner noted that "Because of this functional relationship among the tower, nacelle and rotor, the WTGs are sold as one unit" and ruled that the towers qualified as part of the exempt machinery and equipment (*see* discussion *infra* at p. 14). But the Commissioner found that "The concrete pads to which the WTGs are bolted are not exempt. These are neither machinery nor equipment, but rather part of the real estate and do not satisfy the direct use requirement." Id. at p. 4. Although the Commissioner has already ruled on the taxation of the concrete foundations, this ruling will address each of the issues you raise, because they were not addressed in the earlier ruling, and also because the definition of "machinery and equipment" broadly affects the administration of Vermont sales and use tax.

Vermont sales and use tax applies to sales of tangible personal property. 32 V.S.A. § 9771(1). The articles purchased by [redacted] to construct the wind turbine generators and their steel and concrete foundations are "personal property which may be seen, weighed, measured, felt, touched," and so, are tangible personal property, and subject to the sales tax unless an exemption applies. 32 V.S.A. § 9701(7). Articles of tangible personal property which are purchased for use in constructing real property are subject to the sales tax. Dept of Taxes Reg. § 1.9741(14)-10; Morton Bldgs., Inc. v. Vermont Dept. of Taxes, 167 Vt. 371 (1997). Articles of tangible personal property which are qualified manufacturing machinery and equipment are exempt from the sales tax. 32 V.S.A. § 9741(14). Whether items are qualified for this exemption depends not only on whether they can be said to be machinery or equipment, but also the use to which they are put in the particular case. Id. To qualify, the items must be:

> [M]achinery and equipment for use or consumption directly and exclusively, except for isolated or occasional uses, in the manufacture of tangible personal property for sale. . . . Machinery and equipment used in administrative, managerial, sales or other nonproduction activities, or used prior to the first production operation or subsequent to the initial packaging of a product, shall not be exempt from tax, unless such uses are merely isolated or occasional. Machinery and equipment shall not include buildings and structural components thereof.

Id. That is, to qualify for the machinery and equipment exemption, the articles purchased must not only be machinery or equipment, they must be used in the manufacturing process, the use must be direct and exclusive, and the manufacturing process must produce tangible personal property for sale. [1]

The articles which are the subject of this ruling request are the components used to create the concrete foundations for the WTGs: concrete, reinforcing steel, 13 foot diameter steel bolt rings and bolt cages, and steel rock bolts. The machinery and equipment exemption does not apply to these articles because as used in this case, they are incorporated into real property, and they are not machinery or equipment used directly in the manufacturing process, as explained below.

1. Machinery and equipment

The exemption in subsection (14) quoted above specifies that machinery and equipment do not include "buildings and structural components thereof." The definition in the related regulation reiterates that machinery and equipment must be tangible personal property and may not be real property:

> Reg. § 1.9741(14)-2 Definitions

[1] Electricity is tangible personal property. 32 V.S.A. § 9701(7). Therefore, the use of machinery and equipment to generate electricity qualifies as the manufacture of tangible personal property. The exemption in § 9741(14) would thus apply to "machinery and equipment" used "directly and exclusively" to generate electricity from wind.

A. "Machinery and Equipment" means tangible personal property, capital in nature, with a useful life of one year or more, and does not include real property or supplies.

Department of Taxes Reg. § 1.9741(14)-2(A). Thus, under this definition, "machinery and equipment" and "real property" are mutually exclusive. The first question in this ruling, then, is whether the purchased components as used in this project function as personal property or function as real property.

You have asserted that the foundations are personal property, based upon the following:

(a) Under the terms of the Decommissioning Plan [redacted] intent is to remove a portion of the foundations to a depth of not less than 24 inches after 25 years;
(b) [redacted] may be able to depreciate the foundations for Federal income tax purposes over a 25-year period; and
(c) [redacted] estimates that after 25 years the foundations may no longer have sufficient structural integrity to support the WTGs.

(a) Intent of the parties

You cite the case of Sherburne Corp. v. Town of Sherburne, 124 Vt. 481, 207 A.2d 125 (1965). That case sets out a three-part test for determining when an article becomes real property, including:

(1) the annexation, actual or constructive, of the article to the real estate;
(2) its adaptation to the use of the realty to which it is annexed; and
(3) whether or not the annexation has been made with the intention to make it a permanent accession to the freehold.

Id. at 484. The Court said that the third part of the test was the most important:

The. . .intention to make the property a part of the real estate. . . is crucial, since if the intention to make it a permanent accession is doubtful, it remains a chattel. First National Bank v. Nativi, supra, 115 Vt. 15, 21. . . .

Id. In the Sherburne case, the State owned the land and leased it to Sherburne Corporation, which erected ski lifts on the property. The lease provided that the lifts would be deemed real estate and would remain on the land at the end of the lease. The Court held that the lifts were real property because Sherburne Corporation had no right to remove the lifts at the end of the lease. Based upon that intent, expressed in the lease, the Court held that "Between the parties, the lifts are irrevocably fixed to the land," and therefore "part and parcel of the real estate." 124 Vt. at 486.

You request a ruling that [redacted] Decommissioning Plan requirement to remove the concrete foundations at the end of 25 years shows that there is no intent to make them a permanent accession and so, the foundations would be personal property under the Sherburne case.

The Sherburne case, however, addressed the status of ski lift machinery, and not the status of the concrete foundations supporting the lifts. The Court described the components of the lifts, which did not include the cement base:

> The lifts, including towers, cables, chairs, railing and platforms, are integrated devices for providing uphill transportation.

124 Vt. at 484. The Court then described the lowermost component of the lift, that is, the tower, as "embedded in a heavy cement base" which was separate from the components of the lift machinery:

> The towers are designed according to the topography of the line of the particular lift, and each tower is embedded in a heavy cement base.

Id. The Court then stated that the towers "cannot be removed without permanent damage to the real estate." Id. The "real estate" referred to in that sentence thus included the cement base.[2]

More importantly, the intent expressed in your Decommissioning Plan and Easement Agreement is not to remove the foundations as such. The expressed intent in both documents is to remove only up to 24 inches of the below-ground foundations. Even with the extensive project requirements imposed upon [redacted], including an anticipated expenditure of $4 million for decommissioning and site restoration, the intent under both documents is to leave permanently embedded in the ground up to three feet of the 24-foot diameter concrete pads, including any encased reinforcing steel, anchor rings and rock bolts. Thus the intent is not to remove the foundations, but to destroy them by demolishing a portion of each and leaving the remaining unusable bulk of each one firmly embedded in and a permanent part of the real estate. The remaining buried bulk is so integrally affixed to the real estate that it would apparently be too expensive to warrant its complete removal.

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[2] In an earlier case, the Court was more pointed in finding that cement bases are real property. First Nat. Bank v. Nativi, 115 Vt. 15 (1946). The Court in Sherburne cited Nativi as the origin of the three-part test for real property versus personal property. Nativi also dealt only with motors and a compressor, and not with the cement base they were attached to. The base "extended four feet into the ground and two feet above the floor. . . Bolts were headed into the cement before it set. . . . Id. at 16. The Nativi Court saw the cement bases as so clearly real property that it stated its conclusion with no analysis of accession or intent:

> Under the circumstances [*viz.*, the Court's holding that the machinery attached to the cement base was real property], there is no necessity to give attention to the defendant's exceptions which are founded upon the theory that the cement bases were not a part of the freehold, and hence that no damage could be allowed for their act in cutting off the bolts that held the compressor. The bases were clearly permanently attached to the realty and a part of it.

Id. at 22.

The purpose in ascertaining whether an article has become affixed or remains a chattel is to determine whether it could be removed without damage and taken away for use or sale elsewhere, or must remain in place for use by the landowner. [redacted] has no intention to remove the foundations, as such, for use or sale; it has only agreed to demolish a portion of each and remove the debris. Where the article is so annexed to the real estate that it cannot be removed without completely destroying the article, the "intention to make it a permanent accession" cannot be said to be "doubtful."[3]

If [redacted] does not cease operations at the end of 25 years, and instead continues operation, the WTGs will be removed and salvaged. The foundations, for obvious reasons, will not be removed and salvaged; they will be destroyed. The fact that the parties do not intend to remove the foundations *as such*, but intend only to destroy and remove a portion of each, demonstrates an intent to make the foundations a permanent accession to the freehold.[4]

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[3] This was, in fact, the holding in In re Reese and Thomas, 194 B.R. 782 (Md. 1996). That case was analyzed in the context of a security interest, so is not directly on point for a sales tax exemption. The court's reasoning, however, is not limited to the secured interest context. The court began its analysis with the Maryland three-factor test for determining "whether an article is a fixture," which included (1) annexation to the realty, either actual or constructive, (2) adaptation of the article to the realty, and "(3) the intention of the party making the annexation to make the article a permanent accession to the freehold." Id. at 791. A provision of the parties' security contract provided that certain affixed items would remain personalty. The court held that the parties' intent was irrelevant where the items could not be removed without destroying them:

> [A]s to goods that have no value or useable character separate from the real estate after they are removed and which are an integral part of the real estate, the parties' intent, as evidenced by a contractual provision, that the goods should remain personalty contradicts the actual nature of the goods and can not be given effect in characterizing the nature of the goods.

Id. at 792-793.

[4] It is of interest that all structures of any kind used to generate electric power must be set in the grand list as real estate, 32 V.S.A. § 3602a, though this statute may have no application in this ruling, because the statute applies to property taxation, not to sales tax. In Gordon v. Board of Civil Authority for Morristown, 180 Vt. 299 (2006), the Court established that where property is deemed to be real property by statute, the statutory determination will govern, regardless of the parties' intent or the three-part test in Sherburne. Gordon constructed an airplane hangar on land leased from the State, and argued that since he could be required to remove the hangar at the end of the lease, the parties' intent was that the hangar be treated as personalty. A statute provided that "Buildings on leased land. . .shall be set in the list as real estate." Id. at 302, *citing* 32 V.S.A. § 3608. The Court held that the common law fixture test in Sherburne is inapplicable where the Legislature has defined the property as realty ("Because the Legislature has chosen to define taxable real estate, this Court may not disregard that choice in favor of a common-law definition of real estate for tax purposes." Id. at 302). Gordon is of interest in this ruling because the Legislature has also chosen to define all property of an electric generating facility in Vermont as real estate for purposes of the grand list:

> § 3602a. Facilities used in the generation, transmission or distribution of electric power
>
> All structures, machinery, poles, wires and fixtures of all kinds and descriptions used in the generation, transmission or distribution of electric power that are so fitted and attached as to be part of the works or facilities used to generate, transmit or distribute electric power *shall be set in the grand list as real estate*. . . .

(b) Ability to depreciate the foundations for Federal income tax purposes over a 25-year period

You have noted that "As is the case with the other 3 components of a WTG, the Taxpayer will be allowed to depreciate the cost associated with the wind-turbine foundation for both accounting and income tax purposes," and you cite the case of Standard Tube Co. v. Commissioner, 6 T.C. 950 (1946), in support of your statement. Standard Tube , however, addressed only questions related to depreciation periods, and did not adjudicate whether property was personalty or realty in any other context.

We note first that Federal income tax law allows depreciation of *all* business property (other than inventory and land), regardless of whether it is personal property or real property. 26 U.S.C. § 167. So the mere fact that [redacted] concrete foundations might be depreciable under Federal income tax law does not mean that they are necessarily personal property. Conversely, the fact that an item might be deemed real property in another context is not necessarily determinative of what its useful life might be for depreciation, and this is the import of Standard Tube.

In Standard Tube the taxpayer corporation leased buildings in which it installed a seamless tube mill and specially designed foundations for the mill and auxiliary equipment. The question before the court was what "useful life" the lessee could use to depreciate these foundations.[5] The court held that because the foundations were specially designed and adapted to the mill and the machinery, and "had no useful value. . .other than in connection with the operation of the seamless tube mill and auxiliary equipment," the foundations had the same useful life for purposes of depreciation as the machinery. 6 T.C. at 955. The court held:

> The fact that the foundations were specially designed and adapted to the seamless tube mill (which was dismantled and sold in 1939) and to the machinery and equipment other than the seamless tube mill and that all such expenditures were capitalized on the petitioner's books demonstrate that they were essentially integral parts of the machines and were so treated and considered. It is logical and proper, therefore, to allow depreciation on the same basis and at the same rate as those applicable to the machines for which the foundations were built and to which the installation costs pertained.

Id. at 956. Thus, Standard Tube establishes that in certain cases mill foundations may be depreciated over the same period as integrally-related machinery. It does not establish whether,

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32 V.S.A. § 3602a (emphasis added). It is not clear under Gordon that Section 3602a would be determinative with respect to the GMP concrete foundations, because Gordon only addressed property taxation, and Section 3602a expressly governs the status of the foundations for property tax purposes, and not necessarily for sales tax purposes.

[5] The primary question for the court was whether the installation costs and costs of the foundations should be depreciated over the term of the lease or over the useful life of the foundations. The court held that the depreciation period should be the useful life, and then turned to the secondary question of what that useful life of the foundations would be.

for purposes of property taxation or sales tax exemption or other purposes, foundations are real or personal property.

(c) The foundations may lose structural integrity over 25 years

You have stated that the foundations may not be safely useable for more than 25 years, and infer from that limited useful life that the foundations are personal property. Under the Nativi test, any article of personal property becomes real property if it is affixed with the intent to make it a permanent accession; the useful life of the article if it were not affixed to the realty is not part of the Nativi analysis. This is made clear by the fact that the Nativi Court found two motors and a compressor to be so affixed as to have become real property.

As one court phrased it, in the context of determining whether the article is permanently affixed, " 'permanent' does not mean 'forever'." Farmland Industries, Inc., v. Alliance Process Partners, LLC, 298 B.R. 382, 388 (2003). In that case, the court considered whether a "fluid catalytic cracking unit (FCC unit)" connected to a concrete foundation was personal property or real property, and applied a three-part test similar to that in the Nativi case. The court recited the third part of its test ("What is the intention of the party making the annexation?") and explained as follows:

> Alliance argues that Kansas law requires an intent to make a piece of equipment a "permanent annexation" to the freehold before the equipment can become real property. . . The [Debtor] testified that he thought "permanent" meant "forever," and the FCC Unit was not "permanent" because it had a finite useful life. In the context of a real property discussion, however, "permanent" does not mean "forever;" rather, "permanent" means "fixed or intended to be fixed." *Webster's Third New International Dictionary* 1683 (1981). Consonant with Webster's definition, Black's Law Dictionary defines real property, in part, as "[l]and; that which is affixed to land; that which is incidental or appurtenant to land; that which is immovable by law." *Black's Law Dictionary* 1218 (6th ed. West 1990). Nothing in use will wear forever. Buildings, and the fixtures within them, do not last "forever," yet Kansas courts recognize the general rule that a building is normally considered part of the real estate. "Permanent annexation" is a matter of degree subject to judicial discretion based on the facts and circumstances of a particular case.

Id. Thus, whether an article had become realty was not dependent upon the length of the article's own useful life, but rather, was determined by whether the article had become "affixed to the land" or "immovable by law."

In [redacted] case, the intent is to affix the concrete foundations to the land permanently. Although they may not be used for more than 25 years, the foundations, as such, are "immovable." A portion of each foundation may be destroyed after 25 years. But the unusable portion of the concrete and steel will remain affixed to the bedrock most likely for many, many years after that.

Buildings and fixtures

At the beginning of the Legal Discussion section of your request letter, you cite a Tax Department regulation which provides that property will not lose its manufacturing machinery sales tax exemption based on the fact that it "houses the manufacturing process." The full regulation reads:

> D. Not Directly and Exclusively Used
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> 1. Generally, buildings and fixtures used to house manufacturing operations are not directly and exclusively used in manufacturing even if they are personal property. *Personal property* that is directly and exclusively used in the manufacturing process will not lose its exemption based on the fact that such property also houses the manufacturing process.

Department of Taxes Regulation § 1.9741(14)-4(D) (emphasis added). This regulation has no relevance to the concrete foundations in your case, however, since the foundations do not "house the manufacturing [electric generating] process," and, more importantly, as explained above, are not personal property.

The second sentence of (D) merely provides that an article which is *otherwise qualified* as exempt machinery or equipment will not be disqualified simply because it is part of the housing. This sentence refers to a situation such as that in Formal Ruling 97-02. That ruling concerned a business which made microchips, in a manufacturing process which required that the air touching the chips during manufacture be maintained to an extreme standard so as not to contaminate the microscopic chips as they were fabricated. To maintain that air standard, the chips were created in a "cleanroom" which had specially-designed interior components "with surfaces which resist collecting or emitting contaminants and which are nonconductive." Id. at p. 2. The Commissioner found that these interior components qualified as part of the direct manufacturing process and therefore were exempt:

> In general, maintenance of an environment in which manufacturing is conducted is not a direct manufacturing function. In the case of the cleanroom, however, the configuration directly controls the manufacturing function of keeping the highly processed, tightly controlled air around the product. Those elements of tangible personal property from which the cleanroom is configured are exempt manufacturing equipment. These include raised floors, walls, ceilings and light fixtures to the extent that a *[sic]* the fixture constitutes part of the control of the air flow. Vinyl flooring permanently cemented to the floor is part of real property and is not exempt.

Id. at pp. 2-3. As noted in the final sentence of the quote, only the cleanroom components which were personal property qualified for the exemption; the affixed flooring was real property and so, did not qualify.

2. Direct use

To qualify for the sales tax exemption, machinery must not only be tangible personal property, it must also be used "directly and exclusively, except for isolated or occasional uses, in the manufacture of tangible personal property for sale." The regulations provide four factors for determining whether a use is a "direct use":

> B. Direct Use
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> 1. In determining whether machinery and equipment is directly used, the following factors are considered together with other relevant facts and circumstances:
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> (a) The active causal relationship that exists between the use of the machinery and equipment in question and the production of a product;
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> (b) Whether the machinery and equipment in question operates with an exempt machine or piece of equipment to complete or facilitate an integrated and synchronized system;
>
> (c) Whether the machinery and equipment in question guarantees the integrity or quality of the manufactured product;
>
> (d) The physical proximity of the machinery and equipment in question to the production process; lack of physical proximity by itself will not establish that a use is not direct.

Department of Taxes Regulation § 1.9741(14)-4(B)(1). These factors will be discussed in detail below.

Most states which impose a sales tax provide an exemption or partial exemption for purchases of machinery and equipment used in manufacturing. Hellerstein and Hellerstein, State Taxation, 3d ed., Vol. II, § 14.05[1]. These manufacturing machinery exemption statutes contain definitions of what constitutes "use in manufacturing." Goodman, Marcus and Hughes, 1330 T.M., BNA, Sales and Use Taxes: The Machinery and Equipment Exemption, § 1330.04. The states vary, however, on how broadly to view what constitutes use in manufacturing:

> There are two distinct lines of authority followed in determining whether machinery and equipment are used directly in manufacturing. The first of the theories is the liberal "integrated plant theory," which allows tax breaks for assets that are essential to the manufacturing process. The second theory is the more narrow "Ohio Rule" or "physical change theory," which permits an exemption only for assets that physically transform raw materials during the manufacturing process.

Id. Under the broader "integrated plant theory" manufacturing encompasses all of the operations which are essential to the production, and may include such activities as transport of the raw materials before fabrication begins, and packaging the product after fabrication ends. Id. Under

the narrower "Ohio Rule," manufacturing only includes those steps in the operation that physically change the raw material into the finished product. Hellerstein, § 14.05[2][a].

For example, a state like Kansas, which applies the more liberal "integrated plant theory," will exempt machinery used in operations outside of the actual production line. In In re LaFarge Midwest/Martin Tractor Co., Inc., 271 P.3d 732 (Kan. 2012), the Kansas Supreme Court held that Caterpillar loaders and haulers used in the pre-production activity of moving limestone from the taxpayer's quarry to its cement manufacturing facility were exempt machinery and equipment used in the cement manufacturing business. The court noted that recent amendments to the Kansas sales tax statutes "were intended to move Kansas from a state that employs some characteristics of the integrated plant theory to a pure integrated plant theory state." Id. at 736. In rejecting the argument that the pre-production loading and hauling machinery was not used in the manufacturing, the court "recognized that argument as an attempt to apply the narrower 'Ohio rule' rather than Kansas' integrated production operation theory." Id. at 737.

The Kansas statute is broad, and exempts:

> (kk)(1)(A) all sales of machinery and equipment which are used in this state as an integral or essential part of an integrated production operation by a manufacturing or processing plant or facility;
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> * * *
>
> (2) For purposes of this subsection:
>
> (A) "Integrated production operation" means an integrated series of operations engaged in at a manufacturing or processing plant or facility to process, transform or convert tangible personal property by physical, chemical or other means into a different form, composition or character from that in which it originally existed. Integrated production operations shall include: (i) Production line operations, including packaging operations; (ii) preproduction operations to handle, store and treat raw materials; (iii) post production handling, storage, warehousing and distribution operations; and (iv) waste, pollution and environmental control operations, if any;

K.S.A. 79–3606(kk)(1)(A), (2)(A). Clearly, the Kansas definition embraces activities beyond the actual process of transforming the raw materials.

According to at least one commentator, Vermont follows the "Ohio Rule." Goodman, et al., § 1330:0032, (46) "Vermont." It is more accurate to describe Vermont as a "modified" Ohio Rule state.[6]

The important point for this ruling is that under Vermont's exemption for machinery used in the production of tangible personal property for sale, that machinery must be used "directly and

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[6] Vermont's exemption statute defines "manufacturing" narrowly to include only the operations which change the raw material into the manufactured product, which is the strict Ohio Rule. But Vermont also statutorily extends its exemption to items which would be rejected under a strict Ohio Rule statute. For example, Vermont's statute also exempts machinery and equipment for use "in the manufacture of other machinery or equipment, parts or supplies for use in the manufacturing process". 32 V.S.A. 9741(14).

exclusively" "in the manufacturing process," and does not include machinery which is merely "essential" to the process in some way. While the concrete foundations or their components might be said to be essential, because they support the WTGs, they are not used directly in the process that transforms the raw material of wind into electricity. This narrower approach is established by Vermont's statute and its regulations under the manufacturing machinery and equipment exemption:

First, "manufacturing" is defined to include "industrial processing," which in turn is limited to the "integrated operations" which "change the form" of the raw material into the finished product:

> Reg. § 1.9741(14)-2 Definitions
>
> A. "Machinery and Equipment" means tangible personal property, capital in nature, with a useful life of one year or more, and does not include real property or supplies.
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> B. "Manufacturing" means:
> 1. Industrial processing
> 2. Food processing
> 3. Mineral extraction
> 4. Information processing
>
> C. "Industrial Processing" means an integrated series of operations, usually involving machinery and equipment, which changes the form, composition or character of tangible personal property by physical, chemical or other means.

Dept. of Taxes Regulation § 1.9741(14)-2, A,B,C. Subsection (C) in that definition is the "physical change theory" of the Ohio Rule. This narrower theory of "direct use" is also expressed in the definition of "manufacturing process," which includes only actual production steps, and excludes any operations occurring before or after production:

> 1. For industrial and food processing, the term "manufacturing process" means an integrated series of production activities beginning with the first production process and ending with the initial packaging of the product. If the product is not packaged, the manufacturing process ends with the last step that places the product in the form in which it is sold. Not included in the term "manufacturing process" are activities prior to the first production stage (such as collecting, weighing, testing, and bulk storage of raw materials) or any activities following initial packaging (such as secondary packaging, loading, delivery or transportation of finished goods following initial packaging to storage). The first production stage generally begins at the time the raw materials that are used or consumed in the manufacturing process are removed from storage. Thus, for example, conveyors, motorized lifts, cranes, chain falls and chemical, gas and electrical distribution systems constitute machinery and equipment used in the manufacturing process and would be exempt if used exclusively in such process.

Dept. of Taxes Regulation § 1.9741(14)-2, G. Machinery which is not used to change the form of the raw material into the finished product does not become manufacturing machinery simply because it is required by law or even by practical necessity:

> 2. The fact that particular machinery or equipment may be considered essential to the conduct of the business of manufacturing because its use is required either by law or practical necessity does not, of itself, mean that the machinery or equipment is "used directly" in the manufacturing operation.
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> * * *

Dept. of Taxes Regulation § 1.9741(14)-4(B)(2).

The [redacted] concrete foundations are not used to change the form of the raw material into the finished product. They are physically, if not temporally, "prior" to the production stage.

Nor do the four factors for "direct use" in Regulation § 1.9741(14)-4(B)(1), quoted above, pertain to the concrete foundations:

(a) The active causal relationship that exists between the use of the machinery and equipment in question and the production of a product

First, the articles used to create the concrete foundations are not "machinery" or "equipment," as noted in Section 1, "Machinery and equipment," of this ruling; they are permanently affixed to real estate. Even if the foundations were machinery, which they are not, there is no "active causal relationship" between the foundation and the production of electricity.

You note that the Superior Court in Alteris Renewables, Inc. v. Vermont Department of Taxes, No. S0208-11 CnC (June 27, 2011), held that "steel and aluminum racks that hold [photovoltaic] modules at a constant 30 degrees facing solar south" qualified as exempt manufacturing equipment, and you analogize [redacted] concrete foundations to those metal racks. The court held, however, that the racks "have a 'causal' relationship to production because their use directly results in the enlargement of the generating plant's power output to a commercially viable level." Id. at 6. In this regard, the metal racks are analogous to the steel tower component of the wind turbine generating assembly, because the tower places the rotor blades upright at the specified height for optimum wind generation of electricity. In Formal Ruling 2010-17, the Commissioner ruled that these towers do qualify for the manufacturing machinery exemption because they are "built to a certain height in order to ensure maximum wind intake and electricity production for that site" and "[b]ecause of this functional relationship among the tower, nacelle and rotor, the WTGs are sold as one unit," and the towers have a "physical proximity to the production process." Id. at 4.

The towers, like the solar racks, are immediately next to the generating assembly and hold it in the necessary position for optimum manufacture of electricity. Although neither the towers

nor the racks move, they both are immediately attached to, and serve to orient, the generating assembly, and in both cases, this was found sufficient to show an "active causal relationship."

In contradistinction, the concrete foundations are not immediately attached to, and have no physical proximity to, the WTG generating assembly. Nor do they orient the assembly for optimum production. Concrete foundations for holding the metal racks in Alteris were not mentioned by either party or by the court as possible manufacturing machinery, and so, the Superior Court did not consider their role.

> (b) Whether the machinery and equipment in question operates with an exempt machine or piece of equipment to complete or facilitate an integrated and synchronized system;

This factor must be read in the context of the full definition of "manufacturing" as described in Vermont's law and regulations. The "integrated system" is the system which changes the form of the raw material into the finished product. Department of Taxes Regulation § 1.9741(14)-2, A,B,C. The foundations do not "complete or facilitate" the change of wind into electricity. They do not "operate," even in the expanded sense applied by the Alteris court:

> [T]he racks do "operate" because they perform a function and produce a desired effect as a component of the PV arrays - namely, they increase the power output of the PV modules.

No. S0208-11 CnC at 5. The foundations do not increase the power output of the wind generators. They are physically remote, passive supports affixed to bedrock and embedded in the earth.

> (c) Whether the machinery and equipment in question guarantees the integrity or quality of the manufactured product

Again, the foundations are not machinery. But even if they were, they do not guarantee the integrity or quality of the electricity produced.

> (d) The physical proximity of the machinery and equipment in question to the production process; lack of physical proximity by itself will not establish that a use is not direct.

The foundations have no physical proximity to the assembly which produces the electricity.

None of the four factors applies to the concrete foundations. Therefore, they cannot be said to have a "direct use" in the manufacturing of electricity.

CONCLUSION

The concrete foundations are not machinery and equipment and are not used directly and exclusively in the manufacturing process, and the articles purchased to construct them are used to construct real property. Therefore, they do not qualify for the sales tax exemption for manufacturing equipment.

GENERAL PROVISIONS

This ruling will be made public after deletion of the parties' names and any information which may identify the parties. A copy of this ruling showing the proposed deletions is attached, and you may request within 30 days that the Commissioner delete any further information that might identify the parties. The final discretion as to deletions rests with the Commissioner.

This ruling is issued solely to the taxpayer and is limited to the facts presented, as affected by current statutes and regulations. Other taxpayers may refer to this ruling, when redacted to protect confidentiality, to determine the department's general approach, but the Department will not be bound by this ruling in the case of any other taxpayer or in the case of any change in the relevant statutes or regulations.

_____ _____

Emily Bergquist Date

Approved:

_____ _____

Mary N. Peterson Date
Commissioner of Taxes